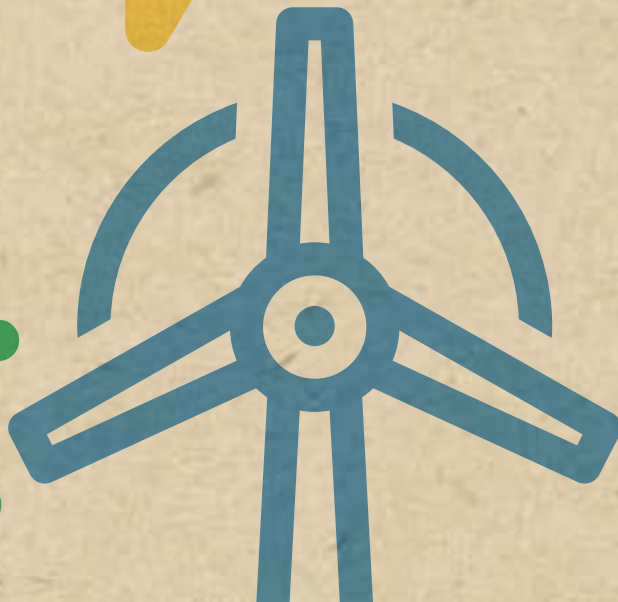
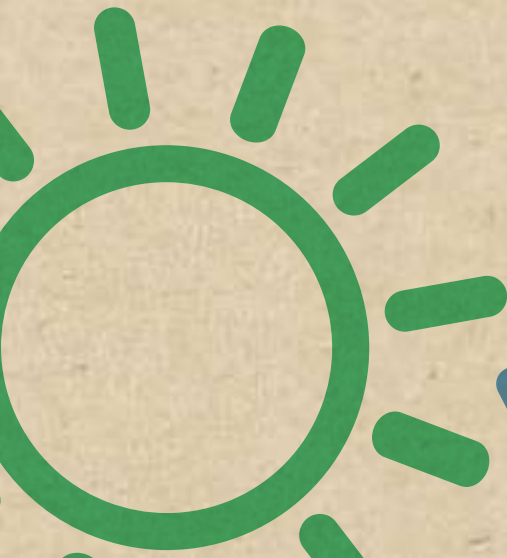
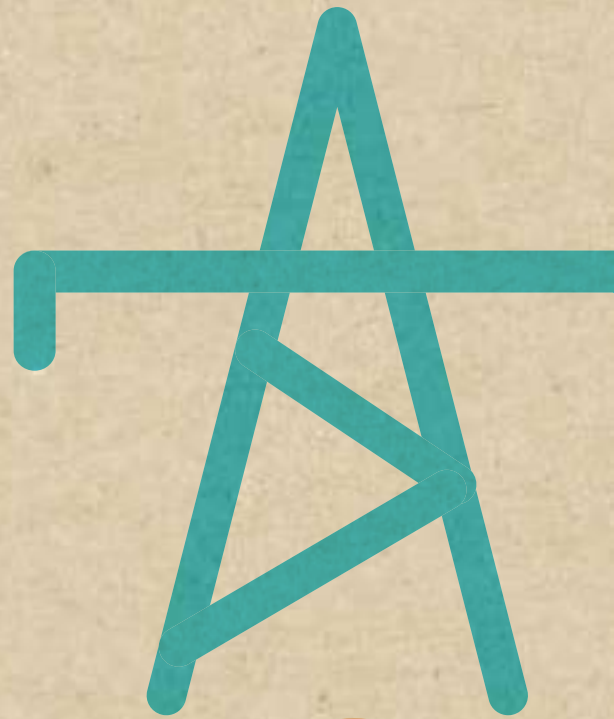




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**ANNUAL  
INTEGRATED  
REPORT  
2018**





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**ANNUAL  
INTEGRATED  
REPORT  
2018**



This report includes the 2018 performance of Colbún S.A. and its affiliates, both in Chile and Peru. The acronyms shown under certain headings correspond to economic, environmental and social performance indicators established by the Global Reporting Initiative (GRI). The "NCG" indicators are related to General Standard 386 of the Financial Market Commission. Further detail of these indicators is provided in Chapter 6, GRI Standard Index.



CONTRIBUTING  
WITH THE BEST  
ENERGY TO THE  
FUTURE OF OUR  
REGION

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# Colbún in numbers 2018

102-2, 102-4, 102-6, 102-7, 102-45, EU1, EU4

In 2018, the commissioning of Colbún's fifth power plant certified to issue certified carbon credits (the La Mina Hydropower Plant), positioning the Company as the largest issuer of carbon credits coming from hydropower in Chile. The significant share of hydropower generation in our generation matrix has allowed Colbún to supply cleaner energy compared to industry average: our CO2 emission factor in 2018 was 29% lower than the average of the National Electric System.

# US\$ 684.1

Million in EBITDA

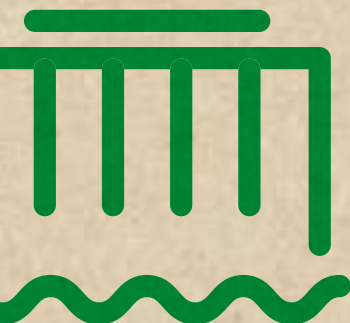
# US\$ 230.4

Million in Net Income



**971**  
Workers in Chile

**88**  
Workers in Perú.



**OWNERSHIP**

- 49.96%** Matte Group
- 20.82%** AFPs
- 9.58%** Antarchile S.A.
- 19.64%** Others



## CHILE



**16.8%**

Market share in the SEN in energy generation



**2.680**

Contractors working for Colbún



**941 Km**

Transmission Lines



**3.342 MW**

Installed Capacity:  
49% hydro  
51% thermal



**3er**

Largest SEN Generator



**161 Clients**

19 clients are distribution companies.  
142 are free clients supplied as of December 2018.



**12,880 GWh**

Generation:  
49.0% hydro / 50.9% thermal  
0.1 % solar



**14.1%**

Market share in the NES (in MW)

## PERÚ



**3,914 GWh**

Thermal generation by Fenix in 2018.



**565 MW**

Installed Capacity  
(100% thermal)



**7.7%**

Market share of SEIN in terms of generation



**10 Clients**

Six distribution companies.  
Four industrial companies.





# 2018 Acknowledgements and Third-party Assessment

## Huella Chile

In November 2018 Colbún was awarded the highest distinction of Huella Chile Program of the Ministry of the Environment for outstanding management of the carbon footprint in the four areas assessed: Quantification, Reduction, Neutralization, and Declaration of Excellence. Colbún was the sole company to be awarded the highest distinction.

## Dow Jones Sustainability Index (DJSI)

In September 2018 Colbún listed on the DJSI Chile and the DJSI MILA. These indexes measure the sustainability management of businesses. The top ranked companies in Chile are included in the first index, while the DJSI MILA groups together the top rated companies in the markets of Colombia, Peru, Mexico, and Chile.

## Informe Reporta

This survey conducted by the financial communications agency DEVA evaluates the Annual Reports of all the IPSA companies. Colbún's 2017 Annual Integrated Report ranked first in the general ranking, standing out in the categories "Leader of Principle of Relevance" and "Leader of Utilities Sector".

## Report of Women on Boards (IMAD)

The 2018 IMAD ranking prepared by “Mujeres Empresarias” and DESUC (the Social Studies Department of the Catholic University) recognized our company on the category “Female Representation on Corporate Boards”. Colbún was the company with the most female representation on the corporate boards of directors of the IPSA companies as of December 2018.

## Transparency in Corporate Reporting

In the context of the publication of the study “Transparency in Corporate Reporting” carried out by the Chilean Chapter of Transparency International and published in February 2019, Colbún was the leader in global reporting methodology from more than 35 companies surveyed.

## Best Place to Innovate

The Best Place to Innovate ranking recognized Colbún in the “Perception of Innovation/Action” category in a study conducted by GFK Adimark, the Adolfo Ibáñez University and Microsoft.

## Chilean-British Chamber of Commerce

In November 2018, the Chilean-British Chamber of Commerce awarded Colbún a distinction for its participation on the 9th Recognition to Environmental Innovation of the Chilean-British Chamber of Commerce.

## Generadoras de Chile

The Reverse Osmosis Plant built by Colbún in the Nehuenco Complex ensures water can be saved under water scarcity conditions. This plant received the award for innovation granted by the Chilean Generators Association (“Asociación de Generadoras de Chile” in Spanish).

## Pro Aconcagua

In May 2018, Colbún was recognized by Pro Aconcagua for its historical involvement and contribution to the area of the valley of Aconcagua within the framework of the celebration of the 15th anniversary of this development corporation.



## Letter from the Chairman

102-14

**Juan Eduardo  
Correa G.**

CHAIRMAN OF THE  
BOARD COLBÚN S.A.

Colbún S.A. Annual Integrated Report is prepared to provide our shareholders, workers, clients, suppliers, contractors, communities, and in general all stakeholders with relevant information about the Company.

As is tradition and following an increasingly widespread practice in the market, the report herein draws on the Company's results and management indicators, not only regarding financial and corporate governance matters, but also in relation to environmental and social management areas.

For the fourth consecutive year the Annual Report is built on an integrated manner, recognizing that the management of the company must be assessed in the light of every dimension of the company's

interaction with its stakeholders, which in turn require increasing levels of information and transparency. The Annual Integrated Report – built to the standards of the Global Reporting Initiative (GRI) and in line with the Principles of the UN Global Pact to which our company adheres to – is also a great opportunity to set down the global vision of our business in a single document, understanding that sustainability is a company-wide concern.

Anchored in this vision is the Company's strategy considering five main pillars. First, to expand the development of renewable energy from variable sources like solar and wind. We already have our road map and a diversified portfolio of projects that will be executed according to market conditions. Second,



Notwithstanding the significant challenges that we are experiencing at Colbún, the 2018 financial year was very good for our company, in the context of accelerated changes of the industry, and a very competitive market dynamics.”

to increase our market share of unregulated clients as this segment is showing very attractive expansion rates. Third, we are focusing on reducing our fixed costs to react to the challenges of the new competitive dynamics of the energy market. Fourth, and highly related to the previous point, we are currently implementing a company-wide automation and digitalization plan whose aim is to generate a more efficient operation and improve our competitive position, and lastly, our strategy considers an ongoing analysis of the opportunities for growth and expansion in other countries of the region through asset acquisition, and the systematic search for new opportunities in businesses complementary to the generation and transmission businesses that would allow us to add value to the Company.

## 2018 Performance

The 2018 financial year was a very good year for our company, in the context of the accelerated changes taking place in the industry, and the competitive market dynamics the electric energy business is facing.

I would like to start by making some comments about the results reached in the year. The company's EBITDA was US\$684 million in 2018, a figure very

similar to the historical record of 2017 (US\$692 million) which was positively influenced by an increase in energy sales, especially to unregulated clients, consistent with the company's growth strategy oriented to this segment (which I'll be discussing in detail later in this document).

Regarding the previous point, I would like to stress two facts: first, these results are achieved even though 2018 was once again a year with lower rainfall than the historical average in the more relevant basins of the National Electric System (SEN), and, second, the stability represented by this performance, with a steady and growing trend shown in the recent four financial years. This stability is also related to the good performance of our assets, including the excellent performance of our power plants in terms of availability.

It is also important to mention the initiatives intended to contain costs that we implemented in 2018, allowing us to make savings of nearly 8% of the fixed costs vis-à-vis 2017 or an equivalent US\$14 million. Thanks to this, Colbún's fixed costs last year reached its lowest absolute level since 2013 (as measured by the 2018 exchange rate). We hope to deepen this trend in 2019. As a contribution to this purpose, in 2018 the Company

speeded up its cross-company Automation and Digitalization Plan which aims at incorporating digital technologies along four pillars or areas of action: maintenance of our power plants; operation thereof; process productivity, and reporting.

In matters of social and environmental management, an area in which the civil society is demanding increasingly higher compliance standards, the Company continued striving for the good environmental performance of its operations, as we know this is the only way possible to build long-term relationships that will ensure the sustainability of our business. Thus, in 2018 the Company did not have any breach in its environmental performance. Moreover, with respect to our operations in Coronel, where we are operating in a complex setting, the Public Prosecutor decided not to persist in an investigation on the environmental performance of the Santa María Power Plant since they were not able to find any grounds for an Environmental Damage situation caused by this Plant. This investigation took almost five years and included multiple judicial steps and technical and scientific analyses.

This decision was followed by a decision of the Environmental Court of Valdivia which, in a ruling issued

in late 2018 dismissed the action for “reclamation of environmental damage” brought against the company, contending that any breach to the environmental regulations had been proven and that, in addition, the company provided evidence that it does comply with the emission standard for thermal power plants.

As for the community outreach work, I would like to point out two relevant facts that took place in the year. First, the company proposed to the National Electricity Coordinator to adapt the operations of the Canutillar Power Plant to the new climatic conditions of the recent years, where there had been a decrease of rainfall, in order to raise the water level of Lake Chapo (Los Lagos Region) that feeds this power plant, facilitating the access to the lake and adjacent farms. This operational change set the basis for a cooperation agreement signed by our company, the Lago Chapo residents’ Association, the Municipality of Puerto Montt, and other local and regional authorities, with a view to boost the touristic development of the area and to improve connectivity. All the mentioned stakeholders formed a Tourism Working Group the fruits of which should be seen in 2019.

In this same line, the Company and the Municipality of Colbún joined efforts in 2018 to start a new beach in the Machicura Dam (El Maule Region) as its operational condition makes it possible to launch projects like this one. The new facility started its operations in January 2019 and it is completely equipped to become a focal point of tourist attraction in the region, similarly to what has already occurred in our Angostura Hydropower Plant, and that we endeavor to replicate at Lake Chapo. Let me just add that the

Machicura beach has already received an estimated 40,000 tourists only in the first month of operations, which shows that there is a social need for family leisure and recreation, and meeting them contributes to improving the quality of life of people.

At a corporate level, our sustainability efforts resulted in the company being selected for the second year in a row in the Dow Jones Sustainability Index Chile and the Dow Jones Sustainability Index MILA, a measurement conducted by the Swiss consulting firm Robeco SAM that assesses the international performance of companies in the economic, environmental, and social areas.

With respect to safety management, the Accident Frequency Index reached its historical low in 2018. Although the integrity of our workers and contractors is an ongoing and long-term duty, it is indeed a fact that at Colbún we have been able to gradually embed a culture of safety, which is much more present today in each one of our activities and operations.

Also regarding our workers, one of the priorities proposed by the Board of Directors to the Administration was to implement an Integrity Plan within the organization, encompassing, among other initiatives, the development of an inclusive agenda considering the first disability register of the Company; the setting up of a Gender Working Group that prepared an agenda on this issue to be a focus for work in 2019, and the holding of different workshops and courses about Compliance. This Integrity Plan was one of the main pillars of the Sustainability Weeks held in all our power plants during the year, in which the Corporation Human Rights Policy approved the year before was also disseminated.

Finally, it is also important to mention the reorganization of the company’s transmission assets in last October. All of them were consolidated in Colbún Transmisión S.A for a greater focus on the management, reportability, and visibility of a business that generated almost US\$ 65 million pro forma EBITDA in 2018.

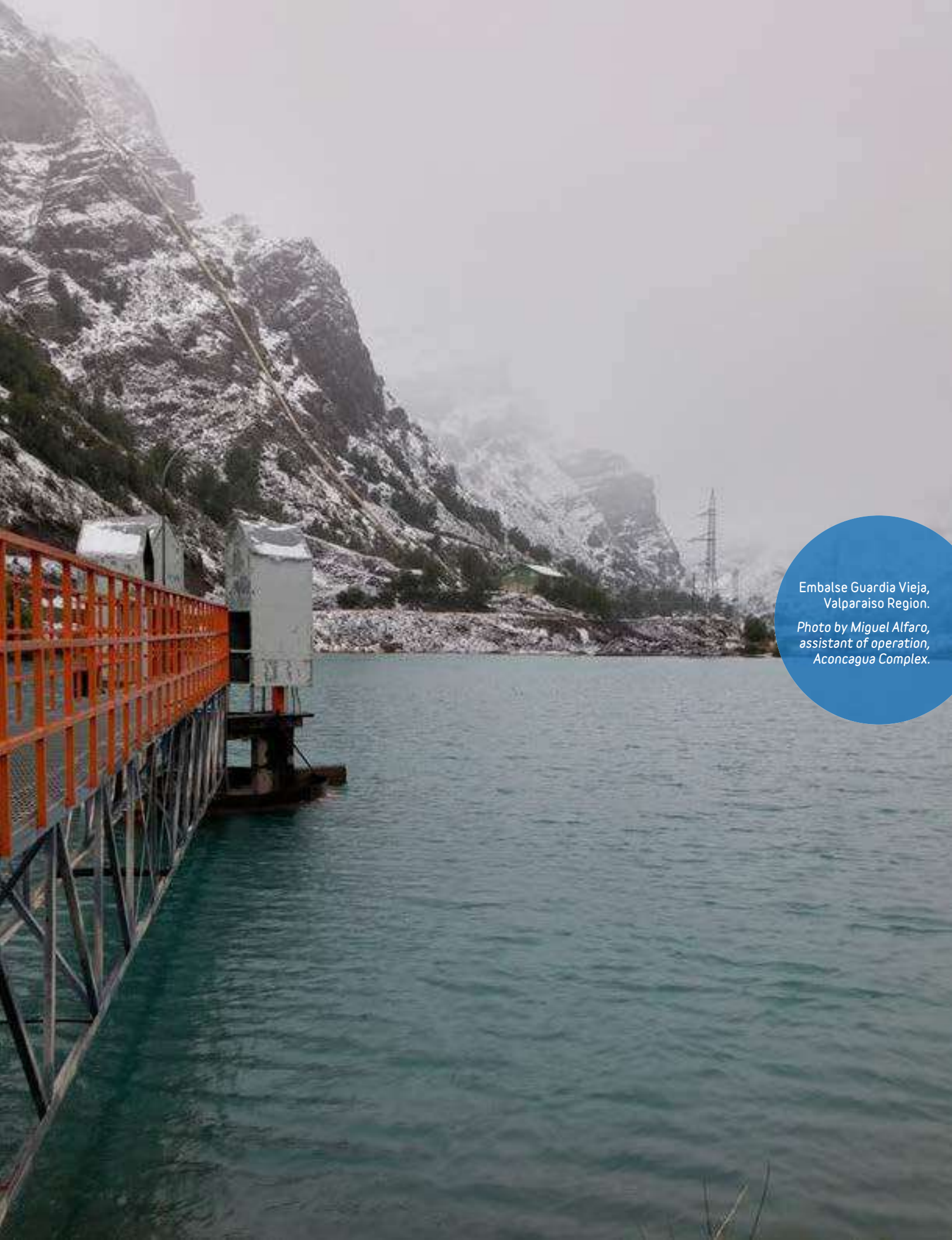
## Commercial Strategy

Our commercial strategy during 2018 also made significant progress. As we all know, since 2016 the energy market is facing a very strong competitive dynamics triggered by multiple factors: reduced costs of renewable energy from variable sources like solar and wind energies; entrance of new developers who have been significantly involved in the auctions of regulated customers to be awarded long-term contracts to make their projects viable; and a reduction of fuel prices (even though this trend reversed for a great part of 2018).

In this context, in 2018 we reinforced our strategy to continue to grow in the unregulated clients segment made up of medium and large businesses, such as supermarkets, IT companies, cement factories, and obviously, mining companies whose global demand in the National Electric System last year grew 14.9% (vis-à-vis the 6.8% drop of the regulated clients demand).

In order to address this challenge Colbún launched an advertising campaign in the press, radio, and digital media, along with developing a renewable energy certificate for those clients who appreciate this alternative.

This, plus the significant deployment of our sales forces led to the generation of a value proposition that has yielded



Embalse Guardia Vieja,  
Valparaíso Region.

*Photo by Miguel Alfaro,  
assistant of operation,  
Aconcagua Complex.*



very good results: Colbún ended the year with 245 unregulated clients (including clients already awarded but not yet supplied as of December 2018, and clients already receiving the energy supply). The new contracts in Chile account for more than 1,400 GWh/year. In less than two years' time in which we are developing this focus on free clients, the Company has added more than 3,000 GWh/year in new contracts in Chile. Behind these figures there is a significant organizational and cultural change considering that up until 2016 the Company only had three unregulated clients (and fifteen regulated clients).

### Growth: Focus on Renewable Energies

In terms of installed capacity there were also relevant milestones in 2018. The La Mina Hydropower Plant (34 MW. Maule Region) is our sixteenth hydropower plant and the fifth plant certified to issue carbon credits used to compensate greenhouse gas emissions. This makes Colbún the largest issuer of these offsetting instruments coming from hydropower in Chile. I wish to highlight the work carried out during the construction phase that considered a limited intervention of the environment, with minimal impact on the river, and on the wild flora and fauna. Also, the architectonic design of the powerhouse looks like a house in the mountain so that the power plant may be better integrated into the landscape, minimizing as much as

possible the visual impact by using locally sourced materials. All of this is complemented with the great collaborative work with the surrounding communities, confirming Colbún's hallmark in this matter.

With respect to renewable energy from variable sources, in 2018 we also started up the first photovoltaic park of the Colbun, "Ovejería" in the commune of Tilttil, Metropolitan Region. While it is a small plant (a PMGD\* of 9 MW) it meant a great learning opportunity that allows us to continue to make progress towards the real diversification of our energy matrix.

In a global long-term view, in these recent years Colbún has prepared itself to incorporate renewable energy from variable sources from solar and wind sources massively in the coming decade – to its portfolio of projects.



# 1,800MW

identified in solar and wind projects

In this respect, in 2015 the Company set up a Renewable Energies Area with a team dedicated exclusively to searching and developing new business opportunities. In the past two years this team has focused on identifying the best alternatives for developing renewable energy projects in Chile, analyzing the opportunities available at the market place in a rigorous and systematic way, and searching for new locations for greenfield developments. Our purpose has been to ensure a portfolio of projects with highly competitive locations.

We finished 2018 with a portfolio of seven solar and wind powered projects, in the initial development phases, accounting for 1,800 MW throughout the country. We hope to receive the environmental approval of 1,000 MW by 2020. The construction of these initiatives will nevertheless be subject to the evolution of the demand for energy.

Among these projects highlight the Horizonte wind farm (607 MW, Region of Antofagasta) and the Sol de Tarapacá photovoltaic project (200 MW) in progress according to the established schedule. In the first case, in 2019 we expect to carry out the technical and environmental studies of this project, to begin the processing in early 2020. As for the Sol de Tarapacá Project, we expect to complete the environmental assessment and engineering studies in 2019 for a final estimation of the investment.

In the long run these 1,800 MW fall within our aspiration to build close to 4,000 MW in solar and wind

by the end of the next decade in Chile. The challenge this road map implies is that we will have to double our current installed capacity.

If we add this project portfolio to our current asset portfolio, in particular our hydropower plant with regulation capacity reservoirs, we think we are in a very good position to offer 24-7 renewable energy to our current and future clients, allowing us to achieve a relevant competitive position in the electric energy generation market.

Another relevant aspect of our growth strategy was the negotiation to have again the Argentine natural gas supply available in our facilities, after almost ten years of disruption. One of the factors that made this operation feasible is the fact that the volume contracted is disruptable, meaning we have flexibility to import the fuel only when market conditions in Chile allow dispatching natural gas-fired units. This option joins the other alternatives the Company has developed in recent years in order to rely on the best competitive conditions for dispatching using natural gas. We have been through the company's performance in its different areas, and now I would like to congratulate the management and all Colbún's workers for the excellent results obtained in 2018 and for the progress made in the execution of our strategic plan, convinced that if we persevere in this direction, we will be best prepared for the challenges ahead.



Flexibility is an attribute which is increasingly necessary, and it requires a regulatory framework and a pricing scheme recognizing this new service and stimulating the investments needed to provide this flexibility to the system



## Regulations for Energy Transition

However, these challenges go beyond what a company can do on its own. The energy transition and transformation of this industry also require public policies and an adequate regulatory framework to encourage the transition to new energies in a safe, efficient, and competitive manner.

In spite of its advantages and good competitive position, solar and wind energies, have the disadvantage of been intermittent and variable, so it is not yet manageable supply.

In this scenario, and as the penetration of variable source renewable energies continue to make strides, the flexibility of the rest of the electric system to adapt itself and cover for the intermittency of renewable energies is more important than ever. This means making deep changes to the system, since thermal power plants in particular were designed for base-load operation, in other words, for constant operation. Hence, flexibility is an attribute which is increasingly necessary, and it requires a regulatory framework and a pricing scheme recognizing this new service and stimulating the investments needed to provide this flexibility to the system, of what is known as Complementary Services. Many countries of the developed world have already addressed this regulatory challenge. In this sense, we really appreciate the announcement made by the government that they are preparing a new bill on flexibility of the electric system. It is our hope that this piece of legislation would provide the adequate price signals so that a future expansion of the electric system would allow for a

safe insertion of variable source renewable energies. Solving the flexibility challenges will also help to better outline the decarbonization process driven by the Government. At this moment it is important to recall that the electric generation sector is one of the sectors making the fastest progress in this matter through the massive incorporation of new sources to its project portfolio. Colbún owns only one out of the twenty-eight coal-fired plants currently operating in the electric system, which is also one of the more modern and efficient of the whole system, with a good environmental compliance. But even if we are a relatively small player in this scene, our Company has stated its willingness to participate actively in the process driven by the government, assuming that, as the authority has stated, this process must be executed gradually to deal correctly with the challenges of security and competitiveness involved, without overlooking in the analysis the fact that there are contracts committed for the energy generated by these assets. Another regulatory field presenting a significant challenge is the electric energy distribution market. As I said before, the unregulated-clients segment has gone through a great transformation with numerous participants – mostly generation companies and distribution companies – trying to capture a share of this growing market. While the authority has taken relevant steps to improve the competition conditions – for example, by publishing the list of regulated consumers who may potentially become unregulated clients,



we think there are still some pending regulatory improvements that would help to level the playing field ensuring that consumers that may have a choice of energy supplier, can do this freely and in the best possible conditions. Some of these improvements include facilitating access to information on energy consumption to all stakeholders in a balanced way, and care that all clients receive the same quality of supply, regardless of the area in which their consumptions are located. As we can see, the electricity sector continues to undergo a deep transformation, with trends and ongoing processes that have made of this industry an even more dynamic and competitive industry.

At Colbún we have taken on the challenge to be the main players of this transformation that implies making relevant changes within the Company,

from its commercial operation to the way in which its projects are conceived and developed, just to name a few areas. The Company has had great results in the last years, but we are fully aware that the future is not assured, and that we must continue to embrace our challenges.

We are committed to continue working to generate long-term value to our shareholders and other stakeholders with a focus on people and on the sustainable performance in every area of our business.

Finally, on behalf of Colbún Board of Directors, executives and workers I would like to conclude my words by remembering our Director María Ignacia Benitez who has sadly passed away in late February. Those among us who had the opportunity to share with her are witnesses to her deep commitment and dedication as Director of the

Company, the clarity and depth of her ideas on how to develop the business, her great experience and knowledge of environmental and sustainability topics, her warmth and unassuming ways. There is no doubt that she made a huge contribution to the Company in her role as Director and her departure is a great loss to our Board of Directors and to Colbún.

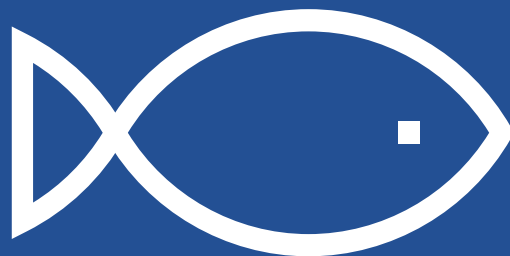
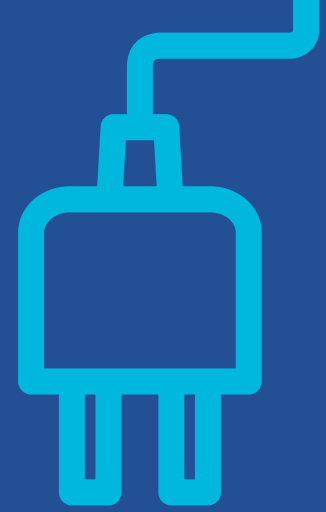
Thank you.

**Juan Eduardo Correa G.**  
Chairman of the Board of Directors,  
Colbún S.A.

# 01

## Chile and the Energy Industry Context

This Chapter presents the evolution of the general context and the regulatory framework in which the electricity industry operates in Chile and in Peru, the two countries in which Colbún has facilities.







# Materiality Analysis

A material topic related to the subject areas covered in Chapter 1 was identified from the Materiality Analysis conducted to prepare the Annual Integrated Report.

## Material Topic:

### Regulation and Change in the Electricity Industry



#### Scope:

- Electricity market Regulation
- Regulatory Management
- Flexibility, Distribution, and Water Code
- Energy Transition
- Decentralization

#### Associated Risks:

Regulatory Changes

#### How do we manage:

Colbún is actively involved in the professional associations of the industry through which its vision on the regulatory changes is articulated. Added to this are the spaces for direct participation fostered by the authority. We also have our own Regulation Committee following up all modifications in this field constantly.

#### Why it is material to Colbún:

The energy transition in the electricity industry also requires regulatory changes. In Chile, these regulatory changes focus on flexibility and on the distribution business, while in Peru changes target subsidies to renewable energies and the gas prices. The regulatory changes may have an impact on the development of this industry, including Colbún, and they also have a high technical component.

# 1.1 General context

After many years of low growth, in 2018 the Chilean economy has shown signs of recovery with a GDP annual variation of 4% by the end of the year, the highest rate of expansion since 2013.

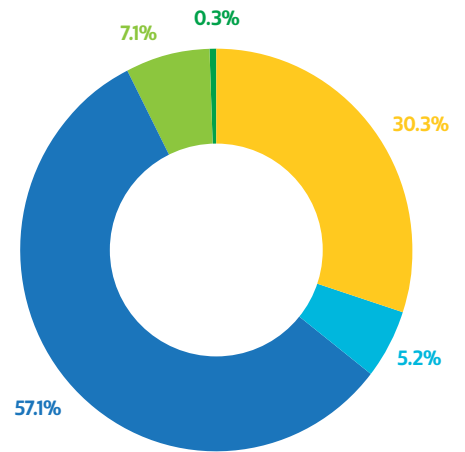
## Chile

After many years of low growth in 2018 the Chilean economy has shown again signs of recovery with an annual GDP variation of 4% by the end of the year, the highest expansion rate since 2013.

However, this was not an even trend all year long. The best economic activity indicators were recorded in the first half of 2018, with a 4.8% GDP growth that reflects a trend observed towards the end of the year 2017 expressed in 2018 by a greater activity in the manufacturing industry, commerce and mining. In these results there was also a weak comparison base of the mining industry affected by the strike at Escondida mine in early 2017.

During the second half of 2018 we could observe a slowdown of the economy leading to the discussion of how strong the recovery really was, and its long-term projection. This trend was accompanied by the relative decline in the copper price starting in January 2018 with a monthly average of 321 dollar cents per pound, and ending in December at 276 dollar cents per pound according to Cochilco's figures.

A key factor in the uncertainty in the year has been the potential commercial war between the US and China which was far from being solved by the end of 2018, but that certainly has had a relevant impact on the global economy.



**Energy Generation by Source in Chile (in %)**

- Thermal
- Hydropower
- Solar
- Wind
- Other

Source: CEN

The most important positive news for the Chilean economy in 2018 was the recovery of the investment

rate, where the gross fixed capital formation increased 7% in the second and third quarters, which is the strongest growth since 2013. In this scenario, some relevant investment projects were reactivated during the financial year, especially in the mining sector, in a context in which the new administration of President Sebastian Piñera installed in La Moneda since March 2018 had the economic growth and reactivation of the economy as one of its main drivers.

In this general evolution of the economy, the energy sales in the National Electric System (SEN) showed a movement similar to the GDP behavior posting a 4.1% growth in the period from January – December 2018, according to figures provided by the National Electricity Coordinator (1).

But within this figure there are two very different trends; while in 2018 sales to distribution companies dropped by 6.8%, sales to unregulated clients increased by 14.9%, a rate reflecting the growing migration of large

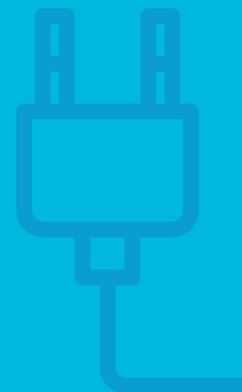
and medium-size consumers (with more than 500 kW connected load) from the scheme of regulated clients to free contracts. This evolution can be explained by the price differential between both segments, as a result of the competitive dynamics observed in this two recent year, which is characterized by a considerably slower adjustment process among the regulated clients' segment.

In terms of gross generation by type of energy, in 2018 the solar and wind sources showed again the highest rates of percent growth. According to the figures of the National Electricity Coordinator, during 2018 the gross generation of solar energy in the National Electric System (SEN) grew 38.9%; wind generation grew 13.9%; hydropower generation showed a 6.3% increase while thermal power energy dropped 2.4%.

Therefore, in 2018, solar energy reached a 7.1% share in the Chilean electricity matrix, with 5.2% share of wind energy, and 30.3% share for hydropower energy. In total, renewable energies account for 42.9% of Chile's electricity system.

4.1%

Growth in energy demand in Chile in 2018



14.9%

Growth of energy sales to free clients in Chile in 2018



(1) Figures of the January 2019 Energy Report of the National Electricity Coordinator.





# 11

## Commitments on the 2018 - 2022 Energy Road Map

From the stand point of the evolution of public policies and the regulatory framework, the installation of the new administration was reflected in the presentation in May 2018 of the 2018-2022 Energy Road Map. This document from the Energy Ministry was put together in a participatory manner, and it sets up eleven commitments by the present administration to deal with the main challenges in energy matters in the country.

In relation to public policies it is also worth mentioning the voluntary agreement signed in January 2018 between the Administration of former President Michelle Bachelet and the generation companies to stop building new coal-fired plants which fail to have systems for carbon capture and storage or equivalent technologies. Moreover, and based on this agreement, in mid-2018 the Decarbonization Working Group was set up as an instance promoted by the Government, with the participation of the public sector, the communities, companies, the academia and NGOs.

The main purpose is to “discuss the effects of retiring and/or converting coal-fired units based on the security and economic efficiency of the national electricity system, the local economic

The draft bill on flexibility of the electricity system could become a very relevant initiative for the future development of the system, as a greater penetration of solar and wind-based sources will push for a more flexible model.

activity and the environmental aspects having a bearing thereon” (2) The Working Group completed its work in early 2019.

With respect to regulations, the Ministry of Energy started working on some modifications that may be part of future bills (for more details see the Regulatory Framework section in this same Chapter). One of the first aspects announced was the reform to the electric distribution segment, with the aim of “gathering new realities of the energy sector, to facilitate its implementation in a competitive manner” as set out in the Energy Road Map.

The government also announced the submission in 2019 of a draft bill on the flexibility of the electric system, to accompany the development of variable source renewable energy projects, with other sources and technologies to help manage the variability of intermittence of the solar and wind generation. This initiative is extremely relevant for the future expansion of the system since a greater penetration of the solar and wind sources will require a more flexible electric system, which needs clear regulatory and pricing signals to ensure

the investments needed to manage the intermittence and variability of the mentioned energies.

Also, in the regulatory field, in July 2018 the Ministry of the Environment submitted a draft bill to the Congress – where it is being discussed right now – on a reform of the Environmental Impact Assessment System (SEIA in its Spanish acronym). Some of the main changes proposed include abolishing the Committee of Environmental Ministers; abolishing the regional environmental assessment commissions to replace them with three macro-zone commissions; and set up a mandatory non-binding citizen participation procedure.

Lastly, on the subject of the main milestones of the year, we must refer to the delay on the construction of the Polpaico-Cardones high-voltage line that was not put into operation at December 2018. It is expected that this line will have a positive impact on the energy flows between the central-south zone, and the North zone of the country, especially for transmitting variable renewable energies to make the system’s operation more efficient.

(2) Presentation by the Ministry of Energy to the First Meeting of the Working Group on the Retiring and/or Conversion of Coal-fired Units, June 2018.



Nehuenco  
Thermoelectric  
Complex,  
Valparaíso Region



4%

Growth of the economy of Peru in 2018.

## Peru

In 2018, Peru experienced a 4% economic growth, higher than in 2017 (2.5%). Even if the Peruvian market showed the fastest rate of expansion among all the economies of the Pacific Alliance (Chile, Mexico, Colombia, and Peru), the year 2018 was indeed much more nuanced for Peru.

The Peruvian economy growth was driven by public investments and the internal demand, particularly by the strong activity reported in the modern agricultural sector that introduced dynamism to the formal employment.

Along with this, there was also a new cycle of mining investment. The Peruvian government anticipates that in 2019 the Peruvian economy will be leading the economic growth among the countries of the region with 4.2% growth, outperforming Chile, Colombia, Brazil, and Mexico. To a large extent this projection is based on the new mining, hydrocarbon, and infrastructure projects, among which stand out the Toromocho Expansion Project, the General San Martin Port Terminal, Quellaveco, and Mina Justa. With respect to political issues, the abrupt ouster of former president

Pedro Pablo Kuczynski in March

2018 due to the political turmoil caused by his alleged links to the company Odebrecht, brought to the Presidency the then First Vice-president of the Republic Martín Vizcarra. This development was followed in the second half of the year by the disclosure of audio recordings revealing a corruption network operating in some institutions of the State, with the ensuing resignations, citizens' demonstrations, and a proposal of constitutional reforms pushed by the Executive power.

This anti-corruption agenda allowed President Martín Vizcarra to gain a sustained support in surveys, facilitating the government leadership.

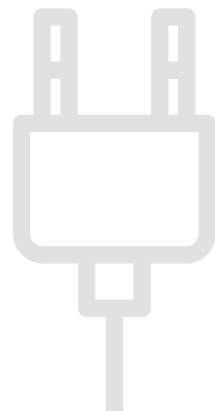
The high economic growth has had its correlation in the electricity market. Considering 2018 altogether, the demand of the National Interconnected System (SEIN) in Peru grew 3.7%, higher than the previous year growth of 1.7%. Marginal costs increased 12.2% compared to 2017, due to a greater demand, a restriction of the natural gas pipeline in February and the maintenance of Pluspetrol facilities (natural gas supplier) from July – August.

Electricity generation companies



3.7%

Growth of the demand of the National Interconnected System (SEIN) of Peru.

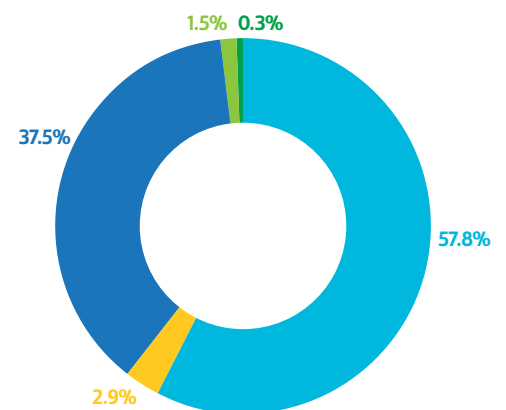




focused their efforts in capturing unregulated clients to increase their sales as compensation for the low prices at the spot market, in spite of their increase vis-à-vis 2017.

In terms of generation by energy source, solar and wind energies experienced the highest percent expansion with annual increases of 158% and 40%, respectively, in 2018. But the share of added solar and wind

energies is still modest in the energy matrix, accounting only for 4.4% of the total. In terms of share in the energy matrix, hydropower generation continues to be the most relevant contribution in Peru, with 57.7% of the total matrix, followed by natural gas that contributes close to 37%.



**Energy Generation by Source in Peru** (in %)

- Thermal
- Hydro
- Solarr
- Wind
- Other

Source: COES

# 1.2 Regulatory Changes

## Chile

The regulatory framework governing the Chilean electricity sector and Colbún's operations mainly comprises the General Law on Electric Power Services, the General Environmental Law and the Water Code

Seven key agencies oversee the application and compliance of the laws and regulations of the energy sector.



### Entities having competence in the energy industry in Chile

 <p><b>Ministry of Energy</b></p>	<ul style="list-style-type: none"> <li>· Public and Sectorial Policies</li> <li>· Advisor to Government</li> <li>· Long-term Planning</li> </ul>	 <p><b>General Water Directorate</b></p>	<ul style="list-style-type: none"> <li>· Water Rights / Project Approval</li> <li>· Oversight</li> <li>· Measurement and Control of Water Resources</li> <li>· Surveillance of the operation of Water User Associations</li> </ul>
 <p><b>Superintendence of Electricity and Fuel (SEC)</b></p>	<ul style="list-style-type: none"> <li>· Oversees Legal Compliance</li> </ul>	 <p><b>Ministry of the Environment</b></p>	<ul style="list-style-type: none"> <li>· Design and Application of Public and Sectorial Policies</li> <li>· Advisor to the Government</li> <li>· SEA: environmental Approval</li> <li>· SMA: Oversees Legal Compliance</li> </ul>
 <p><b>National Energy Commission (CNE)</b></p>	<ul style="list-style-type: none"> <li>· Rates</li> <li>· Regulatory function</li> <li>· Expansion Plans</li> </ul>	 <p><b>Expert Panel</b></p>	<ul style="list-style-type: none"> <li>· Dispute Settlement</li> </ul>
 <p><b>National Energy Commission (CNE)</b></p>	<ul style="list-style-type: none"> <li>· Rates</li> <li>· Regulatory function</li> <li>· Expansion Plans</li> </ul>	 <p><b>National Electricity Coordinator</b></p>	<ul style="list-style-type: none"> <li>· Coordinates the system's operation</li> <li>· Economic Dispatch</li> <li>· Monitoring competition</li> </ul>



## Public Policies developed by the Ministry of Energy

From the standpoint of public policies, the presentation of the 2018-2022 Energy Roadmap in May 2018 was one of the first actions carried out by the Ministry of Energy of the new administration of President Sebastian Piñera. In this document prepared in a collaborative manner the Government committed itself to the “Eleven Mega Commitments” for the electric sector during that period.

The commitments include:

- 1.** Mapping of the energy vulnerability of the country, identifying families still lacking electricity supply and other energy-related services, to narrow the existing gaps.
- 2.** Streamline the energy institutionalism to increase the governmental efficiency and to give a better service to citizens, most particularly the Superintendence of Electricity and Fuels, and the National Nuclear Energy Commission
- 3.** Reduce by 25% the time required for environmental processing of projects making use of the “Plan+Energía” scheme compared to the times recorded in the recent four years.
- 4.** Increase four times the current capacity of small-scale renewable distributed generation (less than 300 KW) by 2022.
- 5.** Increase at least ten times the number of electric vehicles in circulation in our country.

**6.** Streamline the power distribution regulation through a participatory process which will help incorporate the new realities of the energy industry and facilitate its effective and competitive implementation.

**7.** Regulate solid biofuels such as firewood and its byproducts, giving all the necessary power to the Ministry of Energy to set out the technical specifications and application regulations for the commercialization of firewood in urban areas.

**8.** Setting up a regulatory framework for energy efficiency which would generate the incentives needed to promote an efficient energy use in high consumption sectors (industry and mining, transportation and buildings) and to create a real energy culture in the country.

**9.** Initiate the decarbonization of the energy matrix through a schedule for retiring or converting coal-fired thermal plants, and the incorporation of effective electro-mobility measures.

**10.** Provide training to 6,000 operators, technicians, and professionals of the energy, fuel, and renewable energies sectors to develop the skills and competencies required for sustainable use and management of energy, of which 3,000 at least must pass the certification.

Later on, President Piñera added the eleventh commitment concerning the Regional Interconnection. Of the eleven commitments in 2018 there were progress made in Energy Efficiency, Decarbonization, and Electro-mobility.



The regulations stemming from the Transmission Law have been prepared by the CNE and the Ministry of Energy in an open and participatory manner, in working sessions with different players and stakeholders of the industry.

### Progress made in regulations preparation

Law 20,936 approved in July 2016 and known as the "Transmission Law" incorporated structural changes to the Chilean power sector.

The law modified the regulation applicable to the electricity transmission system and replaced the old Economic Load Dispatch Centers (CDECs for its Spanish acronym) with an independent agency called "Independent Coordinator of the National Electric System" (CEN) responsible for the operation of the entire Chilean electric system.

These modifications have required a substantial development of regulations

and technical standards. The regulations stemming from the Transmission Law have been prepared by the CNE and the Ministry of Energy in an open and participatory manner, in working sessions attended by different players and stakeholders of the industry. The results and subjects discussed in these working sessions are freely available.

Furthermore, each regulation has been submitted to a public consultation process. Colbún has been actively involved in all these processes.

The details of the main regulatory milestones associated to the regulations stemming from the transmission Law are presented below.



#### Regulation for the Coordination and Operation of the National Electric System

The Transmission Law gave new power and attributions to the Coordinator of the National Electric System (CEN). Some of the most relevant are monitoring competition, measuring the system's performance, maintaining a public information system, and coordinating the international exchanges of energy. Along with this, the Law also requires the issue of a Regulation for the Coordination and Operation of the National Electric System (SEN)

which sets out the conditions for the coordination and operation thereof, and the rights and duties of the agencies subject to coordination under the principles of security, economic operation, and guarantee of free access to all the transmission systems. Although the Regulation was began in 2017, it was withdrawn from the General Controllorship of the Republic in 2018 and is still in this status by the end of the year.





### Regulation for Transmission Systems and Transmission Planning

This Regulation started to be drawn up in 2017, based on the working sessions in which Colbún was actively involved. During 2018, the CNE prepared a preliminary version of the regulation followed by the public consultation by the end of the year. This document covers the access to facilities since the new Transmission Law gives open access to all the

transmission facilities, on the condition that there is available capacity in the case of dedicated transmission facilities. In addition, the regulation addresses the transmission planning, auctions, and remuneration of expansion works and international interconnection systems.

### Regulation for Qualification, Valuation, Price Setting and Remuneration of Transmission Facilities

This Regulation consolidates different exempt resolutions issued by the CNE used for provisional regulation of the Transmission sector. Some of the subjects covered include:

- (i) Quadrennial processes, such as the qualification of transmission facilities to determine whether the facilities are National, Zonal, Dedicated, or in Development Hubs.
- (ii) The transmission facilities price setting process, including determining the service life, and key discount rates for the valuation process
- (iii) Definition of rules of the valuation process, and who bears

the costs thereof and (iv) determining how will transmission be remunerated and how will generation companies that inject or withdraw energy be compensated when troubled by congestions caused by a delay in the commissioning of transmission facilities. After the authority set up the working sessions to draw up this Regulation, in 2018, the CNE published a preliminary version thereof which was subsequently submitted to public consultation at the end of the year. In the first months of 2019 the regulation would be presented to the General Controllorship of the Republic.



Colbún's approach pointed to the need to recognize and stimulate Complementary Services as an indispensable part of the safe operation of the system, particularly in a situation of massive incorporation of solar and wind renewable energies

### Regulation on Complementary Services

Complementary Services are services and products that facilitate a safe and continuous supply of energy. Standing out among the changes incorporated in Law 20,936 on Complementary Services is the responsibility for payment of the new facilities required to provide complementary services to the end users. The Coordinator and the CNE were given the power to incorporate new services when deemed it necessary. The details of the application thereof and other changes were subject to the new Regulation for Complementary Services. In 2017, the Commission set up a working group with different stakeholders of the industry to draw up this regulation. In this sessions Colbún's approaches pointed to the need to recognize and

stimulate Complementary Services as an indispensable part of the safe operation of the system, particularly in a situation of massive incorporation of solar and wind renewable energies

In 2017 the new Regulation was discussed, drawn up, submitted to public consultation, and was presented at the end of the year before the Controller General. In 2018 the Ministry of Energy withdrew the regulation from the General Controllershship of the Republic.

In late 2018 the Ministry of Energy announced a draft bill on flexibility to give the electric system the incentives of greater flexibility for a safe incorporation of renewable energies which is also the goal of Complementary Services.



## Facility Planning and Qualification Processes

The new Transmission Law also considered changes associated with the transmission planning and qualification of facilities processes.

### Transmission Planning

During 2018, the preparation of the 2017 Annual Transmission Expansion Plan was completed. This process received observations from the electric sector and the large energy consumers, because it incorporates a system of storage and a nearly 3,000 km. long HVDC line. The CNE decided to eliminate the storage units from the final expansion plan, and made minor modifications to the HVDC line. Both projects were submitted to the Experts Panel pursuant to a petition to reincorporate the storage units and eliminate the HVDC line. Finally, the Panel dismissed both projects, the first one for lack of discussion and legislation, and the second one, because they decided that it will not hurt to delay the project for one year, to include it with modifications on the 2018 Expansion Plan at a lower cost.

During 2018, the National Electric Coordinator (CEN) presented a proposal for the 2018 Transmission Expansion Plan subsequently validated by the CNE.

The Preliminary Technical Report published in mid-November received comments from the stakeholders at the end of the same month. It must be mentioned that there were no discrepancies regarding the HVDC line, and that no storage system was incorporated in this Expansion Plan. The Final Technical Report was released in January 2019.

### Qualification of Facilities 2020-2023 Process

During 2018 the Qualification of Transmission Facilities Process was carried out to qualify the transmission components, be they lines or substations, as part of the National, Zonal, Dedicated systems, or of Development Hubs. This new process established in the Transmission Law considered a change of the historical classification criterion, resulting in many modifications to the qualification.

In view of this, the CNE decided that all lines and substations covered in Decree 23T would pertain to the National system.

On the other hand, and while the Experts Panel discussed the Final Transmission Facilities Qualification Report, the CNE informed of several methodological errors and decided to invalidate the process. In October 2018 the Qualification Process restarted after the CNE published a new Preliminary Technical Report.

The Final Report of this process was also submitted to the Experts Panel in late 2018.

## Annual Regulatory Work of the CNE.

Starting in late 2016 and as provided for in the Electric Transmission Law, the National Energy Commission (CNE) must establish an annual Work Plan through exempt resolution, to propose, facilitate, and coordinate the development of technical standards. This regulatory work shall be carried out in a public and participatory process that must be started officially by the Commission, or under request of the Coordinator, the coordinated entities, or any other agency or institution involved in, or having an interest in the electric sector.

The CNE Work Plan for 2018 included the following Regulations:

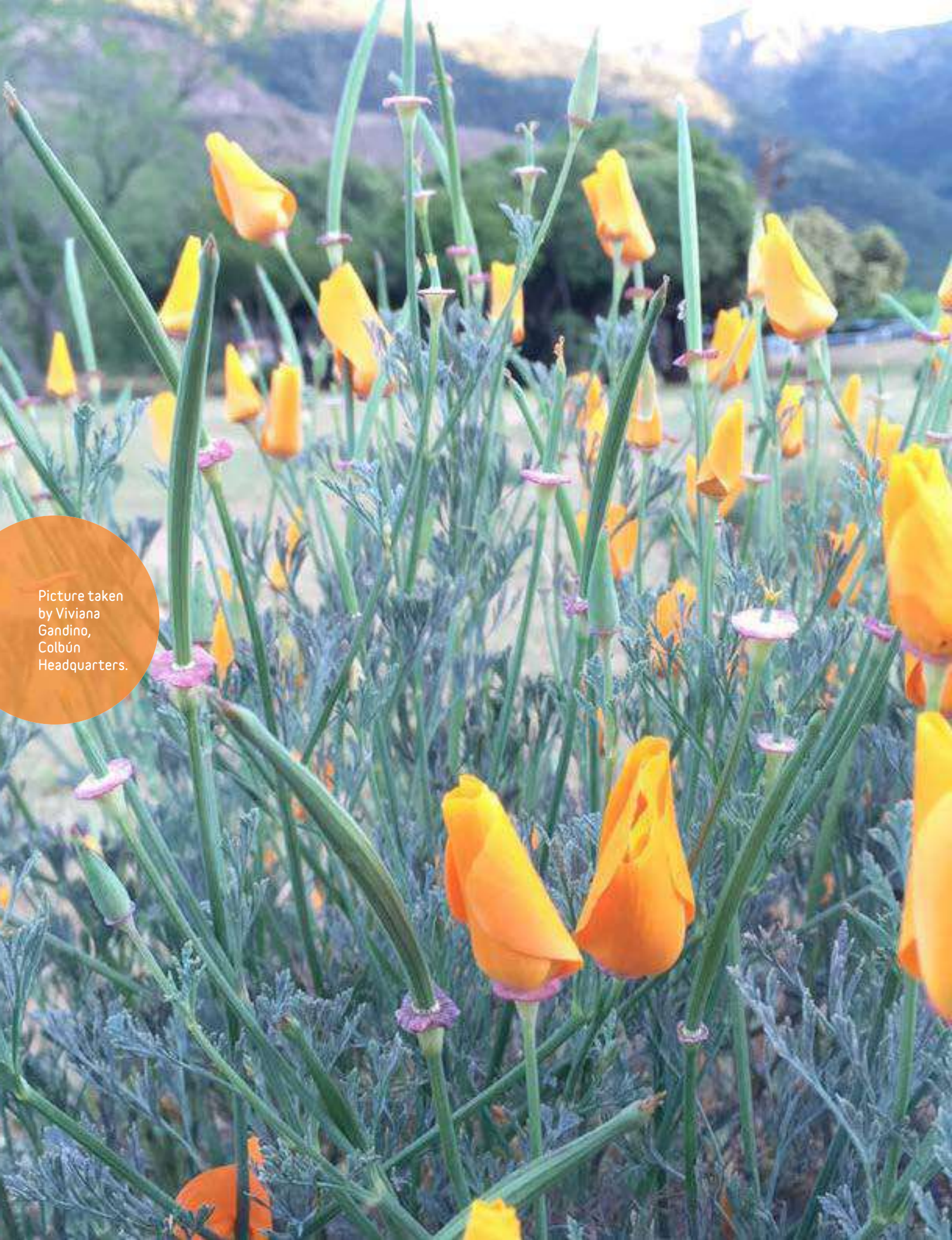
- **Technical Standards for Intermediate Systems**
- **Modification to Technical Standard on Safety and Quality of Service**
- **Modification of Technical Standard on PMDG Connection and Operation in Medium-Voltage Facilities.**
- **Modification of Technical Standard on Connection and Operation of Low-Voltage Generation Equipment.**
- **Technical Appendix. Measurement, Control, and Monitoring Systems of Technical Service Quality Standards for Distribution Systems.**
- **Technical Appendix Preparation. Facilities Design.**
- **Technical Standard on Coordination and Operation of the National Electric System.**

- **Technical Standard on Complementary Services.**

- **Technical Standard on Programming and Coordination of Units using Regasified Natural Gas.**

Although most of these standards are a legacy of the 2017 Work Plan, in 2018 many of the Working Groups on the preparation of these standards were set up. The work continues in 2019. All these regulatory processes start with the setting up of a Consulting Committee in which Colbún has participated either directly or via the professional associations.





Picture taken  
by Viviana  
Gandino,  
Colbún  
Headquarters.

## Draft Bills

There are two very relevant draft bills for the energy industry under discussion in the Congress.

### Energy Efficiency Law

The draft bill under discussion in 2018 in the Congress aims at encouraging the rational and efficient use of energy resources, promoting productivity and competitiveness improvements, improving the quality of life, and contributing to the country's sustainable development.

An interesting development is that the Ministry of Energy shall prepare a National Energy Efficiency Plan every five years, including the goals and objectives for the period, Specific Energy Efficiency actions to be implemented, and mechanisms for measuring and checking progress. The Plan shall be submitted to the Council of Ministers for Sustainability.

Furthermore, the draft bill establishes that companies having consumptions  $\geq 50$  Tcal, shall report their energy uses and energy intensity to the Ministry of Energy on an annual basis. The Ministry will be able to establish a list of consumers classified as "Consumers with Energy Management Capacity" (CCGE) including companies with energy consumptions for end uses over 100 Tcal or companies having at least one energy consumption facility for end use  $\geq 50$  Tcal.

The CCGE will send every year to the Ministry and the SEC a Report describing the energy consumptions for final use, opportunities detected, and energy efficiency actions carried out and projected.



### Draft Bill to Reform the SEIA

The draft bill prepared by the Ministry of the Environment and submitted to the Congress in mid-2018 has among its stated objectives the following: (i) reinforce the SEIA as an environmental protection instrument; (ii) increase the instances for citizens' participation; (iii) provide juridical certainty and increase the standards of quality and optimization of time; and (iv) strengthen regional participation.

Some of the main proposals of the project include abolishing the Council of Ministers, establishing a non-binding early citizen participation process, and creating three macrozone commissions responsible for the qualification of projects, made up of one member appointed by the President of the Republic, the SEA Macrozone Director, the Intendent of the region in which the project would be executed, the relevant Regional Secretaries of Economy and Environment, one expert from the Sciences area, and one law expert.



## The Legislative Agenda: What 2019 Might Bring

There are three draft bills already announced by the Government, but not yet submitted, that may be disclosed in 2019 with relevant effects on the electricity market



### New Electric Distribution Law

Since 2016, the public institutions of the electric sector and the relevant stakeholders of the system have prepared a diagnosis of the Chilean power distribution sector, which has not undergone a significant reform over the last years. All this with a view to creating a new regulatory framework to put this sector up to date.

The diagnosis work groups completed their task in 2018 and the Ministry of Energy announced that the discussion will be resumed in 2019, at which time the Company expects to continue contributing to the debate. In this context, we really appreciate the progress made so far in the identification of existing opportunities to make the electric sector more competitive, by introducing adjustments to the distribution regulation.

Although it does not relate directly to the diagnosis made by the Ministry of Energy, at Colbún we consider a relevant milestone the publication by the Coordinator in April 2018, of the list of all regulated clients that meet the legal conditions to become free clients. According to the Technical Standard for Service Safety and Quality, the distribution companies will send the updated list to the Coordinator and the Superintendence of Electricity and Fuel on a monthly basis, as proposed by Colbún in the Public Consultation of this standard in 2017. Without any doubt, these measures will help to set better conditions for competition and transparency in the sector.

However, we believe there is still room for improvements, such as the elimination of asymmetries of information still remaining, and the establishment of regulations to ensure that the quality of service for unregulated clients in a concession zone of a distribution company should be the same if supplied by a generation or distribution company.

Finally, this is about having each consumer who wants to and can contract its energy as free client to do so without any restrictions or limitations, stimulating a greater competition.



**New  
Flexibility  
Law**

In October 2018, the Ministry of Energy announced the draft bill addressing the flexibility required by the Chilean electric system to continue operating in a safe and efficient manner, within the context of the growing share of variable source renewable energies such as solar and wind energies.

While the Ministry has not yet revealed its discussion Agenda, it is possible that it will address issues relating to the strong penetration of renewable energies, the systemic effort needed to provide a safe and efficient support to these energies, and the allocation of costs that these systemic effort will impose on the market.

From Colbún's standpoint, and as we have already proposed it publicly, the regulation must care that the system expansion, pushed by variable source renewable energies, preserves the principles of safety and efficiency that have characterized its development. This implies the need to have price signals that prevent distortions and acknowledge one of the main features required for the future electric system: greater flexibility.

What is definitively needed is the adequate design with the support capacity to back the variability of intermittent renewable energies, which today is not well solved, in our opinion. This is not a problem that may jeopardize the quality and safety of the supply for now, but it will be a problem as the mentioned renewables increase their share in the generation matrix.

**Improvements  
to the Trans-  
mission Law**

Another announcement made by the authority is the beginning of a discussion to introduce improvements to the 2016 Transmission Law. While we do not know yet all the details of the Agenda, the authority has informed of the improvement areas involved: open access, efficient use of facilities with different purposes, and the need to provide flexible and efficient transmission solutions.





Colbún operates only one of the 28 coal-fired power plants existing in the system. This plant is one of the newest and most efficient of the system, with very high environmental compliance scores.

## Decarbonization Work Groups

In January 2018 the electricity companies operating coal-fired thermal plants in Chile signed a voluntary agreement with the Ministry of Energy and the Ministry of the Environment to stop developing new projects of this type that do not have carbon capture and storage systems installed, or equivalent technologies available at that time.

Moreover, and as part of the agreement, a Working Group was set up to discuss, in the context of the 2050 Energy Policy objectives, the technological, environmental, social, economic, safety, and sufficiency elements of each plant and of the whole electric system. The aim is to establish a schedule and the conditions for the scheduled phase out of the coal-fired power plants that do not have the referred carbon capture equipment.

In keeping with this, the new administration pushed for the formation of the Work Group known as the Decarbonization Work Group in which the following subjects were discussed in the different monthly sessions: (i) The international experiences; (ii) Impacts of decarbonization

In the Electric System; (iii) Environmental variables; (iv) Technological alternatives; and (v) Economic and social impacts of decarbonization.

The companies that signed the deal participated in these discussions – Colbún among them – in addition to the national Electricity Coordinator, energy consulting firms, municipalities, experts of the sector, and NGOs, among others.

Upon completion of the discussion of the Working Groups in 2018, in 2019 the Ministry will endeavor to identify a schedule for the phase out of the coal-fired plants with each generator, and the conditions required to carry out this process without jeopardizing the safety and the efficiency of the electric system.

In this regard, it is important to note that Colbún operates only one of the 28 coal-fired power plants of the system, which is one of the newest and most efficient plant with very high environmental compliance scores. Having said that, the Company will collaborate in this process, understanding this will be gradual, that the sector's safety and competitiveness must be protected, and that there are contracts involved.



## Changes to the Water Code

Since 2011 a draft bill reforming the Water Code is being discussed in Congress. In 2016, the first constitutional stage was approved by Chamber of Deputies, an initial text incorporating structural changes to the way in which waters are regulated today in Chile. Some of the most relevant changes were the provisional nature to granting water rights, the extinction of rights for different causes, mainly for failure to use thereof, and the establishment of a retroactive ecological flow for some of the already granted rights, among other matters.

In 2018, the new administration worked in this project to submit in January 2019 a substitute text to the draft bill now in the second constitutional stage. These indications meant a significant change to the text approved in the first stage, as it eliminates the concepts of expiry and extinction, in order to give greater

legal certainty to the rights, and increases the payment of licenses for non-use, to prevent speculation; it includes more powers to the water users associations, and includes tools oriented to safeguard the priority for human consumption and sustainable management of the water resource in a situation of evident climate change conditions.

Another reform to the Water Code processed in parallel with the above-mentioned reform is the one governing waters in relation to oversight and sanctions. This Law was promulgated and enforced on January 27, 2018.

The main changes relate to the reinforcement of the oversight powers of the General Water Directorate, increasing the power to impose sanctions and the penalties, a more detailed classification of causes for penalties, and a greater transparency in the information regarding actual extraction carried out by water use rights holders.

It also included modifications to the

Penal Code with a stronger penalty for water usurpation, including ground waters.

It is very important to ensure that changes will not negatively affect the investments made in developing hydropower in Chile, and consequently, the materialization of the Energy Policy (PEN 2050) which expressly sets out that hydropower with regulation capacity is very relevant to enabling a larger penetration of variable sources (solar and wind energy) adding flexibility and minimizing emissions and economic costs.

It is worth noting that hydropower makes a non-consumptive use of waters. That is, it does not consume water, it only uses it and returns water to its natural stream for industrial, agricultural, tourist, and human use downstream.





5.6%

Was the annual compound growth of the installed capacity in Peru from 2008 to 2018.

## Peru

The Peruvian electricity sector has a regulatory framework in force since 1992. This has driven a notorious increase in energy generation, with a compound growth of 9.4% installed capacity between 2008 and 2018.

The structure of the electricity sector allows its agents to participate in its regulation and promotion with the

aim of achieving the objectives of the energy policy and signing agreements to promote the synergies between the rights of the electricity companies to conduct activities and to make businesses, the rights of the end user to receive a good service, and the protection of the environment.

### Competent Entities of the Peruvian Power Sector in Peru



- Sectoral Policies
- Housing rights
- Standards and Regulations



- Transmission Plan and SEIN Procedures
- Coordination of the SEIN Operation
- Economic Dispatch



- Rates
- Regulatory and Standard Setting Function
- Dispute Settlement
- Answering Complaints



- Water Rights / Project Approval
- Oversight
- Measurement and Control of Water Resources
- Surveillance of the Operation of Water Users Associations



- Compliance with the law
- Supervision



## State Interventions and Market Distortions

The main reform advanced by the Electrical Concessions Law (LCE) of 1992 involved delegating the development of the electric industry, in part at least, to market forces, limiting the State's intervention to a regulatory role and as a subsidiary corporation.

This premise implied that investments, particularly investments on power generation should be guided by a price signal resulting from the law of electric supply and demand. As a corollary, this premise also implied that the private investor in generation should take on the demand risk (price and/or volume)

The recent interventions of the State, however, promoted the entry of generation power plants via market mechanisms (calls for bids or tenders) but isolating the investor from the demand risk. Even if this has reduced the risk of generation deficits because the system has a greater reserve margin, this has been achieved to the detriment of higher costs paid by users.

As a result of these interventions, a high percentage of generation had guaranteed demand due to long-term tenders called by the distribution companies (Law 28832) and/or PROINVERSION, the private investment promotion agency, commissioned by the Energy and Mining Ministry. This intervention produced a transfer of the demand risk from the generator to the demand itself and created different remuneration and regulatory regimes for each contract.

Three main issues are identified, among these different aspects:

### 1. Over contracting by Distribution Companies

In recent years, the electric generation supply in the SEIN has experienced a significant increase while the demand has not expanded at the rates forecasted in the auctions developed under Law 28,832. Furthermore, there is a noticeable migration of regulated clients to unregulated clients that generated an overcontracting situation by Distribution companies. For this reason, the Ministry of Energy and Mining (MINEM), in DS No 022-2018-

EM (modified by DS No. 026-2018-EM) activated a procedure which, from the date of publication of this Decree (May 9, 2018) and up until December 31, 2018, will authorize the generation companies to renegotiate their contracts with the distribution companies, in every aspect, to deal with the issue of over contracting.

To prevent discriminatory or abusive treatment on December 26, 2018, the MINEM issue the Ministerial Resolution 509-2018-MEM/DM, setting out that discounts in firm power and

transmission of contracted power agreed to between generation and distribution companies will have the same conditions.

Thus, Fenix amended its contracts with the distribution companies using a procedure by which Fenix will extend the contract and all the energy non consumed vis-à-vis the original contract will be paid in the form of a credit note or a future option in the period of contract validity.

### 2. Gas Price Declaration

On the other hand and to this date, the Peruvian electricity regulation maintains the exception established by Executive Decree 016-2000- EM of 2000, by virtue of which natural gas generation plants are authorized to declare their variable costs and to not submit them to audits, as is the case for other types of generation. It is worth mentioning that this rule is understandable within the framework of the promotion of the natural gas industry driven by the Natural Gas Industry Development Promotion Law approved under Law 27,133 and its Regulation, approved under Executive Decree 040-99- EM. But today, when natural gas account for almost 50% of the energy matrix this rule, which implies programmatic sectorial planning, is no longer compatible with the principles set forth in the LCE.

Aside from the fact that this difference

in treatment of generation for the dispatch is controversial, it gives just a group of companies with a specific technology (natural gas) freedom to offer a price, instead of supporting their costs, opens the possibility to offer prices above or below the real variable cost of generation. This in turn can lead to upward or downward pressures of the marginal cost, depending on the commercial positions of said companies, which are a function of the structure and regulation of the natural gas market (independent from the electric market)

During 2017, the regulations associated to the under declaration of prices were modified up to three times, to finally establish a minimum price for each company at the end of that year, for an initial period of six months which should end on the first semester of 2018. However, during the year the Government extended the life of the

relevant Decree for twelve additional months. The Ministry is still working on a regulatory alternative that may fix the distortions generated by this mechanism.

The incentive given to the RER generators, where the demand pays the difference between marginal costs and the price offered by the awarded company in the RER bidding through a single charge, has prompted the increase of electricity rates paid by the final consumers.

For all these reasons, a draft bill named "Law to re-establish efficiency in generation and electricity prices to guarantee a fair rate to the user" was submitted to the Congress on January 12, 2018. The aim of this bill is to eliminate the declaration of gas prices from July 2019.



In parallel, another congressman presented a bill named “Law to establish the veracity and transparency in electricity generation by guaranteeing rates amendment and by promoting investment and technological innovation in the energy sector”. This project sets out that part of the reduction in costs on the demand side shall be used to compensate for gas not used by the generation companies.

At the end of 2018, the Energy and Mines Commission of the Congress of Peru approved a proposal to merge both draft bills.

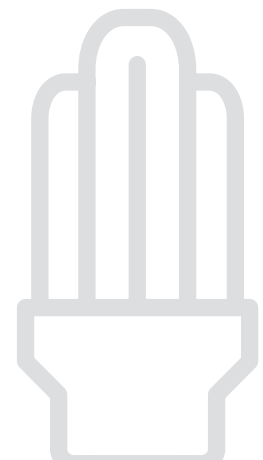
**3. Migration from Regulated to Unregulated Clients.**

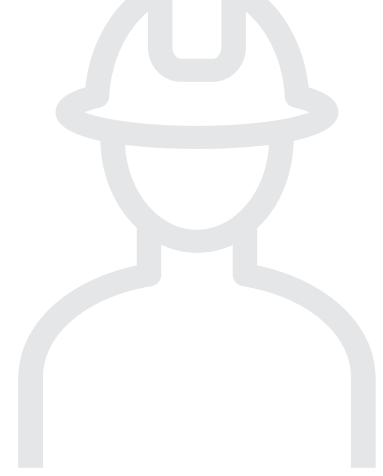
Given the above, since regulated users are subject to contracts resulting from bidding processes, there are differences

in the relative energy price paid by a regulated user, versus the value paid by a free user. This has encouraged regulated clients who can change their condition to free clients, to do so to benefit from the lower prices offered by the free client market. This “migration” of regulated to free clients is leaving distribution companies with excessive contracts with generation companies in the short term, while in the medium term when these same users would want to go back to their status of regulated clients, the distribution companies would fall short of contracts with generation companies.

**7.7%**

Was Fenix’s market share in electricity generation in Peru in 2018.





## 1.3 Operation and Commercialization Model (Chile and Peru)

### Operation

The operation of the energy sector in Chile is based on a marginal cost scheme (costs incurred by the system to supply an additional demand unit). The cost includes in turn efficiency and safety criteria in the allocation of resources.

To meet the “efficiency goal”, the power generation companies coordinate their operations through the CEN (National Electricity Coordinator) since January 2017 in the case of Chile, and through the COES (Center for Economic Operation of the National Interconnected System) in the case of Peru. The coordinator’s duty is to minimize the operational costs and failures of the electric system, and care for the quality and safety of the service supplied by the generation and transmission companies.

The main goal of the dispatch system is to ensure that the demand for electricity is served by the most efficient units available at any given point in time.

The respective coordinator entity dispatches the power plants in the ascending order of their respective declared variable production costs, starting with plants of the lowest declared price. The declared variable cost of the most expensive unit in operation represents the marginal cost of the system, and determines the energy price at the spot market at that time measured in US\$/ MWh. From 2008 and up until October 2017 Peru applied the idealized marginal cost, establishing that a system without any restriction in natural gas production or transportation or in energy transmission would be considered to calculate the energy spot price. Likewise, the spot price could not be higher than a limit value set by the authority.

With the end of the application of idealized marginal cost the spot price calculation had to include all the system’s inflections, establishing transitory mechanisms until the enforcement of the Wholesale Market Regulation in January 2018. In Chile, costs declared by each company owning a power plant are subject to audit and are declared on a weekly basis. In Peru, costs declared by thermal power plant operating with liquid (oil) or solid (coal) fuels are audited on a monthly basis.

Natural gas-fired power plants are free to under declare their operational costs, with a maximum limit equivalent to their actual operational costs, and a minimum limit equivalent to a price related to the gas supply take or pay.

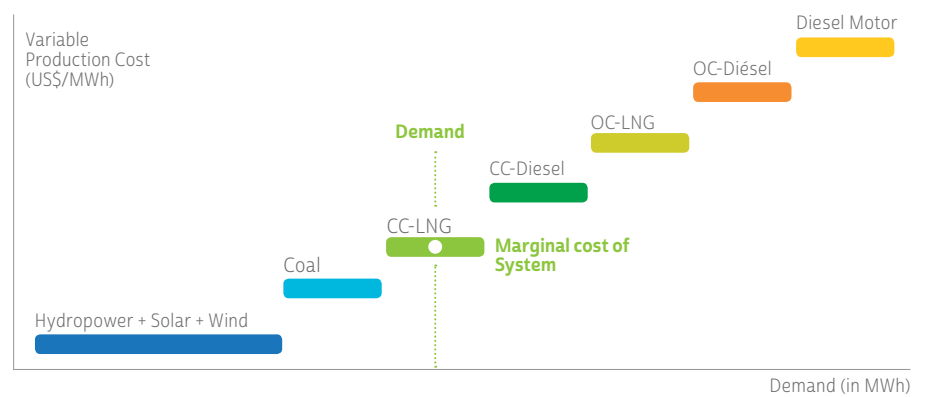
Power plants with variable costs lower than the spot price make a margin for the production delivered to the system, while the plant dispatched whose variable cost is equal to the spot price will only be able to recover its variable production costs. At any time generation companies are able to meet their contractual sales commitments with dispatched electricity, either their own or bought from other generation companies via de spot market.

To meet the “electric supply safety and continuity” objective the pricing model also considers a “charge per power” or an additional remuneration paid to those generation companies that have their plants available, as an incentive to have backup capacity in the system. This remuneration is measured in US\$/ KW/month.



Embalse Colbún, Región del Maule.

### Energy Dispatch Scheme







Type of Clients and Contracts

## Commercialization

In Chile and Peru generation companies can : (i) commit to sell energy to clients through (short / medium / long term) contracts (ii) to sell their energy production to other generation companies falling short in the spot market; (iii) or a combination of both.

Generation companies are authorized to sign contracts with three different types of clients: regulated clients (distribution companies); unregulated clients (industrial companies, mining companies, etc.); or other generation companies.

### Type of Clients and Contracts

	Regulated (Distribution Cos.)	Choice Between Regulated and Unregulated	Unregulated
Chile	< 500 KW	From 500 KW to 5.000 KW. Clients may opt under the condition that they stay for a minimum 4 years term in this scheme.	> 5,000 KW
Peru	< 200 kW	Clients between 200 KW and 2.500 KW may opt.	> 2,500 KW

### Market Share by Business Group in the SEN (Chile) in 2018

(generated energy in %)

Enel	24.2%
AES Gener	28.1%
Colbún	16.8%
Engie	5.9%
Others	25.0%
<b>TOTAL</b>	<b>100%</b>

Source: CEN



More than  
**200**

Companies participate in the competitive Chilean electricity market.



**16.8%**

Colbún's share in the Chilean market (energy generated in the National Electric System SEN)



In Chile Colbún holds a market share of 16.8% in Chile in terms of energy generated in the National Electric System (SEN) during 2018, and 14% market share measured by installed capacity. With more than 200 companies involved, the electricity market is very competitive in Chile. This competitive dynamic has intensified in the last years with the entry of new players into the market, and the impact of the large-scale roll-out of solar and wind energies at rapidly decreasing costs.

To a greater extent this can explain the growing share of these technologies in the generation mix, a trend that

we have no doubt will continue. For Colbún, this change in the energy industry opens an opportunity for expanding and creating future value for the Company. To this end, Colbún's new road map would allow the Company to double its size in ten years' time, based on solar and wind renewable energy projects that would add close to 4,000 MW installed capacity. This along with our base generation assets, particularly our reservoir hydroelectric power plants will enable us to provide our customers and the country with a continuous and safe renewable energy supply

**Market Share by Business Group in the SEIN (Peru) at Dec. 2018**

(by generated energy in %)

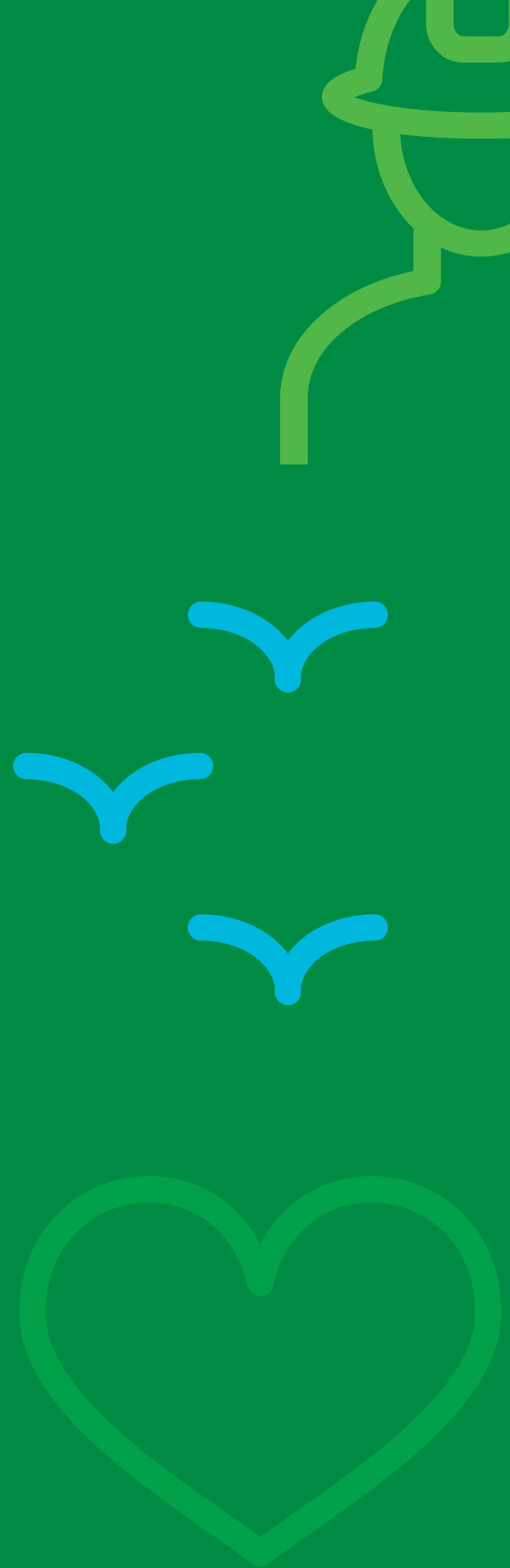
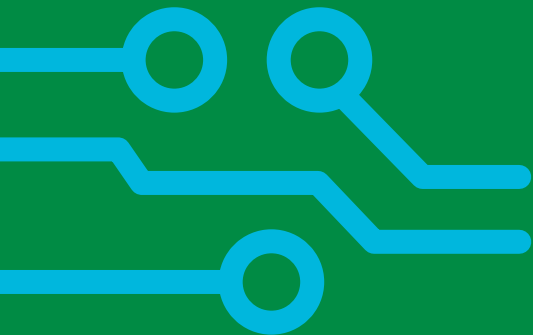
Electroperu	<b>13.6%</b>
Engie	<b>10.5%</b>
Enel Perú	<b>15.5%</b>
Kallpa	<b>15.0%</b>
Fenix	<b>7.7%</b>
Otros	<b>37.7%</b>
<b>TOTAL</b>	<b>100%</b>

Source: COES

# 02

## Colbún: Who We Are and What We Do

The following chapter contains essential and relevant information about the Company in terms of its history, milestones for the year, main assets, shareholders structure, corporate governance, business model and additional background that makes it possible to understand who we are and what we do in the Company.





# Materiality Analysis

Based on the Materiality Study carried out to prepare the Integrated Report, we identified four material relevant issues involving the topics analyzed in Chapter 2.



## Material Issue:

### New Business and Innovation

#### Scope:

- Business strategy
- New business and market opportunities
- Research and Development
- Innovation

#### Related Risks:

- New competitors
- Technological obsolescence
- Loss of competitiveness

#### How we manage it:

Colbún has been developing for many years a strategy that seeks to promote a culture of innovation in the Company, aimed at adding value to our operation, and which has involved the development of a company-wide Action Plan. In addition, since 2017 we have been developing a multidisciplinary project aimed at identifying new business opportunities based on innovation.

#### Why it is material for Colbún:

The energy industry is experiencing a significant transformation, hand in hand with technological innovations, that is changing the business: its management, power supply, the profile of electricity demand and the sector's future development. This translates into the emergence of new players, obsolescence of certain technologies, and new competitiveness parameters.

## Material Issue:

### Automation and Digitalization



#### Scope:

- Technology
- Automation
- Digitization

#### Related Risks:

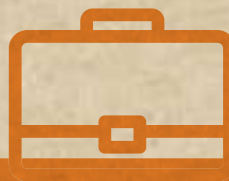
- Loss of competitiveness
- Technological obsolescence

#### How we manage it:

In 2018, Colbún articulated the Digital Transformation Plan comprising different initiatives, some already underway, and new ones. This plan comprises about 20 initiatives, which are implemented across the company and are aimed at achieving an efficient operation and at adding value to the business.

#### Why it is material for Colbún:

The use of tools and automation of processes and operations is spreading to all sectors, and the energy industry is no exception. Well designed and implemented, these tools make it possible to gain important efficiencies, and thus improve the competitive position of companies.



### Material Issue:

## Corporate Governance and Risk Management

### Scope:

- Corporate governance and ethical conduct
- Board of Directors' Composition
- Transparency
- Integrity
- Conflict of Interest
- Management Risks

### Related Risks:

- Reputational damage
- Legal non-compliance
- Loss of trust

### How we manage it:

Colbún has multiple documents and regulatory action plans: Manual on the Handling of Information of interest for the Market, Code of Ethics, Information Management Policy, Policy on the Contracting of Goods and Services Supplied by Politically Exposed Persons, Board of Directors Policy and Policy of Delegation of Authority of the Board of Directors. In addition, regular trainings are carried out on these matters, as well as certification processes.

During 2018, an Integrity Plan was implemented, mandated by the Board of Directors, aimed at promoting a culture of integrity, including issues relating to ethics, human rights, diversity and inclusion and compliance.

### Why it is material for Colbún:

Having a good Corporate Governance is an essential part of trust and relationship of a company with its stakeholders, and reputation problems can affect business development and value creation. Therefore, it is essential to ensure transparency, regulatory compliance of excellence, ethical behavior of all personnel and high standards in the management of conflicts of interest.

### Material Issue:

## Communication with Stakeholders



### Scope:

- External communication
- Management of Stakeholders
- Prosumer Citizens
- Suppliers' Management

### Related Risks:

- Conflicts with stakeholders
- Legal proceedings
- Reputational damage
- Power plant shutdown

### How we manage it:

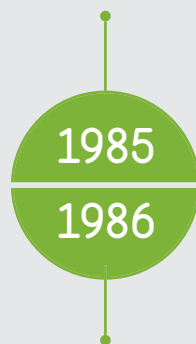
At a regulatory level, Colbún has different guidelines on how to manage its relationship with main stakeholders.: Policy on Investors Relations, Personnel Management Policy, External Communications Policy, Community Relations Policy, etc. We have also created multiple channels of communication and dialogue with all our stakeholders.

### Why it is material for Colbún:

The engagement of its stakeholders is essential for the development of Colbún's business, in all their dimensions: workers, investors, suppliers, communities and customers. To comply with this purpose, it is very important to have a permanent and fluid communication with them, that allows to detect opportunities and manage risks.

## 2.1 Our history

Based on the agreement to divide Empresa Nacional de Electricidad S.A., Endesa, the Electricity Company Colbún Machicura S.A., currently Colbún S.A, is created



Commissioning of Colbún and Machicura reservoir hydroelectric power plants.

Commissioning of San Ignacio Hydroelectric power plant.



CORFO ceases to be a main shareholder of the Company by selling 37% of its shares in Empresa Eléctrica Colbún Machicura S.A. The subsidiary Empresa Eléctrica Industrial S.A. is created.

Commissioning of Rucúe Hydroelectric power plant.



Commissioning of Nehuenco I combined-cycle thermoelectric power plant. Through its affiliate Empresa Eléctrica Industrial S.A., Colbún S.A. acquires the Carena run-of-the river hydroelectric power plant.



CORFO sells most of its shares in the local stock market and the Company's name is changed to "Colbún S.A.", while it also expands its line of business.

Commissioning of Nehuenco II combined-cycle thermoelectric power plant.

Tractebel sells its entire share ownership in Colbún. In this sale Antarchile S.A., company related to the Angelini group, acquires 9.53% of Colbún's ownership.

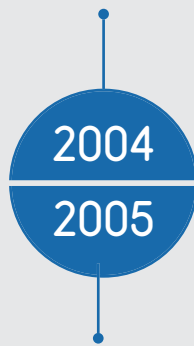
A partnership is created for the development of HidroAysén project, where Colbún contributes 49% of Centrales Hidroeléctricas de Aysén S.A.'s capital and Endesa contributes the other 51%.

Commissioning of Quilleco and Chiburgo run-of-the-river hydroelectric power plants. Chiburgo is the first power plant of the Company built within the legal framework of the law that promotes non-conventional renewable energies.

Commissioning of the dual operation (natural gas and diesel oil) of the power plant Nehuenco II.



Commissioning of Nehuenco III open-cycle thermoelectric power plant.



Commissioning of Candelaria open-cycle thermoelectric power plant begins.

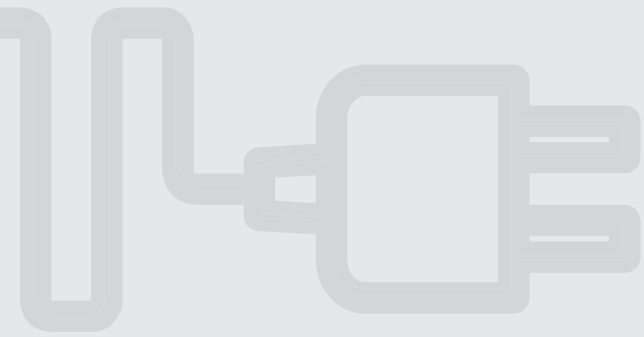
Minera Valparaíso S.A., an affiliate of Matte Group becomes the principal shareholder of Colbún S.A. as a result of the merger with Hidroeléctrica Cnelca S.A. With the merger, the following run-of-the-river hydroelectric plants are incorporated: Chacabuquito, Los Quilos, Blanco, Juncal, Juncalito, together with the reservoir hydroelectric plant Canutillar, and the thermoelectric plant Antilhue.

Purchase of 100% of the share ownership of Sociedad Hidroeléctrica Melocotón Ltda.



Registration of Chacabuquito run-of-the-river hydroelectric power plant with the United Nations' Clean Development Mechanism, which will allow an annual reduction of approx. 80 thousand tons of CO<sub>2e</sub>., equivalent to removing from circulation more than 20 thousand cars. It is the first hydroelectric power plant in the world that trades carbon credits. Within the framework of the first tenders with distribution companies, Colbún is awarded supply contracts for 10 to 15-year term, with CGED, SAESA and Chilectra for 2.800 GWh annually starting in 2010; and 2.500 GWh annually, starting in 2011.





Commissioning of Hornitos Hydroelectric power plant.

Registration of Hornitos and Quilleco run-of-the-river hydroelectric power plants at the United Nations' Clean Development Mechanism, which will allow an annual reduction of 118 thousand and 172 thousand tons of CO<sub>2</sub>e respectively.

Commissioning of San Clemente mini-hydro power plant.

Issuance of the first International Bond for US\$500 million for a 10-year term.

Definition of Colbún's Sustainability Strategy.

Commissioning of Santa Maria's Unit 1 (Biobío Region) the first coal-fired thermoelectric power plant pertaining to Colbún.

Publication of our first Sustainability Report, compiling all the indicators that measure our performance in this matter according to the Global Reporting Initiative (GRI) methodology.

Creation of the subsidiary Colbún Transmisión S.A. The affiliates Hidroeléctrica Guardia Vieja S.A., Hidroeléctrica Aconcagua and Obras y Desarrollo S.A. merge with Colbún.

Commissioning of Angostura Hydroelectric plant.

Opening of Angostura Park, a tourism project associated to the power plant of same name.

Colbún issued a second bond in the international financial market for US \$500 million.

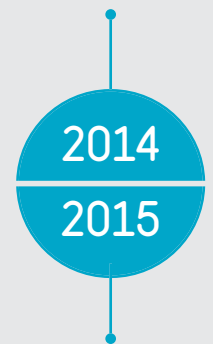


The application of International Financial Reporting Standards (IFRS) starts, and the U.S. dollar is adopted as the functional currency.

Commissioning of Los Pinos open-cycle thermoelectric power plant.



Registration of San Clemente run-of-the-river hydroelectric power plant at the United Nation's Clean Development Mechanism (CDM), which will allow an annual reduction of approximately 17 thousand tons of CO<sub>2</sub>e, equivalent to removing from circulation more than 4 thousand cars.



Acquisition of a 51% stake in Fenix Power Perú S.A., Peruvian company owner of a combined cycle thermoelectric power plant based on natural gas, located in Chilca, Peru.



Publication of the Company's first Annual Integrated Report, which reflects the Company's 2015 performance and gathers in a single document the Annual Report and Sustainability Report.

Colbún acquires part of SunEdison's assets in Chile, including supply contracts.

Colbún introduces a new corporate image. The new logo includes three core concepts: Pride in the Company's history; evolution toward new technologies; and an invitation to take on the challenges of the future.



2016

Colbún was awarded a land concession for 30 years for the development, construction and operation of a wind farm located approximately 70 km northeast of Taltal. The project called "Horizonte" wind farm considers 607 MW of installed capacity.

Company issued issues two bonds in the international market:

- Fenix issued its first bond, for US \$340 million.
- Colbún issued a new series of US \$500 million bonds, using funds to refinance the bonds that expired in 2020.



2017

The Hydroaysén S.A. company reported halting of activities and cancellation of the Hydroaysén Hydroelectric Project.

# 2018

## **Colbún acquires First Solar project in Tarapacá**

**Region:** The project acquired corresponds to the 150- 200 MW "Sol de Tarapacá" Photovoltaic power plant, located in the Pozo Almonte district. This operation, carried out in March, is included within Colbún's strategy to increase renewable energy from variable sources (REVS) sources in its generation mix.

## **Zaldívar will be the first mine site to operate with 100% renewable energy after signing an agreement with Colbún:**

The agreement, which will be in force as from July 2020 and will have a 10-year term, will allow the mining company to be supplied by clean energy for itself, preventing emissions equivalent to 350.000 tons of annual greenhouse gases.

## **With environmental and design innovations,**

**La Mina Power Plant was commissioned:** The architecture of its power house is an innovative and unique design in Chile, aimed at mimicking a high-mountain refuge. La Mina Power Plant (34 MW) is Colbún's fifth power plant accredited to compensate for third-party emissions, making us the largest issuer of carbon credits to compensate for greenhouse gas emissions from hydroelectric generation.

**Comissioning of Ovejería Solar Plant:** The photovoltaic Comissioning, located in the district of Tiltill, has a nominal power of 9 MW. Its operation will prevent the emission of 11.000 tons of CO2 per year, which is equivalent to removing approximately 2.750 cars from circulation.

## 2.2 Our 2018 milestones



### January

#### AtaMos Tec project starts new era in solar development

This scientific initiative financed by CORFO and with the joint participation of Colbún, Universidad de Chile, Universidad de Antofagasta, Universidad Federico Santa María, Universidad de Concepción and Universidad Adolfo Ibáñez in addition to foreign research institutes, was officially launched. It seeks to generate its own solar technology or to adapt the existing one to the exceptional radiation conditions of the Atacama Desert.



### March

#### Colbún acquires First Solar project in Tarapacá Region

The project is the "Sol de Tarapacá" 150-200 MW photovoltaic power plant, located in the Pozo Almonte district, an operation included within Colbún's strategy aimed to increase renewable energy from variable sources (REVS) in its generation mix.



### April

#### Start of Company's Public Accounts Program

The Santa María Thermolectric Complex carried out in Coronel its fifth public account, an activity in which it reports the power plant's environmental, social and operational performance to the community. Colbún's public accounts program started in 2014 in this city and has gradually extended to all the Company's operations. In 2018, 10 meetings of this type were carried out covering 13 districts, attended by about 550 people.

#### Cuentas públicas 2018

Santa María Complex	Wednesday, April 18
Nehuenco Complex	Tuesday, May 15
Candelaria Power Plant	Tuesday, May 15
Los Pinos Power Stations	Wednesday, September 12
Angostura Power Plant	Wednesday, October 17
Rucúe-Quilleco Power Plants	Thursday, October 18
Canutillar Power Plant	Thursday, November 15
Fenix Power Plant	Wednesday, November 28
Carena Power Plant	Wednesday, December 5
Aconcagua Complex	Wednesday, December 12



## June

### Zaldívar will be the first mining site to operate with 100% renewable energy after signing an agreement with Colbún

The agreement, which starts in July 2020 and will have a ten-years term, will allow the mining company to be supplied with clean energy, avoiding emissions equivalent to 350,000 tons of annual greenhouse gases.



### Moody's assigns Investment Grade international rating to Colbún

The risk classification agency assigned the Baa2 category to the Company and its two bonds issued on the international market, defining a stable perspective for the Company, upon its initial risk rating.



## July

### With environmental and design innovations, La Mina Power Plant is commissioned.

The architectural design of its power house is innovative and unique in Chile, aimed at mimicking a high-mountain refuge. The La Mina Power Plant (34 MW) is the fifth Colbún power plant accredited to compensate for third-party emissions, turning us into the largest issuer of carbon credits to compensate for greenhouse gas emissions from hydroelectric generation.



### Colbún reaches an agreement with Commodity Exchange to benefit SME suppliers

The agreement will provide suppliers access to the commercialization of invoices and other instruments on the cloud arranged by the Exchange for transactions between different financial market players, granting a competitive liquidity alternative for companies providing services to the Company.



## August

### Colbún leads the 2018 Informe Reporta ranking

The 2017 Integrated Report was recognized in the Leaders in Relevance Principles and Leaders in Public Services Sector categories, distinguishing Colbún for the second consecutive time within the first three places of the general ranking.



### Commissioning of Ovejería Solar Plant

The photovoltaic farm, located in the district of Tiltit, has a nominal power of 9 MW. Its operation will prevent the emission of 11,000 tons of CO<sub>2</sub> per year, which is equivalent to removing approximately 2,750 cars from circulation.

## September

### “Voices with Energy 2018” with focus on innovation

Around 700 persons assembled at the seminar “Voices with Energy 2018, Made in Chile for the world: How can Chilean companies promote world-class innovation?” organized by Colbún S.A. On the occasion, the speakers were MIT’s associate professor, César Hidalgo; Chilean biochemist Yuly Fuentes-Medel and Colbún’s General Manager, Thomas Keller. The seminar was moderated by Andrés Benítez, Business and Editorial Director of the Copesa Group.



### Inclusion in DJSI Chile and DJSI of the Pacific Alliance indexes

Colbún S.A. was selected for the third consecutive year in DJSI Chile and second in DJSI MILA, carried out by the Swiss consultant RobecoSAM, that assesses the performance of companies in economic, environmental and social fields. Colbún’s economic evaluation, obtained high scores in the administration of Customer Relationship Management, Stakeholder Engagement and Occupational Health and Safety.



## October

### Reverse Osmosis Plant receives innovation award

The reverse osmosis plant of the Nehuenco Complex was especially recognized for innovation, at the Competition and Seminar “Good Practices for a More Sustainable Electric Future” organized by Chilean generators.



### Agreement with Chapo Lake Neighbors

The Neighbors Association of the Chapo Lake and Colbún subscribed an agreement to permanently raise the operational level of the lake for the benefit of the area’s tourist development. Following this agreement, in November, a tourist promotion work group was set up with the participation of neighbors, the municipality of Puerto Montt, regional agencies and authorities and the Company.



## November

### Chile resumes introduction of Argentine gas through Nehuenco Complex

The interruptible contract between Compañía General de Combustibles and Colbún S.A., is valid from October 1 2018 to April 30, 2019. It is expected to import from Argentina surplus natural gas not required by the local market during the summer, given the high seasonality of Argentine demand.

### Colbún becomes the first company to receive the maximum distinction from Huella Chile program

The Company was recognized for its carbon footprint management with the four qualification stamps assessed by this program, reporting to the Ministry of Environment: Quantification, Reduction, Neutralization and Declaration of Excellence. Thus, Colbún becomes the only company in Chile to be awarded the maximum distinction of the Huella Chile program.

### Fenix carries out the first public account

As part of Colbún's Public Accounts program, our Fenix subsidiary carried out its first public account meeting in the power plant facilities.

The generator becomes the first company in Chilca to report its corporate results to the community, following the guidelines of its Colbún parent company, Colbún.



## December

### Customers convene at annual meeting and address industry challenges

Global energy transition and transmission challenges in Chile were the two major issues addressed by Colbún on Customer Day 2018, which was held for the second consecutive year to create a space for dialogue and information with Colbún's main customers.



### Municipality of Colbún and Colbún S.A. completed socialization of the new Resort Machicura

The project promoted by both entities envisages the implementation of a 150-meter long beach of public access and a series of services for the visitors of the Machicura Resort. During its first summer of operation the resort had over 100,000 visitors.



## 2.3 Our facilities

102-6

# 26

Generation power plants in Chile and Peru

Colbún currently operates 26 power generation plants, 25 of which are in Chile and one in Peru, acquired in December 2015.

In addition, the Company owns 28 substations, close to 941 km of transmission lines and various concessions and patents, among them, the concession for the development of a wind farm in Taltal, geothermal, electrical and transmission concessions and water rights that allow building projects for a total estimated capacity of 600 MW. All facilities and water rights are owned by Colbún and its subsidiaries.



Colbún Power Plant



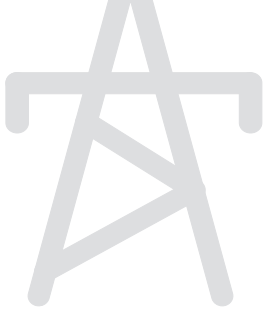
Candelaria Power Plant



Canutillar Power Plant



Plant solar Ovejería



941 Km

Transmission Lines



1

Onerous concession for the development, construction and operation of a wind project in Taltal

Nehuenco Power Plant



Santa María Power Plant



Angostura Power Plant



La Mina Power Plant



Rucue Power Plant



Machicura Power Plant







48%

Of the energy generated by Colbún in Chile in 2018 came from renewable sources.

# Map of Colbún power plants and third-party Suppliers \*



18 Renewable energy power plants (hydraulic and solar)



08 Thermoelectric power plants



- 1 ACONCAGUA BASIN**  
210.3 MW / Run-of-the-river  
Los Andes, San Esteban, Valparaíso Region  
• Los Quilos (39.9 MW)  
• Chacabuquito (25.7 MW)  
• Blanco (53 MW)  
• Juncal (29.2 MW)  
• Juncalito (1.5 MW)  
• Hornitos (61 MW)

- 2 OVEJERÍA SOLAR PLANT**  
9 MW / Photovoltaic  
Til Til, Metropolitan Region

- 3 CARENA POWER PLANT**  
410 MW / Run-of-the river  
Curacaví, Metropolitan Region

- 4 MAULE BASIN**  
Reservoir - Run-of-the-river  
Colbún, Yervas Buenas, San Clemente, Maule Region  
• San Clemente (5.9 MW)  
• Chiburgo (19.4 MW)  
• La Mina (34 MW)  
• Colbún (474 MW)  
• Machicura (95 MW)  
• San Ignacio (37 MW)

- 5 EL LAJA BASIN**  
249.2 MW/Run-of-the-river  
Antuco, Quilleco, Biobío Region  
• Rucúe (178,0 MW)  
• Quilleco (70,0 MW)

- 6 ANGOSTURA**  
323.8 MW / Reservoir  
Santa Bárbara, Quilaco, Biobío Region

- 7 CANUTILLAR**  
172 MW / Reservoir  
(Lago Chapo), Cochamó, 3 Los Lagos Region



Purchases Of Renewable Energy And/Or Attributes

- 1 PUNTA PALMERAS (ACCIONA)**  
45 MW / Wind  
Canela, Coquimbo Region

- 2 LAUTARO POWER PLANT (COMASA)**  
26 MW / Biomass  
Lautaro, Araucanía Region

- 1 FENIX POWER**  
565 MW / Gas  
Chilca, Department of Lima

- 2 NEHUENCO COMPLEX**  
874.7 MW / Diesel / Gas  
Quillota, Valparaíso Region  
• Nehuenco I (368.4 MW)  
• Nehuenco II (411.2 MW)  
• Nehuenco III (108.0 MW)

- 3 CANDELARIA**  
256,1 MW / Diésel / Gas  
Mostazal, Codegua O'Higgins Region

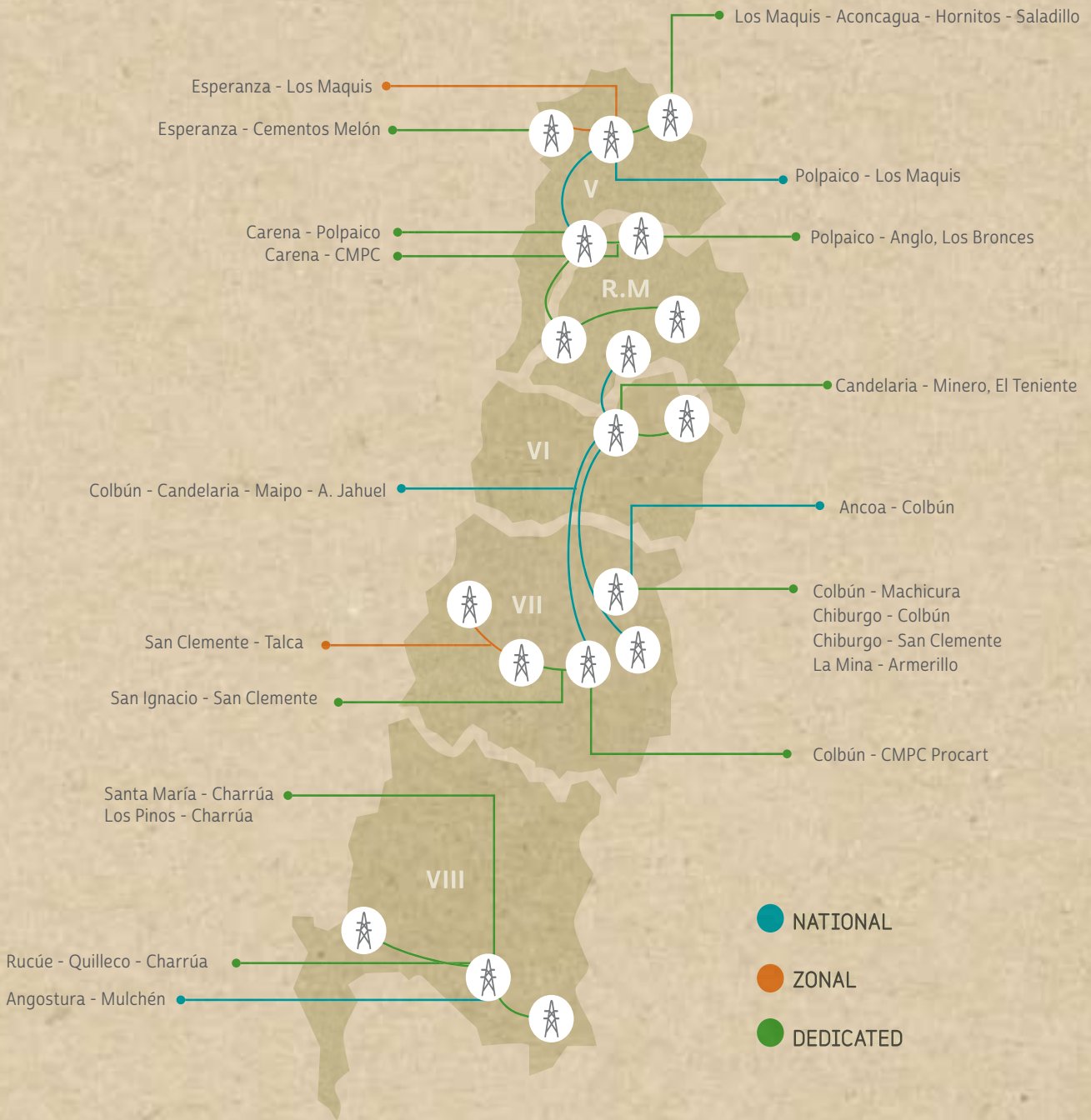
- 4 LOS PINOS**  
104.2 MW / Diésel  
Cabrero, Biobío Region

- 5 SANTA MARÍA**  
350 MW / Coal  
Coronel, Biobío Region

- 6 ANTILHUE**  
102.5 MW / Diésel  
Valdivia, Los Ríos Region

\* Power informed to the National Electrical Coordinator and in force as of December 31, 2018.

# Colbún Transmission Lines





## 2.4 Ownership and Corporate Structure

102-5, 102-10

### Ten major shareholders as of December 31, 2018 (%)

(102-5)

Name of shareholders	Share %
Minera Valparaiso S.A.*	35.17%
Forestal Cominco S.A.*	14.00%
Antarchile S.A.	9.58%
AFP Habitat S.A.**	6.82%
AFP Provida S.A.**	4.69%
AFP Cuprum S.A.**	4.02%
Banco Itaú on behalf of investors	3.89%
Bank of Chile on behalf of third parties	3.82%
AFP Capital S.A.**	3.17%
Banco Santander - JP Morgan	3.07%
Other shareholders	11.77%
<b>TOTAL</b>	<b>100%</b>

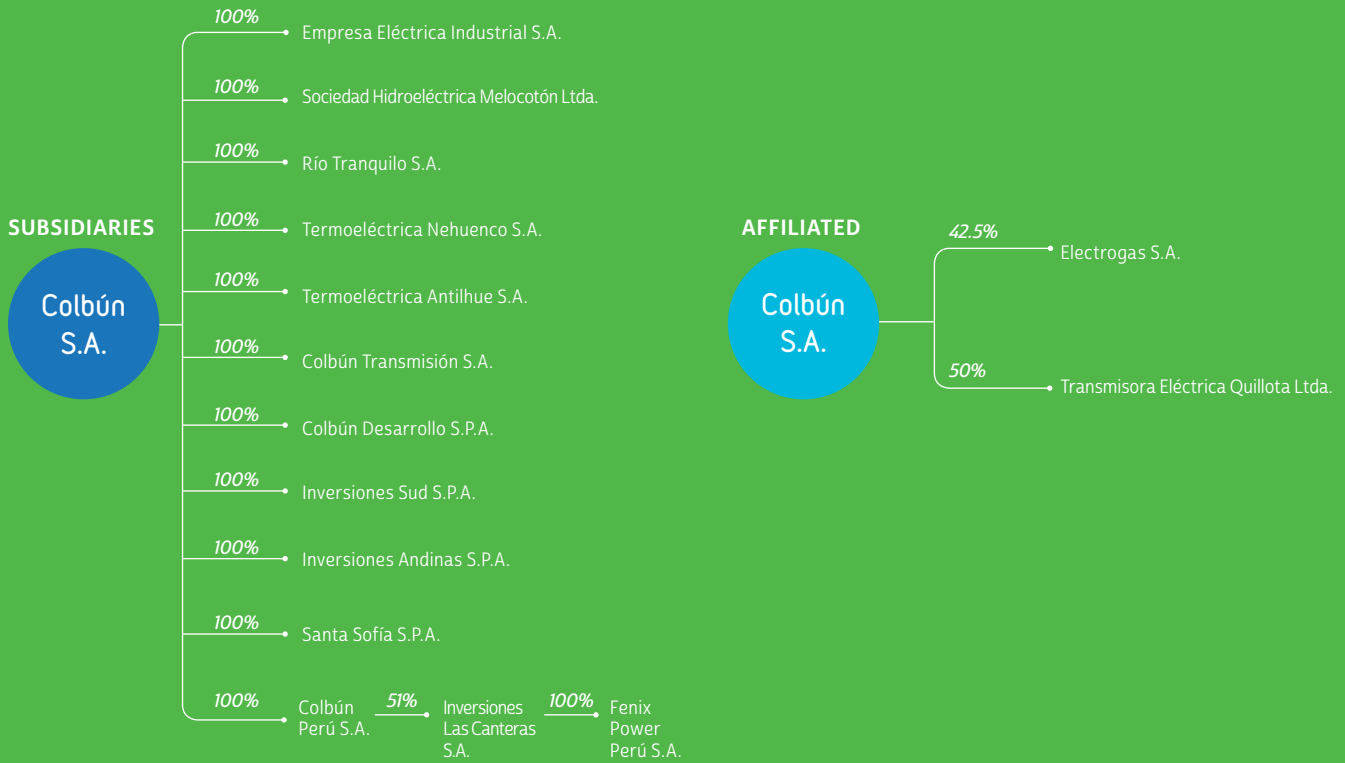
**Note:**

As of December 31, 2018, the Company's capital stock consisted of 17,536,167,720 single series, fully subscribed and paid, non-par value shares. The number of shareholders at the closing date is 2,891. As of December 31, 2018, the Matte Group directly and through other affiliates hold the control of the Company - 49.96% - in single series shares. The Matte Group holds investments in the energy, financial, forestry, real estate, and telecommunications. AntarChile S.A. Taxpayer N°: 96.556.310-5) holds 9.58% ownership of Colbún, allowing it to appoint a Board member. In addition, the AFPs altogether hold a 20.82% stake in Colbún.

(\*) Companies belonging to the controlling group (Matte Group).

(\*\*) Corresponds to the consolidated share for each Pension fund Administrator.

## Corporate Structure (102-10)



**51%**  
Colbún Perú S.A.

**36%**  
Blue Bolt A 2015 Limited  
(Subsidiary controlled by  
Abu Dhabi Investment  
Authority)

**13%**  
Infrastructure  
Investment Fund  
of Sigma del Peru SAFI

**100%**  
Inversiones Las  
Canteras S.A.

Fenix Power  
S.A.



Aconcagua Complex,  
Valparaíso Region.  
Photo by Francisco  
Camus, technician,  
control systems  
of the Aconcagua  
Complex.

## 2.5 Our corporate governance

Corporate governance refers to the entire set of principles, standards and mechanisms that regulate the operation of the bodies that govern the Company, to create sustainable value for its shareholders and stakeholders.



### 1 Corporate Governance Structure

The bodies responsible for enforcing the governance of Colbún are the Board of Directors, its advisory committees, the Management and workers.

At the top of the structure are shareholders and other stakeholders who are impacted by the Company's governance strategy.

### 2 Corporate Governance Structure

Procedures that promote an adequate governance of the Company, its subsidiaries and operations in general.

### 3 Corporate Governance Framework

Internal regulations (policies and procedures) and external standards (regulations) that define how Colbún's corporate governance operates.

## Board of Directors

102-18, 102-19, 102-21, 102-22, 102-23, 102-24, 102-33, 102-34, 102-35, 102-36, 405-1, 102-37

Colbún's Board of Directors is the highest governing entity of Corporate Governance.

Our Board of Directors is made up of nine members, who do not hold executive positions, can be re-elected indefinitely (except for Directors representing AFPs) and may or may not be shareholders.

The Board holds regular monthly meetings to address all relevant matters relating to the Company's performance and operation and extraordinary meetings when there is the need to address a specific or contingent matter.

In addition, once a year the Board holds the Regular Shareholders' Meeting, where all shareholders can participate with voice and vote. Once a year the Board validates corporate objectives for the management, which consider various dimensions: financial results, social and environmental management, occupational safety, work environment and growth.

The Board Policies and Procedures establish a yearly program of visits by board members to the Company's facilities, which represents an instance of direct communication with the Company's workers.

## Thus, in December 2018, the entire Board visited the Ovejería Photovoltaic plant,

The Board of Directors delegates part of its authority in the Company's Management through the document called Delegation of Authority of the Board Policy.

The Board has an information system in place that allows remote, safe and permanent access to the information of Board and Committee meetings in which they participate.

## Board Management Reports

Executives who are accountable for or who report directly to the Board are the General Manager and the internal Audit Manager. Without prejudice to the foregoing, regular attendants to Board Meetings are the Business Manager, Finance Manager and Legal Manager, who also acts as Secretary of the Board of Directors. Other managers that report directly to the General Manager may attend, as necessary, depending upon the subject to be discussed by the Board.

At Board Meetings, the General Manager reports on the Company's monthly performance in its main line of business showing the most relevant business indicators (Account of the General Manager); he also discusses the special or most relevant situations, subjects or transactions that need to be reported to or approved by the Board each month, including the main activities undertaken with our stakeholders (workers, community, etc.).

The General Manager and his team provide periodic report to the Board on risk and sustainability related matters.

In matters pertaining to approvals and/or updating of regulatory bodies or key declarations related to the organization's economic, environmental and social issues, senior management (General Management) proposes and the senior governing body (Board of Directors) approves.

## Board of Directors Training

102-27, 102-28

During 2018, two training sessions were provided for the Board of Directors, one addressed the topic of innovation and another focused on energy transition and the future of electricity generation, both were provided by external specialists, aligned with the Board's training policy, which forms part of the Board's policy and procedures.

Our Board has a performance self-assessment procedure, applied in 2018 for the third time, the results of which were presented at the Board's session carried out in December of last year. This process, led by the Chairman of the Board, assesses the operation of the Board and detects opportunities to improve the performance of our highest governing body.

*Board of Directors visit to Ovejería, in December 2018*







**María Ignacia Benítez**  
(1958-2019)

Her career was marked by her contribution to the development of environmental practices and policies, becoming responsible for leading the creation of the first Ministry of Environment in our country, in 2010. From her role as Minister, María Ignacia Benítez contributed in a relevant manner to strengthen Chile's environmental institutional framework, e.g. the creation of the Superintendence of Environment and the new standard on thermoelectric generating plant emissions, among others.

A Chemical Civil Engineer from Universidad de Chile, she was involved in environmental issues early on as a professional at Gestión Ambiental Consultores (GAC) firm, where she was head of Senior Projects and Deputy Finance Manager, working on various investment projects. In the public sphere, in addition to holding the office of Minister, she was Regional Advisor to the Regional Government of the Metropolitan Region from 2000 to 2008, while in the academic field she was professor of Business Administration at Universidad Adolfo Ibáñez.

At Colbún, she was chosen by the AFPs as Director in 2016. Deeply involved in her position and in the Company's progress, Ms. Benítez was renowned for her expertise on environmental issues and sustainability, her comprehensive view of the role of companies and her clarity and in-depth knowledge on business development. However, in addition to her intellectual and professional capabilities, all of us who worked with her remember her great warmth and kindness in the day to day.

No doubt, her passing is a significant loss to our Company.



## Members of the Board

- 1. JUAN EDUARDO CORREA GARCÍA**  
 CHAIRMAN  
 Civil Industrial Engineer, U. de Chile
- 2. VIVIANNE BLANLOT SOZA**  
 VICE CHAIRPERSON  
 Economist PUC
- 3. LUZ GRANIER BULNES**  
 INDEPENDENT DIRECTOR  
 Commercial Engineer, U. de Chile
- 4. BERNARDO LARRAÍN MATTE**  
 DIRECTOR  
 Commercial Engineer, PUC
- 5. ANDRÉS LEHUEDÉ BROMLEY**  
 DIRECTOR  
 Commercial Engineer, PUC
- 6. JORGE MATTE CAPDEVILA**  
 DIRECTOR  
 Commercial Engineer, PUC
- 7. FRANCISCO MATTE IZQUIERDO**  
 DIRECTOR  
 Attorney, PUC
- 8. HERNÁN RODRÍGUEZ WILSON**  
 DIRECTOR  
 Civil Industrial Engineer, PUC



## Board Compensation

102-35

Members	Position	2017				2018			
		Fixed Compensation MUS\$	Variable Compensation MUS\$	Directors' Committee MUS\$	Sub-total MUS\$	Fixed Compensation MUS\$	Variable Compensation MUS\$	Directors' Committee MUS\$	Sub-total MUS\$
Juan Eduardo Correa García	Chairman	124	86	8	218	153	236		389
Vivianne Blanlot	Vice-Chairperson	74	86		160	76	141		217
Bernardo Larraín Matte	Director	98	172		270	76	190		266
Luz Granier Bulnes	Director	74	86	25	185	76	141	26	243
María Ignacia Benítez Pereira	Director	74	47	25	146	76	141	26	243
Francisco Matte Izquierdo	Director	74	47	17	138	76	141	26	243
Jorge Matte Capdevila	Director	74	47		121	76	141		217
Andrés Lehuédé Bromley	Director	74	7		81	76	141		217
Arturo Mackenna Íñiguez	Director	74	86		160	46	141		187
Hernán Rodríguez Wilson	Director				0	31			31
Eduardo Navarro Beltrán	Director		79		79	0			0
Luis Felipe Gazitúa Achondo	Director		35		35	0			0
Eliodoro Matte Larraín	Director		35		35	0			0
Juan Hurtado Vicuña	Director		35		35	0			0

### Notes:

In the Regular Shareholders' meeting held on April 27, 2018, it was agreed to maintain the compensation of the Board of Directors approved at the Regular Shareholders' Meeting of 2016, which contemplates payment of an annual variable compensation equivalent to 0.75% of profits.

In the ordinary session held on July 31, 2018, the Board of Directors appointed Hernán Rodríguez Wilson as new member of the Board, who replaced Arturo Mackenna Íñiguez, who resigned from his position.



## Board's Diversity Indicators

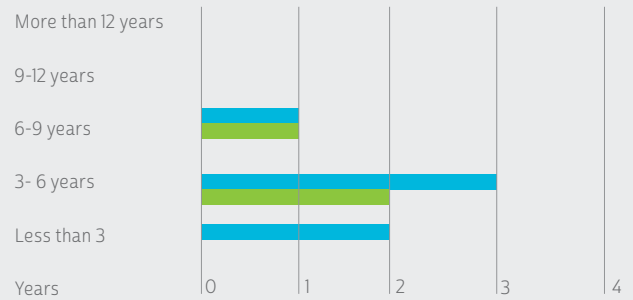
NCG.386

Matters of inclusion, diversity and non-discrimination are part of the Company's "Code of Ethics". Colbún has not implemented a procedure or policy establishing a diversity criteria for the designation and election of Board members, since its shareholders are legally entitled to consider and define candidates for the Board.

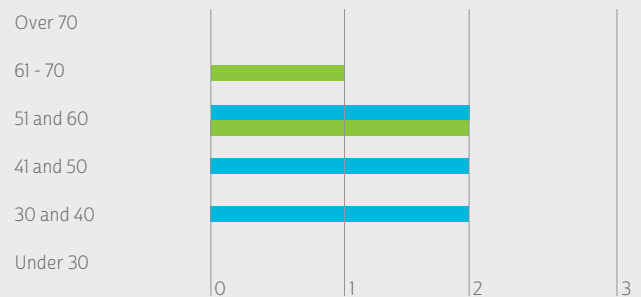
However, it should be noted that in 2018 the Company was distinguished with first place in Female Presence in Board of Directors, in the 2018 IMAD (Report on Women in Senior Management in Companies).

Study prepared by Female Entrepreneurs and the Directorate of Social Studies of Pontificia Universidad Católica. The study included 111 companies, highlighting in the case of Colbún the presence of three women from a total of the Company's nine directors.

### Board members by seniority (NCG.386)



### Board Members by age and gender (NCG.386)



## Advisory Committees and their Sustainability Agenda

102-18, 102-19, 102-22

There are three committees that advise the Board of Directors: The Directors' Committee, the Executives' Committee and the Audit Committee.

The Board's sustainability agenda is present across the three Advisory Committees.

The Executives' Committee is an internal body of Colbún that strengthens communications from executives to the Board of Directors in matters of sustainability. In addition, the

General Manager informs the Company's relevant sustainability issues at Board sessions. Board members usually visit operational sites in order to personally acknowledge the problems faced by the power plants (operational and socio-environmental issues, among others).

During 2018, the Directors' Committee met eleven times to analyze transactions between stakeholders and examine issues established by law.

With respect to these operations, the Committee verified that these transactions match the fairness conditions prevailing in the market for

such operations, to then submit them to the Board.

The Audit Committee met four times during the year, and in general terms discussed the internal audit plan, management of the compliance hotline and compliance with the crime prevention model, as set forth in Law 20,393. A summary of the sessions of the Audit Committee is presented quarterly to the Board of Directors.

### Board of Directors

#### Directors' Committee

Entity foreseen in the Law of Open Stock Corporations, composed of independent directors and intended to review certain matters to be submitted to the Board's consideration. These matters include: Review of Financial Statements, operations between related parties, and remuneration and compensation plans for executives. The latter topic is rightly linked to sustainability.

In the meeting of May 3, 2017, the Board appointed independent directors Luz Granier, María Ignacia Benítez and Francisco Matte as members of the Directors' Committee.

#### Executives' Committee

Entity set up by Colbún, composed of the General Manager, Chairman and Vice-Chairman of the Board to which other Board members and executives are invited to discuss issues relating to the progress or development of the businesses to be later presented to the Board. Some of these issues have a clear sustainability component, such as water level and use of water in Colbún reservoirs, potential conflicts with communities and compliance with environmental standards, as well as presentations of state-of-the-art technologies for the power market.

#### Audit Committee

Among its several functions, this Committee is in charge of supervising Internal Audit activities, the operation of the Compliance Hotline and compliance with Law 20,393 on Criminal Responsibility of Legal Entities; all these issues bear a significant sustainability component. Audit Committee members are Luz Granier, María Ignacia Benítez, and Francisco Matte. The Internal Auditing Manager serves as the Committee Secretary.



The garden of Los  
Pinos Power Plant,  
Biobío Region

*Photo by Víctor  
Peña, Maintenance  
Supervisor,  
Los Pinos  
Power Plant*

## Colbúns Executives\*



**1. THOMAS KELLER**  
5.495.282-1  
CHIEF EXECUTIVE OFFICER  
Commercial Engineer, Universidad  
Adolfo Ibáñez

**2. JUAN EDUARDO VÁSQUEZ**  
7.868.160-8  
BUSINESS AND ENERGY DIVISION  
MANAGER  
Civil Electrical Engineer, Universidad  
de Chile

**3. EDUARDO LAUER**  
6.994.492-2  
ENGINEERING AND DIVISION  
MANAGER  
Civil Mechanical Engineer, Fach  
Hochschule of Munchen (Germany)

**4. CARLOS LUNA**  
25.046.079-1  
GENERATION MANAGER  
Civil Engineer, Escuela Colombiana de  
Ingeniería

**5. SEBASTIÁN MORAGA**  
12.026.836-8  
FINANCE AND ADMINISTRATION  
DIVISION MANAGER  
Commercial Engineer, Universidad  
Adolfo Ibáñez

**6. DANIEL GORDON**  
8.866.967-3  
ENVIRONMENT MANAGER  
Civil Engineer, Pontificia Universidad  
Católica de Chile

**7. PEDRO VIAL**  
7.034.342-8  
PUBLIC AFFAIRS MANAGER  
Attorney, Pontificia Universidad  
Católica de Chile

**8. SEBASTIÁN FERNÁNDEZ**  
10.673.365-1  
DEVELOPMENT MANAGER  
Commercial Engineer, Universidad de  
Los Andes

**9. PAULA MARTÍNEZ**  
14.449.738-4  
ORGANIZATION AND PEOPLE  
MANAGER  
Psychologist, Universidad Diego  
Portales

**10. RODRIGO PÉREZ**  
10.313.675-K  
LEGAL MANAGER  
Attorney, Pontificia Universidad  
Católica de Chile

**11. HERALDO ÁLVAREZ**  
12.369.371-K  
INTERNAL AUDITING MANAGER  
Certified Public Accountant and  
B.S. in Accounting, Universidad  
de Talca

\* December 2018

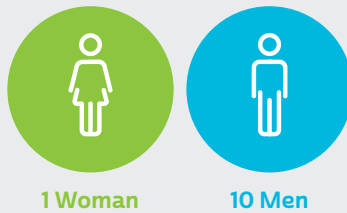
## Executives' Diversity Indicators for Colbún in Chile

Norma NCG 386, 202-2

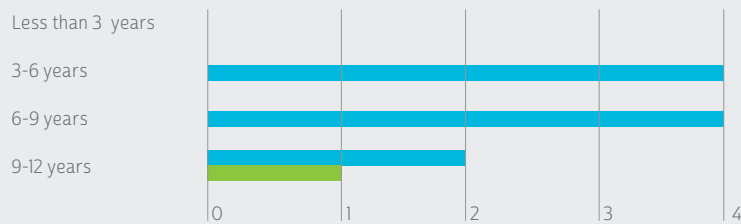
### Managers by nationality



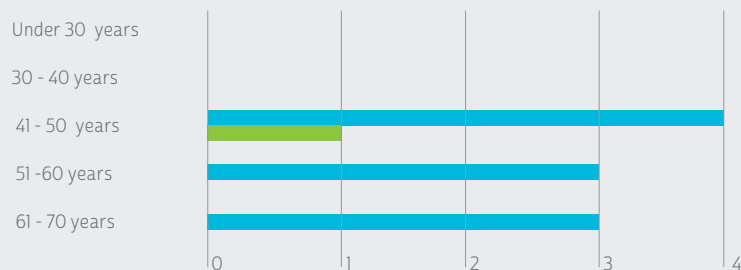
### Managers by gender



### Manager(s) by seniority in the company



### Managers by age and gender



**Notes**

1.- Senior executives are defined as the managers who report to the general manager, in addition to the latter. 2.- Locations with significant operations are Chile and Peru.

## Executives' Diversity Indicators for Colbún in Peru

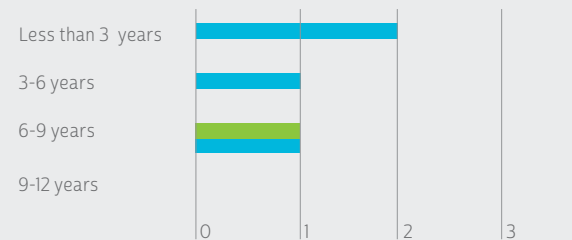


**Juan Miguel Cayo**  
General Manager  
Fenix Power

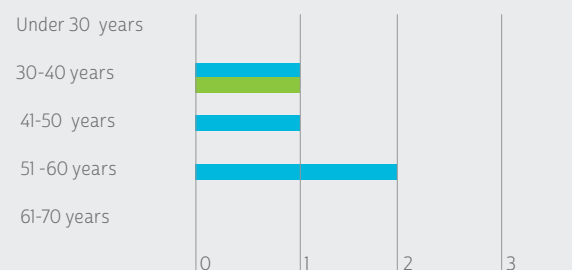
### Managers by nationality



### Manager(s) by seniority in the company



### Managers by age and gender





## Management support committees

### Managers' Committee

Instance where the main executives share and report on the progress of the plans, actions and strategies of their respective areas; it meets once a week.

### Risk and Sustainability Committee (\*)

Supervises the comprehensive management of the Company's main risks, including environmental and social sustainability risks. It meets once a month.

### Project Committee (\*)

Controls and supervises the development and execution of projects. It meets once a month.





**Information Security Committee**

Oversees the Company's information security process, ensuring that there are appropriate resources and access for a continuous monitoring. It meets on a quarterly basis.



**Tax Committee**

Supervises and monitors the Company's tax issues and risks associated with these matters. It meets at least quarterly.



**Regulatory Committee (\*)**

Supervises the status of legislative and administrative procedures of proposed laws, regulations and decrees that affect the Company's business activities. It meets once a month.



*(\*) A representative of the Board of Directors (Chairman or Vice-president) and other Company managers may also attend these meetings.*



Nehuenco Complex, Municipality of Quillota, Valparaíso Region



## 2.6 Value Creation with a purpose

### Our Purpose and Hallmark

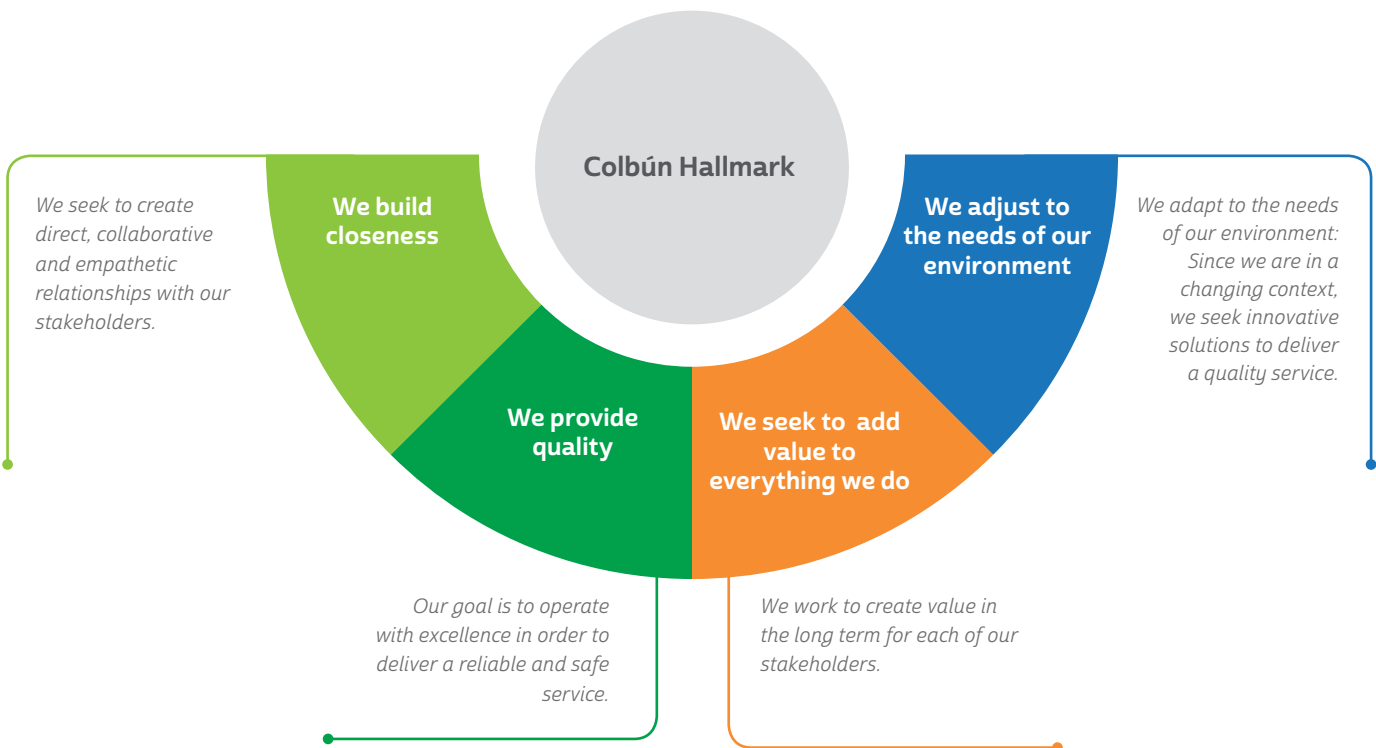
Colbún aims to generate and commercialize continuous and safe electric energy for our customers, at competitive prices for the market and in a manner that is sustainable for the environment and its stakeholders.

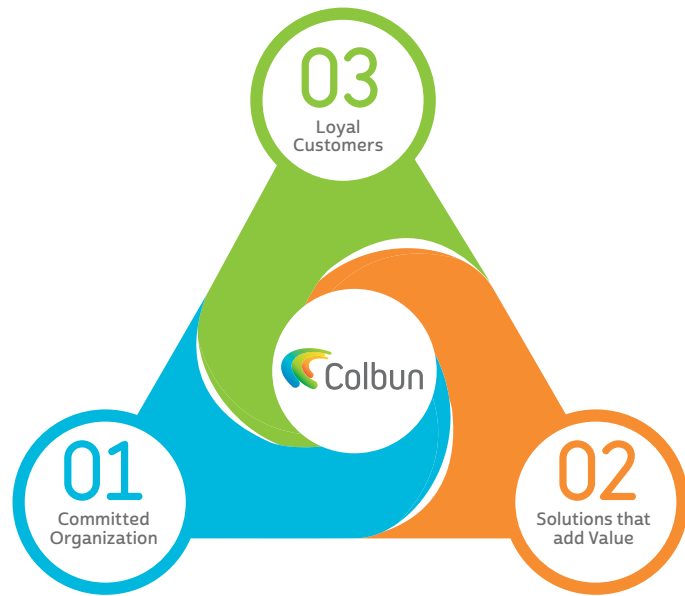
However, we understand that beyond WHAT we do, there is a reason WHY we do it, our reason to exist, which reflects

what we seek to achieve in the long-term through our daily work. In other words, the Company's Purpose.

This purpose, however, is not fulfilled in just any way. HOW we do things bears the hallmark of the Company, a view that we seek to stamp in each of our actions, and that is summarized in four pillars:

The purpose of Colbún is synthesized in one sentence: **"We exist to contribute the best energy to the development of our region"**.





The achievement of this purpose, through Colbún's special hallmark, is carried out through a strategy based on three pillars:

### 01

A committed organization, which means having an entrepreneurial and service-oriented culture; efficient corporate governance and collaborative structure; and to be an organization of people with integrity, flexible and innovative

### 02

Solutions that add value, expressed in efficient processes with robust and digital technologies, develop and operate a diversified matrix with emphasis on renewable energies, and look for new businesses that adapt to different needs

### 03

Loyal customers, providing them a close experience, with safe, competitive and sustainable energy, and with customized products and services



## Business model

To carry out this purpose under the hallmark and strategic pillars described, the Company has a business model or Value Creation Model in place.

This model allows us to build value from various financial, technical, industrial, social, natural and human capital inputs. For this purpose, our model considers as main pillar the building and operation of power plants and transmission infrastructure-with high technical and environmental standards, in order to ensure high efficiency and availability of

our operations and the proper protection of our resources and natural environment.

The model allows us to create value for our shareholders and investors in the form of dividends or maximizing their investment; for our customers, through safe, competitive and sustainable energy; for our workers through quality jobs; for our communities by contributing to local development; for our suppliers and contractors through new opportunities and best practices, and for the environment, through responsible and careful use of our natural resources.

To create value for our shareholders and different stakeholders, it is imperative that the business is sustainable. In order to safeguard the sustainability of the business, we identify, evaluate and manage risks that could have an impact on our results and our stakeholders

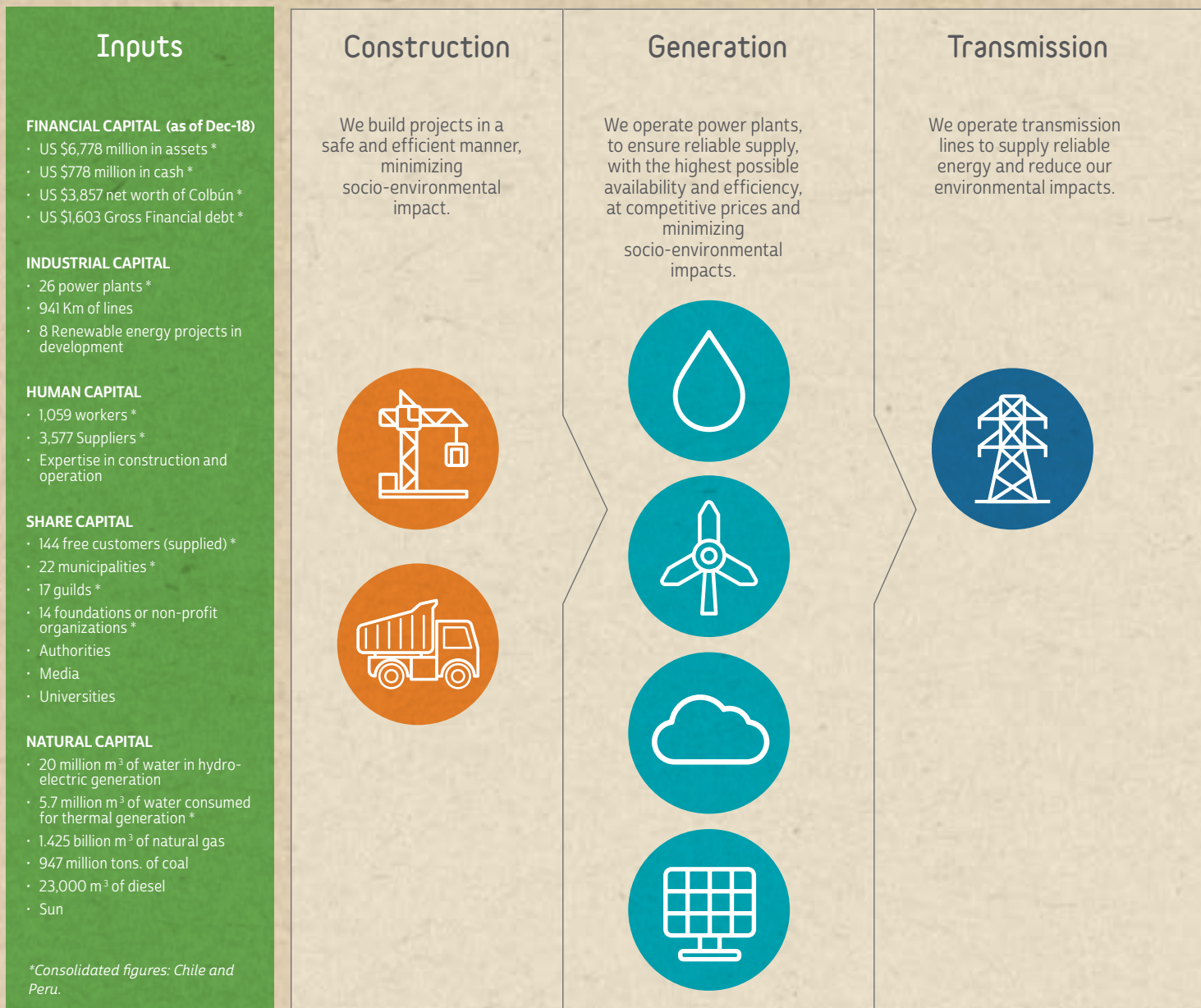
(See Risk Management in this chapter).





At Colbún we understand that sustainability is not a part of the business, it is the business itself. As expressed by the turbine diagram, sustainability is integrated into all areas of the Company. At the center of this turbine are growth and profitability, without which it is not possible to add value to stakeholders, while each turbine blade represents a particular stakeholder and the value that the Company can create together with them. In turn, the force that moves this turbine is excellence in people, socio-environmental and operational management.

# Colbún's Business model



## Main Risks



### SOCIAL PERFORMANCE RISKS

- **Work-related Risks:** Talent retention/Strikes/Occupational diseases/Occupational accidents/Organization and Cultural Change/Regulatory breaches
- **Community Risks:** Suspension of projects or operations/Social incidents / Legal actions/Reputational damage

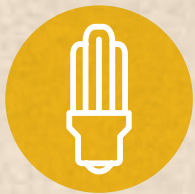


### RIESGOS DESEMPEÑO AMBIENTAL

- **Environmental risks:** Climate change/regulatory breaches/environmental incidents/reputational damage

Colbún is a power generation and commercialization company, owner of power generating plants, that sells its production to free or unregulated customers (supermarkets, industries, mining companies, vineyards, commerce, etc.) and distribution companies through contracts and/or by selling that energy to other generators in the spot market. In addition, it participates in the energy transmission business through the operation of its own transmission networks.

## Product



Marketing and transmission of safe, competitive and sustainable energy

## Value Added

### CUSTOMERS (Distributors and industries)



- Safe, competitive, sustainable energy.
- Long-term relationships.

▶ Valor Clientes



- ### INVESTORS
- Profitability and value.

▶ Valor Accionistas



- ### WORKERS
- Quality employment
  - Career development.



- ### CONTRACTORS
- Excellence in the value chain
  - Hiring local suppliers and contractors.

▶ Valor Social



- ### COMMUNITY
- Local development.
  - Continuous dialogue.



- ### ENVIRONMENT
- Excellence in Environmental management.

▶ Valor Ambiental

## Figures 2018

16,814 GWh of energy sold\*

74% of customers agree with the Company's management.

684 million dollars in EBITDA \*

8% of fixed cost savings in 2018

18% women in total staff \*

965 staff members trained

0.8 accident frequency index, the lowest in the history of Colbún \*

83% satisfaction in the internal climate survey \*

6.4 million dollars in social investment \*

98.4 million dollars paid in income tax

293 local suppliers in districts where Colbún operates \*

550 people attended Public Accounts \*

5 certified power plants to reduce emissions

355 000 tons of CO<sub>2</sub> reduced by CDM-plants

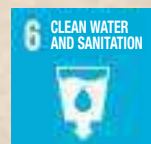
6,648 648 GWh of energy from renewable sources

28% of savings in irrigation water were enabled by the agreement signed by Colbún and the irrigators of Maule.

399,027 m<sup>3</sup> of drinking water made available to the community

\*Consolidated figures: Chile and Peru.

## Contribution to SDO



### ECONOMIC PERFORMANCE AND GOVERNANCE RISKS

#### • Electrical Business Risks:

Variation of demand, supply and prices/natural disasters/fuel prices/fuel supply/ power plant equipment and transmission lines failure and maintenance/ cyberattacks/project construction /Breach of regulations and/or standards / supply and service of key suppliers/hydrological/technology changes/contract dilution.

• **Financial Risks:** Exchange rate/Interest rate/Credit/Counterparty/Liquidity/Risk rating/Regulatory breaches

• **Ethics and Governance Risks:** Reputational damage/Theft or loss of information/Unethical behavior



## Growth and profitability strategy

How do we ensure the the Company's growth and profitability that allow moving this turbine and creating value in a sustainable way? The answer lies with the growth and profitability strategy that the Company has been working on in recent years, which considers five pillars of action:



### 01

**Renewable energy:**

Grow in the development of renewable energy from solar and wind variable sources (see Chap. 3)

### 02

**Unregulated customers:**

Increase our share in the unregulated customers market (see Chap. 3)

### 03

**Digital transformation:**

Company-wide automation and digitalization plan to optimize our operations and improve our competitive position (see in this Chapter, p. 98)

### 04

**Cost control:**

Fixed cost control and reduction plan, also as an opportunity to create value. (See chap. 3)

### 05

**Internationalization:**

Systematic analysis of growth and expansion opportunities via acquisitions, including the search for opportunities in businesses that are complementary to generation and transmission (see Chap. 3)



These five pillars allow us to ensure the Company's competitiveness in the medium and long term in the dynamic context that the power industry is encountering.

## Contribution to SDGs

Based on this sustainable value creation model, the Company contributes to the fulfillment of the United Nations Sustainable Development Goals (SDG). Despite the fact that Colbún responds to most of these goals, there is a group of SDGs to which our performance contributes more directly:

Direct SDGs	Description	Some of Colbún initiatives
 <b>Clean water and sanitation</b>	Ensure availability of water, its sustainable management and sanitation for everyone.	<ul style="list-style-type: none"> <li>Hydroelectric plants do not consume water or compete with human consumption.</li> <li>Reverse osmosis plant in Nehuenco to optimize water use.</li> <li>Agreement with Maule Irrigators.</li> <li>Hydroelectric plants exceed international standards established by UN to qualify projects as efficient in water management and of low environmental impact.</li> <li>Colbún Reservoirs level, Chapo Lake level</li> </ul>
 <b>Affordable and clean energy</b>	Ensure access to affordable, safe, sustainable and modern energy for all. It's an opportunity that transforms lives, economies and the planet.	<ul style="list-style-type: none"> <li>Development of competitive, safe and sustainable energies, including renewable energies (hydro, solar, wind)</li> <li>Optimization of resources (fuel, materials, etc.)</li> <li>Ashes reuse</li> </ul>
 <b>Climate action</b>	Take urgent action to combat climate change and its effects.	<ul style="list-style-type: none"> <li>CDM/VCS Certifications for 5 power plants</li> <li>Carbon Footprint Measurement (CDP)</li> <li>Third party emissions neutralization</li> <li>Carbon Neutral Routes</li> <li>Mitigation and emission compensation plans in thermal plants</li> </ul>
 <b>Life on terrestrial ecosystems</b>	Promote sustainable use of terrestrial ecosystems, fight against desertification, stopping and reversing land degradation and curbing biological diversity loss rates.	<ul style="list-style-type: none"> <li>Evaluation, monitoring, reduction of impacts</li> <li>Specialized areas (e.g.: forestry)</li> <li>Strategy and promotion of biodiversity care (e.g.: guides)</li> </ul>
 <b>Partnerships to achieve goals</b>	Strengthen implementation means and revitalize the Global Alliance for Sustainable Development.	<ul style="list-style-type: none"> <li>Alliances with guild associations, Chambers of commerce, international organizations, universities, public-private work groups, community working groups, etc.</li> </ul>
 <b>Gender equality</b>	Achieve gender equality and empower all women and girls.	<ul style="list-style-type: none"> <li>Creation of Colbún Gender Equality Initiative to identify gaps and opportunities</li> <li>Workshops and lectures on diversity and inclusion, with a focus on gender and disability</li> <li>Gender Equality Action Plan, with established goals.</li> </ul>
 <b>Decent work and economic growth</b>	Promote sustained, inclusive and sustainable economic growth, employment and production and decent work for all.	<ul style="list-style-type: none"> <li>Operation in 7 regions of Chile and 1 in Peru, which provide local employment to workers, contractors and suppliers</li> <li>Internal mobility &gt; 55%</li> <li>Scholarships, training for workers</li> <li>Competitive remuneration</li> </ul>
 <b>Industry, innovation and infrastructure</b>	Build resilient infrastructures, promote inclusive and sustainable industrialization, and promote innovation.	<ul style="list-style-type: none"> <li>Innovation focused on the operation, development of new businesses.</li> <li>Workshops to generate innovation culture</li> <li>Community infrastructure in all power plants, both in Chile and Peru</li> <li>Promotion of an innovative culture</li> </ul>
 <b>Sustainable cities and communities</b>	Ensure that cities and human settlements are inclusive, safe, resilient and sustainable.	<ul style="list-style-type: none"> <li>Angostura Case</li> <li>Machicura Reservoir Resort</li> <li>Street lighting and road safety projects with communities</li> </ul>
 <b>Peace, justice and strong institutions</b>	Promote peaceful and inclusive societies for sustainable development, facilitate access to justice for all and create effective, responsible and inclusive institutions at all levels.	<ul style="list-style-type: none"> <li>Public accounts at power plants</li> <li>Meetings with investors, clients and suppliers</li> <li>Visits to power plants</li> <li>Participative monitoring</li> <li>Training in Crime Prevention Models, Free Competition</li> </ul>

## 2.7 Risk Management

102-15, 102-19, 102-26, 102-27, 102-29 102-30, 102-31

Colbún has implemented a model that provides for a systematic recognition of internal and external developments and events that may represent risks for the achievement of business objectives. The Company also maintains a Risk Control and Management Policy establishing the basic principles and the general framework for actions to control and manage all kinds of risks to be faced by the Company. The management is responsible for developing and applying the policies and procedures required for maintaining an adequate risk management and control.

Risk management is a dynamic and continuous process flowing through the organization. It is carried out by individuals at every level of the organization, both with a top-down and bottom-up approach, and reviewed on a regular basis, as risks change over time.

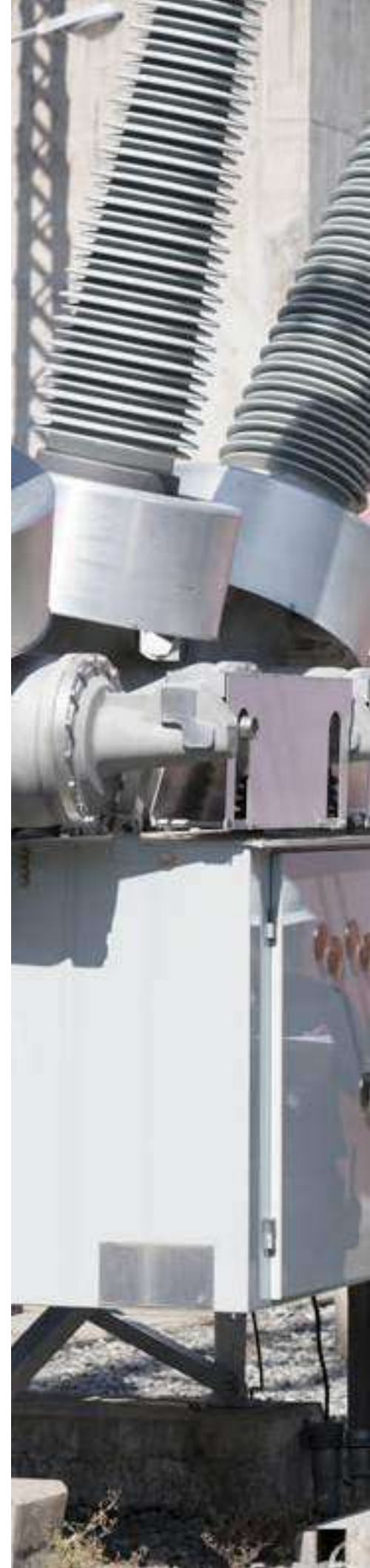
The Risk and Sustainability Committee monitors the strategic risks of the Company and makes sure that the Company manages risk effectively. The Committee meets bimonthly and is composed of the General Manager and senior executives; representatives of the Board of Directors also attend

the sessions, and other Board members may attend as well.

Risk management is considered an integral part of the business and is included in reports submitted by the General Manager to the Board of Directors for discussion and analysis.

The area of Control and Corporate Risks Management is responsible for the design and methodological implementation of the model, which is based on the ISO 31,000 standard and supports and assists the rest of the units of Colbún in the practical implementation and the risks monitoring.

The Company policies enable the identification and control of risks; this information is available on Colbún's website. Such policies include the Sustainability Policy, Community Relations, Financing, Investment, Health and Occupational Safety, among others.





## Risk Management Methodology





## Main guidelines to manage risk

- **Safeguard the business sustainability** by defining mitigating actions to address the impact of the adverse behavior of variables that may affect the Company's results or trust capital.
- **Integrate the risk vision into corporate** management in all business areas.
- **Generate an organizational structure and a management** methodology suitable to manage the Company's risks.
- **Minimize in a cost-efficient way the risks**, in order to respond to the changing environment in which the business develops.
- **Monitor the compliance with the agreed** mitigation plans and resulting residual risks.



### Risks associated with Economic Performance

#### Power Business Risks

- Variation of demand / supply / prices
- Natural disasters
- Fuel prices
- Fuel supply
- Failures and maintenance of power plant equipment and transmission lines
- Cyber attacks
- Projects construction
- Non-compliance with regulatory requirements and/or standards
- Supply / service by key suppliers
- Hydrological conditions / long drought periods
- Contracts dilution and counterparty risk
- Technological changes
- Loss or leakage of confidential information
- Water supply
- Unit tear and wear due to plant cycling

#### Financial Risks

- Exchange rates
- Interest rates
- Clients credit quality / counterparty risk
- Liquidity
- Risk rating
- Regulatory breaches

#### Ethics and Governance Risk

- Reputational damage
- Information theft and/or leakage
- Unethical behaviors



### Risks associated with Social Performance

#### Labor Risks

- Retention of professionals
- Strikes
- Occupational illnesses
- Occupational accidents
- Organization and cultural change
- Regulatory breaches

#### Community Risks

- Halt of projects and/or operations
- Social incidents
- Reputational damage



### Risks associated with Environmental Performance

#### Environmental Risks

- Climate change
- Regulatory breaches
- Environmental incidents
- Reputational damage

## 2018 Risk Management Advances

The Company furthered its risk management model in 2018, which is reflected in the following initiatives:

### New Technical Risk Panel

*With the purpose of deepening the analysis of strategic risks control, a Technical Risk Board was created in 2018 involving representatives of all the Company's areas.*

This year, strategic risks were reviewed in detail and their assessments and risk levels Colbún's emerging risks were analyzed:

Emerging Risks	Description	Potential Impact on the Business	Mitigation Actions
<b>Technological changes</b>	Technological changes such as Distributed Generation and Storage, among others, can be disruptive in the sector's business model, but can also generate new business opportunities.	A potential lag in the integration of new technological changes, can lead to their incomplete and/or delayed development and, therefore, to a lower growth potential.	Explore and develop business opportunities using new technologies. Implement Automation and Digitalization program.
<b>Projected increase in the cycling of combined cycles</b>	Due to the greater penetration of renewable energy from variable sources, there is a need for power plants that can provide flexibility to the system and cover its variability and intermittency. Generation plants with conventional technologies have been designed to operate at base load, thus, this is a new operating context.	An increased cycling of combined cycles, which are not designed for that type of operation, can raise maintenance and operating costs, lower reliability and reduce the useful life of assets.	Active involvement in the discussion about complementary services and flexibility of the system, in order to create the proper incentives to cover intermittency. Analysis of the adaptation of current combined cycles.
<b>Organization and cultural change</b>	The changes in the power sector, along with the digital transformation process, require a very flexible organization, capable of adapting quickly to meet the needs of our clients. Organizations must be able to transform themselves to address the use of new generation technologies and a market with a large number of unregulated clients.	An organization that does not adapt to a new context can lead to an incomplete development of the competitive potential and be unable to take advantage of new business opportunities.	Communication to the organization of Colbún's purpose and strategy, highlighting the need to change and adapt to new challenges. Training, internal restructuring.
<b>Client counterparties</b>	Colbún's client portfolio has expanded to new unregulated clients, of different sizes and from different industries.	A possible default on the part of unregulated clients of their commitments due to temporary insolvency or inability to pay can result in financial losses.	Active participation in increasing market share in the unregulated customers segment; dissemination of new internal procedures that incorporate new customers risk assessment and monitoring of payment behavior. Active participation in increasing market share in the unregulated customers segment and the publication of new internal procedures that incorporate risk assessment of new customers and monitoring of payment behavior..

## Other risk management milestones

### Automated mechanism for the acquisition of commodity hedges

The Business and Energy Management Division developed a daily and automated monitoring mechanism to evaluate whether to go ahead or not with the acquisition of hedges to face price risks of commodities relevant to Colbún (brent and coal). This innovation

has allowed the Company to cover the exposure systematically and has made this management more cost-efficient. The monitoring of this risk and the results of this mechanism are monitored by the Risk and Sustainability Committee.

### Clients counterparty risk

With the incorporation of a significant number of new unregulated clients, the management disseminated new internal procedures ("Recruitment of management clients" and "Collection

of invoices issued to clients") that incorporate new controls to mitigate potential payment defaults by this new customers segment.

### Human Rights and Colbún's Risk Performance

In 2018, the Performance Control and Risk Manager participated in the Human Rights laboratory in order to incorporate this view into the Company's corporate risk model. As per the first review, it was verified that several human rights issues are already

incorporated into the current model and the challenge for 2019 is to incorporate the views of different groups into the risk analysis, such as workers, unions, vulnerable groups and communities, among others.





Santa María  
Power Plant  
Coronel  
District,  
Biobío Region



## 2.8 Sustainability Management

Colbún maintains a Sustainability Policy reemplazar por: with the purpose of establishing the management criteria to develop the business in a sustainable manner, creating long-term value for Colbún S.A., its shareholders and other Company stakeholders.

Although sustainability is a cross-Company aspect, the Public Affairs Management is responsible for promoting the application of sustainability criteria across all the Company's activities and supporting the dissemination and management of sustainability within the organization. To do this, a survey on sustainability gaps is applied on an annual basis in each area of the Company.

The responsibility of managing these gaps rests with each area of the Company; the work is coordinated through the Sustainability Board, an instance that includes members from all the management areas of the Company.

In addition to coordinating the management of gaps, the Board also has the mission to inspire and mobilize all workers for the sustainable management of the business, providing visibility to the actions carried out by the Company in this area. Among the projects coordinated by this Board in 2018 are an Integrity Plan (see next section), corporate volunteering, and development of local suppliers.





Quila sprout  
 Photograph by  
 Patricio Rodríguez  
 Engineering and  
 Projects Division

In turn, compliance with the Sustainability Policy and the risks involved are a subject of discussion and monthly analysis in the Risk and Sustainability Committee. The most relevant aspects identified during this process are presented by the General Manager in the monthly Board of Directors session, which includes advances in the social, environmental and safety performance of the Company, in addition to the main

socio-environmental environmental contingencies, eventual fines, sanctions or claims, and the main issues associated with the progress of projects and/or operations. Regarding the status of the internal control environment and the adherence to the Code of Ethics, these are regularly reported by the Audit Manager to the Audit Committee and on a quarterly basis to the Board of Directors.

**5**  
 topics were addressed by the Integrity Plan driven by Colbún in 2018





## Integrity Plan and Human Rights Due Diligence

412-1, 412-2



One of the priorities raised by the Board of Directors to the Company's management in 2018 was the implementation of an Integrity Plan. This plan, which was coordinated by the Sustainability Board, included five topics:

### 1. Dissemination (Socialization) of the Purpose:

The meaning and scope of the Purpose formulated for the Company, i.e., "We exist to Contribute with the Best Energy to the Development of Our Region", was presented in 2018 by the General Manager in each of the power plants and complexes operated by Colbún.

In addition, during the Sustainability Weeks that take place throughout the year in our facilities, workshops were organized with the same purpose.

### 2. Diversity and Inclusion:

In 2018, the first Survey on Diversity and Disability Management was conducted at Colbún to outline in an aggregate manner workers' perception of religious beliefs, belonging to indigenous peoples or migrant groups, sexual diversity and disability. This survey was designed in a participatory manner with the unions, and was applied in March, with 85% participation. The results will be very valuable for a better management within the Company.

In addition, a Gender Equality Initiative was launched, a cross-sectional group composed of workers who met regularly during the year in order to raise barriers and detect opportunities for improvement in this area - and propose an Action Plan, focused on 4 areas - recruitment, professional development, work and family conciliation, and socialization (See Chapter 4).

Workshops and talks on diversity and inclusion were also held within the framework of the Sustainability Weeks.

**3. Ethics:**

In 2018, efforts were made to strengthen the promotion of and commitment to ethical behavior in line with the Code of Ethics at all levels of the Company. To this end, the Sustainability Weeks focused on the dissemination of the Company's Compliance Hotline – in addition to other channels serving similar purposes, such as a newsletter and Meetings with Suppliers –; also, ethical dilemma games were held with workers. In addition, the Code of Ethics was updated (April 2018) and “eticápsulas” were generated (see Chapter 3, page 152).

**4. Compliance:**

In terms of compliance, a series of training courses for workers were implemented in areas such as free competition, criminal liability of companies, and guidelines on Lobbying Law, among others. (See details in Chapter 3, page 152)

**5. Human Rights:**

After having completed a diagnosis in 2017, in May 2018 the Company approved and published a Policy on Human Rights and Business, with a twofold purpose: 1) To compile and synthesize the principles and values that guide Colbún's rights management and that are, sanctioned pursuant to the Ethics Code, the Policy on Sustainability, the Policy on Community Relations, Policy on Supply, Policy on People Management, Policy on Donations, Policy for the Procurement of Goods and Services Provided by “Politically

Exposed Persons” (PEP), Crime Prevention Model and Internal Rules for Order, Hygiene and Safety; and 2) Ratify our commitment to the promotion and respect of the UN Sustainable Development Goals and the Guiding Principles on Business and Human Rights, understood as a guide for business activity within the limits of the social objectives and the legal order of the country. Additionally, this year Colbún joined the Laboratory of Human Rights for the Extractive Sector, an initiative driven by Acción Empresas, which will extend until 2020.

Within the framework of this project, a focus group was formed by our employees and another group with our stakeholders' representatives, in order to raise their perception about strengths and opportunities for improvement in the area of Human Rights.





## Human Rights Governance at Colbún

Based on the Human Rights Policy and the aforementioned documents, Colbún's governance in this area is given by:

- **Higher body:** Board of Directors.
- **Supervision:** Public Affairs Management and Risk Management.
- **Implementation:** Organization and People Management, Supply Management, Public Affairs Management, Legal Management, and all Colbún's managements.
- **Revision:** Internal Audit Management.

## Human Rights Risks and Impacts

During the Human Rights Diagnosis conducted in Colbún's Chilean and Peruvian operations, completed in 2017, we identified nine topics relevant to Colbún:

1. Occupational Health and Safety
2. Non-Discrimination at Work
3. Freedom of Association
4. No Forced Labor, No Child Labor
5. Right to be Heard and Informed
6. Communities Safety
7. Water and Environment
8. Corruption and Ethics
9. Land rights

For the 2018's Due Diligence, we used the following tools:

- *Reputation and Risk Survey, conducted by a third party, the latest version of which was applied in late 2018, involving all our stakeholders in Chile: communities, suppliers, investors and customers, including questions related to Human Rights: 663 individuals were interviewed.*
- *Focus Group with corporate workers, conducted by Acción Empresas within the framework of the Human Rights Laboratory.*
- *Focus Group with power plant workers, conducted by Acción Empresas within the framework of the Human Rights Laboratory.*
- *Multi-stakeholder Dialogue Board, with representatives of the community, suppliers and union leaders from the companies participating in the Human Rights Laboratory.*
- *Climate Surveys in Chile and Peru, respectively.*
- *Reports from the Compliance Hotline, Contact Line, public accounts, instances for community participation, safety and occupational health statistics, among others.*

## Human Rights risk scenarios are monitored and communicated to Senior Management

### Integration of Human Rights into the organization

In order to integrate and pervasively disseminate the Policy on Human Rights in the Company, the following activities were carried out in 2018:

- *Approval and publication of Colbún's Policy on Human Rights and Business.*
- *We disseminated the general concepts of Human Rights during the Sustainability Weeks held at all the power plants and headquarters in Chile and Peru.*
- *Integration of Human Rights Laboratory for Companies in the Extractive Sector.*
- *We disseminated issues associated with ethics and integrity through the Eticápsulas, videos and ongoing training in the Crime Prevention and Free Competition Model.*
- *During 2018 and to date, we have headed the Human Rights Committee of the Global Pact in Chile, where companies have undertaken short-term commitments. We have also headed the Mesa Empresa y Territorio (Business and Territory Working Group), linked to Acción Empresas.*



### Monitoring and communication

Risk scenarios associated with Human Rights matters are monitored and communicated to the Company's senior management. Workers are kept up to date through talks and the Intranet, and our stakeholders, through the Integrated Report. In the specific case of the community, initiatives are carried out such as participatory monitoring, work groups on safety and water issues, among others.

### Complaints and remediation mechanisms

Colbún maintains a Compliance Hotline and a Contact Line, both available to all stakeholders through the Company website. In addition, a communication channel has been implemented through the Colbún Suppliers Portal.

As needed, we have implemented remediation mechanisms, for example, due to the resettlements on some of our projects, or work accidents, etc.



## 2.9 Communication channels

102-43, 103-2



+550

participants  
in 2018 public  
accounts



10

public accounts,  
including our  
Fenix power plant in  
Peru

The Company maintains a Policy on External Communications Management establishing four principles upon which communication with third parties is based: transparency, where the importance of promoting this value is acknowledged while recognizing the existence of financial or commercial information that, due to its nature, must be kept confidential; dialogue, which means looking for two-way communication channels with the different stakeholders; timeliness, understanding that speed in the delivery of information is relevant; and collaboration, based on the belief that adequate communication is the starting point for a collaborative work with third parties.

Based on these principles, for several years now we have been promoting the creation of different channels to communicate with our stakeholders, the media and society in general. In 2018, some of the initiatives were:

### **Internal TV channel:**

In order to improve communication with our workers, and as a complement to the existing Intranet, an internal television channel was implemented in 2018 that included the installation of screens in all Colbún's power plants and in the corporate building. On these screens, different audiovisual contents are displayed regarding the

Company and its stakeholders; this initiative was very well received by our workers.

### **Newsletter for customers:**

Last year a new digital newsletter was implemented for customers, including the design of a digital site where this material is made available. We also worked on a series of contents for this group, including regulatory matters in the power industry that have an impact on customers.

### **Reformulation of public accounts:**

In order to promote greater participation and dialogue, a new format for the annual public account given by the Company at the power plants was designed; it included a greater participation of the community itself, by assigning it a more relevant role in these instances. In 2018, 10 public accounts were carried out, covering 14 districts and more than 550 participants, including our Fenix power plant in Peru.



Recycling project  
Maule Region,  
part of the  
program  
Cuido Mi Planeta



## How we communicate with our stakeholders

Stakeholder	Dialogue & Communication Channels	Frequency
 <b>Workers</b>	Meetings between the Organization and People Management with unions and collective agreements workers.	<i>Every six months</i>
	Meetings with Joint Committee *	<i>Monthly</i>
	Compliance Hotline / Query Line *	<i>Ongoing</i>
	Labor Climate Survey *	<i>Annual</i>
	Meeting between union leaders and General Manager	<i>Monthly / Quarterly</i>
	Induction*	<i>Monthly (as applicable)</i>
	Meeting between union leaders and Chairman of the Board	<i>Annually</i>
	Visit by General Manager to all power plants *	<i>Annually</i>
	Visit by Board of Directors to power plants	<i>Annually</i>
	Collective bargaining	<i>Biannual</i>
	Meetings between supervisory level and General Manager *	<i>Quarterly</i>
	Shared Services Survey	<i>Annually</i>
	Bottom-Up Evaluation	<i>Annually</i>
	Sustainability Weeks *	<i>Annually</i>
	Performance assessment *	<i>Every six months</i>
	Expanded Meeting of the General Manager with the entire Company *	<i>Annually</i>
	Focus group on labor climate, human rights, others *	<i>Annually</i>
	Colbún Intranet *	<i>Ongoing</i>
 <b>Community &amp; Society</b>	Public accounts at power plants *	<i>Annually</i>
	Compliance Hotline / Query Line *	<i>Ongoing</i>
	Bulletin +Energía /Bulletin Buen Vecino*	<i>Monthly, Quarterly and Every six months</i>
	Local media (interviews, news and publicity)*	<i>Ongoing</i>
	Website*	<i>Ongoing</i>
	Work/Dialogue tables *	<i>Monthly</i>
	Meetings with authorities and neighbors *	<i>Ongoing</i>
	Visits to power plants *	<i>Monthly</i>
	Account on Twitter @ColbunEnergia	<i>Ongoing</i>
	Account on Facebook ColbúnEnergia	<i>Ongoing</i>
	Meetings with media *	<i>Ongoing</i>
	Participation in traders and regional associations *	<i>Monthly</i>
	Participation in programs with universities	<i>Monthly</i>
	Participation in local, national and international associations *	<i>Monthly</i>
	Survey on Reputation and Risks applied to Communities and local and national Opinion Leaders *	<i>Annually</i>
	Dedicated and customized community affairs team *	<i>Ongoing</i>
	Newsletter for Opinion Leaders	<i>Quarterly</i>
	Own radio broadcast in Coronel, Santa Bárbara and Colbún	<i>Fortnightly (per annual season)</i>
Colbún News *	<i>Occasional (to report on specific events)</i>	
Suggestions Dropbox **		

Stakeholder	Dialogue & Communication Channels	Frequency	
 <b>Investors &amp; Shareholders</b>	Area dedicated to Investor relations *	Ongoing	
	Survey on reputation and risk for Investors	Annual	
	Compliance Hotline /Query Line *	Ongoing	
	Breakfast, work meetings and conferences	Ongoing	
	Section on Corporate Website *	Ongoing	
	Corporate Newsletter	Quarterly	
	Shareholders' meeting *	Annual	
	Colbún News	Occasional (for specific events)	
 <b>Clients</b>	Dedicated and personalized commercial team *	Ongoing	
	Clients survey on reputation and risk *	Annual	
	Compliance Hotline /Query Line *	Ongoing	
	Meetings with clients	Annual	
	Visits to power plants	Annual	
	Section on Corporate Website *	Ongoing	
	Annual Colbún Seminar	Annual	
	Newsletter for Clients	Quarterly	
	Colbún News	Occasional (for specific events)	
	Account on Twitter@ColbunEnergia	Ongoing	
	Account on Facebook ColbúnEnergia	Ongoing	
	 <b>Contractors and Suppliers</b>	Administrative team available *	Ongoing
		Supplier Portal (Website) *	Ongoing
Compliance Hotline /Query Line *		Ongoing	
Meetings with suppliers		Annual	
Feedback meetings with contract managers		Annual	
Survey on reputation and risk for clients		Annual	
Participation in entrepreneurial seminars		Every six months	
Sustainability Weeks		Annual	
Corporate Newsletter		Quarterly	
Colbún News		Occasional (for specific events)	
Account on Twitter@ColbunEnergia		Ongoing	
Account on Facebook ColbúnEnergia	Ongoing		
Best Supplier Award per Power Plant	Annual		

\* Practice shared with Fenix

\*\* Exclusive Fenix practice

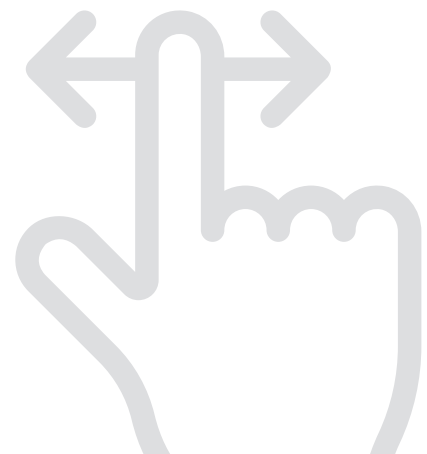


## 2.10 Innovation strategy and digital transformation

Our innovation strategy is inspired by a broad and comprehensive business vision, where all processes, enabling technologies and business models that add value to our operation are constantly explored.

The Company has a dedicated innovation team, which has developed and installed a participation mechanism at the power plants and corporate offices, based on the “Design Thinking” methodology, which was specially adapted to Colbún’s reality.

Participation is promoted by means of clear and transparent governance, building on the experience and collective learning of the Company’s workers in the search for valuable opportunities for power plant management. To this end, Innovation Challenges and Activity Workshops are developed, in which different workers from each power plant are invited, forming multidisciplinary teams to raise and work on opportunities for improvement that they have detected on their own. The ideas raised are developed through multidisciplinary teams, managing uncertainties through prototypes and viable minimal projects, validated by Innovation Committees established for their subsequent implementation.





## 2018's Progress

In 2018, the power plant innovation program kicked off in 2017 was furthered; this program considers various Open Innovation Challenges and workshops, involving a total of 157 workers (both from the power plants and head offices). These activities focused on the search for new ways to do our business, promoting creativity to go beyond the common practice of the industry. Under this logic, we worked in the areas of safety, sustainability, availability, efficiency, automation, digitization and renewable energy (among others). These participatory and collaborative processes helped raise and prioritize 24 new ideas in 2018.

In 2018, the Innovation and Climate Change Management's website was activated on the Intranet, where aspects ranging from the Innovation

Strategy to the most relevant news are posted, including the Open Innovation Challenges, the ideas implemented and the Innovation Hotline, the latter being a new communication channel for employees to communicate innovative ideas that are managed appropriately, depending on their impact and level of innovation.

Within the context of the ongoing energy transition, innovation and the search for new businesses are necessary to face the changing environment of the industry. Against this background, in 2017, Colbún started an internal, collaborative and multidisciplinary project to identify new opportunities in the power sector, leveraged in market trends and technological developments identified in the global industry, such as storage, customer value added services, and electro-mobility, among others. During 2018 we deepened all opportunities identified, with work groups in charge of monitoring and designing action plans for each one. As a result of this work, next year, a storage pilot project will be implemented in one of our hydroelectric plants, in addition to a demand management pilot for a group of clients. Also, a new process for the search and selection of opportunities will be carried out to study businesses other than those already identified.

In order to stress the importance of innovation among its various stakeholders, Colbún invited César

Hidalgo, Associate Professor and Director of the Collective Learning Group of the MIT Media Lab, to the annual seminar "Voces con Energía 2018" (Voices with Energy); he addressed the subject of knowledge, its measurement and distribution in society and communities. In this meeting - where customers, workers, suppliers, investors, authorities and public in general were invited, Corfo's executive vice president, Sebastian Sichel, and Yuly Fuentes-Medel, biochemist, PhD in biomedical sciences of the School of Medicine of the University of Massachusetts and President of Chile-Massachusetts Alliance, who shared her experiences in the exchange between innovation and technology at a conference in Concepción.

By the end of the year, a talk dedicated to Artificial Intelligence was also given internally by Pablo Zegers, an outstanding engineer with vast experience in neural networks. This talk also addressed the issue of Digital Transformation and provided a context for our digital strategy whose preliminary design was developed during 2018.



## 2018 Innovation in numbers

### International Challenge of Open Innovation

- Total participants: 85
- Countries involved: 36
- Ideas collected: 30
- Ideas selected: 3

### Open Challenge International at Plants

- Number of challenges: 2
- Total participants: 157
- Total ideas collected through the platform: 126

### Innovation Days at Plants

- Innovation workshops: 3
- Total participants: 78
- Total ideas pre-selected for implementation: 24



## Colbún's digital transformation

One of the core strategic aspects being promoted by the Company as part of its development and growth plan is to incorporate the benefits of digital transformation into processes and operations. The goal here is just one: to achieve optimizations and open market opportunities that improve the Company's competitive position and add value to the business.

For this reason, in 2018, Colbún articulated, under a single methodology and vision, a Digital Transformation Plan that includes various initiatives that were already underway while adding new projects. Anchored onto the vision that this plan must result in benefits for our business, the projects included must meet the following criteria: be cost-efficient, simplify processes, increase efficiency in operations, adapt the Company to the needs of the business and/or facilitate compliance with regulations. Currently, the incorporation of digital technology is a cross-Company process, covering the main areas of Colbún. Execution is carried out at the level of each Management or Division, provided with centralized control and monitoring in order to give continuity and coherence to this initiative. In total there are 20 specific programs and initiatives, at different degrees of development, comprising four broad Company areas.

In this manner, for instance, regarding the industrial and commercial areas linked to our generation plants, the initiatives seek, among others, to optimize the maintenance of our assets, making operational data available online and promoting predictive maintenance; have robust systems to project the generation of renewable energy from variable sources such as solar and wind; optimize the operation of our power plants in general, and implement systems that allow our customers to manage demand. In the processes area, meanwhile, the goal is to optimize all procedures linked to the Company's back office, such as contract management, purchases from suppliers, and travel management and control, just to name a few examples.

There are also initiatives linked to improving the management and control of internal data (Big Data), simplifying reportability; and facilitating collaborative work between different areas.

In short, at Colbún we believe that the benefits of digitization are diverse, and range from impacts at systemic level, such as maintaining the stability of the network before unforeseen changes in the supply or demand of energy, to the optimization of our assets, including the development of additional revenue sources and the creation of new market opportunities.





San Clemente  
Power Plant,  
Maule Region,  
Certified to offset  
emissions  
through carbon  
credits





### 1.- Open Innovation International Challenge

## Some innovation highlights

These are some of the innovations developed by Colbún in the past year.

Colbún maintains six run-of-the-river plants distributed in part of the Aconcagua river basin; the basin's water is characterized by containing large amount of sediments during the ice-melting season, which are captured by the hydraulic works at those plants. These sediments cause turbine tear and wear, impacting generation efficiency and maintenance costs. Also, these large amounts of sediments accumulate in the regulation dams, filling up to 50% of their useful volume, considerably reducing its function.

Faced with this situation, Colbún has been looking for different medium- and long-term solutions. In this sense, it posed the challenge to an international community of engineers through a web platform, developing a three-staged contest, where different solutions were selected and refined both in nature and complexity, adjusting them to the guidelines previously established by Colbún, ultimately seeking to maintain a year-round useful dam capacity above 70%.

The challenge included a total of 85 participants from 36 different countries, mainly technological centers, entrepreneurs and engineering students. At the end of the first stage, they managed to design a total of 35 solutions at a conceptual level. During the following stages of the contest, the solutions delivered were gradually fine-tuned, with the seven most attractive and, promising solutions being selected for further development to a detailed level, to be able to evaluate the technical and economic feasibility of the solution.

Finally, three ideas were selected to participate in the last stage. There will be one single winner and this idea will be submitted to internal studies to be properly implemented, in order to maintain the useful capacity of the dam without interfering with the normal operation of the hydroelectric complex.



## 2.- Efficient use of water at the plants

In 2018, the drought conditions in recent years due to low rainfall and less snow accumulation in much of the central-southern part of the country persisted. This situation has impacted various economic activities, including hydroelectric generation and cooling processes for thermoelectric power plants. In this context, focus has been placed on Innovation Challenges and Workshops for the development of water optimization projects.

Two projects developed in recent years in the Aconcagua basin are currently underway. The first is an optimization algorithm to distribute the water resource in the different generating units, considering their efficiencies and accumulated wear. The second is a mathematical model that optimizes the operation of the Aconcagua basins to generate at peak hours.

Another two projects have been developed that seek to reduce water consumption in thermoelectric plant processes. The first, at the Antilhue power plant, with the implementation of a process water recirculation system to keep the water plant operational, avoiding the use of drinking water. The second, Fenix power plant, is the use of high-quality water, recovering condensation water to produce demineralized water.

These 4 projects account for a better water management of 50 million cubic meters per year and offer the concrete benefits of an additional generation of renewable energy of 16 GWh per year, along with a reduction of emissions from the electric system by 15 thousand tons of CO<sub>2</sub> per year. In economic terms, these projects represent an estimated net present value for the Company of more than US\$7 million.

Along with these projects, several studies have been developed seeking to take advantage of the resources already available: one of the highlights is the sizing of the hydrokinetic potential in the channels of the Colbún Hydroelectric Complex, where six points of interest were detected, with a total potential of 1.2 MW, with plant factors ranging between 40% and 70%.



### 3.- Operational Innovation and predictive maintenance

In 2018, the Innovation Management worked with different areas of the Company and multidisciplinary power plant teams in the implementation of projects designed to increase competitiveness and ensure the operational continuity of the business.

One project that stands out among those developed in hydroelectric power plants is the operational improvements in the cooling system of the Carena power plant. This project involved the implementation of a filtering system in the power matrix of the cooling system that prevents the entry of sediments into the coolant ducts. With this improvement, cleaning work stoppages will be avoided. Additionally, other predictive maintenance projects are being developed in order to increase the availability of the power plants and the reliability of the equipment, as well as to reduce the costs of preventative and corrective maintenance.

The implementation of a data capture system is particularly important within this context, since it facilitates the task of the site operator when trying to capture information during inspection. This initiative was designed to track down and view trends of critical variables and to detect alarms under abnormal conditions. Along this same line, thermographic and ultrasonic inspection windows in electrical cabinets and generators were installed in order to strengthen the thermographic routes by incorporating measurement points not measured in the past during operation, while increasing the safety of operators dedicated to these functions by not having to intervene the equipment to make the measurements.



### 4.- Gamification and machine learning

At the level of relationship with the entrepreneurial ecosystem, the implementation of gamification solutions by a local startup (NIVELAT) is worth noting. These solutions seek to enhance motivation by strengthening behaviors, activating learning through the design of trivia games developed in an application for devices and mobiles, so that users can learn while progressing through the different game stages. As a first step, issues associated with People Safety and Operational Maintenance were addressed. Also noteworthy is the development of an optimization model for thermoelectric power plants: by means of a statistical algorithm, this model increases the efficiency of combustion by modifying the percentage of air injected into the mixture. The software developed uses the principles of machine learning to constantly learn until an accuracy of 98% is achieved, with a margin for improvement of more than 1% in the use of fuel, without increasing emissions of polluting gases.



## Acknowledgements

*As a result of our innovation work, in 2018, for the second consecutive year, Colbún was listed among the 50 most innovative companies in Chile, recognized by the “Best Place to Innovate” ranking in the, Perception category, along with other leading innovation companies. This study is developed by GFK Adimark, and is sponsored by the Center for Innovation, Entrepreneurship and Technology of Universidad Adolfo Ibáñez.*

*In addition, the Chilean-British Chamber of Commerce granted recognition to our 2018 Environmental Innovation for four water optimization projects developed through internal innovation processes.*

*Also, at the seminar “Good Practices for a More Sustainable Electric Future”, organized by Generadoras de Chile, the Nehuenco Thermoelectric Complex Water Treatment Plant designed to optimize of water usage was praised as an innovative project. Details on this project are available in the 2017 Integrated Annual Report.*



# 03

## Economic Performance and Governance

This chapter analyzes the issues related to the results of the Company in 2018, investor relations, customer management, generation figures, growth prospects, governance and management of the Compliance Hotline.





# Materiality Analysis

Based on the Materiality Study carried out to prepare the Annual Integrated Report, we identified four material relevant issues involving the issues examined in Chapter 3.

## Material Issue:

### Customer Management



#### Scope:

- Customer relations
- Customer satisfaction
- Customer increase

#### Related Risks:

- Evolution in the number of customers
- Volumes and prices of the future contracting
- Evolution of operating margin and return

#### How we manage it:

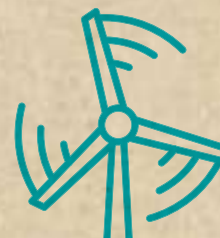
The Company has a Commercial Policy and Customer Management that seek to build a long-term relationship with customers and add value to that relationship. Focus has been placed on improving the value offer and the customer experience, increasing communication. The Company has continuous plans to improve the availability, reliability and efficiency of its assets to meet its contractual commitments.

#### Why it is material for Colbún:

In 2018 we placed great emphasis on raising our number of customers; the Company captured 25% of contracts with unregulated clients awarded in 2018, a figure over its 17% market share. Proper customer management, to retain old ones and win new ones, is very relevant for the Company's sustainability and growth.

## Material Issue:

### New Generation Sources



#### Scope:

- Renewable energy from variable sources (REVS)
- Colbún's Project Portfolio

#### Related Risks:

- Greater competition
- Market price evolution
- Safe operation of the system
- Remuneration of Complementary Services

#### How we manage it:

A Renewable Energies Area was created in 2015 to seek opportunities in this area. From the experience gained, today Colbún has a Renewable Energy Route with a defined strategy and business plan. There are seven renewable projects in different stages of development, the execution of which will depend on market evolution and the development of technical, environmental and social variables of each initiative.

#### Why it is material for Colbún:

Renewable energies were awarded an important part of the last two major customer tenders (2016 and 2017), becoming this industry's most competitive technologies. Solar and wind energies are expected to lead the growth of the energy matrix in future. In addition, they are usually quick projects to develop and build, despite their challenge of supplying energy in a variable and intermittent manner.

## Material Issue:

### Profitability, competitiveness and operational excellence



#### Scope:

- Profitability and EBITDA
- Share price fluctuations
- Economic performance
- Electricity oversupply in Peru
- Competitive construction costs
- Energy price
- Cost efficiency
- Quality, availability and reliability
- Operational efficiency
- Operational excellence

#### Related Risks:

- Incidents or accidents affecting assets
- Fuel supply
- Cyberattacks
- Hydrology
- Regulatory risks
- Credit quality

#### How we manage it:

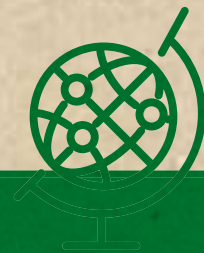
Different Company policies aim to manage risks and opportunities associated with profitability: Trade, Financing, Investment and Dividend Policy, among others. At the operational level, there are continuous improvement plans to increase asset availability, reliability and efficiency; a Policy on the Relationship with Subcontractors and Suppliers that aims to have a chain of continuous supply of excellence, and a Risk Control and Management Policy to monitor all the Company's risks. In addition, in 2018, work started on a fixed cost reduction plan to be extended in 2019, and a Digital Transformation Plan is under development that will make our operation more efficient. Finally, the focus on future renewable projects is on their competitiveness.

#### Why it is material for Colbún:

In 2018, Colbún had shown a solid profitability, in line with the trend of these last few years. However, in a more competitive scenario, with strong price competition, it is necessary to improve competitiveness in the medium term. Therefore, an efficient cost structure and an excellent operational performance are key to future competitiveness. As shown in the Sustainability Turbine, profitability is at the core of the business and without it, it is not possible to generate value for stakeholders.

## Material Issue:

### Internationalization



#### Scope:

- Growth
- Diversification of revenue and risks

#### Related Risks:

- Regulatory changes
- Political Changes
- Incorrect Valuations

#### How we manage it:

Colbún has a Development Management that analyzes systematically the opportunities for growth and investment in the region, in addition to an Investment Policy that establishes a framework for this type of operations. Local partners are usually sought for good knowledge of the local market.

#### Why it is material for Colbún:

COLBÚN has defined as one of its growth focuses, expanding to other Latin American countries – in specific countries with regulatory systems like Chile's –, and thus diversify risks and markets. After a first investment in Peru at the end of 2015, many investment opportunities have been analyzed. The guiding principle is that the newly acquired operations should add value to the Company.



## 3.1 Consolidated Financial Management

Positively influenced by higher sales to unregulated customers, Colbún's 2018 results presented an EBITDA of US \$684 million, a figure very similar to 2017 (US \$692 million) corresponding to the second-best operational result in the Company's 32- year history.



Income from ordinary activities in the year amounted to US \$1,571 million, a 1% increase from 2017, mainly explained by higher revenues from energy sales to unregulated customers. This was partially offset by: (1) lower sales to regulated customers; (2) lower revenues from tolls, mainly due to the change in methodology in collecting these tolls, which, as of January 2018, are paid directly to the owner of the transmission facilities.

The costs of raw materials and consumables at December 2018 amounted to US \$774 million, increasing 2% over the previous year, mainly due to the higher price of gas and coal consumption, which was offset mainly by lower: (1) Toll costs, (2) diesel consumption due to reduced generation

using this fuel, and (3) costs recorded under the "Others" line, associated mainly with maintenance and insurance expenses, resulting from the fixed expenses reduction plan that the Company started to implement.

The Company's net profit reached US \$230 million, 26% lower than the profit of US \$289 million from the previous year, mostly explained by (1) higher spending in taxes, mainly due to the recognition in 2017 of a deferred tax asset resulting from the cancellation of the Hydroaysén Hydroelectric Project; and (2) increased depreciation expenses due to the activation of major maintenance and projects. These effects were partially offset by the quarter's lower non-operational losses.

### Cost Reduction Plan

In order to reinforce its competitive position, in 2018 Colbún initiated a plan to make its fixed cost structure more efficient, which considered a detailed review of disbursements for all areas of the Company, optimization of expenses and search of synergies. During the past year, the Company achieved an important degree of progress in the implementation of this plan, achieving a reduction in fixed costs of approximately 8%, taking them to their lowest absolute level since 2013.

The plan will continue to be intensified this year; it is estimated that the sum obtained in 2018 with the amount projected for this year will result in savings for a minimum yearly amount of US \$20 million as from 2019.

## Statement of Comprehensive Income, by Nature

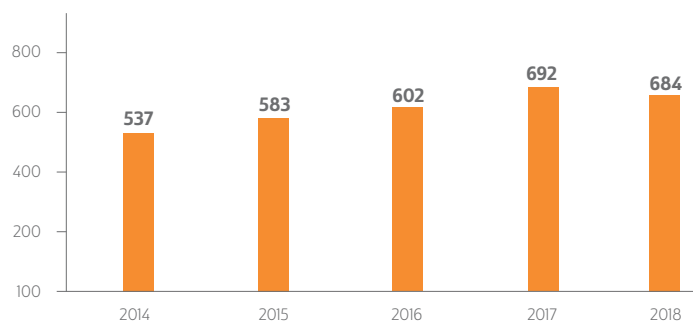
(January-December, millions of US \$)

	Consolidated		Var %
	2017	2018	Ac/Ac
<b>INCOME FROM ORDINARY ACTIVITIES</b>	1,548.4	1,571.3	1%
Sales to Regulated Customers	796.9	706.6	(11%)
Sales to Unregulated Customers	425.3	627.8	48%
Sales of Energy and Power	112.5	111.0	(1%)
Tolls	189.5	98.4	(48%)
Other Income	24.1	27.6	14%
<b>RAW MATERIALS AND CONSUMABLES USED</b>	(755.7)	(773.6)	2%
Tolls	(194.1)	(170.1)	(12%)
Energy and Power Purchases	(46.0)	(45.5)	(1%)
Gas Consumption	(308.4)	(355.5)	15%
Oil Consumption	(31.1)	(16.4)	(47%)
Coal Consumption	(73.8)	(86.8)	18%
Other	(102.3)	(99.3)	(3%)
<b>GROSS MARGIN</b>	<b>792.7</b>	<b>797.7</b>	<b>1%</b>
Employee Benefit Expenses	(76.8)	(79.8)	4%
Other Expenses, by Nature	(23.8)	(33.9)	42%
Depreciation and Amortization Expenses	(223.5)	(237.0)	6%
<b>INCOME FROM OPERATING ACTIVITIES (*)</b>	<b>468.6</b>	<b>447.2</b>	<b>(5%)</b>
<b>EBITDA</b>	<b>692.1</b>	<b>684.1</b>	<b>(1%)</b>
Financial income	12.7	20.4	60%
Financial Expenses	(85.0)	(83.9)	(1%)
Exchange Differences	8.2	(12.6)	-
Results of Companies Accounted by the Share Method	2.9	11.4	292%
Other Income (Losses)	(84.8)	(53.6)	(37%)
<b>NON-OPERATING INCOME</b>	<b>(146.0)</b>	<b>(118.3)</b>	<b>(19%)</b>
<b>PROFIT (LOSS) BEFORE TAXES</b>	<b>322.7</b>	<b>328.8</b>	<b>2%</b>
Income Tax Expense	(34.1)	(98.4)	189%
<b>PROFIT (LOSS)</b>	<b>288.6</b>	<b>230.4</b>	<b>(20%)</b>
CONTROLLER PROFIT (LOSS)	271.0	240.3	(11%)
PROFIT (LOSS) ATTRIBUTABLE TO NON-CONTROLLING SHAREHOLDINGS	17.6	(9.9)	-

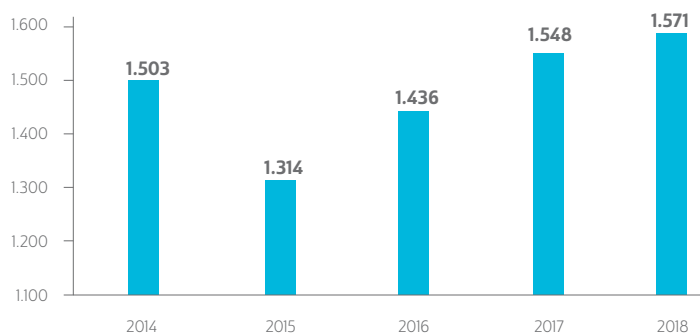
(\*): The subtotal of "operating income" herein excludes the line "Other profit (losses)" presented in the Financial Statements. This is explained by a change in taxonomy by the SVS, with which the "Other income (losses)" concept, which in the case of Colbún, are only non-operating items, was incorporated as an operational item in the Financial Statements.

## Evolution of Colbún's main Consolidated Financial Metrics

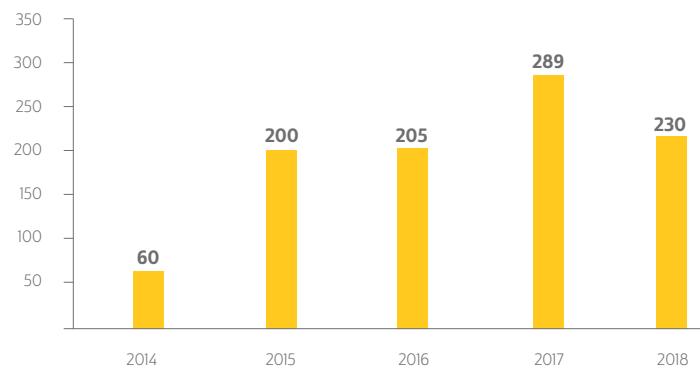
EBITDA (US \$ Million)



Total Income from Ordinary Activities (US \$ Million)



Profit (Millions of US \$)





**Consolidated Statement of Financial Position**

(Million US \$)

	2016	2017	2018
Current Assets	947.6	1,147.2	1,151.3
Non-current Assets	5,875.0	5,775.4	5,627.1
<b>TOTAL ASSETS</b>	<b>6,822.6</b>	<b>6,922.5</b>	<b>6,778.3</b>
Non-current Liabilities	360.1	354.8	345.4
Non-current Liabilities	2,672.7	2,611.4	2,576.0
Equity	3,789.8	3,950.7	3,856.9
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>6,822.6</b>	<b>6,922.5</b>	<b>6,778.3</b>



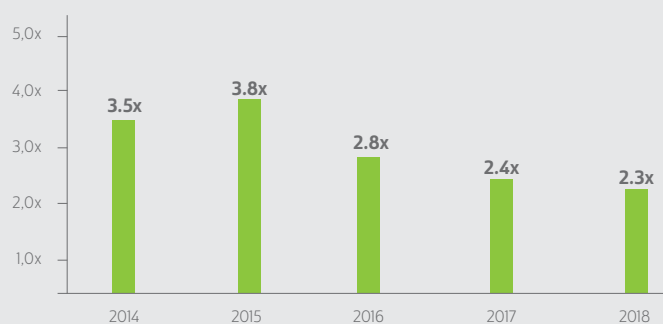
## Consolidated Financial Indicators

The Financial Debt reached US \$1.603 million, 3% down from December 2017. Financial Investments, in turn, totaled US \$788 million, decreasing 3% compared to the closing of 2017. Given the foregoing, Net Debt reached US \$815 million.

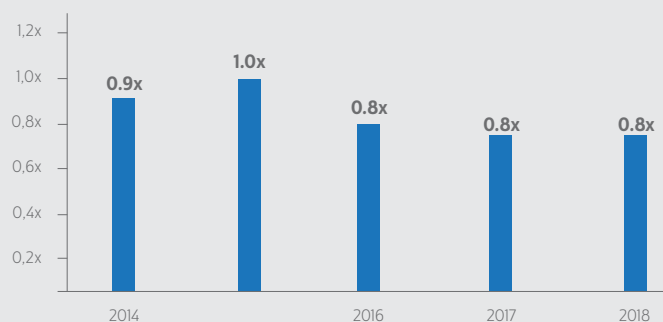
At the end of 2018, Gross Debt/EBITDA ratio reached 2.3, debt ratio (total liabilities over equity) totaled 0.8 times and leverage ratio (EBITDA over net financial expenses) reached 8.2 times, figures that reflect the Company's strong financial situation.

At the closing of 2018, Standard & Poor's (S&P) and Fitch Ratings, rated Colbún with AA- both with stable perspectives. At international level the company was rated BBB by S&P and Fitch Ratings and BAA2 by Moody's, all with stable perspectives.

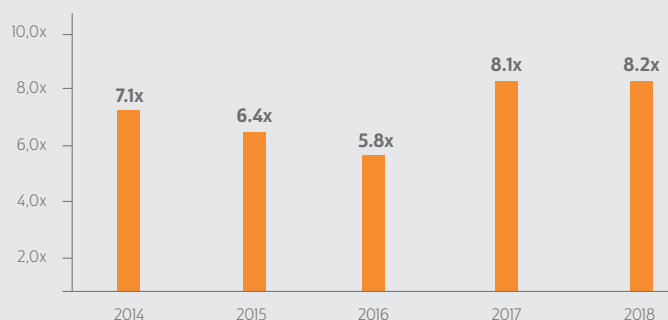
### Gross Financial Debt/EBITDA



### Debt Ratio



### Financial Expenses Coverage





# US\$ 297

Million in distributed dividends in 2018



# US\$ 684

Million was the EBITDA at 2018 closing



# 2,3

Times is the gross debt ratio on EBITDA

## Direct economic value generated and distributed in consolidated (in US\$ million) (201-1, 201-4)

(201-1, 201-4)

	2017	2018
Operating Income	1,838.3	1,830.3
Financial income	22.7	26.0
<b>Total direct economic value generated (VEG)</b>	<b>1,861.0</b>	<b>1,856.4</b>
Operating expenses	1,083.0	1,146.8
Employee Salaries and Benefits	69.8	74.3
Payment to Capital Suppliers (1)/Financing Activities (2)	306.3	361.1
Payments to the State (3)	97.2	108.4
Fixed-Asset Investment (4)	594.7	146.4
Community Investments (5)	6.8	5,5
Environmental Investments	5.4	5.1
<b>Total distributed Economic Value (VED)</b>	<b>2,163.1</b>	<b>1,847.5</b>
Net Effect of Financing Activities	- 32.1	-35.4
<b>RETAINED ECONOMIC Value (REV)</b>	<b>-334.3</b>	<b>-26,6</b>

### Notes:

1) Dividends (shareholders) and interest (banks) expenses.

2) Net Value between income and loan payments (only capital amount, interest-free).

3) Tax expenditure in those periods amounts to MMUS \$34.1 and 98.4 for 2017 and 2018, respectively.

4) Includes Investments in Term Deposits over 90 days.

5) This amount of community investment does not consider the production of water that Fenix delivers to the community of CHILCA (m3/year valued at US \$458,881).

The values indicated in this table correspond to the Company's cash flows during 2017 and 2018, which is why they do not coincide with what is expressed in the Statement of Comprehensive Income.

While Colbún did not receive direct assistance from the State, it did have access to tax franchises for donations to non-profit and SENCE-credit entities, and registered expenses accepted for donations, totaling US \$3.4 million.

## 3.2 Investor Relations

At Colbún we have implemented an Investor Relations model and Policy whereby we seek to provide transparent, relevant and timely information to all our investors, regardless of their size, to keep them properly updated regarding the Company's business.

In addition, the company seeks to maintain trust and long-term relationships with its investors, to which end it has set up an exclusively dedicated Investor Relations Area

that takes care of information requests both from Chile and from our Fenix Power subsidiary in Peru. Therefore, through this area, we have strengthened communication with industry investors and analysts through a series of initiatives, including visits to our plants, participation in breakfasts, regular meetings in our offices and participation in local and international investor conferences, seeking to promptly respond to their requests.

On occasion of the quarterly publication

### Investor Relations Model

#### Dedicated and trustworthy relationship

- I. Conference calls and breakfasts to present quarterly results.
- II. One-on-one meetings: With all the investors and analysts who so require.
- III. Attendance to national and international conferences.
- IV. Timely response to inquiries via email and telephone.

#### Relevant and timely information

- We seek to provide our investors with timely information, regardless of their size, to keep them duly updated on:
- I. The Company's operation and latest developments.
  - II. Their future plans, and
  - III. Other relevant facts.

#### Transparent Information

- En nuestra página web se encuentra disponible para todos nuestros inversionistas:
- I. The Company's financial information.
  - II. Market Information.
  - III. Main News.
  - IV. Corporate Presentations.
  - V. Contact Details of relations with investors team.

of financial results, the Investors Relations area is responsible for preparing analysis reports, organizing national and international conference calls with the participation of Company executives, and update the presentation of results for investors. This material is available to any

interested party at our Company's website where it is periodically updated.

During 2018 we increased the number of contacts and meetings with our investors; focused on reducing our response times and started contact with our investors in Fenix.



The Company's management in this area was reflected in the Reputational Risks Survey that Colbún carries out each year with its different stakeholders to detect risks and gaps, in which over 80% of investors consulted assessed shareholders' treatment positively.

And the same percentage agreed or highly agreed with the Company's transparency standards.





View of the  
Cordillera from  
Hornitos Power  
Plant, Valparaíso  
Region.

*Photo by Roy Seguel,  
Aconcagua operator  
Complex*



## Investor Relations Policy

This Policy is aimed at establishing the general guidelines regarding the Company's information, its content and the way in which it is provided to the investors.

The core principle of this policy is to provide public information on the

Company's historic performance in an equitable manner without privileging any specific group, maintaining an active and open dialogue with the Investors Community, always complying with current legal regulations.

## Financial policies approved by our shareholders

### Shareholders

#### Dividend Policy

**50%**

of distributable net income for the year.

#### INVESTMENT POLICY

Investment decisions should consider, the energy sale contract portfolio, the contribution of each project to the company's mix and medium-long term profitability, among others.

#### Financing Policy

Financing must provide the necessary funds for the proper operation of existing assets and for new investments. The level of debt should not compromise the "Investment Grade" credit rating of the issued debt instruments.

## 3.3 Business Management: Commercial Policy and Energy Supply

Colbún's Business and Energy Management Division is responsible for implementing the Company's business Policy and its relationship with customers, as well as the management necessary to provide continuous and reliable energy supply. The main management elements in these areas are described below.

### Commercial policy and customer relationships

EU3

Colbún seeks to provide its customers and the markets where it participates with reliable, sustainable and competitive energy supply. To that end, it has defined a Commercial Policy that considers an optimum contracting level based on its generation capacity, hydrological risk, demand and supply forecasts in the system, and indexation mechanisms in contracts, among others.

### CHILE

As we know, in recent years the electricity market has experienced a highly competitive context, with falling energy prices, reflected in supply tenders for Vis-à-vis this scenario, since 2017 Colbún has been developing a strategy focused on growing in the unregulated customers segment, i.e. consumers with over 500 kW of connected power, to whom the law offers the possibility of negotiating their rates directly with an energy vendor,

instead of the regulated rate system (electricity distribution companies).

At Colbún, we observe that unregulated customers value continuous, safe and reliable energy supply, provided by a longstanding and experienced generating company, whose asset and project mix allows it to honor its commitments. It is also a matter of attributes that in the design of regulated customer tenders are less evident.

Colbún has thus played an active role in the development of a robust market for unregulated customers, which has represented an opportunity for

growth for the Company and savings for many energy consuming companies. As result of this strategy, last year we were awarded new contracts for approximately 1,400 GWh/year, totaling over 3,000 GWh in the past two years and adding a total of 161 supplied customers (19 distribution companies and 142 unregulated customers) in December. If to this number we add the companies with which we have supply contracts which have not yet entered into force, in 2018 Colbún ended up with 245 customers. This figure compares to the 47 that we managed at the end of 2017.

### Evolution in the number of Colbún Chile Customers (EU3)

Type of Customers	2015	2016	2017	2018
Distributors	15	15	19	19
Industrial and Commercial (Unregulated)	3	3	28	142
<b>TOTAL</b>	<b>18</b>	<b>18</b>	<b>47</b>	<b>161</b>



**74%**  
of customers said they “agreed” or “highly agreed” with a favorable view of our sustainable management

The above has meant a major transformation of the Company, which has strengthened its commercial team throughout this period and implemented different initiatives aimed at our customers viewing Colbún as a friendly company that seeks direct and collaborative relationships and is characterized by providing safety, operational excellence and reliable service.

To imprint this stamp in the relationship with our clients, during 2018 we carried out different initiatives:

- The development of a new digital platform was initiated to have a better tool to manage the relationship with our clients.
- Billing and commercial communication processes with customers were improved.
- The customer service area was reorganized with the aim to improve their experience in this field.
- A renewable energy certificate was created, which allows customers who subscribe to this modality to be supplied from hydro, solar or wind power plants. This certificate has been very well accepted in the market.
- A newsletter for customers was launched in April, through which we

seek to deliver information related to the industry’s developments, regulations that can impact customers, and Colbún’s relevant milestones.

- During the year we organized two customer visits to the Angostura power plant, one of the projects where we managed to harmonize energy generation with community development through a tourist park built on the bank of the Angostura Reservoir.
- The second annual meeting with customers was held, in which industry challenges such as the decarbonization process were addressed.

To complement this effort, the Company also activated a communication campaign focused on the savings that can be attained as a unregulated customer and increased its presence in instances such as fairs and sectoral seminars.

It should be noted that in the annual survey carried out by the Company with its different stakeholders to enquire on satisfaction levels, risks and gaps, 74% of Colbún customers (energy and transmission) said they “agreed” or “highly agreed” with a favorable vision of our sustainable management.

This survey was responded by 84 people, belonging to 75 companies (out of a total of 115 companies that received the survey).

Regarding the protection of our customers’ data, we have not had any complaints related to data losses or violation of their privacy.

#### PERU

We are also developing this commercial vision in Peru through our Fenix subsidiary, a company that at the end of 2018 had ten customers, of which six were distributing companies, two unregulated customers and two generating companies.

Like in Chile, in Peru, the Company also seeks to generate a close relationship and high standard services with its customers. All of this was reflected in the annual survey implemented by this subsidiary and addressed to its customers, where satisfaction level was 85%.

In Peru, we have not had any complaints about data loss or violation of our clients’ privacy.

#### Number of customers, by type, in Peru (EU3)

Tipo de clientes	2018
Unregulated Customers	2
Distributors	6
Other Generators	2
<b>TOTAL</b>	<b>10</b>



## Customer Management Model

103-3, 418-1, 103-2

The Customer Strategy is based on the following pillars:

### Reliable, Sustainable and Competitive Supply

Our goal is to design, build and operate generation projects with high technical, economic, social and environmental standards to achieve sustainable energy supply in the long term for the markets where we operate and for our customers. This sustainable supply implies in turn meeting two important conditions:

**Reliable Supply:** we have a diversified generation mix that comprises an important base of renewable technologies (mainly hydroelectric, supplemented by energy commercialization or NCRE attributes of wind and biomass generation) and thermoelectric generation plants with high environmental standards. Our current hydroelectric and thermoelectric assets are located in different areas of the country, helping the electricity system to maintain the reliability conditions required in the operation, and offsetting the intermittence of variable energy generation sources.

**Competitiveness:** The management and operational efficiency of our thermoelectric and hydroelectric power plants are very important to be in a position to offer competitive prices. We are progressing in incorporating new

technologies such as solar and wind power to our generation portfolio, in order to supply even more competitive energy, from a more diversified mix, contributing to a safe and reliable energy transition in Chile.

### Close and high-quality service

We seek to build close and long-term relationships with our customers, based on mutual benefit, transparency and permanent dialogue. To comply with this, we are based on two principles with which will help us to make a difference in the market:

**Experience:** Colbún has over 30 years of experience in the power generation business, with a committed professional and technical team that is recognized in the industry.

**Dedication:** Colbún manages its contractual relationships in a personalized manner, delivering quick, effective and customer-tailored solutions. To continue improving our customer service, we conduct an annual customer perception and satisfaction survey to detect opportunities for improvement in our service.

### 2018 Milestones with our customers



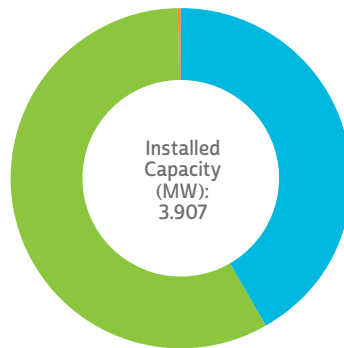


## Power Generation and Commercialization

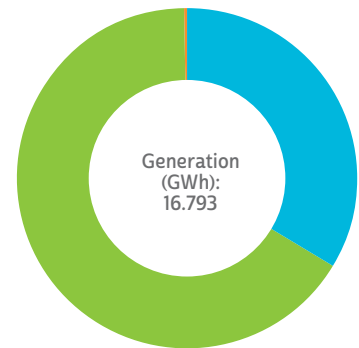
EU1, EU2

The following section describes Colbún's consolidated generation figures, showing an increase in hydroelectric and solar generation and a decrease in thermal generation.

Colbún Consolidated Power and Generation Figures (Chile and Peru)

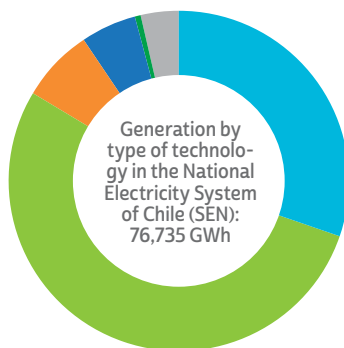


58.0% Thermal | 41.8% Hidroelectric | 0.2% Solar

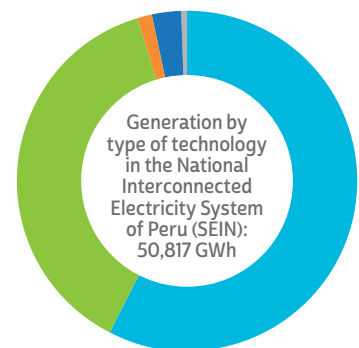


62.3% Thermal | 37.6% Hidroelectric | 0.1% Solar

Chile and Peru Electrical System Figures



53.4% Thermal | 30.3% Hidroelectric | 7.1% Solar | 5.2% Wind | 0.4% Diesel | 3.6% Other



57.8% Hidroelectric | 37.5% Thermal | 2.9% Wind | 1.5% Solar | 0.3% Others



Angostura  
Power Plant,  
Quilaco and  
Santa Bárbara,  
Biobío Region.



## Colbún Generation and Sales in Chile

In year-to-date terms, physical sales in Chile reached 12,796 GWh in 2018, 2.4% higher than December 2017. The greater physical sales for the period are mainly due to higher sales to free customers, partially offset by less withdrawals by regulated customers.

Colbún's total year-to-date generation in 2018 in Chile increased 2.4% in comparison to the previous year, mainly due to higher hydraulic generation (+ 7%) and higher efficient thermal generation based on natural gas, partially offset by lower coal and diesel generation.

### Installed Capacity by technology (MW)

Type of Energy	2018
Hydroelectric	1,633
Thermal	1,700
Solar	9.0
<b>TOTAL</b>	<b>3,342</b>

### Energy sales by type of customer (GWh)

2017	2018	2018
Distributors	6,332	5,308
Industrial	4,708	6,148
Total sales under contract	11,040	11,456
Sales to the SEN	1,435	1,045
<b>TOTAL</b>	<b>12,475</b>	<b>12,501</b>

### Average power sales by type of customer (MW)

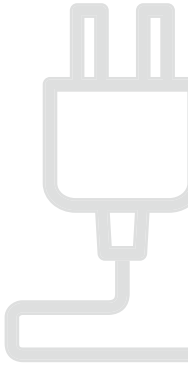
Type of Customer	2017	2018
Distributors	947	854
Industrial	661	774
Sales to the SEN	94	34
<b>TOTAL</b>	<b>1,703</b>	<b>1,661</b>



### Own production and purchases in the spot market (GWh)

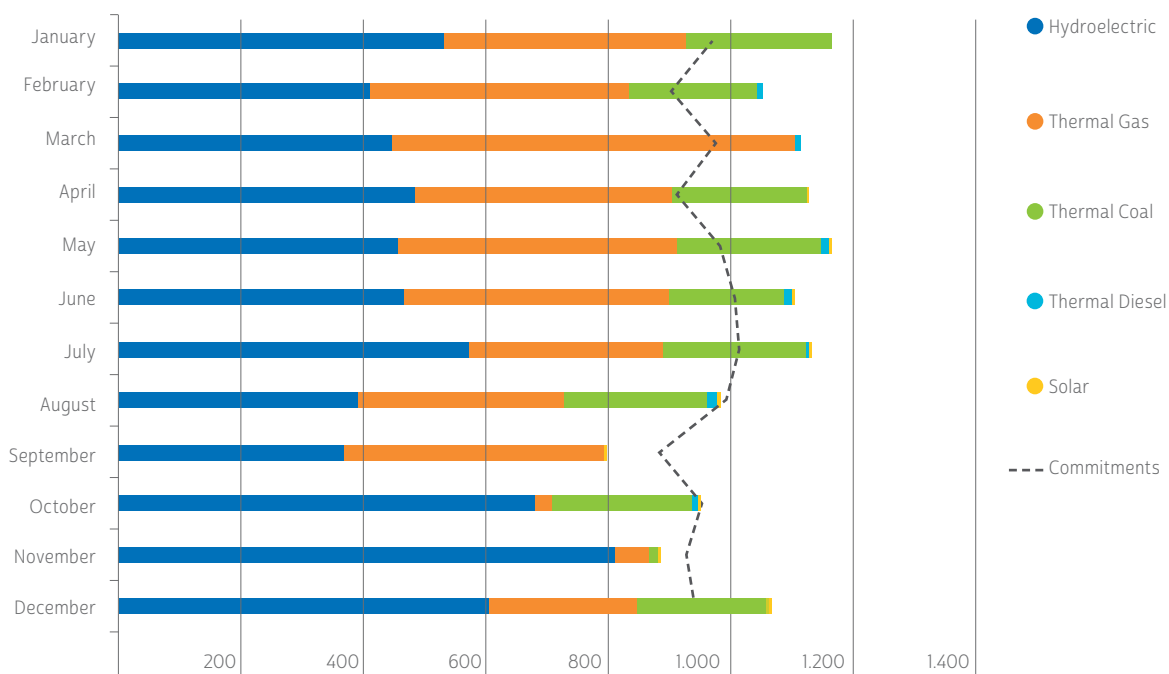
	2017	2018
Hydroelectric	5,895	6,312
Thermal Gas	3,822	3,859
Thermal Diesel	163	78
Thermal coal	2,716	2,620
Solar	-	10
<b>Total Own Production</b>	<b>12,597</b>	<b>12,880</b>
<b>Purchases from the SEN</b>	<b>61</b>	<b>132</b>
<b>TOTAL</b>	<b>12,658</b>	<b>13,012</b>

**100%**  
Efficient base  
Generation (hydro, coal  
and natural gas) covered  
100% of the year's  
commitments.



The following graph shows the behavior in 2018, where Colbún had deficits only in September and November, which were covered by purchases in the spot market

### 2018 Generation versus Commitments (GWh)





## Generation and sales in Peru

Physical sales to customers under contract in Peru at the end of December 2018 amounted 3,001 GWh, in line with the same period of the previous year.

Thermal gas generation in Fenix, in turn, reached 3,914 GWh in

December 2018, declining by 4.8% as compared to December 2017, explained mainly by the plant's lower availability with respect to 2017, resulting from a longer maintenance. The foregoing implied that, during the year, 95% of commitments were supplied with their own generation

### Installed Capacity (MW)

Type of Energy	2018
Thermal	565
<b>TOTAL</b>	<b>565</b>

### Energy sales by type of customer (GWh)

	2017	2018
Distributors	1,827	1,703
Industrial	409	448
Generators;	776	850
<b>Total sales under contract</b>	<b>3,012</b>	<b>3,001</b>
<b>Sales to the SEIN</b>	<b>1,100</b>	<b>1,044</b>
<b>TOTAL</b>	<b>4,112</b>	<b>4,045</b>



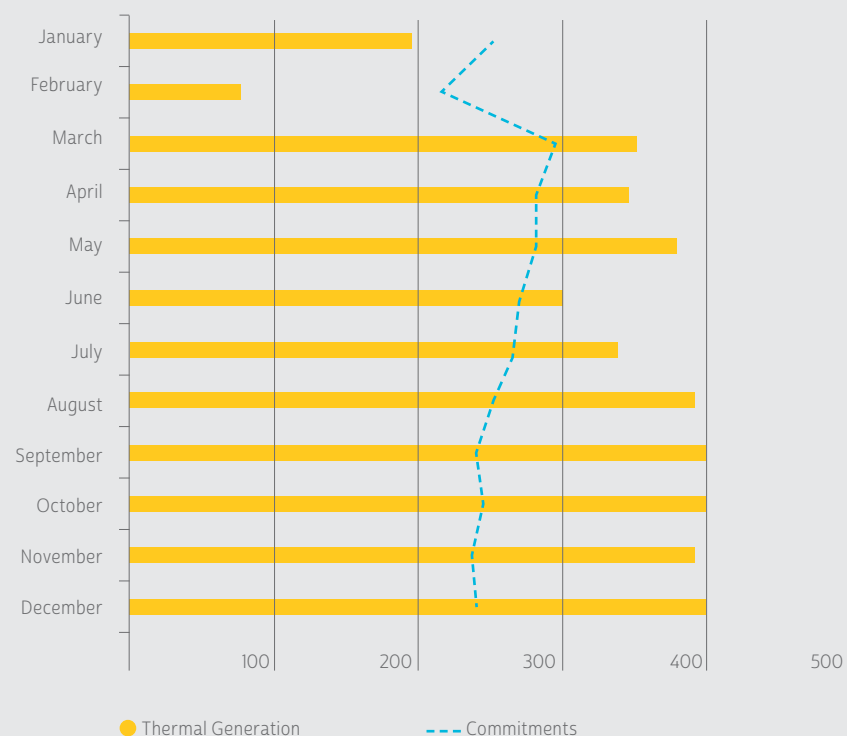
### Average power sales by type of customer (MW)

Type of Customer	2017	2018
Distributors	281	263
Industrial	54	58
SEIN	222	231
<b>TOTAL</b>	<b>557</b>	<b>552</b>

### Own generation and purchases in the spot market (GWh)

Thermal Gas	4,113	3,901
Thermal Diesel	0	12.5
Total Own Generation	4,113	3,914
<b>Purchases from the SEIN</b>	<b>93</b>	<b>221</b>
<b>Compras al SEIN</b>	<b>93</b>	<b>221</b>
<b>TOTAL</b>	<b>4,206</b>	<b>4,135</b>

### Generation versus commitments 2018 (GWh)



## Availability and reliability of power plants

EU6, EU30, 103-2, 103-3

The availability and reliability of our plants is based primarily on a maintenance strategy that includes preventative and predictive actions, improvements and modernizations, together with enhancing the competencies and skills of our staff. During 2018, the main activities were based on transversal programs, with significant advances in predictive maintenance, review of preventative maintenance strategies, making them more efficient and with a significant reduction in their costs.

It should be noted that an exhaustive revision of the short and medium term Opex and Capex was carried out including initiatives and significant improvements in their management, which resulted in an important cost reduction during 2018 and the future scheduled plan.

With respect to other plans that contribute to the improvement in availability and reliability, we incorporated in 2018 numerous initiatives based on a new strategy of Automation and Digitization that includes technologies according to the state of art in this matter.



## Maintenance Management

### Maintenance and modernization in thermoelectric power plants

#### Nehuenco Complex

During 2018, annual maintenance of the units was carried out, with no relevant activities or findings to mention. In addition, two improvements were made in the plant, in line with predictive maintenance. These are the creation of windows to improve safety in the execution of thermographies and the installation of a vibration monitoring system for 6.6 kV equipment. Both improvements are aimed at reducing equipment failures and increasing their reliability.

#### Santa María Complex

The unit's yearly maintenance was carried out during November, within the scheduled period, without relevant findings. On this occasion, the change of all the hydroelectric system control lines of steam turbine valves was completed, with an improvement in the engineering and flexibility of circuits as result of the Root Cause Analysis (RCA).

#### Fenix Power Plant

The power plant's shutdown took place in January and February and included three relevant works:

- Replacement of power transformers of the 2 gas turbines (TG-11 and TG-12).
- Replacement of generator rotors in a gas turbine (TG-12) and steam turbine (TV-10).

- Correction to the displacement of the shim in the compressor of a gas turbine (TG-II).

The last two were covered within the CSA contract with General Electric.

### Open-Cycle Plants

Major maintenance was carried out in Antilhue and Los Pinos plants, consistent with the application of corrections recommended by the manufacturer (service bulletins). In Antilhue, the re-installation of the factory-repaired turbine under supplier's warranty was performed on unit II and in Los Pinos, the turbine's combustion chamber and high-pressure blades were changed.

## Maintenance and modernization in hydroelectric power plants

### Aconcagua Complex

The maintenance program was executed without relevant facts to mention, in addition to minor modernizations in equipment. Since March, the Ovejería photovoltaic plant was incorporated into this complex. It is located in Til-til and has 9 MW of power.

### Biobío Complex

In the Rucúe power plant, the replacement of the voltage regulator, the excitation transformer and the electrical protections of unit I are worthy of mention.

### Colbún Complex\*\*

All scheduled maintenance was carried out, with nothing to report.

### Carena Power Plant

The modernization of units 3 and 4 of the control unit was carried out with refurbishment of the butterfly valves and the installation of a new distributor and turbine impellers, speed regulator and digital voltage, electrical protections, instrumentation and control system associated to the entire unit. This improves the plant's performance, and significantly increases reliability.

### Canutillar Power Plant

All scheduled maintenance was carried out, with nothing to report.



## Availability and load factors

Power plant availability in Chile was 92.5%, higher as compared to the previous year that recorded 91.6%.

As for the load factor, an increase of 0.6 percentage points was obtained, in 2018 load factor reached 44,3%.



## Availability per hydroelectric power plant (%) (EU30)

Power plant	2017	2018
Carena	90,81%	89,58%
Los Quilos	94,30%	86,98%
Chacabuquito	95,29%	95,68%
Juncal	95,29%	95,39%
Blanco	94,10%	89,28%
Juncalito	87,74%	97,61%
Hornitos	94,48%	93,42%
Colbún	94,21%	91,67%
Machicura	95,87%	92,78%
San Ignacio	98,13%	95,21%
Chiburgo	98,69%	97,18%
La Mina	-	94,04%
San Clemente	98,71%	93,45%
Angostura	95,36%	95,39%
Rucúe	93,57%	94,00%
Quilleco	96,87%	96,57%
Canutillar	95,16%	84,78%

## Hydroelectric power plant availability

Hydroelectric power plant availability reached 93.5%, slightly lower than the previous year, due to longer scheduled maintenance times. The load factor, in turn, reached 44.2%, increasing 2,3% comparing to previous year.



### Availability of thermal power plants

The combined cycles of the Nehuenco Complex reached 89.8% availability; a significant increase compared to 2017 (79.7%). In addition, they had a plant factor of 57.5%, versus 54.8% recorded the previous year. This was mainly due to lower scheduled maintenance requirements and a significant improvement in the plant's reliability.

The availability of single-cycle plants was 95.8% against 98.7% in the previous year and the load factor was 1.5%, versus 6.1% in 2017. The above due to major maintenance scheduled for these units.



### Availability by thermoelectric power plant (%) (EU30)

Power plant	2017	2018
Nehuenco I	73,05%	87,80%
Nehuenco II	85,78%	91,71%
Nehuenco III	98,88%	97,72%
Candelaria I	98,17%	93,62%
Candelaria II	99,18%	95,48%
Antihue I	99,83%	97,98%
Antihue II	95,84%	95,71%
Los Pinos	99,67%	95,68%
Santa María	92,59%	88,09%
Fenix	90,64%	84,78%





## 3.4 The Transmission Business

EU12, EU4

The electrical transmission infrastructure, fundamental to the reliability and competitiveness of electricity supply has become increasingly important, particularly in the context of the new Transmission Law passed in 2016 and the increased penetration of renewable energies that require an efficient evacuation of energy.

Colbún has 941 km of transmission lines and a total of 28 substations.

In 2018, the Company reorganized its assets, consolidating all transmission assets (national, zonal and dedicated) in Colbún Transmisión S.A.

This reorganization seeks to give this business increased focus on management, reporting and visibility. It should be noted that Colbún Transmission reports independently to the Commission for the Financial Market (CMF) its Financial Statements and main figures annually.

This company's Proforma EBITDA (considering all transmission assets) was close to US \$65 million in 2018.

Transmission facilities are managed by means of a contract between the two companies for the operation, failure repair and maintenance, by personnel of a Management specially established for this purpose in Colbún S.A. in 2015. This Management has 49 people and its objectives are to:

- Minimize transmission losses and maximize line reliability.
- Define and carry out scheduled maintenance and contingencies plans in existing installations, to improve efficiency and reliability indicators.
- Participate in the technical definition of the new transmission facilities to be developed to fulfill legal requirements of reliability and safety.
- Commercially manage transmission facilities to obtain adequate remunerations in each segment where they operate (National, Zonal and Dedicated).

### Transmission Lines property of Colbún, Km (EU4)

Transmission Assets	2016	2017	2018
Colbún S.A.	652.2	609.7	0,0
Subsidiaries (Colbún Transmisión S.A.)	263.8	331.3	941.0
<b>TOTAL</b>	<b>916.0</b>	<b>941.0</b>	<b>941.0</b>

### Transmission Losses as a Percentage of total energy (EU12)

	2016	2017	2018
<b>Transmission Losses</b>	<b>1.1%</b>	<b>1.3%</b>	<b>1.4%</b>

*Note: Our transmission line losses are directly related to the coordinated operation of the entire National Electricity System (SEN), which is defined by the National Electricity Coordinator (CEN) responsible for determining and coordinating the operation of all facilities in the power system, including power generation plants and transmission lines, among others.*

## Transmission Availability

	2016	2017	2018
Transmission Availability (time in %)	99,56%	99,86%	99,88%

*Note: Data on transmission availability refer to the annual availability of Colbún facilities and they reflect the availability improvement*

## Transmission Projects under Development

In agreement with current regulations and as a result of Transmission System Expansion Decrees published by the Ministry of Energy, Colbún S.A. and its subsidiary Colbún Transmisión S.A. are executing several expansion and regulatory adjustment projects in their facilities classified as National.

Work	Term (months)	Amount allocated (US\$ thousands)
Engineering, Supply, Construction and Commissioning Puente Negro 220 kV Substation DS 158 (PES June 2018)	24	11,259
Engineering, Supply, Construction, Testing and Standardization Commissioning of 220 kV Candelaria Substation and New Compensation Series at Puente Negro 220 kV Substation, DS 373	24	21,188
Engineering, Supply, Construction, Testing and Standardization Commissioning of Ancoa 220kV S/S. DS 373 (PES August 2018)	24	1,613
Engineering, Supply, Construction, Testing and Standardization Commissioning of Bays J3 and J10 at Alto Jahuel 220 kV S/S. DS 373	15	587
Engineering, Supply, Construction, Testing and Commissioning of Expansion and Change of Layout at Maipo 220kV S/S. DS 373	24	15,319
Engineering, Supply, Construction, Testing and Commissioning of Expansion and Change of Layout at Maipo 220kV S/S. DS 373	32	8,601
Extension of Mulchen 220 kV Substation in 5 segment positions to allow the connection of generation projects in the area (Supreme Decree 422) Commissioning: August 2019	21	3,661
<b>TOTAL</b>		<b>62,228</b>

Additionally, the "Pirque Sectioning S/S" work is under construction that was assigned to Papeles Cordillera S.A. (CMPC) in agreement with DS418 and later transferred to Colbún Transmisión S.A., which operates and runs the Papeles Cordillera's Maipo-Pirque line. This expansion work should be put into service in January 2020:

In Tender Process (months)	Term (months)	Estimated VI* (US\$ thousand)
110 kV Pirque S/S sectioning consists of the construction of two 110 kV segment positions to allow the sectioning of the Maipo-Pirque 110 kV line	18	1.765

*Nota\*: El Valor de Inversión (VI) estimado corresponde al valor que la CNE publica como referencial en el respectivo Decreto (DS 418).*

## Transmission customers by type

Type of Customer	Nº
Distributors	2
Generators	2
Industrial	3
Mining companies	2

*Note: Colbún S.A., Empresa Eléctrica Industrial S.A. and Río Tranquilo S.A. are also customers of Colbún Transmisión S.A., which are not considered in this table.*

## 3.5 Growth Prospects: Focus on renewables

103-2, 103-3

At Colbún we seek to maximize the value of our Company by exploring and identifying growth opportunities through projects that allow us to meet the power demand of our customers and of markets where we are present with competitive, safe and sustainable energy.

Under this premise and considering that solar and wind energy technologies are already proven developments that have experienced a significant reduction in costs in recent years, Colbún has increasingly focused its growth strategy towards renewable energies from variable sources.

In that sense, the Company's long-term goal is to double its size from now until 2030 based on renewable energies and be one of the most competitive company in the development of these projects.

This implies building about 4,000 MW in the next decade, which is equivalent to producing more than 1 MW a day in that period.

To the extent that there are adequate regulatory conditions and market opportunities, we also want to take this focus on renewables to other countries in the region, where we are already exploring opportunities.

These energies, added to our current generation portfolio, particularly, hydroelectric dams, will allow us to have a very competitive position to offer our customers and the country 24/7 renewable energy in the future.

That being said, the regulatory challenge of a large insertion of renewable energies should not be overlooked, since the variability and intermittency of solar and wind sources will require a more flexible electrical system to complement this type of energy (see details on this regulatory challenge in Chapter 1).





Ovejería  
photovoltaic  
plant

## Our Strategy

Colbún created in 2015 a Renewable Energies Area, focused on the search and development of business opportunities to undertake renewable projects of variable source (solar and wind) in Chile.

Therefore, together with rigorous and systematic analysis of most projects available in the market (brownfield), we also started the search for new locations for greenfield developments, in order to ensure a project portfolio with highly competitive locations.

As result of this work carried out in recent years, at present, the Company has a portfolio of seven wind and solar projects in initial stages of development, over 1,800 MW, distributed in different parts of the country.

In addition, we have participated since 2017 in the Consortium Atamos-TEC (Atacama Module and System Technology Center) an alliance of universities, companies and institutes (CEA INES de France, ISC Konstanz of Germany and Fraunhofer Chile)

that will develop technologies for the solar energy industry that adapts to Chile's specific conditions. This Consortium has funding from CORFO and private companies, including Colbún.

Below we detail the status of the projects with a greater degree of progress and whose materialization is subject to the technical/financial evaluations of each initiative, to the country's energy needs, and to the development of a management that allows an adequate insertion of projects in their environment and/or in the communities that welcome them.



## Projects under Development

Colbún-6.EC

### **Horizonte Wind Farm Project:**

This project consists of a wind farm located 70 km northeast of Taltal and 170 km southwest of Antofagasta.

Horizonte has a total power of approximately 607 MW and an average annual generation of approximately 2,000 GWh.

This project starts at the end of 2017 based on being awarded a tender called by the Ministry of National Assets for the development, construction and operation of a Wind Farm through a 30-year concession of use in a sector owned by the government of approximately 8000 hectares.

Four years are estimated for its studies and permits phase and three years for its construction.

During 2018 the feasibility phase progressed, beginning with the resource measurement process through the installation of anemometric towers and Lidar equipment. Progress was also made in engineering and environmental diagnoses.

### **Sol de Tarapacá Photovoltaic Project**

The Project considers the installation of a solar plant with an installed capacity close to 200 MW.

This solar plant is located approximately 5 km southwest of the town of La Tirana, and about 16 km south of Pozo Almonte in the Tarapacá Region and uses a total area of approximately 423 hectares.

The generated energy will be supplied to the Interconnected System through an electric transmission line, which starts at the S/S associated with the farm, passing through a transmission line of an approximate extension of 8 km that runs south to north, to the new Pozo Almonte substation located 2.5 km

northeast of the intersection of the La Tirana and the Panamericana Highway. This project originates from its acquisition to the First Solar American company which had some progress, including engineering studies, environmental studies and an exclusive contract with a buying option of the land.

### **Other renewable energy from variable sources projects**

At the closing of 2018, Colbún has completed a portfolio of locations for 5 other wind and solar projects (in addition to Horizonte and Sol de Tarapacá projects mentioned above), which are in early stages of development. These in total amount to approximately 1,000 MW, distributed in the Atacama Region, Coquimbo, Biobío, Los Ríos and Los Lagos.



### **San Pedro Hydroelectric Project:**

The San Pedro Hydroelectric Project is located about 25 kilometers north-east of Los Lagos district, Los Ríos Region and considers using the water from the homonymous river through a reservoir power plant. Considering the adjustments envisaged in the project, it will have an approximate installed capacity of 170 MW and an annual generation of 953 GWh under normal hydrological conditions.

The operation of the power plant will be such that the reservoir level will remain practically constant, which means that the flow downstream of the plant will not be altered by its operation.

The San Pedro-Ciruelos transmission line project will allow injecting energy from San Pedro power plant to the SEN over a 220-kV high voltage line with a total extension of 47 km that will connect at the Ciruelos substation.

After observations made by the Authority in 2015 to an Environmental Assesment Study of Adjustments to the original project, in order to adapt it to the conditions of the terrain, in 2018 a

new EIA was concluded that was finally readmitted to the SEIA in December 2018.

### **Guaiquivilo Melado Project:**

The Guaiquivilo Melado Hydroelectric Power plant project is a hydroelectric complex with regulation capacity located in the basins of the Guaiquivilo and Melado rivers, in the District of Colbún. It has a total power of 316 MW and an average annual generation of approximately 1,629 GWh. To inject energy into the SEN, a 220-kV high voltage line is considered with a total extension of approximately 90 km from the Guaiquivilo Power Plant to its point of connection in Los Cóndores High Voltage Line.

Regarding this project, Colbún has decided to defer its development if market conditions to execute the initiative are not present, which are permanently monitored.

### **Los Cuartos Project:**

Los Cuartos Hydroelectric Project is located on the Biobío river, near the town of San Carlos de Purén, about 5 km upstream from the intersection of the Carretera Panamericana and Carretera del Sur highways. This hydroelectric plant has water rights for 93 MW, with an annual average generation of approximately 511 GWh. The Project also considers a 10 km transmission line to be connected to the Mulchén substation.

Regarding this project, Colbún has decided to defer its development if market conditions to execute the initiative are not present, which are permanently monitored.



## 3.6 Internationalization

Colbún-6.EC

One of the Company's strategic focuses is to seek growth opportunities at regional level, studying investment alternatives in other markets to diversify income sources and risks, in addition to applying our know-how and standards of excellence at operational and management level.

During 2018 the search and evaluation of opportunities focused on Peru, where we aim to consolidate Fenix's position, and in certain Latin American countries, where we identify stable regulatory frameworks and/or low electricity consumption per capita and/or needs for electrical infrastructure that offers future growth opportunities.

Participating in markets other than the current one will improve our diversification in terms of hydrological conditions, generating technologies, and regulatory framework, among others. We seek to grow and to diversify with a responsible and long-term vision, under the premise that this type of operations will add value to the Company.

For this reason, our search has focused on assets in operation, the acquisition of which will not compromise our investment grade credit rating, and which meets the Investment Policy approved by the

Shareholders' Meeting. We search for opportunities where we identify room to apply excellence management criteria and make use of our expertise in the industry in technical, socio-environmental, financial and commercial terms.

For this purpose, we have a dedicated team with the experience and competencies to develop this analysis in a systematic way.

Throughout the year, we continued to work on the international growth plan, studying new markets and evaluating between 1,500 and 2,000 MW in various investment alternatives at regional level.

In 2019 we will continue to explore growth options in Latin America, which are going to be studied on their own merits and always under the criterion that they add value to the Company.





Fenix Power  
Plant, Chilca,  
Peru



## 3.7 Ethics and Corporate Governance

102-16, 102-17, 102-25, 102-26, 102-29, 102-30, 102-34  
102-43, 103-2, 103-3, 205-1, 205-2, 205-3

### Corporate Governance Framework

102-26

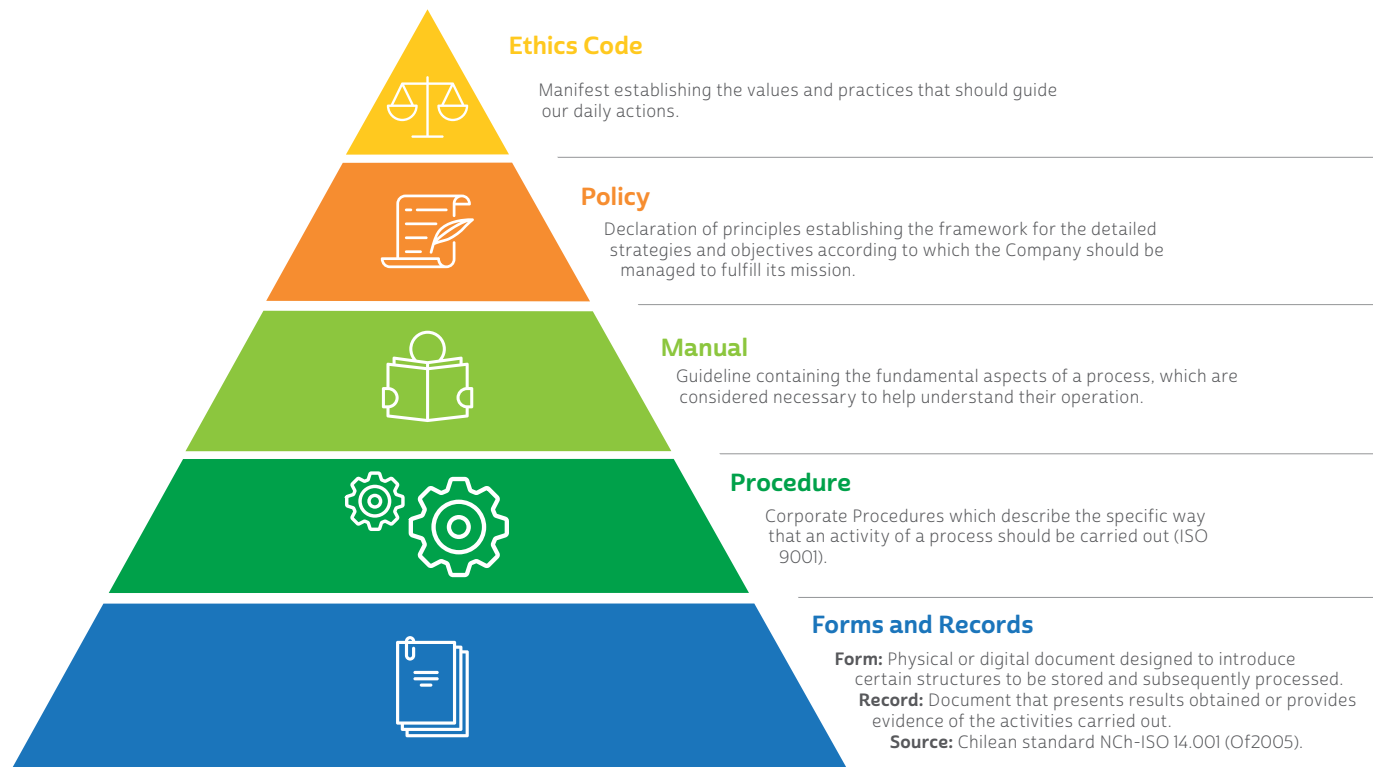
Colbún's Corporate Governance is ruled by policies and procedures that have been disseminated within the Company. Approvals and/or updates of standards and policies associated to the organization's economic, environmental and social issues are

proposed by the Company's senior management, headed by its General Management, and subject to the approval of the Board of Directors.

At Colbún we have made available to all our workers the Corporate Policies and Procedures website called Colbunpedia,

which enables access to the following information: Corporate Documents, Company Process Maps, Policy Catalog and Process Procedures.

Also, most of our policies are made available to our shareholders and stakeholders on the Company's website.





## Ethics Based Culture

102-26, 102-16

At Colbún, we have a Code of Conduct and Business Ethics since 2013 that sets forth the mission, vision, values, ethical principles and practices that must guide our daily activities and the decision-making of all our workers, contractors and suppliers, applicable to all operations of Colbún and its subsidiaries.

**Our Code of Ethics is reviewed annually by evaluating possible improvements, and the most recent update was published in April 2018.**

The organization in charge of this matter is the Ethics Committee, integrated by the Internal Audit Management, the Legal Affairs Management and the Organization and People Management, which must propose improvements and annual updates to the Ethics Code.

The dissemination strategy of the Ethics Code - which is available in Spanish and English - considered an email from the General Management to all workers, who had to register the opening of the document online, leaving evidence of its receipt. In addition, infographics were

developed which are available in all the bulletin boards of the Company's physical facilities. With respect to new workers, induction processes include disclosure of the principles of this Code and the obligation of incoming collaborators to become familiar with the existence of the code and the main topics addressed therein.

In the case of Fenix, in June 2018 the Code of Ethics was updated based on Colbún's and disseminated by means of an email to all collaborators in late August 2018, where the second version of the Ethics Code was presented. This document contains the same principles, values and practices that are guiding the daily actions and the decision-making, emphasizing the ethical action of all our collaborators, aligned with the fight against corruption. The new version considers important issues such as conflicts of interest and facilitation payments as misconduct that, if we become involved in them, it would have a negative impact on the Company's reputation. Also, a notification was sent with a reading task on the Fenix platform, action through which its reading is verified.

Informative panels have also been displayed in highly visible places of the Magdalena and Chilca headquarters on the Ethical Line and its operation.

In addition, as part of the dissemination process, "Eticápsulas" were sent, concerning the reception of gifts and presents, and conflicts of interest, all through emails to collaborators with the aim to reinforce key guidelines of the Ethics Code.

Finally, **it is important to note that, at the beginning of January 2018, at the request of the Board of Directors, Colbún created an Integration Plan, which seeks to ensure a culture of integration throughout the Company** and formalize and systematize policies and practices in the field of human rights, free competition, ethical dilemmas, gender and diversity, while maintaining the Board informed of all progress, as well as of any internal and external conflict in advance.



## Complaint Management

102-17, 102-34

The Code of Ethics is published on our website so that all our stakeholders can have access to it and can make inquiries or complaints if necessary.

For this purpose, we have a communication channel available on the website called Compliance Hotline that operates via electronic form, e-mail or regular post to receive direct or anonymous complaints related to compliance with standards of ethical conduct, conflicts of interest and any issue relating to a potential noncompliance with these standards. This channel of communication can be used by all interested parties.

In addition, complaint mechanisms are informed to employees through the

Intranet. Complaints are channeled through the Ethics Committee, composed of the Internal Audit Management, Legal Affairs Management and Organization and People Management.

In the case of our contractor companies, they were sent a letter in 2018 to disseminate the Compliance Hotline and reinforce the Ethics Code.

During 2018, 20 complaints were posted on our Compliance Hotline in Chile and 9 in Peru, all of which were addressed according to the established procedure. The Ethics Committee is also the body responsible for the investigation and operational analysis of the complaints, independently, confidentially and without consequences for its issuers. The investigation carried out is presented to the Board of Directors' Audit Committee, the final entity responsible for this communication channel.

Complaints received in 2018 in Chile



By interest group

- Anonymous
- Contractors and suppliers
- Workers
- Community and society



By subject

- Labor practices
- Conflicts with third parties
- Conflicts of interest
- Infraction of internal regulations
- Legal non compliance
- Safety and Health



La Mina Power Plant, San Clemente District, Maule Region  
 Photo by David Gonzalez, Environmental Supervisor of Colbún Complex

Complaints received in 2018 in Peru



- By Interest Group**
- Anónimo
  - Contractors and suppliers
  - Community and Society
  - Workers



- By subject**
- Conflicts of interest
  - Infraction of internal regulations
  - Queries
  - Others



## Management of potential conflicts of interest

102-25

For Colbún it is essential to act in a consistent and transparent way, avoiding conflicts of interest that may arise, or manage them properly when necessary. Thus, in our Ethics Code we define that a conflict of interest arises in any situation where a worker uses his/her contacts or position in the Company for the benefit of his or her own interests, or those of indirect relatives or third parties.

It also provides that each worker is responsible for preventing these issues or for managing them properly, and to notify any situation of potential conflict of interest, reporting the situation to his/her direct superior and the Internal Auditing Manager.

In the same way, in the event that a Board member is in a situation of potential conflict of interest, he/she must communicate this issue to the Board of Directors and shall refrain from participating in the discussions in which decisions are made concerning the reported issue, as provided in the law.

During 2018, for the first time, a survey was applied to the entire organization to identify potential risk for conflicts of interest, with a response rate of 89%.





## Crime prevention model

205-1, 205-2, 205-3

### In Chile

Our Company has a Crime Prevention Model, within the framework of Law No. 20,393 on Criminal Liability of Corporations, which seeks to prevent the risks of bribery, money laundering, financing of terrorism and handling of stolen goods. The model is provided with an internal and external regulatory standard, and with a Crime Prevention Head (Internal Auditing Manager) designated by the Board.

This model is certified by the independent risk rating agency ICR. In 2018 workers were informed about anti-corruption procedures, through e-learning training on the Criminal Liability Act, including bribery. During the year there were no complaints regarding crimes described in the law just mentioned.

In addition, Colbún incorporated in its contracts with contractors and vendors' provisions for precautionary compliance with the law in this matter by consultants and third parties that are linked to the Company.

### In Peru

During the 2018 period, in agreement with current regulations of Peru, the Crime Prevention Model and Manual was approved for Fenix, in compliance with Law 30,424 and its amendments. This model consists of a preventative and supervisory system on the processes and activities that are exposed to the risks of the crimes of bribery to national or foreign public officials, financing of terrorism, money laundering, collusion and trafficking of influences. It also includes the principles, values and duties that should guide the daily action and decision-making of all our collaborators and suppliers.





0

Registration of facts linked to corruption offenses in Chile and Peru during 2018.



100%

of the members of Colbún's Board received training in anti-corruption Policies and Procedures.

## Risks identified in relation with corruption

During the 2018 period, the Corruption Crime Risk Matrix has been updated according to a review of Colbún and Fenix processes, and it has been possible to develop control measures to mitigate these risks.

The following risks were identified, which are part of Colbún's risk matrix:

- Risk of Bribery
- Risk of financing of Terrorism
- Risk of money laundering
- Risk of handling of stolen goods (acquiring stolen goods)

During 2018, there were no acts linked to corruption offenses in Chile or Peru. During 2018, 100% of the members of

Colbún's Board received training in anti-corruption Policies and Procedures.

In addition, due to amendments to Peruvian law, the Fenix Audit Committee approved the New Crime Prevention Model, which was released publicly on December 13, 2018.

## Free Competition

206-1

The Company has a Free Competition Policy approved by the Board of Directors. It states that all workers must fully comply with the rules in defense of free competition. It also defines the practices that are understood to be contrary to free competition, such as collusion or any agreement between Colbún and its competitors, involving prices, sales conditions, market division and production limitation, among others.

As for the trainings, since 2011 the Company periodically carries out talks addressed to the main executives, in

order to inform about the current issues in free competition, such as updating of standards, case analysis, international experience, etc.

During 2018, in Chile and Peru, there were no lawsuits, legal procedures or fines for causes relating to antitrust practices or free competition issues against Colbún.



Water  
purification  
(Reverse  
Osmosis) plant  
in Nehuenco  
Complex



# 04

## Social Performance

This chapter gives an account of Colbún's work in three major dimensions: workers, suppliers / contractors and community management. The 2018 management and performance model is discussed in each case.





# Materiality Analysis

Based on the Materiality Study carried out to prepare the Annual Integrated Report, four relevant material aspects associated with the subject matter are addressed in Chapter 4.

## Material Topic:

### Management of Organizational Change



#### Scope:

- Internal organization of the company
- Change management to cope with new challenges
- Way of doing business

#### Associated Risks:

- Loss of competitiveness
- Loss of business opportunities
- Inability to attract new talents
- Organizational rigidity and failure to adapt to the environment

#### How we manage it:

The Company has been driving internal changes and action plans in order to cope with the new challenges the industry is facing. This includes the drafting of new purpose and associated strategic vision, internal campaigns to promote new capabilities and business insight, restructuring and internal reorganizations, hiring new capabilities, training and partnerships with third parties.

#### Why is it material to Colbún:

This is a new material topic, which has emerged strongly within the context of the relevant changes affecting the power sector (energy transition) and the cultural changes that the country has experienced (more empowered citizens, diversity issues, higher environmental standards, business ethics, etc.). Managing change to adapt the Company to this new context is very relevant in the face of proper risk management and the Company's future growth and development.

## Material Topic:

### Occupational Safety and Health



#### Scope:

- The health and safety of our workers and contractors
- The health and safety of the communities where we operate

#### Associated Risks:

- Potential accidents
- Potential occupational illnesses
- Damages to facilities
- Damages to public infrastructure
- Impact on operations

#### How we manage it:

Internally, Colbún has been working for several years now in order to install a safety culture. To this end, we maintain various programs and policies seeking to manage this topic and reduce associated risks. Among them are our Healthy Life Program; Program for the Prevention of Professional Illnesses; Zero Fatality Protocol; Zero Fatality Standards, and Action Plans associated with safety for each management, etc. Externally, the Company monitors the safety of its facilities on a regular basis, implements signage and measures to prevent accidents and works on education and information campaigns. This, in addition to a Policy of Human Rights and a Policy on Occupational Safety and Health, Environment and Quality.

#### Why is it material to Colbún:

The health and safety of the people working in our facilities is a priority for Colbún: there is no justification to putting at risk the physical health or integrity of a person. The same applies to the communities where we operate: our facilities must meet the appropriate standards to avoid accidents or endangering people's lives. Both are first priorities.

**Material Topic:**  
Internal Culture



**Scope:**

- Human capital
- Work practices
- Work climate
- Human rights
- Diversity and inclusion (gender and disabilities)

**Associated Risks:**

- Labor conflicts
- Operation stoppage
- Loss of high-performing technicians and professionals
- Loss of competitiveness
- Inability to attract and retain new talents
- Organizational rigidity

**How we manage it:**

The company develops measurements and applies diagnostics on a regular basis to monitor progress and gaps that may exist in terms of professional development and internal climate. This has led to the implementation of programs such as Leadership Program, Development Plan and Succession Chart, Work Plan with Trade Unions and Workers' Groups, Benefits Program, activities that include families and training in general. An adequate communication with our workers is also very relevant: for this reason, emphasis has been placed in recent years on improving communication channels. The same applies to unions, with whom regular meetings and workshops are held. All the above is developed within the framework of a People Management Policy, supplemented by our Code of Ethics and the Declaration of Human Rights. In addition, an Integrity Plan has been worked out, one of whose pillars is to strengthen management in the area of gender and diversity.

**Why is it material to Colbún:**

Providing quality employment, in a good work environment and fostering professional and personal development is very important to encourage performance of workers and contractors and is a competitive advantage when it comes to retaining or attracting talent. But also, companies now must have an internal culture allowing them to be flexible and adapt quickly to major changes in their environment; this is especially true for the power industry.

**Material Topic:**  
Community Relations and Development



**Scope:**

- Social-environmental challenges: relationship with the Chapo Lake community, community perception of Santa María, development of San Pedro
- Community relationship
- Local education and entrepreneurship
- Local infrastructure
- Local tourism
- Job opportunities
- Local security

**Associated Risks:**

- Community opposition
- Conflicts with local authorities
- Damage or stoppage of our facilities
- Local frustration due to expectations not fulfilled

**How we manage it:**

The Company maintains a Community Relations Policy and a Community Manual, which set the main guidelines for establishing a relationship with the communities; they include a Community Relations Strategy to address this challenge, the ultimate expression of which is a series of social plans and programs adapted to the needs and conditions of each location. In addition, Colbún conducts a survey on the perception of the adjacent communities at least once a year, to identify the local perception of our Company, pending challenges and opportunities for joint work, in addition to the Policies on Sustainability and Donations.

**Why is it material to Colbún:**

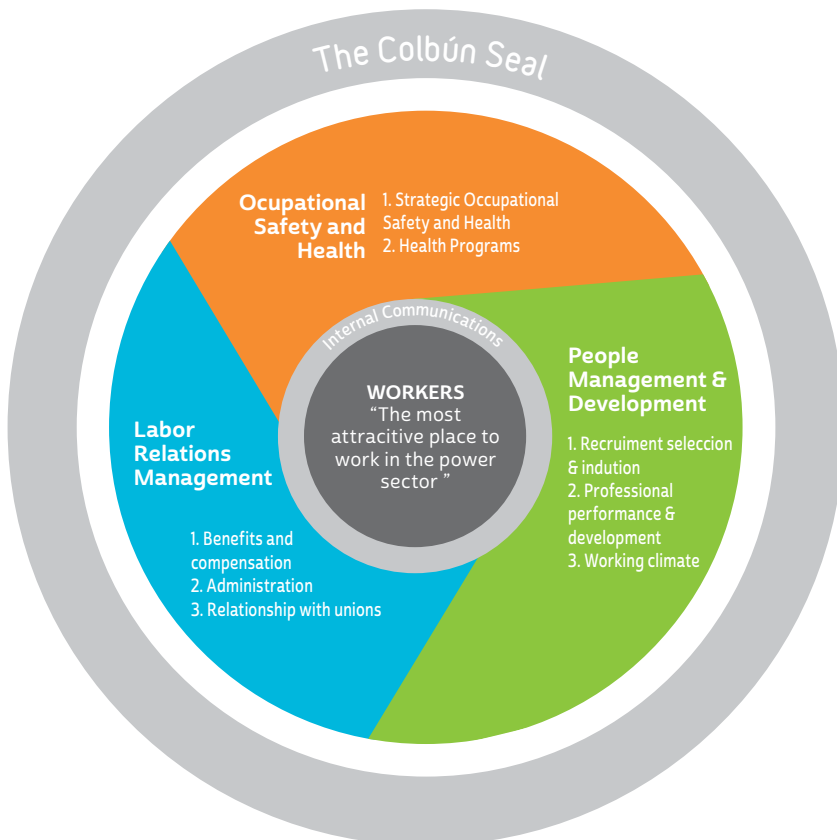
The sustainable management of our facilities requires a long-term relationship with the neighboring communities where they are located and that these communities perceive that they are better off with than without the presence of the Company. This means not only mutual knowledge and good operational and environmental performance, but also developing community work to generate opportunities and better quality of life at the local level.

## 4.1 Workers

102-8, 102-36, 102-43, 103-2, 103-3, 203-2, 404-1, 404-3, 405-1, 405-2, EU-14, Colbún-8.TR, NCG 386

The following section describes the main policies and performance indicators that define Colbún's relationship with its workers. Our main commitment with them is to offer them a quality job and a work environment that is safe and promotes personal and professional development.

### Workers' Management Model



### 1. Workers:

At Colbún, we strive to be the most attractive company to work in the power sector. For this reason, we care about our workers, managing labor relations from the onset, for people to feel valued and to develop their skills. All this is branded with Colbún's own seal.

### 2. Seguridad y Salud Ocupacional:

We are committed to protecting the safety and health of all our workers and those who work in our contracting companies. We seek to apply programs and policies that promote safe work, ensure the welfare of our people, and are consistent with a good quality of life.

### 3. People Management and Development:

We strive to be an organization that attracts the best professionals, where a positive organizational climate is fostered and where people feel valued and can develop according to their competences. To this end, we have implemented programs that enhance the capabilities of our people.

### 4. Management of Labor Relations:

We make sure to build good working relationships with our workers and their representatives, through continuous relations.

### 5. The Colbún Seal:

We work on the identity that characterizes us as an organization, on the values and principles that distinguish us.



## Headcount

At December 2018, Company headcount was 971 workers, 2.1% less than 2017. This is mainly due to reductions in the Engineering and Projects Division, both at Head Office level and in Maule Region Project personnel.

In Peru, meanwhile, the affiliate Fenix recorded a total of 88 workers at the same date. In 2018 there was a reduction of four workers as compared to the previous year, distributed in the power plant and corporate offices, in the districts of Chilca and Magdalena in Lima, respectively.

### Overall headcount Colbún Chile according to geographical location

(102-8)

Region	2016			2017			2018		
	Femele	Male	Total	Femele	Male	Total	Femele	Male	Total
Metropolitan Region	133	290	<b>423</b>	139	293	<b>432</b>	133	283	<b>416</b>
Valparaiso Region	19	172	<b>191</b>	14	163	<b>177</b>	15	167	<b>182</b>
O'Higgins Region	1	23	<b>24</b>	1	24	<b>25</b>	1	26	<b>27</b>
Maule Region	6	107	<b>113</b>	3	96	<b>99</b>	5	85	<b>90</b>
Biobío Region	22	194	<b>216</b>	20	198	<b>218</b>	17	200	<b>217</b>
Los Ríos Region	2	19	<b>21</b>	2	19	<b>21</b>	1	19	<b>20</b>
Los Lagos Region	4	19	<b>23</b>	3	17	<b>20</b>	2	17	<b>19</b>
<b>TOTAL</b>	<b>187</b>	<b>824</b>	<b>1,011</b>	<b>182</b>	<b>810</b>	<b>992</b>	<b>174</b>	<b>797</b>	<b>971</b>

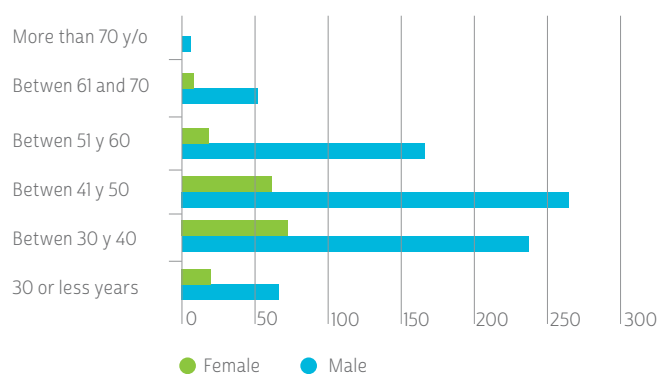
### Overall headcount in Fenix according to geographical location

(102-8)

Region	2016			2017			2018		
	Femele	Male	Total	Femele	Male	Total	Femele	Male	Total
Lima	18	73	<b>91</b>	19	73	<b>92</b>	19	69	<b>88</b>
<b>TOTAL</b>	<b>18</b>	<b>73</b>	<b>91</b>	<b>19</b>	<b>73</b>	<b>92</b>	<b>19</b>	<b>69</b>	<b>88</b>

### Workers ranked by age and gender

(NCG 386)



### Workers ranked by seniority

(NCG 386)





### Chilean Numbers



174  
Female



797  
Male

### Peruvian Numbers



19  
Female



69  
Male

### Workers per Citizenship

Citizenship	Total
Germany	2
Argentina	3
Belgium	2
Bolivia	1
Brazil	2
Colombia	3
Italy	1
Venezuela	3
<b>TOTAL</b>	<b>17</b>





The tables below reflect worker diversity per gender and age

**Total Headcount Colbún Chile,  
According to age range at December 31, 2018**  
(102-8)

Position Category	Less than 30			Between 30 and 50			More than 50			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Executive	0	0	<b>0</b>	9	30	<b>39</b>	2	30	<b>32</b>	11	60	<b>71</b>
Professional	14	29	<b>43</b>	89	215	<b>304</b>	6	81	<b>87</b>	109	325	<b>434</b>
Administrative	2	5	<b>7</b>	23	8	<b>31</b>	17	14	<b>31</b>	42	27	<b>69</b>
Other Positions	5	33	<b>38</b>	7	252	<b>259</b>	0	100	<b>100</b>	12	385	<b>397</b>
<b>TOTAL</b>	<b>21</b>	<b>67</b>	<b>88</b>	<b>128</b>	<b>505</b>	<b>633</b>	<b>25</b>	<b>225</b>	<b>250</b>	<b>174</b>	<b>797</b>	<b>971</b>

**Total Headcount Fenix, Peru  
According to age range at December 31, 2018**  
(102-8)

Position Category	Less than 30			Between 30 and 50			More than 50			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Executive (Managers in the case of Fenix)	0	0	<b>0</b>	1	2	<b>3</b>	0	2	<b>2</b>	1	4	<b>5</b>
Professional	4	2	<b>6</b>	6	32	<b>38</b>	2	0	<b>2</b>	12	34	<b>46</b>
Administrative	3	1	<b>4</b>	2	2	<b>4</b>	1	1	<b>2</b>	6	4	<b>10</b>
Other Positions	0	3	<b>3</b>	0	24	<b>24</b>	0	0	<b>0</b>	0	27	<b>27</b>
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>	<b>9</b>	<b>60</b>	<b>69</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>19</b>	<b>69</b>	<b>88</b>

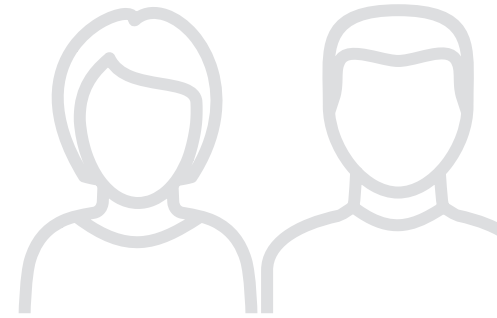
## Competitive Remunerations

(405-2)

To ensure that our compensation is competitive, we systematically compare our income with that of the industry. In this manner, we seek to compensate each worker based on their skills and experience, with a sense of internal and external equity. For purposes of comparison, only those positions and/or roles in which there were more than four women workers with equivalent responsibilities were considered. Regarding the gender wage gap, different methodologies will apply, depending on the entity to be reported or monitored in this area. If we take the Standard 386 Methodology of the Financial Market Commission, which compares the average base salary of women versus men in a company, Colbún recorded an improvement in the wage gap from -12.4% in 2017 to -8.8% in 2018 (in other words, women

have an average base gross salary equivalent to 91.2% of that of men).

The methodology proposed by the Gender Parity Initiative (IPG as per the acronym in Spanish) - a public-private partnership promoted by the IDB, the World Economic Forum and the Women's Community, of which Colbún is a member - also shows improvement: from a gap of -0.4% to a difference of 2.3% in favor of women (in other words, women's salary is equivalent to 102.3% of men's). This index considers a methodology where the average gross salary per hour is compared in senior management, middle management positions and workers with no supervisory roles, all of them weighted by the number of employees in each category.



**-6.4%**

Was the salary gap between female and male workers in Chile in 2018



### Relationship between women's base salary as compared to men's, broken down by professional category according to GRI methodology

(405-2)

Positions Evaluated	Salary Gap (average gross salary) Chile	Salary Gap (average gross salary) Peru
Assistant Managers	-8.5%	-
Professionals and Supervisors	-8.5%	-20%
Technicians	-	-
Administrative	12.2%	-6%
<b>Overall average gap</b>	<b>-6.4%</b>	<b>-16%</b>

**Note:**

The salary gap could only be analyzed with a reasonable degree of confidence by using the GRI methodology in those cases where similar positions exist in terms of roles, seniority and age.



**70**  
Average training hours per worker recorded in Chile in 2018

Finally, according to the GRI methodology, which compares the base salary of women versus men per labor category (see attached table), the gap varied from -4.4% in 2017 to -6.4% in 2018 (that is, women have an average base salary equivalent to 93.6% of the base salary of men). It should be noted that, in this case, the positions considered were those with comparable positions in terms of roles and experience, and with at least four women in such positions. The 2018 gap increase is due to the exit of older, more experienced female staff in the group “Professionals and Supervisors”. As a reference, in that category, the average age of men is higher than that of women - 43 compared to 38 - and their seniority in the company is 8 versus 5.

In turn, the less experienced female staff (30 years old or less) hiring rate increased. Regarding senior executives, the policies and structures of the fixed and variable component of their remunerations are reviewed and validated by the Directors’ Committee, and subsequently confirmed by the Board. The variable remuneration of the general manager, senior executives and all workers is calculated based on factors linked to financial results, growth plan, operational performance, commercial performance, security performance and social-environmental performance. The Company has agreed with some of its senior executives on a permanence bonus of a variable nature, designed to reward the worker’s link with the Company.

### Senior Executives Remuneration Expenses (102-35)

Type of Remuneration	CHILE (US\$)		PERU (US\$)	
	2017	2018	2017	2018
Senior Executive Remuneration	4,365,725	6,060,430	1,015,946	1,304,400
Fixed	3,053,407	2,750,434	782,974	984,658
Variable	1,312,318	3,309,996	232,972	319,742
Senior Executive Indemnifications	0	91,615	0	188,268
Fixed	0	91,615	0	-
Variable	0	0	0	188,268

**Note:**

Bonuses (variable remuneration) are paid at the commencement of the following year. As an example, the bonus paid in 2018 is linked to the performance in 2017, and so on. Indemnification is fixed and agreed ahead of time in the work contracts. A retention bonus was paid to executives in 2018, which accounts to a large extent for the increase in variable remuneration.



## Training and talent development

Colbún-8 TR, 404-1, 404-2.

The Company is committed to training and internal promotion as mechanisms to enhance excellence in people management, one of the objectives proposed in our corporate guidelines.

**In 2018, 136 selection processes were conducted, of which 78 (i.e., 57.4%) involved Company workers through direct promotions, lateral mobility and internal contests.**

Of these, 55 were men and 23 women. The number women moving internally is equivalent to 29.5% of which 57% are

promotion-type movements (vertical) and 43% lateral mobility movements (horizontal). In the case of Fenix, in 2018, internal mobility translated into 4 direct promotions, of which 75% were women. In 2018 there were 68,019 hours of training in Chile, an average of 70 hours per worker. The training programs have been designed to deliver technical tools and skills to enhance performance in their respective positions. In July we started the sixth version of our program 'Capacítate' (Get Trained!), a learning and training instance designed for cross-cutting skills, in e-learning and face-to-face format, compatible with the workload of people; this year the program was extended to regions. Another program to be highlighted was the Technical Academy, launched for the first time in July 2018, aimed mainly at power plants workers; it seeks to strengthen their technical knowledge to achieve operational excellence and high

availability of power plants. Training was also conducted on new sources of renewable energy, management tools, safety, regulations and the environment, among others. Every half-year, about 50 undergraduate scholarships are granted to applicants that meet the defined requirements. In Peru, the total training hours amounted to 4,015, with an average of 45.7 total hours of training per worker. This year's focus was on operations control and security systems.



### Job positions filled through internal contests in Chile (Colbún-8.TR)

	Female		Male		Total	
	Number of openings filled through direct promotion*	Number of openings filled through internal contest	Number of openings filled through direct promotion*	Number of openings filled through internal contest	Total openings filled through direct promotion	Total openings filled through internal contest
<b>TOTAL</b>	<b>21</b>	<b>2</b>	<b>39</b>	<b>16</b>	<b>60</b>	<b>18</b>

**Note:**

\* "Direct Promotion" means the movements made directly by supervisors. Both the movements carried out directly by the supervisors and internal contests can be a promotion movement (vertical) or lateral movement (horizontal). In 2018, the publication and application of internal contests were implemented through the Intranet.

### Total number of workers trained in Chile (404-1)

Position Category	Female			Male		
	Number of female workers	Total formation hours	Average training hours per female worker	Number of male workers	Total formation hours	Average training hours per male worker
Executives	11	1,154	104.9	60	1,981	33.0
Professionals	109	7,122	65.3	325	24,846	76.4
Administrative	42	338	8.0	27	969	35.9
Other positions	12	1,205	100.4	385	30,404	79.0
<b>Total</b>	<b>174</b>	<b>9,819</b>	<b>56.4</b>	<b>797</b>	<b>58,200</b>	<b>73.0</b>
Average total hours of training per worker	70.0					
Total CLP invested in training per gender	204,555,503			936,958,250		
Total US\$ invested in training per gender	324,691			1,487,235		

### Total number of workers trained in Peru (404-1)

Position Category	Female			Male		
	Number of female workers	Total formation hours	Average training hours per female worker	Number of male workers	Total formation hours	Average training hours per male worker
Executives	1			4	78	19.5
Professionals	12	730	60.9	34	1,916	56.4
Administrative	4	209	52.3	6	28	4.7
Other positions				27	1,053	39.0
<b>Total</b>	<b>17</b>	<b>939</b>	<b>55.3</b>	<b>71</b>	<b>3,075</b>	<b>43.3</b>
Average total hours of training per worker	45.6					
Total CLP invested in training per gender	39.081			245.033		
Total US\$ invested in training per gender	11.982			74.703		



## Organizational change management: Corporate Strategy and Integrity Plan

Considering the profound changes faced by the power sector in recent years, in early 2018, a new Purpose was designed at Colbún through a participatory process and the respective strategic pillars. In order for workers to be aware about and to adapt to this new business reality, during the Sustainability Week, we sought to cascade down this new strategic perspective through a participatory workshop, where attendees were able to contribute ideas and proposals on how to do their share for the achievement of the strategic objectives from their respective functions and particular realities. This activity was held in order to achieve greater buyout and organizational alignment.

The Sustainability Week held at the Headquarters and Power Plants has become a Company tradition and a great opportunity to disseminate the core values and principles of Colbún's culture among our workers.

In 2018, this activity was carried out in all our facilities in Chile and Peru. It was an opportunity to disseminate among our workers the scope and progress of the Corporate Integrity Plan, which incorporates Diversity and Inclusion, Ethics, Human Rights and Compliance. Along this line, the results of the Diversity Survey conducted in March 2018 were presented, and topics on unconscious biases and prejudices, labor inclusion law, and diagnosis and advances in gender equality were included. In relation to Ethics and Human Rights, the results of the Ethics Line were presented and a game about ethical dilemmas was played, where interesting dynamics and reflections were generated regarding complex situations that workers face in their day-to-day business. Likewise, information was provided regarding the Human Rights and Business Plan, in addition to the scope of this issue at Colbún. The topics addressed in these conferences also included Climate Change, evolution of the power market, security issues and free customer strategy, among other topics.



## Performance Assessment

404-3

The Performance Assessment Process is conducted for all personnel under indefinite contract. Personnel not assessed are those under specific works project and fixed term contracts, and work for the Company for a short period of time. In 2018, 958 workers were assessed (equivalent to 99% of the Colbún headcount in Chile), representing an increase as compared with the previous year.

This was due mainly to the incorporation into the process of Engineering Project personnel. In 2018, objectives related to the strategy and sustainability of the Company were considered, including social-environmental performance, workers' safety performance, financial results, commercial results, growth plan and power plants operation efficiency. In turn, all workers are assessed based on qualitative factors or behaviors desired by the organization, such as Decision-Making, Teamwork, Initiative,

Flexibility, Results Orientation, Quality of Work and Effective Communication. In the case of Peru, in 2018, 86 workers were assessed (equivalent to 98% of the total staff) by means of a similar process.



\* The assessment was applied to the universe of workers at least three months under contract.

## Internal Culture

412-1

### Labor relations and human rights

102-41, 407-1

The continuous improvement of the labor relations established with our workers is one of the goals we pursue at Colbún. Mutual respect and permanent dialogue between the administration and union representatives is a very important aspect to achieve such goals.

With respect to the freedom of association and the right to benefit from collective agreements, no risks are envisaged in this sense, nor is there any intention on the part of the Company to threaten this freedom.

At Colbún, eight groups negotiate collectively; they account for 45% of the total headcount (16% of the female staff and 52% of the male staff). Of these eight groups, five are unions and the rest are negotiating groups. In 2018, successful negotiations were conducted with the Santa María Power Plant union.

Additionally, we maintain a continuous communication with the representatives of the unions, jointly generating different meeting instances, such as meetings with the General Manager, area managers, as well as meetings with the Organization and People Management. In 2018, we held a meeting day between the various managers and union leaders, in which they were able to choose the topics that they were interested in addressing.

At Fenix – purchased in December of 2015 – there are no unionized workers. In specific areas of Human Rights, there are no risks of child labor or forced labor, and it is also the company's explicit policy to reject both practices. The recruitment and selection processes include rigorous criteria: in addition to validating that technical competences are met these processes also ensure compliance with legal requirements. One such requirement is the appropriate age for work. Regarding forced labor, Colbún complies with current legislation, respects the rest of

workers and complies with the agreed work days. If the need arises or force majeure so requires, and work must be done on rest days, such days are paid with a surcharge higher than that indicated by the labor legislation. On the other hand, 89% of Company employees used at least 10 days of vacation in 2018.

**45%**

of total headcount are members of the 8 groups that negotiate collectively in Colbún





## Diversity and inclusion

At Colbún we believe in dignified treatment as a requirement to build long-term relationships with our workers. For this reason, we place special emphasis on mutual respect, through a dignified, fair and non-discriminatory treatment. Our Code of Ethics, People Management Policy, Human Rights Policy and Recruitment and Selection Procedures promote diversity and express the will and conviction of Colbún to reject any discrimination by gender, age, creed, ethnicity, political trend and any other condition.

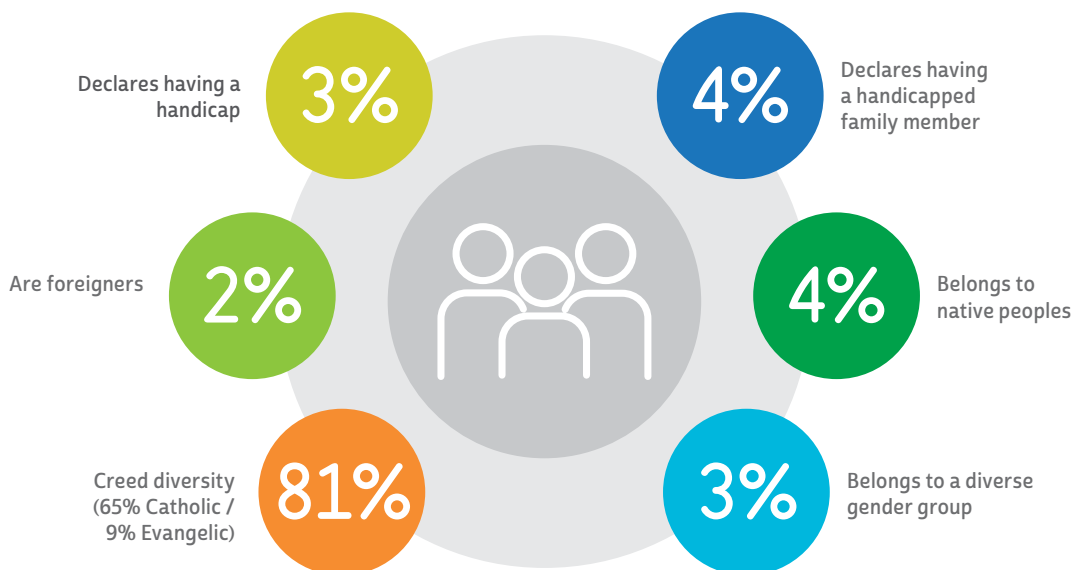
In March of 2018 we conducted the First Colbún Diversity Survey designed to collect information on gender, disability condition, ethnicity, gender diversity, among others.

The survey was responded by about 850 workers, allowing for a representative diagnosis of diversity in the Company. Prior to launching the survey-diagnosis, a round table on inclusion was established in February 2018, which included key company agents and the support of a third-party company specializing in inclusion; they addressed issues such as diversity, inclusion and Law 21,015, types of disabilities, barriers to the incorporation of the disabled, myths and realities, benefits, among other. The design of the survey was carefully and thoroughly reviewed.

One of the main focuses of the diagnosis was to identify individuals with disabilities and to support them in the process of obtaining their disability credential. We also started an inclusive recruitment process for Colbún to incorporate more people with disabilities, not only to comply with the legal quota, but also because we recognize the value of diversity within

an organization. The above-mentioned activities were carried out in the context of the entry into force of the Law on Inclusion in April 2018. This Law requires public and private companies with more than 200 workers to have at least 1% of employees with disabilities. At the end of 2018, 5 workers with a National Disability credential were registered, most of whom were supported by Colbún in the processing of their credential before COMPIN.

### How do Colbún workers define themselves?





## Corporate Volunteers:

At Colbún, we believe that volunteers must be aligned with the Purpose, strategy and values of the Company. In 2018, 14 corporate employees were trained to participate in the program “Protagonists, Young Builders of the Future” - led by SOFOFA, Hogar de Cristo and Attitude Lab -, which seeks to promote the development of social-emotional skills among students in the Betania School of the La Granja District. This, so that students may acquire the tools that will enhance employability in the future. For two years, 10 students visit Colbún on a regular basis; there, they meet with their “tutor” and together they explore the labor world. All 100% of Colbún volunteers said they were very satisfied with the program, because it allows them to share experiences and empower young people, fostering responsibility, commitment and discipline, among others.



## Gender Equality

One of the Company's relevant 2018 work focuses on diversity was Gender Equality. Colbún has adhered to the Gender Parity Initiative (IPG Chile) since 2017; IPG is a public-private platform promoted by the World Economic Forum and the Inter-American Development Bank, designed to integrate more women into the economy and implement best practices to help close the gender gaps in terms of opportunities and economic empowerment in the country.

establishing different initiatives to advance in the area of gender equality. Additionally, and in order to identify potential barriers in our company that threaten gender equality, in September, the Colbún Gender Equality Board was set up, including 15 representatives, men and women, from different Company areas. The initiative, which materialized in 5 work sessions, focused on a diagnosis and action plans in the following four areas:

As part of this commitment, an organizational-level self-diagnosis was conducted and, in early 2019, we presented an Action Plan

1. *Selection and Recruitment*
2. *Professional Development*
3. *Conciliation and Shared Responsibility*
4. *Socialization (Culture)*



Gender Equality  
Action Plan  
Core Concepts  
Colbún





One of the barriers identified is that the low percentage of women working in Colbún, (18%) is due partly to the fact that, historically, very few women apply to more technical areas. One of the reasons that explain this situation - affecting the entire energy industry in general - is that there is a low availability of women in STEM study courses (Science, Technology, Engineering and Mathematics, as per the acronym in Spanish). Therefore, one of the actions planned for 2019 has been designed to generate an alliance with other companies in the sector

to promote and encourage, among women currently enrolled in secondary education, a greater interest in this type of studies.

As a pilot plan, a meeting of professional women from Colbún was held in October 2018 with students from the Liceo Bicentenario Italia, which is part of the SIP School Network. The purpose was to generate a different experience for sophomore students who are fully immerse in vocational discernment, promoting among them high expectations of achievement and

motivation in the study of courses other than those to which women traditionally apply to.

The 2018 diagnosis enabled the presentation of Colbún's Gender Agenda in March 2019, establishing short and medium-term goals. Some of the measures for 2019 included increasing the percentage of women hired in areas traditionally dominated by men by 50% (from 14 to 22%) and increasing by more than 10% the percentage of women in leadership positions, among others.

### Results of Labor Climate Survey in Chile

		2015		2016		2017		2018	
		Female	Male	Female	Male	Female	Male	Female	Male
Employee Commitment	% workers' satisfaction	85%	81%	79%	73%	86%	83%	85%	84%
Coverage	% of total workers	90%		90%		92%		93%	

*Nota: People with a fixed term contract, those who have less than 3 months in the company or those who took extended medical leave don't participate in the Climate survey.*

### Results of Labor Climate Survey in Chile Peru

		2016		2017		2018	
		Female	Male	Female	Male	Female	Male
Employee Commitment	% workers' satisfaction	73%	76%	82%	81%	85%	74%
Coverage	% of total workers	75%		82%		76%	





## Workers' communication channels

102-17

Following is a description of the main Company internal communication channels



### **Intranet Portal:**

The Intranet is Colbún's main internal communication means. It is updated daily and contains the most relevant news, birthdays, photo galleries and personal information on each worker. Salary statements can be displayed, and vacation days taken. In addition, in 2018, a section on Internal Contests was added, where workers can review and apply to openings.



### **Emailing:**

Internal emails where organizational changes, relevant news, births and deaths, etc., are reported. It should be noted that most of our workers have access to computers.



### **Digital Screens:**

On June 1, 2018, the "Digital Billboard" project was launched in all our power plants. We have 35 screens in total: 9 at the headquarters and 25 at the power plants. Screens are meant to be a showcase for the different internal and external Company activities, strengthening and expediting communication.



### **Regular Meetings:**

One of the most effective means of dissemination in the organization is face-to-face communication. For this reason, a series of milestones have been implemented at Colbún during the year in order to align workers. Some of such milestones include the General Manager's Extended Meeting that takes place between March and April; the quarterly management meetings with the Executive Role, the Sustainability Weeks and the visits by executives - including the General Manager- to the Power Plants.

## Organizational Climate

Colbún-IO.TR, 401-2

At Colbún, we perform Organizational Climate measurements on a regular basis to identify our main strengths and opportunities for improvement as a Company. Based on these measurements, we focus our work plans especially on the teams that obtain lower satisfaction levels.

### Organizational climate results for Colbún Chile

The Great Place to Work survey was carried out in September 2018. It measures the perception of workers regarding the work climate in the following dimensions: Credibility, Respect, Impartiality, Pride and Comradeship. This survey was applied to a universe of 951 workers, achieving a response rate of 93% (884 responses), a very representative participation in all the divisions and managements that make up the Company

*In 2018, a score of 84% satisfaction was obtained in the global average ("Trust Index"); this is an improvement of one percentage point over the result for 2017 and one percentage point over the average obtained in the 50 best places to work in Chile.*

This year, the positive perception of the Generation Division increased; this Division represents about 55% of the Company and of the Organization and People Management. At a corporate level, almost every dimension showed an improvement; highlighted as main strengths were Pride and Comradeship. In terms of opportunities for improvement, the Communication and Equality sub-dimensions presented a gap as compared to the results of the best companies to work for. The challenges for 2019 focus on our main opportunities for improvement, that is, in areas that have low levels of satisfaction or that showed a decline in comparison with the previous year. In this case, each area must develop and implement a Work Plan in order to detect and improve the aspects that may be affecting performance.

# 84%

Positive satisfaction  
in the Organizational  
Climate  
Survey Colbún Chile.

# 76%

Positive satisfaction  
in the Organizational  
Climate  
Survey Peru.



### Labor climate results for Fenix Peru

The survey was applied in November and December 2018 to a universe of 102 employees (including fixed-term internships), with a response rate of 89% (91 responses). The result showed a General Acceptance Index of 76%, reflecting a six-point reduction with respect to 2017. The sub-dimensions that stand out as strengths are: Fair Treatment (89%) and Familiarity (87%); opportunities for improvement include Absence of Favoritism (65%), Equity in Rewards (66%) and Integrity (66%). Regarding strengths, phrases such as: "Employees perceive that people are treated equally regardless of their sexual orientation, age and gender"; "Employees are proud of the company's efforts to give back to the community and the environment," were highlighted, among others. By 2019, a work plan will be developed based on opportunities for improvement, such as the review of management training plans; the implementation of a recognition program for collaborators and a Leadership training program based on managerial skills.

## Colbún Quality of Life Program

Aware of the importance of moving forward with a comprehensive people development, Colbún has implemented a Quality of Life Program for its workers and their families that includes the following core action concepts:

### Family

It is our conviction at Colbún that actions that help to reconcile work and family positively affect the integral development of our workers. That is why we look for different instances where they can integrate their families, such as Work Day with Children; Personal Days (two days or four half days at will) and the Christmas Celebration at all power plants and Santiago. Added to this is the improvement in transportation services at the power plants (which has reduced workers' transfer times), part-time work on Fridays at the Headquarters and power plants, granting of inter-holiday days, and the flexible schedule program at the Santiago offices.

### Healthy Life

We encourage sports and healthy living among our workers and their families. In 2018, we assigned 37 Life Quality Grant Funds to sponsor different disciplines managed by the workers themselves. Different projects were carried out, such as soccer, tennis, trekking, cooking lessons, among others.

### Culture

We believe that the culture and knowledge of our history is an essential part of people development. Since 2010, cycles of Cultural Talks have been held in Santiago and regions for workers and their families.

### Education

We recognize the value of effort and reward perseverance and personal improvement. Once a year, we perform Academic Excellence ceremonies in regions and Santiago where we reward good school and university performance of our workers' children. In 2018, 182 students were awarded an average of 6.5 and for the first time, 8 students were recognized with outstanding achievements in some sports or artistic disciplines, such as swimming, dancing, skating, among others. In addition, 10 university students were awarded a \$1,100,000 scholarship.





Los Quilos  
Power Plant,  
In the Aconcagua  
Basin, Valparaíso  
Region



## 4.2 Contractors and Suppliers

102-9

Our industry is experiencing substantial changes in all business areas and becoming increasingly competitive. Within this context, contractors and suppliers play a fundamental role to ensure, promote and increase the competitiveness of the business; therefore, it is very important for them to accompany us in the necessary steps to maintain medium and long-term competitiveness. This involvement in the Company supply chain turns the relationship and collaboration with contractors and suppliers into a strategic aspect.

### Our Commitments:

*1. Ensure traceable and auditable supply processes that guarantee transparency and generate a reliable framework providing optimal conditions of competitiveness, thus achieving honest, ethical and fair agreements, creating long-term relationships and shared value.*

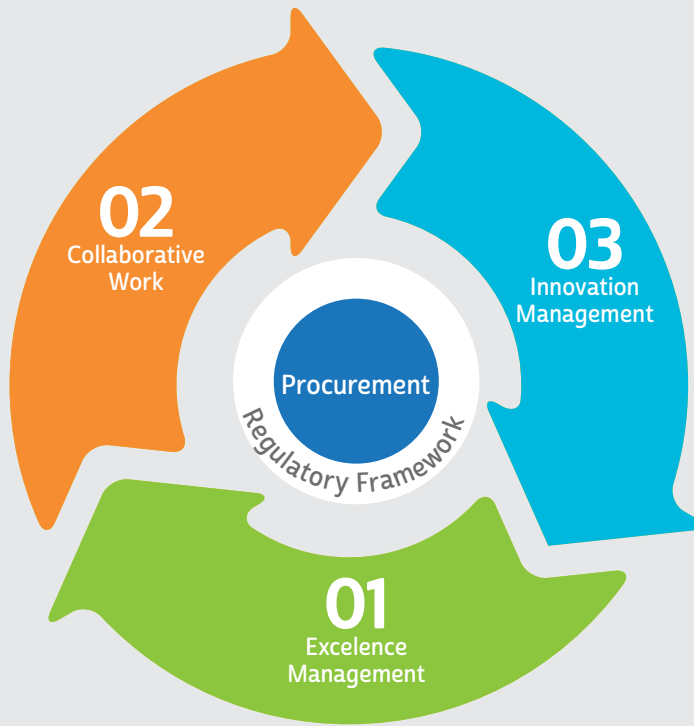
*2. Maintain a close and respectful relationship with all our contractors and suppliers, promoting integration in a framework of joint growth.*

*3. Ensure that all actions associated with the supply process comply with the Company's Code of Ethics.*

*4. Respect our commitments, paying to all our contractors and suppliers in a fair and timely manner.*



Supplier and Contractor Management Model



THIRD-PARTY MANAGEMENT MODEL

**Procurement:**

Ensure a timely and sustainable supply, guaranteeing that each stage of the supply chain is part of a traceable and auditable process: this will ensure transparency, generating a reliable framework that provides optimal conditions of competitiveness, achieving honest, ethical and fair agreements, in a framework of respect with long-term relationships generating shared value.

**Regulatory Framework:**

The regulatory framework that provides the foundation for these principles are our policies, standards and procedures.



**01**

**Excellence Management**

- Achievement of results with a sense for quality and responsibility
- Contract Management Model
- Registration of suppliers (Achilles)
- Supplier segmentation
- Open tender processes
- Quotation and bidding platform
- Standardized materials
- Risk management
- ProPyme Stamp
- Compliance with our commitments



**02**

**Collaborative Work**

- Search for alliances enabling mutual benefits
- Development of local suppliers
- Health and safety
- Labor Relations
- Suppliers portal
- Incentive for local employment
- Environment
- Communities
- Human rights
- Local meetings with suppliers
- Training



**03**

**Innovation Management**

- Creative solutions to address risks and opportunities
- Strategic Alignment
- Improvement programs
- Training
- Programs for critical local suppliers
- Evaluation and recognition
- Suppliers' Day
- Annual supplier survey
- Emissions reduction



## 2018 Milestones and Initiatives

### ProPyme Stamp

For the seventh consecutive year, Colbún obtained the ProPyme Seal, a quality certificate granted to companies that pay their suppliers' invoices within a maximal term of 30 days, verified by external auditors. This achievement reflects our commitment with its contractors and suppliers.

### Low-Cost Financing Options for Contractors and Suppliers (Bolsa de Productos (BPC))

In mid-2018 we closed an agreement with Bolsa de Productos (Product Kit - BPC as per the acronym in Spanish) allowing all our suppliers and contractors to trade their invoices and other instruments in a space provided by the Santiago Stock Exchange for transactions between various financial market players; this is a very competitive alternative to Factoring and Banks. This grants a very competitive liquidity option for companies that provide services to Colbún.

### Updating of the Special Regulation for Contractor and Subcontractor Companies (RECS)

We conducted a review and simplification of the RECS (as per the acronym in Spanish), updating our zero fatality standards, seeking to simplify them and make them more efficient, without losing focus on fulfilling the obligations and responsibilities in labor matters, namely, social security, Hygiene, Industrial Safety and Environment, among others.

### Electronic Execution of Contracts

In order to improve and digitize our processes, the manual approvals and the execution of physical documents was replaced by an electronic process. This enables the authentication of document owners or digital transactions, optimizing contract execution times from a week to one day, on average, and providing greater security, traceability and sustainability by eliminating physical documentation from the process. 202 contracts were signed electronically in 2018.



### Supplier Survey

We apply a survey to different stakeholders in order to be evaluated in terms of sustainability, including variables such as corporate governance, ethics, environmental performance, social issues, operations and relationships. 87.7% of our suppliers positively evaluated our sustainable management.

### Suppliers' Portal

In 2018, we continued updating our website, incorporating relevant information on our business, supplier strategy, contractors, and electronic signature.

### Acknowledgement of Supplier Good Practices

Recognizing and rewarding suppliers for achieving the expected fulfillment of contract commitments is an activity that we perform annually. This year, 12 contractors have been rewarded, one for each power plant, in order to strengthen contractor and supplier integration and commitment. The evaluation included safety, environmental and service quality matters.

### Regional Meetings with Local Suppliers

We held regional meetings in order to transfer best practices to more than 300 of our suppliers, including electronic billing and insurance, and process standardization and optimization. These instances also provide an opportunity to share experiences and deepen our understanding of opportunities for improvement in Company management.

### Open Tender Process

More than 200 tenders have been carried out through the Ariba Platform, which helps ensure equity, competitiveness, traceability and auditability of our Procurement processes.

### Small- and Medium- Size Company Training

*In our search for sustainable supplies, we support the improvement of our SME suppliers through the Contractor Competencies Development Program; the purpose of the program is to provide them with tools to expand and reinforce the knowledge relevant to their activities, in accordance with standards defined by Colbún and the market, in areas such as Labor Legislation, Risk Prevention and*

*Simplified Accounting. This initiative develops and strengthens local suppliers and brings their relationship with Colbún even closer. Participants included eleven Contract Managers in seven local SMEs in the Santa María Power Plant, district of Coronel, Biobío Region*



## Supplier Number and Distribution

102-9, 204-1

The number of supplier companies working with Colbún in Chile in 2018 was 2,680, which represents a decrease as compared to 2,970 in 2017. Purchases amounted to US\$225 million.

**2,680**

was the number of supplier companies we worked in Chile in 2018

**562**

was the number of supplier companies we worked with in Peru in 2018

In addition to these 2,680 companies, Colbún maintains in Chile another 335 suppliers (adding up to a total of 3,015) providing the following services: supply of fuels for thermoelectric power plants (coal, diesel and natural gas); supply of power (other generators) and/or transmission companies that transport this energy to our customers. Of these 335 suppliers, 42 are large companies that account for 80% of Colbún's expenses in purchases of fuel, energy, tolls and others, up from 9 in 2017. This is due to greater competitiveness in the industry and entry of new suppliers. In the case of Peru, in 2018, 562 supplier companies worked, reaching purchases for US \$ 17.6 million.

In the case of Peru, 562 supplier companies worked with Fenix, in the amount of US\$17.6 million. Additionally, Fenix worked with 84 companies that provide fuel, energy

and transmission. Of these, 12 account for 71% of expenses. Colbún has identified suppliers as being critical if they compromise or put at a risk the operational continuity of our power plants, or those that may cause serious environmental incidents. Of the 3,015 suppliers in Chile, Colbún identified 23 critical companies, representing 1% of the total suppliers, and 44% of the purchase volume. These companies belong to the financial, engineering, fuel supply and waste treatment sectors, mainly.

In the case of Fenix, 16 suppliers were identified as critical in 2018, equal to 2.5% of the total, and equivalent to 63% of purchases.

### Average total headcount of Colbún contractors in Chile \*

*\* Trabajadores de las 349 empresas proveedoras sujetas a la Ley de Subcontratación*

<b>Contractors and Subcontractors</b>	<b>2018</b>
Generation and Headquarters	916
Projects	387
Transmission	169
<b>TOTAL</b>	<b>1,472</b>

*1 Suppliers of energy, capacity, tolls and fuels are excluded; they are not considered in the numerical analysis of supplier distribution in this chapter*

In 2018, the number of contractors in Chile was 1,472. The contracted products and services refer mainly to construction, equipment suppliers, maintenance, security, personnel transfer, cleaning and meals.

# US\$225 millones

Alcanzó el monto de compras durante 2018 en Chile



## Geographical distribution of purchases in Chile (204-1)

	2016		2017		2018	
	# of Suppliers	Amount (ThUS\$)	# of Suppliers	Amount (ThUS\$)	# of Suppliers	Amount (ThUS\$)
International	197	75,523	195	97,184	186	26,133
Domestic	3,045	227,303	2,775	254,541	2,494	198,433
V-Valparaíso	269	15,839	271	17,409	221	14,691
RM-Metropolitan	1,624	154,025	1,566	196,960	1,439	144,381
VI-Lib. Bdo. O'Higgins	60	1,174	57	1,093	54	1,177
VII- Maule	157	8,148	154	6,610	129	8,045
VIII-Biobío	722	40,439	526	24,668	480	24,437
XIV-Los Ríos	93	1,806	72	1,566	52	1,075
X-Los Lagos	71	1,838	73	1,514	67	1,171
Other Regions	49	4,034	56	4,720	52	3,456
<b>TOTAL</b>	<b>3,242</b>	<b>302,826</b>	<b>2,970</b>	<b>351,725</b>	<b>2,680</b>	<b>224,566</b>

### Note:

The location of each supplier is determined by the place where the Taxpayer Number was issued, i.e., where they pay for rights, taxes and commercial permits. Purchases of energy, capacity, tolls and generation fuels are excluded. As a reference for generation fuels, four suppliers individually concentrate almost 50% of Colbún's purchases: Empresa Chilena de Gas Natural S.A., ENAP Refinerías S.A., Transelec S.A. and Enel Generación Chile S.A.

## Distribución geográfica de compras en Perú (204-1)

	2017		2018	
	# of Suppliers	Supplier-related Expenditure per Region	# of Suppliers	Supplier-related Expenditure per Region
International	62	4,131	73	1,869
Domestic	480	12,298	489	15,752
Metropolitan Lima	466	12,206	471	15,614
Chilca-Salinas	9	45	7	51
Others	5	47	11	87
<b>TOTAL</b>	<b>542</b>	<b>16,429</b>	<b>562</b>	<b>17,620</b>

### Note:

Excluded are purchases of energy, capacity, tolls and generation fuels



## Exchange of good practices

203-2, 308-1, 308-2, 414-1, 414-2



**288**

Number of valid suppliers/contractors on "Repro Achilles", our sustainable performance review tool<sup>1</sup>

At Colbún we are committed to the exchange of good practices with our contractors and suppliers, seeking to promote high safety, quality, environmental and social standards, supporting them in their growth and development. This, in order to achieve excellence across our value chain.

**We have incorporated environmental principles along with other labor and occupational safety issues in all our bidding and awarding processes with collaborating companies.**

These guidelines are contained in the Special Regulation of Contractors and Subcontractors (REECS as per the acronym in Spanish) and in the Code of Ethics. In addition, the accident rate of our contractors is part of the objectives that affect the performance assessment of the entire Company. At Colbún we ensure 100% compliance with the requirements indicated in the Environmental Qualification Resolution (RCA as per the acronym in Spanish) of the service being hired. If faults are detected, Colbún communicates directly with the contractors, requiring explanations and resolution. The serious or repetitive faults can lead to the early termination of the contract or service.

<sup>(1)</sup> Equivalente al 12% de los proveedores que trabajan en Colbún.

## Supplier Perception and Risk Survey

In 2018, Colbún once again conducted the Reputation and Risks Survey by interviewing 192 supplier companies across Chile, with a special emphasis on critical suppliers. 87.7% of them agreed or strongly agreed with Colbún's sustainable management, 1% down from 2017. In this survey, aspects related to environmental culture, occupational safety and health, integrity, anti-corruption, payments, selection and monitoring processes were evaluated. This tool also allows contractors and suppliers to self-evaluate, and Colbún to identify environmental, social, ethical and human rights risks. In 2018, of the 192 companies that participated in this self-evaluation, 88.5% agreed or strongly agreed with its sustainable performance.

## Contractors, Suppliers and Human Rights

103-2, 403-1, 406-1, 407-1, 408-1, 409-1, 410-1, 412-1, 412-2, 412-3, 414-1, 414-2

No operations are maintained in Chile or Peru representing risks associated with child labor or forced labor among contractors. No activities have been identified where the rights of contractor workers to freely associate or bargain collectively may be threatened. At Colbún we comply with labor legislation. We maintain a Code of Ethics and we adhere to the principles of the United Nations Global Compact, all of which contain human rights topics. Both the Internal Regulation on Contractors and the Colbún Code of Ethics are delivered to the contractor companies as part of the procurement and general services procedures, where our commitments ethical values are established.

Accordingly, our contractor companies must present the work contracts of all staff members working in any of our facilities, as well as the modalities of work and shifts. In addition, in April 2018, the Human Rights and Business Policy was published, which applies to all Colbún workers, to workers of contractor companies, and to the relationships established between them. The Company also has a platform called Repro Achilles, which allows us to accredit and approve contractors and suppliers; this tool enables access to the historical behavior of the contractor companies in terms of indicators associated with environmental, social and human rights aspects, and to evaluate, for example, the accident rate or the lawsuits filed with the Labor Inspection.





## Suppliers' Assessment in terms of their social-environmental practices

412-3, 414-1, 414-2, 308-2

Regarding social impact, 100% of new suppliers were evaluated and selected according to social criteria, considering aspects such as payment of social laws, DICOM, politically exposed persons, among others. In 2018, Colbún contracted services with 349 suppliers subject to the Subcontracting Law and the REECS regulations, which assesses the Companies' annual environmental and social impacts (including labor practices and human rights).

Regarding the environmental assessment, in 2018, 40 companies were identified which could potentially generate some type of environmental impact (spillage of fuels, lubricants and ash, poor treatment of waste and scrap, for example). Of these, none generated significant negative environmental impacts in 2018.

In the case of Peru, 28 contractor companies which could potentially generate some environmental impact were identified. In 2018, one of them generated negative impact due to spills. Work was done to prevent future incidents.

The potential social impacts of our operations include, among others, breach of labor laws (non-payment of salaries, forced labor, child labor), absence of occupational health and safety practices (which could lead to accidents, worsening of health of workers, among other adverse effects). Only two suppliers presented problems in the payments of social laws to some of their workers. This situation was solved in one of the cases using the tools and contractual guarantees to execute said payment at the time of contract closure; in the other case, Colbún assumed part of the costs in joint liability as established by the law. In addition, through the Reputation and Risks Survey, specific human rights risks were evaluated, such as freedom of association, forced labor, child labor, occupational safety and health, whistle-blowing channel and other labor practices. No relevant risks were identified through this tool.





### Potential negative impact of environmental practices on the supply chain (308-2) (308-2)

Potential Impact Fuel and lubricant spills, poor treatment of residues and metal scrap		
	Number of Suppliers	% of suppliers in function of the total
Contractors presenting actual or potential significant adverse impact due to environmental practices	40	1,5%

**Note:**

All these contractors are required to maintain the highest standards, contained in the Colbún Special Regulation for Contractor and Subcontractors, Standard for the Protection of the Environment, and/or environmental legislation.

### Significant investment agreements and contracts containing provisions associated with human rights or subject to human rights evaluation (412-3)

	Chile *	Peru *
Number of Significant Contracts	349	78
Number of Significant Contracts containing Human Rights Provisions	349	78
Percentage of Significant Contracts containing Human Rights Provisions	100%	100%

**Note:**

\* All contracts include provisions associated with the Ethics Code

### Security Contractors and Human Rights

410-1

In Chile, the number of private security guards and watchmen was 143 people in 2018, and 11 in Peru. Like all contractors, they must abide by Colbún's Ethics Code, which includes human rights requirements.

In the case of Chile, the supervising authority - Police Department OS-10 - requires private security guards and watchmen to attend security courses that incorporate issues related to human rights. These courses are valid for two years for guards and three years for watchmen. In 2018, 6 security personnel members in Chile attended this course. Others also participated in the talks during Sustainability Weeks, where HR topics were disseminated.

## 4.3 Occupational Safety and Health

The Company has made safety a core aspect of its performance in recent years, with the focus on developing a culture of its own, turning it into a benchmark, with each worker and contractor being a passionate leader in safety in their daily activities.

The generation of energy involves working in facilities where there are potential risk conditions for the safety and health of workers. Therefore, it

is most important to have these factors evaluated and controlled to protect the integrity of those who work and live near the facilities.

In broad terms, our goal as a Company is for our workers and their families to enjoy good health. In specific terms, one of the strategic objectives of Colbún is to strive and manage towards “zero accidents” and maintain a healthy and fit workforce. Likewise, we want our

communities to feel safe regarding the operation of our power plants and, in that sense, we have made progress in disseminating our emergency response mechanisms, involving our neighbors in those plans.





0.8

was Colbún's accident frequency index (consolidated Chile and Peru) in 2018, a new record in the history of the Company.



## Safety Performance

403-2

Safety Performance  
403-2

At Colbún we have a Safety, Occupational Health, Environmental and Quality Policy that is actively promoted among our workers and contractors. The basic principles of this policy are aimed at meeting the requirements established in the applicable legislation, the voluntary commitments and our safety, occupational health, environmental and quality standards. Likewise, no production goal or operational emergency justify our workers' exposure to uncontrolled risks.

The result of this work allowed us to define a new challenge in this matter: Colbún is to develop a safety culture of its own, turning it into a benchmark,

with each worker and contractor becoming a passionate leader in safety in his/her daily activities. In 2018 we developed a Strategic Occupational Safety and Health Program, concentrating all activities to be carried out, and for which one of the main lines of action aimed at reinforcing the security leadership at all the hierarchical levels of Colbún. In 2016, we hired DuPont, an international company with vast experience in risk prevention, to determine the status of Colbún's safety performance and to support the development of a strategy to further improve performance in this area.

The Strategic Plan was also strengthened by focusing on face-to-face Leadership, management of Joint Committees, and Occupational Health and Safety Training, among others.

In relation to the results for 2018, there were four accidents with lost time, none of them of high potential, understood as causing serious or fatal injuries to workers.

Esto dio como resultado un Índice de Frecuencia igual a 0.8, considerando tanto a los trabajadores propios como los de las empresas contratistas de Chile y Peru. Este valor constituye un nuevo récord para Colbún, siendo más bajo que el índice de frecuencia de 1.1 obtenido en el año 2017.



## Peru

In the case of our affiliate Fenix, we continue with the development and maturation of the SSO Management System through plans and projects that seek to ensure that safety becomes an intrinsic value of workers, so that self-care is the behavior that maintains the result of zero accidents with lost time, as we achieved in 2018. For this reason, in line with the results of the Operational Excellence Workshop conducted by Dupont in 2017 and with the Strategic Planning of the Generation Division of Colbún, the Area Managers developed the annual HSE (Health, Safety and Environment) program for the second consecutive year.

In 2018, we implemented Zyght, a platform for digitizing the PHASE (Health, Safety and Environment Program), an initiative that we hope to consolidate in 2019, based on the lessons learned in 2018. In line with the above, all security and operational procedures are being constantly reviewed, updated and accessed on the ISO tools IT platform.

In 2018 Fenix had “0” accidents with lost time.



0

Fatalities at Colbún, and its affiliate Fenix during the 2015-2018 period.

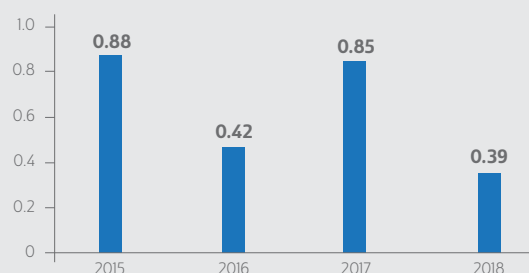
## Peru corporate safety goals

Corporate Objective	Indicator	Goal
PAHSE*	% of compliance with PHASE (20%)	95%
	IF (Frequency Index), number of accidents generating resulting in sick leave (15%)	1,3
	IF (Frequency Index - high potential), number of high-potential accidents defined by special committee (15%)	0,6
	Environmental incidents according to corporate compliance scale (50%)	Maximum 1 level-2 accident

\* Annual Health, Safety and Environment Program

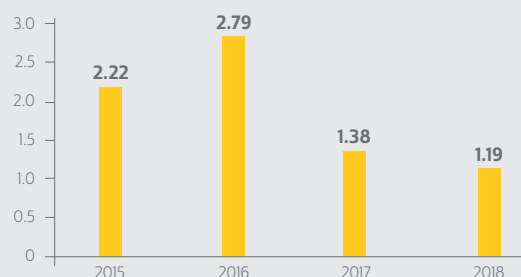
### Frequency Index Own Workers (Chile-Peru)

(Number of accidents x 1.000.000 / working hours)



### Frequency Index Contractors (Chile-Peru)

(Number of accidents x 1.000.000 / working hours)



### Accident Rate Indicators in Chile 2018

(Colbún and Contractors) (403-2)

	Colbún	Contractor Companies	Total
Incident Rate (1)	13.9	7.7	10.2
Accident Rate (2)	0.1	0.2	0.2
Frequency Index (3)	0.4	1.3	0.8
Seriousness Index (4)	58.6	49.6	54.1
Average number of workers	984	1,472	2,456
Total man hours	2,338,578	2,280,558	4,619,136
Accidents with lost time	1	3	4
Lost days	137	113	250
Serious and/or fatal accidents	0	0	0
Accidents without lost time	3	12	15
Vehicle accidents	13	0	13

#### Notes

- (1) Days lost per 100, divided by average number of workers for the period.
- (2) Number of accidents per 100, divided average number of workers for the period
- (3) Number of accidents per 1,000,000, divided by the total man hours for the period.
- (4) Days lost by 1,000,000, divided by total man hours for the period.

### Accident Rate Indicators in Peru 2018

(Fenix and Contractors) (403-2)

Estadísticas	Fenix	Empresas Contratistas	Total
Incident Rate (1)	0	0	0
Accident Rate (2)	0	0	0
Frequency Index (3)	0	0	0
Seriousness Index (4)	0	0	0
Average number of workers	90	141	231
Total man hours	193,311	250,040	443,351
Accidents with lost time	0	0	0
Lost days	0	0	0
Serious and/or fatal accidents	0	0	0
Accidents without lost time	1	0	0
Vehicle accidents	0	0	0

#### Notas

- (1) Days lost per 100, divided by average number of workers for the period.
- (2) Number of accidents per 100, divided average number of workers for the period
- (3) Number of accidents per 1,000,000, divided by the total man hours for the period.
- (4) Days lost by 1,000,000, divided by total man hours for the period.



89

employees took the Safe Driving course at the power plants and headquarters

## Towards a Culture of Safety

In order to continue strengthening the Company's safety culture, in 2018 the Occupational Health and Safety Strategic Plan focused on seven action lines: Development of Safety Leadership, SSO Objectives, Safety Communication, Procedures and Rules, People Management, Incident Management and Occupational Health Management, implemented throughout the year. Among the campaigns and courses implemented in 2018, the Mano a Mano (hand-to-hand) campaign stands out, which sought to raise awareness on the importance of preventing accidents that affect the hands; this campaign was conducted across the Company, with the participation of employees and contractor companies; a Course on Electrical Risks (USACH), an Incident Research Workshop (DuPont), and Safe Driving Course were also offered, the latter mandatory for all workers who drove a vehicle owned or leased by the Company.

There were also courses in the e-learning modality offered by the Mutual de Seguridad, such as Handling Fire Extinguishers, First Aid and Health Protocols.

Colbún maintains an internal procedure whereby any accident affecting Company employees or contractors is immediately reported to the entire Company by means of an email that describes the circumstances and characteristics of the event and the learnings, if applicable.

In 2018 the first Safety Operation Center (COS) began operating in the Hydroelectric Complex Angostura, which incorporates technological surveillance in Company facilities

The offices at this power station now have a modern system that includes, among others, a closed-circuit TV and an audio deterrence system.



## Occupational Health and Healthy Life

403-2, 403-3, Colbún-12.TR

Colbún's Occupational Health policy is aimed at ensuring that workers are not exposed to risks that compromise their health, and that may relate to the substances, equipment, machinery and tools they manipulate and use, or to the environmental conditions in which they carry out their activities.



Colbún  
Power Plant  
Facilities,  
Maule Region

In 2018, 93.9% of the total number of workers who were scheduled to take a preventive health examination did so, while the occupational assessment was carried out by 96.5% of the workers scheduled.

Regarding the latter, 87.4% of workers were within the healthy range.

#### Colbún Chile and Peru Absenteeism Rate (403-2)

	Chile			Peru		
	2016	2017	2018	2016	2017	2018
Male	1.61	1.85	1.82	6.48	17.76	5.22
Female	1.69	2.84	2.80	3.33	8.60	17.37
<b>TOTAL</b>	<b>1.62</b>	<b>2.03</b>	<b>2.00</b>	<b>5.86</b>	<b>15.87</b>	<b>7.84</b>

**Notes:**

· Absenteeism Index = total number of days lost per month / (average workers \*work days in the year)

· Absenteeism Calendar Days: do not consider days for maternity leave. It considers the average headcount per year and the total number of absenteeism days in the year.

This indicator does not include permits, such as: vacations, administrative days, permits with or without pay, days compensated, among others.



## Colbún's occupational Health Pillars



### Epidemiological Surveillance

We monitor the exposure of workers at their workplace, identifying risk agents, doses, concentrations and exposure times in order to quantify their magnitude and propose control measures. Also, health conditions are verified in relation to specific risk agents, measuring biological indicators and performing examinations to detect potential damage to key systems, like cardiovascular diseases and specific organs.



### Occupational Health Protocols

Health protocols focus on minimizing workers' risks and monitoring of individual health condition. Noise is the main health risk identified at the Colbún power plants. However, a series of health protocols have been implemented, which involve a systematic sequence of actions for compliance. Protocol include:

- *Occupational Noise Exposure Program (PREXOR)*,
- *Plan for the Eradication of Silicosis by 2030 (PLANESI)*
- *Skeletal Muscle Disorders related to working with the upper extremities (TMERT-EESS)*
- *Manual Load Management (MMC)*
- *Psycho-social Disorders (TPS), Asbestos, and Non-Ionizing Radiation (Rad UV A / B).*

All these protocols are framed within the hygiene plan that includes, among other actions, qualitative evaluations and previous studies in all power plants.



### Public Health Surveillance

To ensure that workers have the physical skills required for their jobs, the health of workers is systematically evaluated by means of the batteries of occupational exams, incorporating a follow-up program for workers showing some degree of alteration in their health evaluation. This allows the worker to be encouraged to consult by using their insurance and be put on proper medical treatment. The information collected is informed by the Health Commission, made up by three members of the Organization and People Management and three from the Occupational Health and Safety Management, headed by their respective managers. Not having sick professionals (EP) has been Colbún's focus and, in 2018, the goal of "0 EP" was reached again.



### Professional Illnesses

From the point of view of Public Health, in 2018, the voluntary program of medical examinations was continued for all Colbún employees, through the "Colbún battery" with examinations aimed at detecting cardiovascular alterations, since they are the first cause of death in the country.



**Peru**

No occupational illnesses were generated in Fenix in 2018. Still, a 100% medical examination of collaborators was implemented, providing information for the establishment of actions for the occupational health surveillance plan to be carried out in 2019.



**2018 Safety milestones in Peru**

- Participation in the Earthquake Drill followed by Tsunami at the national level
- Celebration of the World Day for Safety and Health at Work
- The study of ergonomic risks, occupational agents and chemical agents were updated.
- The Zyght application system was implemented for the digitation of PHASE
- The Audit of the Occupational Health and Safety System was carried out by the Company's Internal Audit Department
- Good HSE performance Award.
- Power Plant's Risk and Contingency Plan Study update.



## Management of safety issues with our communities

Colbún-5.SO, EU21, 412-1

All Colbún's power plants have an emergency plan for fires, earthquakes and natural disasters. Drills are conducted on an annual basis, with the participation of entities such as firefighters, municipal or government emergency offices, police and/or Mutual de Seguridad.

The security issues of our facilities are considered a priority in various consultations with the communities where we operate. In 2018, progress was made in this area, by developing a matrix of the risks that our operation could generate in the surrounding communities, in order to define priority areas. Below is a detail on some of the measures already underway.

### Colbún Complex

Preventative measures have been adopted to avoid or mitigate the risks posed to the lives of or affecting the public and private or public goods resulting from floods of the Colbún Reservoir. Such measures have been considered in the Protocol known as "Delivery of Information and Communication of Declarations of Floods Warnings and Other Measures pursuant to Reservoirs Law No. 20.304" signed in 2016. Participants in this agreement were the General Water Board (DGA), the Meteorological Directorate, ONEMI (National Emergency Office), Colbún and other companies in the sector. Additionally, when the Colbún Reservoir must discharge water, the Company coordinates with ONEMI and informs the various local and regional authorities ahead of time in order to

prevent any risk situation in the Maule River basin.

Regarding the return channel of the Colbún power plant, in 2018 a dissemination campaign was carried out, which included radio broadcasts and delivery of informative flyers to raise awareness about the importance of self-care. Four presentations of play "Our Future is Today" were made in the districts of Colbún and Yervas Buenas. Additionally, at the recently opened Machicura Spa, several safety measures were agreed upon with the Municipality of Colbún so that bathers could enjoy the first season of this new beach (summer 2019) with all the necessary safeguards.

### Angostura Power Plant

A communication protocol with the authorities, Carabineros, Firefighters

and other stakeholders has been implemented to give a warning when gates need to be opened due to a significant increase in the river's natural flow. It should be noted that, being a reservoir of minimal regulation, when the river increases its natural flow, the power plant must gradually open its floodgates to pour water that cannot pass through the turbines; due to the operational characteristics of Angostura, said opening may occur several times a year.

In the winter, a radio broadcast campaign was also implemented (brochures and radio phrases) before possible floods of the river due to climatic situations.

Additionally, due to the increasing entry of wind and solar power plants with a high variability in their power generation, reservoir hydroelectric



plants are increasingly expected to fulfill the role of covering said variability, in order to make the system safer. Under such circumstances, the National Electrical Coordinator is often in the need to request from reservoir power plants to rapidly increase their generation levels, thereby suddenly increasing the amount of turbinated water and the flow of river water downstream of the power plant. For this reason, in the case of the Angostura Hydroelectric Power Plant, meetings have been held with the local community and authority and a safety plans have been developed; as the first stage, such plans include the installation of warning signage to bathers so that they are on the alert for sudden changes in the flow of the river.

Regarding the tourists that visit the Angostura Park, a new dissemination campaign was carried out, promoting self-care in the use of the beaches and the reservoir. In these places, during the summer season, there are permanent security measures, such as lifeguards, guards and informative posters.

### Aconcagua Complex

During 2018 the work started in 2015 continued; it includes a dissemination campaign (leaflets) on self-care for those who use the Colorado River during the summer. Both in this area and in the sector of Chacabuquito, Colbún has permanent displays and sirens indicating the occurrence of increases in flow due to sudden discharges. In 2018, alarm equipment to warn bathers was stolen; the Company responded by quickly replacing them to maintain a good safety standard.

### Nehuenco Complex

In 2018 we continued with the work started in 2017 with the Disaster Risk Management Board in the Province of Quillota. This initiative is part of the activities aimed at promoting public-private coordination for emergency response at provincial level, pursuant to an agreement signed between the United Nations Program in Chile and the Provincial Government of Quillota. In order to better contribute to the work

of the Board, Colbún organized a guided tour of the Nehuenco Complex, a visit in which the members of the Board participated along with local authorities and presented all the measures the Company has taken jointly with the power plant neighbors for disaster control.



### Fenix Power Plant

Working within the logics of disaster prevention is essential to prevent or to reduce the possibility of people suffering damage due to earthquakes, tsunamis or others, especially in a country with important seismic activity such as Peru.

In 2018, Fenix and the Disaster Risk Assistant Management of the District Municipality worked on the implementation of a Plan with broad community involvement and in keeping with its needs.

Along the same line, the Civil Defense Brigades were thus formed with the voluntary participation of 70 residents of all Chilca and nearby communities, who received specialized training. On the other hand, thirteen (13) public educational institutions - IEP - across the district benefited from the equipment of their Emergency Operations Centers (COE), each school receiving rigid stretcher, head immobilizer, PQS extinguisher, first aid kit and megaphone.

Finally, the first signage was installed in the case of a tsunami in Las Salinas, informing the evacuation routes and the safe areas where people should meet in the event of a disaster of this nature. This is the first articulated intervention between the Company and the local government on civil defense issues.





## 4.4 Community Relations

Aware that our operations can have an impact at local level, one of our objectives in community management is to look for designs and relationship plans to avoid, mitigate or compensate for negative impacts, enhancing the positive effects of our presence. To achieve this, we seek to build a long-term relationship, allowing for an adequate management of these impacts. Within this context, we understand that the basis on which trust and long-term relationship with the communities are built is the achievement of an operational performance of excellence. For this reason, the Company puts special focus on a continuous improvement of its environmental and operational performance.

Without ever losing sight of this focus, Colbún's Community Relations Policy is built on the following basic principles stated in our Community Relations Manual:

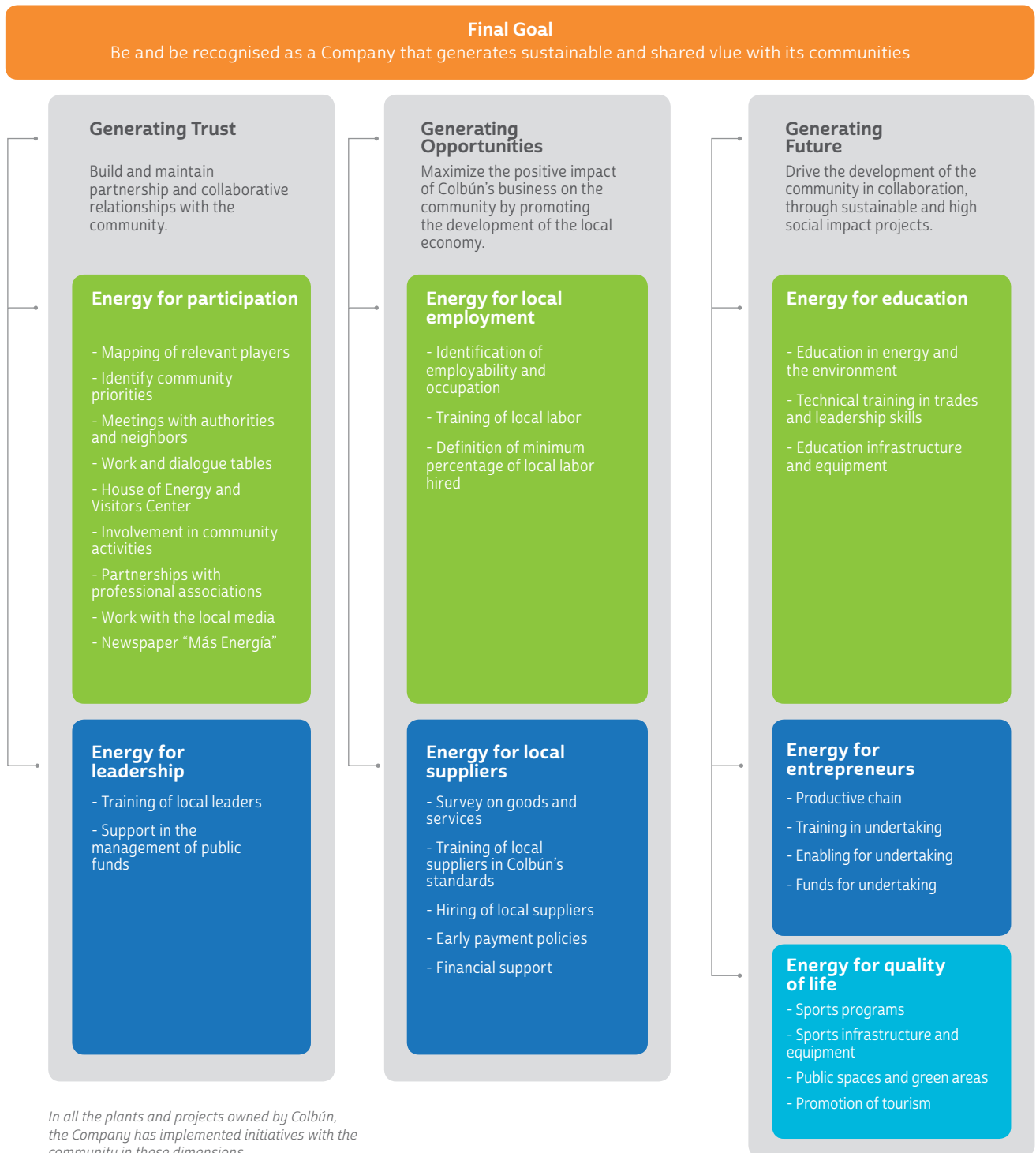
- *Build relationships with the community based on transparent and collaborative dialogue, developing communication instances and strengthening the leadership of community members in order to generate more symmetrical relationships.*
- *Generate opportunities among the communities we are part of by promoting the development of the local economy through the hiring of local workers and suppliers, so that they are incorporated into our value chain.*
- *Contribute to the improvement of the quality of life of the communities, collaboratively promoting the development of innovative and sustainable projects, preferably linked to productive development, education and healthy living.*



## Community Relations Model

103-2; 103-3, 413-1

The purpose and focus of our community and authorities relation strategy in the 21 districts where we operate in Chile and 1 in Peru are shown below.





Surroundings of  
the Canutillar  
Power Plant,  
Cochamó  
District,  
Los Lagos Region



## Dialogue with the community and society: Generating Trust

203-2, 413-1, 413-2, EU19

In order to establish an early approach and a level of fluent dialogue with the communities where the Company seeks to locate its projects, the Public Affairs Management is integrated early into the Engineering and Projects Division and the Environment Management, so as to inform the communities and local authorities about the activity to be developed, while listening to their vision and priorities.

This process is conducted in advance of submitting the corresponding environmental impact study or statement to be acquainted with the community views on the project and to facilitate its integration in the territory. This approach to Internal integration is then maintained during the power plant construction and operation stages, by working together with the Engineering and Projects and Generation Divisions, respectively. The same philosophy applies to Fenix, where the head of community relations is based on the operation of the power plant itself, in Chilca.



## Potential negative impacts

(413-2)

Project Construction	Generation	
	Hydraulic	Thermal-Electric
<ul style="list-style-type: none"> <li>· Noise</li> <li>· Landscape alteration</li> <li>· Resettlement of communities (in some cases)</li> <li>· Dust</li> <li>· Alteration of the community environment due to mass arrival of workers</li> <li>· Alteration of eco-systems</li> </ul>	<ul style="list-style-type: none"> <li>· Alteration off land and water eco-systems</li> <li>· Changes in river regime</li> <li>· Landscape alteration</li> <li>· Risk due to alterations of river flow</li> </ul>	<ul style="list-style-type: none"> <li>· Hazardous and non-hazardous effluents and residues</li> <li>· Atmospheric emissions and dumping</li> <li>· Noise</li> <li>· Water consumption</li> <li>· Landscape alteration</li> </ul>

## Potential positive impacts

(413-2)

Project Construction	Generation	
	Hydraulic	Thermal-Electric
<ul style="list-style-type: none"> <li>· Generation of local labor</li> <li>· Demand for local and regional goods and services</li> <li>· Social investment in the district</li> <li>· Strengthening of trading activity</li> <li>· Archeological findings</li> </ul>	<ul style="list-style-type: none"> <li>· Demand for local and regional goods and services</li> <li>· Reduced rates for districts where generation plants are located</li> <li>· Social investment in the district</li> <li>· Strengthening of trading activity</li> <li>· Tourism-related activities</li> <li>· Storage of water for irrigation</li> </ul>	<ul style="list-style-type: none"> <li>· Demand for local and regional goods and services</li> <li>· Demand for local and regional goods and services</li> <li>· Strengthening of trading activity</li> </ul>

## Channels of communication with the communities

102-17, 103-2, 413-1, 413-2, EU19

The Company has systematically set up new communication channels and spaces for dialogue with neighboring communities with the facilities or improved existing ones; this work responds to the Trust Generation pillar of the Community Relations Strategy.

Although an extensive list of such channels has been offered in Chapter 2, some of the existing channels and 2018 improvements are described here in more detail. These are complementary to more traditional forms of relationships, such as personal or telephone contact, meetings and working groups, letters and emails:

### New radio broadcasts

In 2018, the “Voices with Energy” program was launched in the Coronel district; the program is intended to discuss issues of common interest between Colbún and its neighbors, including operational, environmental and social aspects. In addition to being informative nature, the program seeks to link people, develop networks, among others. It adds to similar programs already existing in the districts of Santa Bárbara and Colbún

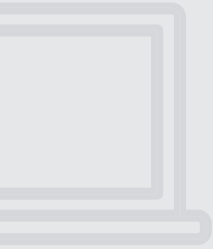
### Bulletin +Energía

In order to improve our communication with the Colbún neighbors, the decision was made in 2018 to increase the frequency of the Bulletin + Energy, which was published on a monthly basis. The Company publishes - either in print or digital version - bulletins of this type in the districts of Santa Bárbara, Quilaco, Coronel, Curacaví, Mostazal, Quillota and Los Andes, in addition to the Colbún mentioned above. The community bulletin has also been implemented in Fenix under the name of “Buen Vecino” (Good Neighbor), published bi-monthly. All of them publish information about the community and our operations.

### Social Media

In 2014 Colbún initiated a digital strategy resulting in the Company having presence on Twitter, YouTube, Facebook and LinkedIn. Each account has a different profile according to the type of audience, but all of them seek to inform about our activities, milestones in our host communities and issues of the energy industry. They are also an important tool for queries. In total, the Colbún account amounts to just over 100 thousand followers, of which about 40% are linked to the Angostura Park. En el sitio web de Colbún existe una Línea de Denuncia confidencial y anónima, con





### Website

The Colbún website includes a confidential and anonymous Whistle-blowing Line, in order to receive complaints related to compliance with Colbún ethical conduct standards. This channel, under the name of Ethics Line, was also implemented for Fenix on its website. In 2018, 20 complaints were received in Chile and 9 in Peru. On our website there is also a Contact Line, which allows anyone to make comments or queries of any kind to the Company. Each question is assigned a tracking number and a response time. In 2018, 913 messages were received through this channel in Chile, of which 884 were queries, 9 were complaints, 12 were suggestions and 8 were messages without content. In the case of Fenix, 4 claims were received through the compliance hotline channel.



### Visits to our facilities

Our “Tour de la Energía” (Energy Tour) program, which seeks to open our facilities to the community through guided tours, continued to grow in 2018. Two days of guided visits per month were implemented on a regular basis at the Los Quilos Power Plant in the Aconcagua Complex, resulting in 966 visits last year. This program started in 2012 in the Colbún Complex and has been gradually extended to other facilities. In addition to Aconcagua and Colbún, the latter with 3,408 visitors in 2018, it is already implemented in Angostura Power Plant (11,279 visitors in 2018) and Santa María Power Plant (1,643 people in 2018). The rest of the Colbún’s power plants, both in Chile and Peru, also receive visitors, but occasionally and not systematically.



### Community Thermometer

We conduct an annual survey of massive perception among neighbors and relevant stakeholders in order to identify the main concerns and issues of interest of the communities where we are inserted.

*The Communities Thermometer allows us to detect our gaps and has become a very important support to community management over the years, focusing on our greater potential challenges*

In 2018, 301 people were interviewed in the communities where Colbún operates.



## Colbún's Public Accounts Program

In our fifth birthday, in 2018 we started a reformulation of Colbún's public accounts program, an instance for communication and dialogue where traditionally the heads of the power plants deliver an account of the operational, social and environmental performance of their facilities.

Therefore, ways of interaction were sought in some power plants to foster a more significant role for the community and its local leaders, opening spaces for more horizontal dialogue to share the experiences and expectations of our neighbors. In 2019 we hope to deepen this model, which we think enriches the experience for all participants in these instances.

In 2018, 10 public accounts were delivered, covering 14 districts. Our affiliate Fenix joined this program for the first time.

### Summary of 2018 Public Accounts

Complex/Power Plant	Date	District
Santa María Complex	Wednesday, April 18	Coronel
Nehuenco Complex	Tuesday, May 15	Quillota
Candelaria Power Plant	Thursday, May 24	Mostazal and Codegua
Los Pinos Power Plant	Wednesday, September 12	Cabrero
Angostura Power Plant	Wednesday, October 17	Santa Bárbara and Quilaco
Rucúe-Quilleco Power Plants	Thursday, November 18	Antuco and Quilleco
Canutillar Power Plant	Thursday, November 15	Cochamó
Fenix Power Plant	Wednesday, November 12	Chilca
Carena Power Plant	Wednesday, December 5	Curacaví
Aconcagua Complex	Wednesday, December 12	San Esteban and Los Andes





## Community involvement and early consultation

EU19

During 2018, early consultations were applied on El Médano mini-hydro project in the Maule Region, to gather the vision and needs of the local community. Something similar was also done with the Machicura Beach Town project where, together with the Municipality of Colbún, an extensive process of early dissemination was conducted to collect information on the perception of the neighbors and the possibilities of generating business opportunities for them. Finally, in the case of the San Pedro project, the Tourism Boards in Los Lagos and Panguipulli have been instances to publicize the adjustment project the Company is promoting and to foster local tourism. All these instances have also served in the past to publicize the adjustment project that the Company is promoting for this initiative.



One of Colbún's policies is to present its projects in advance to neighboring communities and local authorities, in order to identify their views before starting the environmental assessment process and analyze how to incorporate them into the project.

### Photovoltaic Projects in the District of Pozo Almonte

Colbún maintains a relevant portfolio of renewable energy projects from variable sources. These initiatives are usually placed in uninhabited locations or locations with very low population density and because of the type of technologies, their environmental impacts are lower compared to other generation projects. Having said that, the Company conducts a thorough survey of the human component of project locations - as applicable - and establishes early communication channels to generate a dialogue at the local level, in order to know the community's vision on the development of our projects. Within this context, in 2018, surveys and participation efforts were carried out as a preliminary step to the development of future photovoltaic projects in the Pozo Almonte district. In the direct negotiations with the community, meetings were held with local authorities and residents, and a survey on Human Environment was conducted. Such instances helped identify the vision of the community in relation to these projects and helped Colbún to implement a design compatible with the local vision.

### Participatory Environmental Monitoring Program in Peru

Since the construction of the Thermoelectric Power Plant, Fenix conducts a participatory social-environmental monitoring, involving representatives of different organizations from Las Salinas and Chilca. In 2018, the Environmental Monitoring Committee, made up of 10 organizations from Chilca and Las Salinas, carried out 48 environmental monitoring activities at the power plant. With this, Fenix is the only company in Chilca that performs participatory monitoring. The re-launch was a joint effort carried out by Fenix with the support of the companies Golder Associates and consultants Figueroa and Bustamante, who verified the transparency of Fenix's environmental management work.

## Local suppliers and employment: Generating Opportunities

204-1

At Colbún, we promote the purchase of goods and services from local suppliers to the extent that they meet the technical and commercial requirements necessary for a reliable commercial operation.

### Colbún Purchases, districts of influence - Chile (204-1)

Region	District	# of Suppliers	Amount (US\$)
V - Valparaíso		76	3,973,895
	Los Andes	53	3,156,592
	Quillota	18	808,081
	San Esteban	5	9,223
Metropolitan Region		15	414,668
	Curacaví	14	372,004
	Til til	1	42,664
VI - Lib. B. O'Higgins		5	199,698
	Codegua	3	64,980
	Mostazal	2	134,718
VII - Maule		26	4,074,424
	Colbún	16	3,431,124
	San Clemente	10	643,300
VIII - Biobío		97	2,631,325
	Antuco	1	1,627
	Cabrero	14	769,660
	Coronel	46	786,976
	Lota	9	155,772
	Quilaco	4	219,656
	Quilleco	1	750
	Santa Bárbara	22	696,884
X - Los Lagos		6	52,303
	Cochamo	6	52,303
XIV - De los Ríos		61	1,066,067
	Los Lagos	5	9,260
	Panguipulli	8	69,891
	Valdivia	48	986,917
<b>GRAND TOTAL</b>		<b>286</b>	<b>12,412,380</b>

### Colbún Purchases, districts of influence - Peru (204-1)

	Numbers of Suppliers	Amount (US\$)
Chilca-Las Salinas	7	51,413
<b>TOTAL</b>	<b>7</b>	<b>51,413</b>

## Generating opportunities by hiring local labor

203-2

### Santa María Complex

Of the 109 Colbún own workers in this Complex, 83% live in some of the districts in the Concepción Province.

### Nehuenco Complex

31% of the 71 Colbún own workers in this Complex live in the Quillota Province.

### Biobío Complex

Of the 82 Colbún own workers in this Complex, 11% live in some of the districts in the Biobio Province.

### Aconcagua Complex

79% of workers in this Complex come from the districts of Los Andes, Calle Larga or San Esteban.

### Carena Power Plant

Of the 34 workers in this Power Plant, 59% live in the district of Curacaví.

### Canutillar Power Plant

75% of workers in this Power Plant come from some of the districts in the Llanquihue Province.

### Colbún Complex

Of the 77 Colbún own workers, 21% come from the Linares Province.







## Community Development Programs: Generating Future

Colbún-3.SO, 203-1, 203-2, 415-1

Colbún makes community investments under the following principles, established in the Community Relations Manual:



6,4

Million dollars was Colbún's social investment in 2018 (consolidated Chile and Peru).

1. The activities are developed based on well-defined strategies (objectives, criteria, guiding principles).
2. Align strategic business issues with the development priorities of local communities, civil society and the Government to create "shared value".
3. Position the Company as an ally that involves all stakeholders and not as the main player in the promotion of local development.
4. Avoid dependence and instead encourage autonomy and creation of long-term benefits lasting over time.
5. Monitor changes in community perceptions to obtain real-time feedback on performance.
6. Proactively communicate the value generated by Community Investment to internal and external audiences.



Colbún's community investment focuses in three areas whereby the Company seeks to Generate Future. Such areas are:

**1. Energy for Education:**

Programs oriented to deliver support in educational matters to educational institutions and youngsters in the districts where Colbún operates.

**2. Energy for Entrepreneurship:**

Initiatives that seek to strengthen the abilities of our neighbors in the areas of production promotion and employability.

**3. Energy for Quality of Life:**

Investment focusing in the improvement of the living conditions in the communities.

**Community investment in Chile**

(Colbún-3.SO)

Pillar	Subcategory	US\$	# of Beneficiaries
Generating Trust	Participation	748,851	36,752
	Quality of Life **	2,889,605	183,699
Generating Future	Education	471,567	5,148
	Entrepreneurship	668,923	1,154
Others *		727,460	1,363
<b>GENERAL TOTAL</b>		<b>5,506,406</b>	<b>228,116</b>

**Note:**

Training provided to local suppliers in 2018, as part of "Generating Opportunities", are excluded.

(\*) "Other" refers mainly to administrative expenses and donations to charitable institutions.

It should be noted that, in accordance with the law, Colbún does not make political contributions (indicator 415-1).

\*\* "Quality of Life" includes projects linked to the promotion of tourism, public spaces and green areas, infrastructure and sports programs, among others.

## Social Programs and Investment in Chile

Based on the broad work areas defined by Colbún for its social work - education, entrepreneurship and quality of life - the Company designs and executes different programs that adapt to the needs and conditions of each community. Some of the highlights for 2018 in Chile were the following:

### Medical Post on International Route

In order to help satisfy the health needs of the residents in the district living on the International Route, the Municipality of San Esteban promoted the Rural Medical Post of Río Colorado Project.

This initiative was developed with the support of Colbún, through its Aconcagua Hydroelectric Complex, and seeks to improving the quality of life of the more than 1,200 people, their families and neighboring Colbún communities.

The project increased the number of benefits and services, providing greater comfort and facilitating access by neighbors.

### Charrúa Led Street Lighting Community Project

The project includes 2.5 kilometers of LED street lighting installed in 2018 on the access road to the town of Charrúa. The project was born as a result of the associative work developed by the Charrúa Associative Board integrated by Transelec, Orazul Energy, Generadora Metropolitana, GGO Los Guindos and Colbún. We were joined by the Municipality of Cabrero, the Ministry of Energy and the neighbors' associations from the zone. The project involves a total of 61 new street lights using LED technology, in addition to the installation of 3 substations and the respective connection to the power grid.

### Construction of the Santa Bárbara Historical-Cultural Center:

The Municipality of Santa Bárbara raised the need to generate an adequate space for the dissemination and appreciation of the history of Santa Bárbara, where there was an integration between the Pehuenche and the Spanish cultures. Based on this concern, Colbún funded the construction and left to the Municipality the definition of the design of the Historical-Cultural Center as well as its equipment and contents.

### Family Vegetable Gardens:

The purpose of this initiative is to provide training to residents in our facilities so they can generate and maintain their own organic gardens. This program was born in 2016 in the Aconcagua Complex, where to date 90 families and 3 schools on the International Route have been supported so that they can learn to develop sustainable crops and harvest products that will improve their quality of life through healthy self-consumption



# 165 m<sup>2</sup>

Has the new Historical-Cultural Center of Santa Bárbara, constructed by the Company.





or by selling their products. The 2018 program was supported by Fundación La Semilla and Pipartnet Group and the work plan included theoretical-practical workshops, installation of two flowerbeds per household and the delivery of supplies. In turn, a joint visit with people who participated in previous years was made to the Edelweiss Ecological Center located in the city of Catemu to find out about other initiatives and improving the gardens installed in previous years.

#### **Entrepreneur Centers:**

Colbún operates two entrepreneur centers in the Biobío Region. Located in the districts of Coronel and Santa Bárbara (Biobío Region), they provide training, support to start or formalize a business, and business incubation. Both were born under the aegis of an alliance

with the NGO Accion Emprendedora, which played a significant role in the development thereof.

**The Santa Bárbara and Quilaco Entrepreneur Center has been in operation since 2012 and focuses its work on these districts and on Antuco, Quilleco and Cabrero. In 2018, it provided training to 153 individuals, delivered advisory services to 170 entrepreneurs in matters associated with fund raising and management, and offered talks to 115 people.**

Since 2012, 1,428 individuals have been trained.

Another highlight is the leverage of their working network by adding alliances with the Sercotec Business Development Center, Sernatur and Inacap.

The Coronel Entrepreneur Center has been operating since 2010. In 2018, it developed training courses for 69 entrepreneurs, personalized consulting for 55 entrepreneurs, advice for application to public and private funds, resulting in seven winners in the district. This allowed raising funds for \$24 million. The seventh version of the Capital Semilla program “Yo Emprendo en Coronel” (I undertake in Coronel) was also carried out, organized jointly with CIDERE Biobío, and Acción Emprendedora. Twenty-four projects



received this benefit, adding up to about 175 initiatives supported over the seven years of the program's life.

**Antuco Herder Monument Project:**

The Public-Private Tourism Board of Antuco of which Colbún is a part, defined as one of its main objectives to enhance tourism and the heritage value of the district. On this basis, the idea of building a Monument to the Herder was presented, in recognition of the work they have done for years, being a tradition in the area. Board participants decided that the monument should be placed inside the "Visitor Welcoming Center", located next to the Plaza de Armas and the Municipality. As part of the design process, representatives of the Antuco Herders' Club were invited to review the details of the sculptures and Lucien Burquier was subsequently hired to produce them.

**Education Program:**

The Education Program is one of the most all-encompassing and oldest of the Company, turning 11 years old in 2018. In partnership with Inacap at the beginning - and more recently also with the Vertical Foundation, the Santo Tomás University and Engrana Educación - the initiative seeks to deliver technical tools to improve capacities and employability of students, as well as enhance the personal competencies required to form a transformative leadership in each educational community. This is achieved through courses and workshops, such as computing, electricity, accounting, tourism and leadership, among others. In addition, the most complete and comprehensive students in each course are granted a scholarship to cover part of their higher education expenses. Thus, in 2018, a total of 54 scholarships

for higher education were awarded at the Aconcagua, Carena and Nehuenco power plants. In addition, in 2018 at the Aconcagua Central, the teaching competences of two educational institutions with 238 students were supported, while in the District of Curacaví, which houses the Carena Hydroelectric Power Plant, the robotics and renewable energy courses were offered, certifying 37 students.

**Coronel Social Development Funds:**

This fund was started in 2009 as a result of the work of the "Board for the Development of the Southern Sector" - members including Colbún and 13 neighbors' associations; two lines were developed: one that benefits neighborhood associations with projects to improve public spaces and construction or remodeling of community venues, and another that delivers benefits through grant funds to functional organizations such as sports and cultural clubs, among others. In 2018, the first line promoted the construction of a community center in the Cerro La Virgen sector and the improvement of the Cerro La Virgen skydeck, the first benefiting more than 300 people and the second all possible visitors to the city of Coronel.

Along the second line of work, last year projects were awarded to 36 functional organizations, such as sports clubs, clubs for senior citizens and others; since its inception, more than 4,000 people from the 216 organizations that have been awarded these funds in sports, culture, health and other areas have received benefits.



13

Coronel Neighbors' Associations participate in the "Board for the Development of the Southern Sector" Promoted by Colbún.



### **Community Contribution Fund Biobío Cordillera Zone:**

2018 was the second year of this grant fund promoting self-management of the territorial and functional organizations in the Santa Bárbara, Quilaco, Quilleco, Antuco and Alto Biobío districts, through the funding of impact initiatives in communities able to demonstrate management capacities. More than 50 organizations presented their projects, of which 34 were awarded, highlighting projects such as the implementation of a reading room for the elderly, a loom workshop for rural women, sports equipment for soccer clubs, among others.

### **Caring for My Planet:**

This program operates through different lines of work, allowing the community to take a leading role in the care for the environment; among

others, the program offers grant funds, training and artistic contests, among others. The program started in the district of Colbún, where three versions of grant funds and six versions of artistic contests have already been conducted, as well as days for collection of household appliances and local training.

**In 2018, grant funds were awarded for the second time in the districts of Codegua and Mostazal, where a total of 9 organizations, including neighbors' associations, high schools and kindergartens, accessed resources to promote their environmental projects.**

The program was also extended to the district of Curacaví, which houses the Carena Hydroelectric Power Plant, executing five environmental projects together and for social groups in the area.

### **Environmental Certification of Educational Institutions (SNCAE) of the International Route Schools:**

In 2018, Colbún worked with three schools in low-resource, rural areas in the vicinity of the Aconcagua Complex, two of which achieved basic environmental certification and one remained pending for March 2019. The certification is a nationwide program that adheres to the parameters of the Nations United in order to raise awareness of environmental care from an early age.

### **Quillota Tricentennial Square:**

On occasion of the 300th anniversary of the Quillota district, Colbún and the Municipality came up with the idea of building a public space with mosaics and murals to reflect the main symbols and attributes of the district, soon becoming a symbol of the city. This project was built in 2017 in a participatory manner and used various recycled elements. In 2018, more than 3,600 people had visited the square, mainly tourists from social programs promoted by SERNATUR.



## Energy and Tourism: Machicura Beach Town and Chapo Lake:

Inspired by international experiences from countries like Switzerland and New Zealand, more than a decade ago Colbún began to promote the idea that electricity generation reservoirs could represent a source of value creation for local communities through the development of tourism projects in the surroundings.

This vision was materialized in the development of the Angostura project, in the Biobío Region, where the Angostura Park was promoted. This initiative, which began operating in 2014 and includes beaches, campsites, trails, an arboretum and a Visitor Center, has been promoted in a participatory manner through a Tourism Board, and has become a flagship project for the Company, receiving several awards. Today, the facilities receive more than 150 thousand visitors per year.


The experience gained has helped Colbún to develop two additional initiatives which although different in nature and scope, seek to show that it is possible to harmonize energy generation and tourism.

The project, within the Colbún district, began when the Municipality of Colbún told us in early 2017 that its main strategic objective was to highlight the tourism attributes of the district and, in particular, of the Machicura Reservoir, as it is an attractive location in the vicinity of the district's capital, with recreational and economic potential. Based on this approach, Colbún searched for and purchased a property that would meet optimal conditions for the establishment of a spa and project design.

### After generating an alliance with the Municipality, in 2018 Colbún initiated the construction of the Machicura Beach, which was delivered to municipal administration in early 2019.

This project includes an area of 15,000 square meters, a 150-meter beach, barbecue areas, bathrooms, shops, food trucks, playgrounds and a dock for water sports and non-motorized boats. During the first summer in operation, it received more than 50 thousand visitors.

The second project promoted along the same line last year is Chapo Lake, in the Los Lagos Region. Following a request made by the local Neighbors' Association, and considering the gradual decrease in precipitation in recent years, in mid-2018 Colbún proposed to the National Electric Coordinator a higher minimum level of operation for Chapo Lake - where the Canutillar Power Plant operates - in order to generate the conditions for better connectivity and development of local tourism. From this milestone, Colbún, the Neighbors' Association of Chapo Lake and the Municipality of Puerto Montt promoted the creation of a Mesa de Turismo del Chapo Lake (Chapo Lake Tourism Board); in addition to these 3 parties, representatives of the regional government and multiple social organizations within the territory have joined the Board.



The purpose of the Board is to generate a work plan in 2019 to boost local tourism. This plan has as an anchor project, the generation of a coastal walkway, the equipping of the beach sector, turning it into an attraction for the development of tourism and commercial activities. In addition, in order to ensure the participation of local players in this development plan, the Board established a program of training workshops in different trades for people interested in entrepreneurial activities.

These experiences have left at least three important lessons learned: first, dialogue and participation of diverse players is essential to promote projects which, by their nature of being a public good, exceed what a single player alone can do; second, the importance of each player in a territory looking beyond their particular vision to find spaces for innovation, cooperation and generation of value; and third, that true sustainability occurs when social projects are intimately linked to the business itself; in this case, these are tourism projects that are made viable thanks to the power plants that operate there; facilities that, in turn, are legitimized to the extent that they create value in their environment.





Surroundings of  
the Canutillar  
Power Plant,  
District of  
Cochamó,  
Los Lagos Region

## Social Programs in Peru

203-1, 203-2, 303-3, 413-1

Some of the relevant community programs developed by Fenix in 2018 included:

### Seawater changing lives:

As part of the original design of the project, Fenix considered the construction of a seawater desalination and water treatment plant, which required an investment of 4 million dollars and has positioned itself as a benchmark for the area. The plant has the capacity to produce about 2,000 m<sup>3</sup> of drinking water per day, of which most is delivered free of charge to the District Municipality of Chilca for distribution, benefiting 5,000 district residents. In 2018, and as a complement to this program, Fenix implemented Hogar Azul in homes, businesses and institutions in Salinas, flow regulators to promote water savings achieving an efficiency of 4,000 m<sup>3</sup> between January and October of 2018.

It is also important to highlight that in trying to make the use of water even more efficient, Fenix maintains

a Treatment Plant for Residual water - WWTP – which processes 3,985 m<sup>3</sup> of water from the bathrooms and washrooms of the plant, allowing for the irrigation of 1,592 trees distributed in an area of 40,000 m<sup>2</sup> in the Fenix' interior and exterior.

### Las Salinas Polyclinic:

On January 12, Fenix opened the Las Salinas polyclinic, managed by Red Médica, including several medical specialties, state-of-the-art equipment and outstanding health professionals. The Polyclinic covers mainly the approximately 1,000 inhabitants from around the center and, between 2017 and 2018, it has provided care to 6,000 people, women being the most favored, with 64% of the total care provided. In addition, the survey applied to patients showed that 100% are satisfied with the service provided.

### Zero Anemia:

In order to reduce the incidence of anemia in children younger than 3 years old in Chilca, the Micro Health Network of Chilca, in agreement with Fenix, implemented the Zero Anemia Project. This initiative included screening,

treatment, follow-up, as well as educational and demonstrative sessions for parents and children about healthy eating and how to prepare iron-rich foods. Between June and November of 2018, the project achieved very encouraging results, so that 90% of participating children and identified with anemia managed to recover from this disease in the six months of the project. This result turned the project into a nationwide initiative in the fight against anemia, based on the articulated work of Fenix with the health authorities, the Community Health Promoters for the follow-up of families and the parents themselves. As a result, our company received from the Chilca Mala Basic Health Services the recognition as "AMBASSADOR IN THE FIGHT AGAINST THE ANEMIA", the only company in the district receiving this distinction.

## Community Investment in Peru

(Colbún-3.S0)

Pillar	USD	# of Beneficiaries
Energy for Education	32,126	792
Energy for Health	328,298	2,149
Energy for Safety	7,336	2,070
Energy for Economic Development	54,675	17,050
Water for Chilca	458,811	5,000
<b>TOTAL</b>	<b>881,316</b>	<b>27,061</b>

## Main Social-Environmental Challenges

306-3, 411-1, Colbún-4.SO

Colbún maintains a field team from the Public Affairs Department whose objective is to assist in the construction of a long-term relationship with the communities where we are inserted, generate opportunities for development and manage the potential socio-environmental conflicts that arise within the framework of our operations and projects.

To this end, Colbún privileges direct, permanent and fluent communication channels to inform first-hand the concerns or views of the community and to carry out the efforts to generate a mutual understanding. Within this context, the following situations arose in 2018:

Topic	Description	Measures implemented by Colbún
<p><b>Santa María Thermoelectric Power Plant, Coronel District, Biobío Region</b></p>	<p>The Coronel district has seen a significant industrial development in the last two decades, involving the arrival of numerous industries, including fishing, ports, cement, and power generation companies, such as Santa María de Colbún Thermoelectric Power Plant, which started operating in 2012.</p> <p>This industrial development has resulted in opportunities, but also in the emergence of social-environmental conflicts, where a part of the population blames industries for contamination episodes.</p> <p>Thus, in the context of a complaint filed by some residents and fishermen in Coronel, the Public Prosecutor's Office began an investigation into the environmental performance of the thermoelectric plants in Coronel in 2012. After more than five years of investigation, including over 70 witnesses and 30 technical reports, in 2018, the Public Prosecutor's Office decided not to persevere in the investigation against Colbún, as there was no background to support the allegations.</p> <p>At the same time, since 2015, a lawyer from Concepcion has filed different complaints before the Superintendence of the Environment (SMA), for alleged plant environmental or RCA breaches.</p> <p>After a long investigation, in January of 2017, the SMA issued a resolution in which the RCA's breaches were rejected, particularly, an alleged overgeneration of which the Central has been accused. In January 2018, however, the Environmental Court of Valdivia ordered the SMA to continue with the investigation of the Santa María Power Plant and to restart a sanctioning process due to differences detected in the power plant's equipment.</p> <p>Both the SMA and Colbún filed appeals against that resolution, which have not yet been resolved. In any case, the same Environmental Court of Valdivia, but by a different complaint, issued at the end of 2018 a ruling stating that there were no grounds to presume that Santa María Central was responsible for environmental damages in the area.</p>	<p>We, at Colbún, believe that a good community relationship requires, first and foremost, a good operational and environmental performance of our facilities.</p> <p>Therefore, the first focus of Santa María Power Plant has been to have a high-standard environmental performance, minimizing atmospheric emissions and permanently seeking additional opportunities for improvement. Except for a formulation of minor charges for overcoming the noise standard in 2017, in its almost 7 years of operation, Santa María does not have any sanctions based on environmental noncompliance, and all the legal actions filed have been dismissed. In any case, at Colbún, we know that legal compliance is not enough, and that community relationships are a long-term task requiring a much broader view, with a willingness to listen and take corrective actions.</p> <p>For this reason, we have promoted communication channels to inform environmental results and receive concerns and complaints, to evaluate where we need to make changes.</p> <p>These channels include annual public accounts since 2013; installation of working groups since 2011 with neighborhood meetings; regular appearances on television channels and local radio programs; issuance of video shorts informing the environmental performance of the power plant, in addition to a guided visit program. Lastly, Colbún is an active participant in the Council for the Environmental and Social Recovery of Coronel (CRAS), promoted by the Government.</p>

Topic	Description	Measures implemented by Colbún
<p><b>Canutillar Power Plant, Cochamó District, Los Lagos Region</b></p>	<p>In the context of the lower rainfall affecting Chile since 2008, some neighbors of Chapo Lake in the Los Lagos Region have expressed their concern over the changes in the height of the lake, where the Canutillar Power Plant is located, particularly, due to its impact on connectivity and future tourism. This vision intensified in 2018, with criticism of an environmental nature by a group of local people.</p>	<p>Over the last years, Colbún has maintained a working group and regular conversations with the neighbors' association of Chapo Lake and the riverbank inhabitants.</p> <p>Within the framework of this permanent relationship, and at the request of the neighbors' association of Chapo Lake, the Company proposed to the National Electrical Coordinator to adjust the operating conditions of the Canutillar Power Plant to the new hydrological conditions of the south-central area, raising the minimum permanent operation level of the lake.</p> <p>The above was then endorsed in an agreement between the neighbors' association of Chapo Lake and Colbún; this agreement had the support of the municipal authorities of Puerto Montt and the regional government.</p> <p>From this milestone, late in the year, a Tourism Board was set up with the participation of the neighbors' association, the Municipality of Puerto Montt, and various public services in the region, including Sernatur and Colbún. The purpose of this Board is to define a work program to enhance tourism in Chapo for the benefit of its inhabitants.</p>

Topic	Description	Measures implemented by Colbún
<p><b>San Pedro Hydroelectrical Power Plant Project, Districts of Los Lagos and Panguipulli, Los Ríos Region</b></p>	<p>In December 2018, Colbún filed an Environmental Impact Study (EIA) in order to adjust the San Pedro Hydroelectric Project. This project, with an RCA in force since 2008 15% progress in construction, was suspended in 2011 in order to carry out additional studies on the land where the main works are located. These studies led to adjustments currently being submitted to the Environmental Impact Assessment System (these adjustments were entered in 2015 to the SEIA, but the authorities at the time ruled that there was a lack of relevant information to evaluate the new EIA; this led to Colbún to deepen and improve the information required).</p> <p>The presentation of the EIA for Adjustments in late 2018 triggered opposition to the project among some local agents, including environmental groups, kayakers and politicians in the area.</p>	<p>At an informative level, Colbún has been making presentations and guided visits to the San Pedro project for several years now, including traders and neighbors' associations, indigenous communities, etc., in order to explain this initiative and the scope of the Proposed Adjustments. In addition, together with entering the EIA, in December 2018 a website was updated to provide information and clarify all the doubts about this initiative (<a href="http://www.centrosanpedro.cl">www.centrosanpedro.cl</a>).</p> <p>Additionally, Colbún has been working on two community core aspects for three years in order to achieve a better insertion of the project at the local level.</p> <ul style="list-style-type: none"> <li>· Indigenous Communities within the Territory: A permanent relationship is maintained with the 13 indigenous organizations in the vicinity of the project, totaling some 2,000 people. Ten Long Term Cooperation Agreements have been signed with these communities, generated under the guidelines established in ILO Convention 169.</li> <li>· Community Relations: Based on our conviction that energy projects can boost tourism - as is the case of the Angostura Power Plant in Biobío, the Colbún Complex in that district and the Canutillar Power Plant in Chapo Lake - Colbún has sought to promote local tourism. As a result, the Tourism Boards of Los Ríos and Panguipulli were created in 2015, with the support and participation of social organizations in the area. In 2017, these Boards inaugurated tourism infrastructure works on the banks of San Pedro river and Panguipulli Lake, currently preparing Community Tourism Development Policies and a portfolio of projects that could be financed with grant funds.</li> </ul> <p>These Boards have also provided an opportunity for the Company to explain the characteristics of the project and the adjustments that are being submitted to the evaluation process.</p>

## Community and Human Rights

406-1, 411-1, 412-1, 103-2

There were no human right violations against indigenous peoples, nor were there any cases of discrimination or human rights violation reported through the Compliance Hotline or the Contact Line (channel for consultations, complaints and suggestions) in Chile or in Peru.





Coronel Bay,  
Biobío Region

# 05

## Environmental Performance and Climate Change

This chapter describes the environmental performance of all our operations in Chile and Peru during 2018, including aspects related to water use, atmospheric emissions and biodiversity. By subject contains information on Colbún's management in the field of Climate Change.







# Materiality Analysis

Based on the Materiality Study carried out to prepare the Integrated Report, we identified two material relevant issues related to topics discussed in Chapter 5.

## Material Issue: Climate Change



### Scope:

- Impacts and opportunities of Climate Change
- Carbon Credits
- Decarbonization
- Green Taxes

### Related Risks:

- Impact on hydrology
- Regulatory changes
- Water conflicts at local level

### How we manage it

Colbún has a Climate Change Strategy and management model that allows it to detect risks and take advantage of the opportunities linked to this topic. This includes using an internal carbon price in our decision making; developing a project portfolio to issue carbon credits that offset emissions; to measure, verify and report our carbon footprint, and promoting social initiatives to measure, reduce and offset emissions. The Company also participates actively in CLG Chile, a group of leading companies against climate change that seeks to promote an active role by the private sector in this area.

### Why it is material for Colbún:

Climate Change has gradually been taking up the agenda of companies, government and civil society. Its impact on the basins where Colbún is present is a relevant topic for the operation of its power plants. Definitions of public policies and regulations based on Paris Agreement commitments may also have effects on our thermoelectric power plants. Finally, this issue represents an opportunity for the Company, both due to the long history of its management model on Climate Change, and the growth options that arise based on renewable energies

## Material Issue: Emissions, Water and Biodiversity



### Scope:

- Environmental Care
- Decontamination
- Noise
- Water Management
- Biodiversity
- Emissions
- Impacts on Human Rights

### Related Risks:

- Regulatory breaches
- Community Conflicts
- Water availability for operation of power plants
- Regulatory changes
- Water conflicts at local level

### How we manage it

Colbún has a Safety, Occupational Health, Environmental and Quality Policy applicable to all its operations and has a Biodiversity Strategy in place. In addition, we monitor our environmental performance at all times, identifying challenges and improvement opportunities.

An annual survey in communities and public accounts, allow us to detect local perceptions regarding

our performance in this matter, closely following up any possible incident.

### Why it is material for Colbún:

The construction of projects and operation of power plants can have environmental impacts, an issue of increasing relevance to society and our interest groups. In addition, hydrological conditions can affect the operation of hydro and thermoelectric power plants. Therefore, all issues related to water, biodiversity, emissions, noise and environmental standards are relevant to the operation of our facilities.

## Environmental Management Model

Colbún has adopted an environmental management model that steers its actions in this field and is based on four pillars.



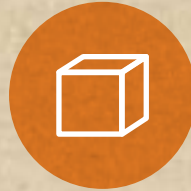
### Water

We strive to efficiently use the water resource at our different power plants and to ensure it will not lose its self-generation capacity.



### Air

We seek to minimize the effects of our emissions on air quality and to manage our greenhouse gas effect emissions.



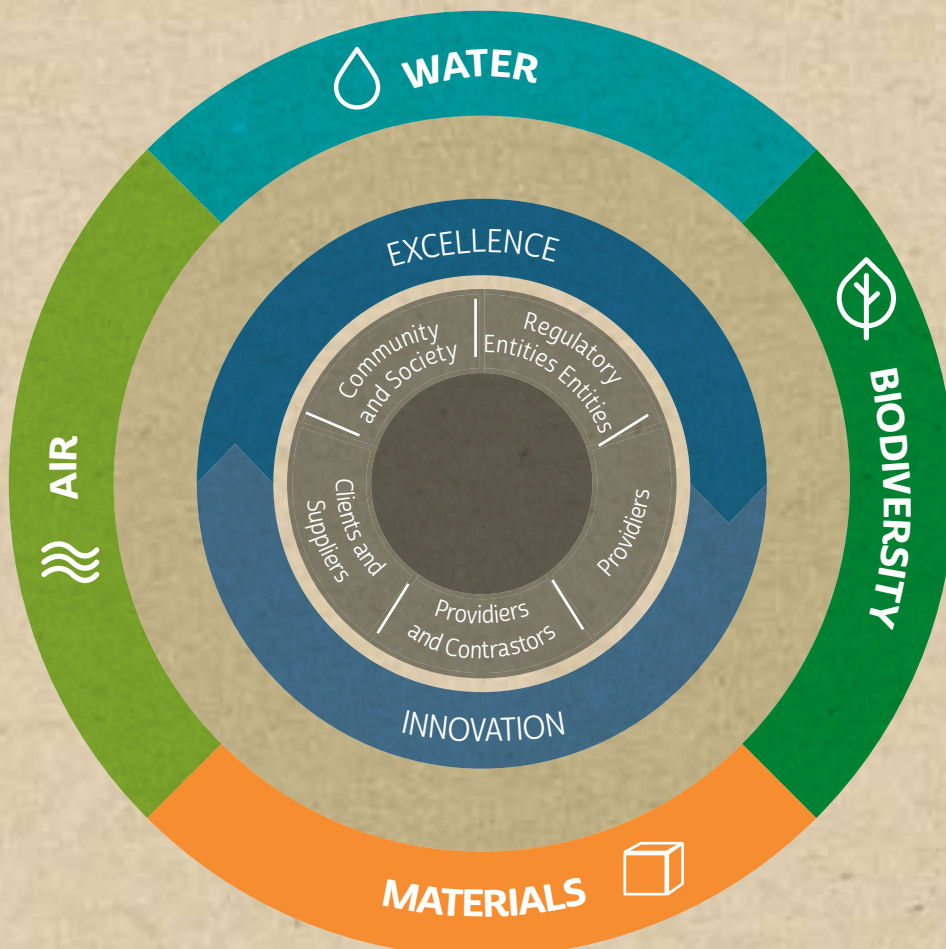
### Materials

We efficiently use the raw materials we turn into electric power, making ourselves liable for managing the waste resulting from our processes.



### Biodiversity

We recognize and take care for the flora and fauna, as well as the habitats and ecosystems where our projects and facilities are located.



## 5.1 Use of Water Resource

103-2, 103-3, 302-4, 303-1, 303-3

Chile faces a decade ago what specialists have called a “mega drought” characterized by a decrease in rainfall in most basins of the country’s central-southern area.

Although there is no water consumption in the case of hydroelectricity, water availability is key for electric generation.

Therefore, in recent years, the Company has been adopting a set of measures aimed at more efficient use

of water, minimizing variability in precipitation patterns and changes in flow regimes.

This is the case, for example, in regulated hydroelectric plants (Colbún, Machicura and Canutillar), which are more important in the current scenario, since they allow adjusting supply by taking on more load, when consumption goes up, being an excellent complement for renewable technologies such as solar and wind power (in which generation is intermittent).

It is important to differentiate the use of water in hydroelectric generation versus thermoelectric generation. Hydroelectric power plants use water in turbines and then return it entirely to the source without any alteration; In other words, they do not consume it (non-consumptive use). Thermoelectric power plants need to use water for their cooling operating processes, consuming water from underground or surface sources (consumptive use) or capturing sea water and returning it to the source.





## Efficient Water Management

During 2018, the development of projects focused on efficient water management was intensified, with four especially noteworthy projects.

In the case of the Aconcagua Hydroelectric Complex, sediment cleaning equipment was implemented in the loading chamber of the Chacabuquito power station, and an open innovation contest was held at international level aimed to develop a system to reduce sediments that accumulate in the regulation dams of Colbún plants operating in the basin.

Also, in the same Aconcagua Complex, an optimization algorithm was developed to distribute the water resource throughout the different generating units, considering their efficiencies and accumulated wear, and

a mathematical model that optimizes the operation of the Aconcagua basin plants to generate in the hours of greatest demand.

In thermoelectric plants, projects have been developed to reduce water consumption for their operating processes, specifically in the Antihue power plant (Los Rios Region) and in the Fenix Power Plant in Peru (see more details in Chapter 2, Innovation section).

A specific case is represented by the Nehuenco Complex (Region of Valparaíso). In order to minimize the use of water for the cooling process of

its plants and ensure operational availability during dry periods, in 2017 Colbún launched the Reverse Osmosis Plant in Nehuenco, which is basically a treatment and purification system for waters captured by the well field, allowing savings of up to 50% in water use during water shortage periods. In addition, we have worked on enhance predictive aquifer behavior models to take proactive actions and minimize possible impacts on the generation of the Nehuenco Complex

5

Initiatives pursued  
 in 2018 for more  
 efficient water use



Pato Jergón  
(Chilean Teal),  
Angostura  
Reservoir,  
Biobío Region



## Water Use in hydroelectric generation

During 2018, dry water conditions have persisted in the Maule, Laja, Biobío and, notoriously, in the Aconcagua basins, which are leaders in terms of the country's hydroelectric generation, and where several of our facilities are located.

Although 2018 levels were not as extreme as those recorded in 2016, they are generally far from a normal year according to hydrological statistics.

2018 was low in terms of rainfall and this effect was very accentuated in the Aconcagua Basin (Hornitos, Juncal, Blanco, Juncalito, Los Kilos and Chacabuquito Power Stations), reflecting in a 23% generation reduction

compare to the previous year in these power plants.

However, from a global perspective, water usage levels to generate energy in our hydroelectric power plants increased by 9.7% in 2018 as compared to the previous year, which is explained by an increase in melting levels at some basins.

9.7%

increased water use to generate energy in our hydroelectric plants during 2018



### Total water collected, turbinated for hydroelectric generation, and returned to the source in Chile \* (Non-consumptive Use)

(303-1)

Power Plant	Unit	2016	2017	2018
Colbún Complex**	Million m <sup>3</sup> /year	3,621	4,134	5,078
Canutillar Power Plant	Million m <sup>3</sup> /year	1,062	1,658	1,708
Carena Power Plant	Million m <sup>3</sup> /year	272	277	258
Rucúe-Quilleco Power Plants	Million m <sup>3</sup> /year	1,526	1,931	1,853
Aconcagua Complex	Million m <sup>3</sup> /year	1,308	1,305	999
Angostura Power Plant	Million m <sup>3</sup> /year	5,504	9,188	10,396
<b>TOTAL</b>	<b>Million m<sup>3</sup>/year</b>	<b>13,294</b>	<b>18,492</b>	<b>20,292</b>

#### Notes

\* Corresponds to water collected at its source and turbinated for the first time. Machicura, San Ignacio, Juncalito, and Quilleco power plants were excluded. They returbine water captured by another hydroelectric plant belonging to the Company (they do not capture water from the source).

\*\* The Colbún Complex includes La Mina Power Plant that started operating in September 2017.



**42%**

of flows captured by Colbún are reused in more than one power plant

## Water reuse in hydroelectric power plants

303-3

Given Colbún's strong hydro-electric vocation, water resources are critical to the Company.

Thus, with the aim to promote energy efficiency and sustainable use of natural resources, Colbún has developed, over the years, several projects in "hydraulic series" in order to reutilize the same water and thus maximize power generation. The recent start-up of La

Mina Power Plant in the Maule Basin is further proof of this approach.

As result of the above, currently, 42% of the flows that Colbún captures from watercourses and uses for its operation, are reused in more than one of the Company's power generation plants, thus allowing greater energy efficiency.

## Percentage and total volume of water reutilized / returbinated in hydroelectric plants (non-consumptive use)

(303-3)

Power Plant	Metering Unit	2016	2017	2018
Total water collected and turbinated	Millions m <sup>3</sup> /year	13,294	18,492	20,292
"Returbinated" water volume	Millions m <sup>3</sup> /year	6,304	7,531	8,484
Percentage of reutilized/returbinated water	%	47%	41%	42%

**Note**

\* These waters are used in more than one hydroelectric plant owned by Colbún S.A. (returbinated), under the same water right. This applies to Machicura, San Ignacio, Juncalito and Quilleco

## Other ways harnessing of water

Water resources used by Colbún to generate electric power also play a relevant role in some of its facilities by enabling the restitution of these waters through different irrigation systems, according to established rights, achieving optimal use of water resources.

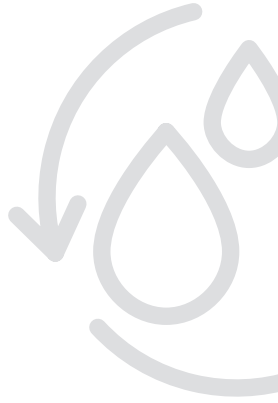
Thus, hydroelectricity allows to generate other social benefits, such as the Water Resource Efficiency Agreement subscribed with the Maule South, Sector Alto Irrigators' Association, which consists in a mutually beneficial agreement, in where irrigators are compensated for saving water and Colbún generates more clean energy and a consequent reduction in CO2 emissions in the country's electricity system.

As result of current agreement with the Maule South Sector Alto Irrigators'

Association, 28% savings in irrigation water were achieved during the 2017-2018 season.

Another way to increase energy efficiency is by optimizing the use of water resources. Thus, Colbún avoids generating energy with fuel by returbining waters not included in the original design of certain projects, such as San Ignacio of the Colbún Complex and Quilleco of the Biobío Complex plants, and by reusing waters in plants built later, such as the Chiburgo and San Clemente plants of the Colbún Complex, developed in irrigation channels.

**28%**  
Water savings  
by Maule South  
Irrigators Association  
for the  
2017-2018 season.



## Use of energy from water in hydroelectric plants

(302-4)

Description	Power Plant	Metering Unit	Estimated Energy Savings			
			2015	2016	2017	2018
Plants that use water flows prior to their delivery to irrigation.	San Ignacio	GWh	171	90	121	147
	Quilleco	GWh	325	224	282	273
	Chiburgo	GWh	70	63	60	66
	San Clemente	GWh	16	17	13	16
<b>TOTAL</b>		<b>GWh</b>	<b>582</b>	<b>394</b>	<b>477</b>	<b>502</b>

**Note**

Standards, methods and assumptions applied in the calculation: Energy that is no longer generated using alternative fuel by returbining waters not included in the original design (San Ignacio, Quilleco) and when using waters in plants built later to optimize the use of the resource (Chiburgo and San Clemente).





**San Ignacio Hydroelectric Plant (run-of-the-river power plant):**

It operates using water from the restitution channel of the Colbún-Machicura Complex, maximizing the use of the Complex's energy and water resources with minimal environmental impact.

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**Chiburgo Hydroelectric Power Plant (run-of-the-river power plant):**

This power plant was built in 2007, taking advantage of Colbún's facilities, which provides water for irrigation without altering its quality or quantity.

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**San Clemente Hydroelectric Power Plant (run-of-the-river power plant):**

This power station allows to take advantage of the terrain slope along the Sanatorio gorge, which is used to return the water to its point of delivery to various irrigation channels. This power plant is registered under the United Nations 'Clean Development Mechanism (CDM), resulting from CO<sub>2</sub> emission reduction from its operation.

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**Quilleco Hydroelectric Power Plant (run-of-the-river power plant):**

This second power plant in the Laja Basin uses the waters of this basin from the Rucúe Power Plant, which is located upstream. It participates in the CO<sub>2</sub> emissions reduction transaction, certified under the United Nations Clean Development Mechanism (CDM) standard.

## Water use in thermal generation and administrative offices

As stated above, our thermal power plants require water consumption for their cooling processes. Another additional consumption is by administrative offices in all our plants (hydroelectric and thermo) for household use and for irrigation of green areas.

In Chile, total water consumption increased 1% during 2018 (see table "Water Consumption in Chile"). It should be clarified that this indicator does not include seawater used by the Santa María Power Plant for its cooling process, which is entirely returned to its original source (see table "Sea water captured and returned to the source in Chile").

**1%**  
Aumentó el consumo total de agua durante 2018



### Water Consumption in Chile (consumptive use) (303-1)

Water Source	Metering Unit	2016	2017	2018
Surface Water (river/lake)	m <sup>3</sup> /year	11,045	9,820	10,278
Groundwater	m <sup>3</sup> /year	4,774,148	5,208,120	5,244,076
Municipal Water	m <sup>3</sup> /year	61,626	73,492	90,758
<b>TOTAL CONSUMED WATER</b>	<b>m<sup>3</sup>/year</b>	<b>4,846,819</b>	<b>5,291,432</b>	<b>5,345,112</b>

**Notes:**

· Includes water consumed for cooling of thermoelectric plants, plus water consumed by our administrative offices in Chile.

· The supply for these facilities comes from lakes, rivers and wells, and from supplies of sanitary companies in some cases.

### Sea water captured and returned to the source in Chile (303-1)

Water Source	Metering Unit	2016	2017	2018
Total sea water collected	m <sup>3</sup> /year	316,705,257	336,714,557	343,196,782
<b>TOTAL SEA WATER</b>	<b>m<sup>3</sup>/año</b>	<b>316,705,257</b>	<b>336,714,557</b>	<b>343,196,782</b>



**2,500 m<sup>3</sup>**

of drinking water can be generated daily by the Fenix desalination plant

In the case of Peru, Fenix thermal plant, by using water collected from the ocean for its processes, prevents water consumption from underground and continental sources. The process which requires the largest amount of sea water is the cooling system that amounted to 289 million m<sup>3</sup> in 2018. A portion of collected water undergoes a desalination and purification process, to generate up to 2,500 m<sup>3</sup> of drinking water per day. A small percentage of

this water is used in the plant's internal consumption, and the largest fraction is delivered to the District Municipality of Chilca, who is charged of distributing it to the local population. The distribution of potable water to the population started in 2016, reaching a maximum monthly level of 35,636 m<sup>3</sup>.

### Sea water captured and returned to the source in Peru

(303-1)

Water use	Metering Unit	2017	2018
Water used for cooling processes of the Fenix Power Plant *	m <sup>3</sup> /year	290,786,513	288,407,521
Water supplied to the community **	m <sup>3</sup> /year /year	374,210	399,027
Water consumed by the power plant's administrative offices ***	m <sup>3</sup> /year	3,648	4,982
Water consumed for fire-fighting system and irrigation of green areas ****	m <sup>3</sup> /year	23,683	18,157
<b>Total sea water collected</b>	<b>m<sup>3</sup>/Year</b>	<b>291,188,055</b>	<b>288,829,687</b>
<b>Total sea water returned to the source</b>	<b>m<sup>3</sup>/year</b>	<b>290,786,513</b>	<b>288,407,521</b>

**Notes:**

\* Seawater used for cooling is returned entirely to its source (including industrial effluent).

\*\* Corresponds to desalinated and potable water delivered to the District Municipality of Chilca.

\*\*\*Corresponds to desalinated and treated water for internal use in the operation of the Fenix plant.

\*\*\*\*Corresponds to desalinated water for the fire-fighting system, for its testing exercises, and irrigation of green areas.

### Sea water reused in Peru

(303-3)

Reused Water	Metering Unit	2017	2018
Water consumed by the power plant's administrative offices	m <sup>3</sup> /Year	3,648	4,982
Grey Water reused for irrigation *	M <sup>3</sup> /year	2,919	3,985
% water from reused water	m <sup>3</sup> /year	80%	80%

## Water reuse in thermal power plants

303-3

As for recycling or reusing water resources in our thermal plants, the operation of the Reverse Osmosis Plant (POI) in the Nehuenco Complex, while purifying groundwater, generates wastewater that is transferred to third parties for reuse. During 2018, the volume of wastewater reused by third parties was 29,641 m<sup>3</sup>.

The Fenix Plant in Peru, in turn, continued with the treatment and reuse of 80% of household wastewater, reusing 3,985 m<sup>3</sup> of grey water to supply part of green area irrigation requirements for the plant's 40,000 m<sup>2</sup> green hedge (perimeter hedge) area.

This wastewater plant has a maximum capacity of 12 m<sup>3</sup>/day, of which an average of 11 m<sup>3</sup>/day of wastewater were treated in 2018, a 36% increase from the 8 m<sup>3</sup>/day treated on average during 2017.



Canutillar  
Power Plant  
Surroundings,  
Municipality of  
Cochamó, Los  
Lagos Region

## 5.2 Use of materials and efficiency

103-2, 103-3, 301-1, 302-4, EU11



**-62%**

**Diesel consumption was reduced in our thermo power plants during 2018**

The main materials used by Colbún in Chile during 2018 were fuels consumed in our plants. Coal consumption in the Santa Maria Complex declined by 1.5%, while diesel consumption fell by 62%, which is explained by the lower generation of Los Pinos, Antilhue and Candelaria power plants.

Natural gas consumption increased 1% in Chile, mainly driven by an increase in Neuquén complex's consumption from 687 million m<sub>3</sub> in 2017 to 726 million m<sub>3</sub> in 2018.

Thus, our thermo power plants generated 2% less energy than the previous year. In this regard, noteworthy is the increased efficiency of Colbún's power plants in 2018 of 50.3% (efficiency measures by how much energy of the fuel used is finally transformed into electric energy injected to the system).

As for Fenix in Peru, the main material used was natural gas. In 2018, Fenix consumed 5% less LNG than in 2017, consistent with the reduced electricity generated by this fuel.

### Fuels used in Chile

(301-1)

Material	Supplier	Metering Unit	2015	2016	2017	2018
Diesel	COPEC, ENAP, ENEX, Petrobras	Million m <sup>3</sup>	0.053	0,069	0,059	0,023
Natural Gas	Metrogas S.A., AGESA, ENAP	Million m <sup>3</sup>	661	701	724	730
Coal	Various	Tons	861	874	961	947

### Fuels used in Peru

(301-1)

Material	Metering Unit	2016	2017	2018
Diesel	Million m <sup>3</sup>	0	0	0
Natural Gas	Million m <sup>3</sup>	640	733	695

## Higher efficiency in thermoelectric power plants

The improvement from 2017 to 2018 is explained by the improved efficiency of Nehuenco II and a somewhat different generation scenario. The improvement of Nehuenco II responds to works carried out during recent major maintenances and frequent compressor washing. The change in generation is

due to open cycle power plants (Candelaria, Antilhue, Los Pinos and Nehuenco III), which are less efficient, generated less, leaving more space for generation with more efficient units, such as Nehuenco II. Both reasons combined explain the improvement of the above-mentioned indicator.

### Average generation efficiency of Colbún thermo power plants in Chile (EU11)

Year	Total Efficiency	Average Age of plants
2015	45.7%	10 years
2016	45.4%	11 years
2017	45.7%	12 years
2018	46.7%	13 years

### Average generation efficiency of Colbún thermo power plants in Peru (EU11)

Year	Total Efficiency	Average Age of plants
2017	54.5%	5 years
2018	56.4%	6 years

**Notes:**

The efficiency indicator reflects how much energy of the fuel used is finally transformed into electric energy injected into the system.

To estimate total thermal efficiency, a weighted average was obtained from each power plant's annual power generation. All Colbún's thermal power plants in Chile are included: Nehuenco I, Nehuenco II, Nehuenco III, Candelaria I, Candelaria II, Antilhue, Los Pinos and Santa María.

## System energy savings attributed to Colbún thermoelectric power plants (302-4)

Name of Initiative	Description	Implemented at	Metering Unit	2018
Improving Efficiency in Nehuenco II	Due to plant efficiency improvements, less fuel is used to generate the same amount of power.	Nehuenco II	MWh	18.853

## 5.3 Climate Change

103-2, 103-3, 201-2, 302-2, 302-3, 305-1, 305-2, 305-3, 305-4, 305-5

Colbún began working almost two decades ago in actions aimed at managing its carbon footprint and mitigating the effects of Climate Change. Thus, in 2001 we started to measure our carbon footprint; In 2002, our Chacabucito hydroelectric power plant (Aconcagua Complex, Valparaíso Region) was the first in the world to trade carbon credits; In 2009 we became the first Chilean company to report its emissions to the CDP (Carbon Disclosure Project), and in 2018 we were the first Chilean company recognized with the maximum distinction of the Chile Footprint of the Ministry of the Environment.

**Additionally, Colbún is member of the Center for Business Leaders for Climate Change (CLG Chile), which promotes policies and actions for climate change in Chile. As from**

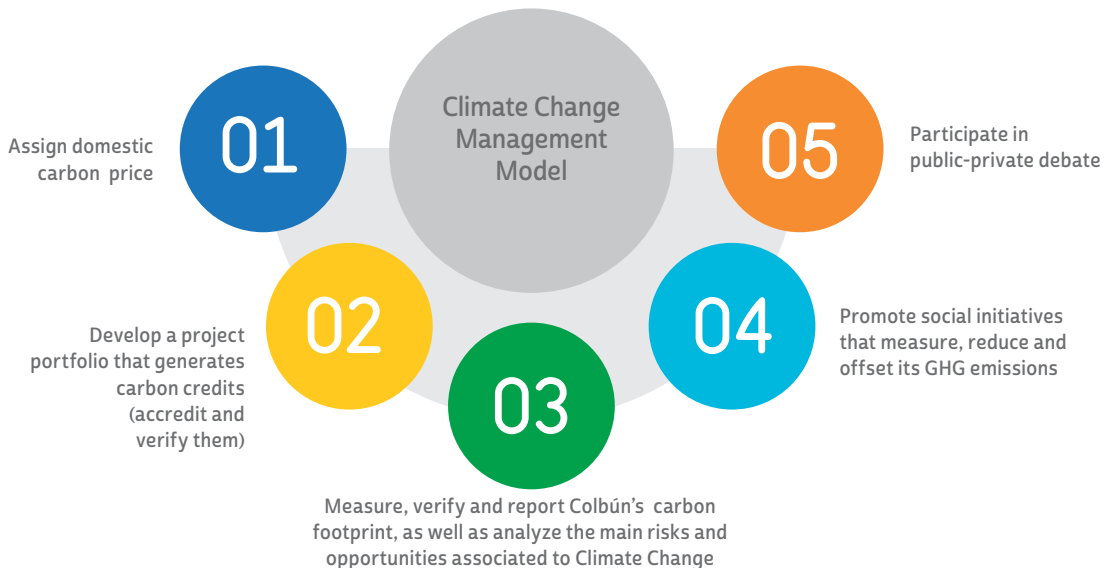
**2017 our general manager, Thomas Keller, is the Chairman of that institution's Board of Directors.**

Colbún's Corporate Risk area is charged with monitoring and analyzing the main risks faced by the Company, including risks associated with climate patterns. These have been analyzed jointly with the Innovation and Climate Change area, considering physical and transitional risks to an economy low on carbon, associated with possible regulatory changes resulting from Climate Change. Thus, we quantified the extent to which lower precipitation levels could impact generation levels and their costs, as well as units where the impact could be greater

Faced with the risks of Climate Change, at Colbún we seek to transform these

risks into opportunities, and work on a management model that allows our business to better address the requirement of reducing CO2 emissions.

Also, our experience in the accreditation and certification of projects before the United Nations' Clean Development Mechanism (CDM) and other voluntary standards, in addition to the subsequent generation of carbon credits, give us competitive advantages to develop more robust and profitable energy projects which enable us to be prepared in the face of potential CO2 emission reduction requirements.





**7%**

Colbún's greenhouse gases (GHG) in Chile declined with respect to 2017

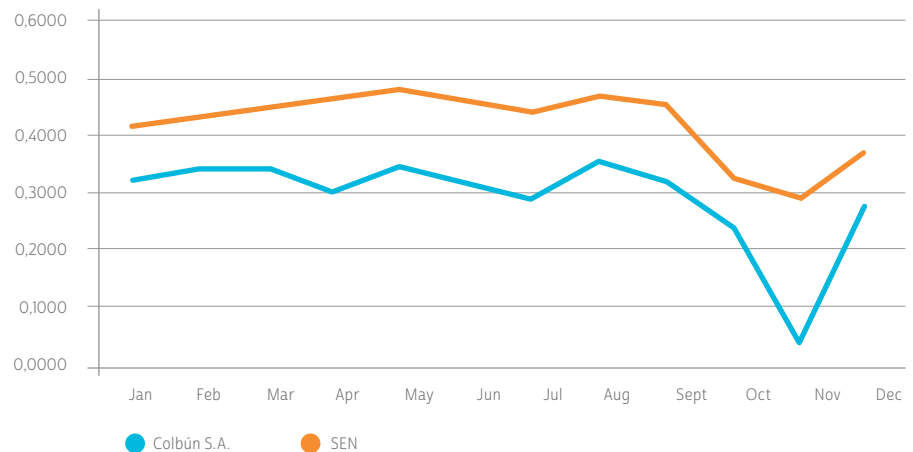
## Reduced CO<sub>2</sub> Emission Factor

In the context of a balanced generation matrix, with an important renewable hydroelectric energy component, the Company has set the goal of reaching a CO<sub>2</sub> emission factor below Chile's electricity system average, thus contributing positively to reduce emissions in the system as a whole.

unit of energy generated (tons CO<sub>2</sub>e per MWh generated). In 2018, the GHG emission factor of the National Electricity System (SEN) was 0.424-ton CO<sub>2</sub>e/MWh, while Colbún's was 29% lower, reaching 0.286 ton-CO<sub>2</sub>e/MWh considering all its facilities in Chile. Compared to 2017, Colbún's emission factor was 7% lower.

The Greenhouse Gas Emission Factor (GHG) indicator makes it possible to measure the behavior of emissions per

Evolution of Colbún's emission factor v/s SEN 2018



**Notes:**

SEN's CO<sub>2</sub> Emission Factor is published by the Ministry of Energy in the Open Energy Web site (<http://datos.energiabierta.cl/dataviews/245975/factor-de-emision-promedio-anual/>). The figures are calculated using generation data published by the National Energy Commission.

Colbún's emission factor is calculated using gross generation data from the Company's facilities.





Considering the growth path of renewable energy from variable sources designed by Colbún for the coming decade, expected to add a 4,000 MW solar and wind generation capacity, the Company plans to reduce its emission factor by 47% in 2030, compare to 2018.

This will mean going from an emission factor of 0.286-tonCO<sub>2</sub>e/MWh in 2018, to 0.151 tonCO<sub>2</sub> e/MWh in 2030, assuming complete execution of the plan to build 4,000 MW of renewable energy.

**Colbún’s greenhouse gas emission factor in Chile**  
(305-4)

Emissions from fuel consumption	2015	2016	2017	2018
Diesel (Ton CO <sub>2</sub> e)	142,224	182,858	156,504	60,109
Carbon (Ton CO <sub>2</sub> e)	1,989,783	2,109,631	2,280,148	2,193,464
Natural Gas (Ton CO <sub>2</sub> e)	1,293,975	1,372,081	1,418,150	1,436,476
Gross Generation (GWh)	12,535	11,179	12,597	12,880
<b>Emission factor (Ton CO<sub>2</sub> /MWh)</b>	<b>0.273</b>	<b>0.328</b>	<b>0.306</b>	<b>0.286</b>

**Note:**  
The emission factor reported in this table is calculated based on gross generation.

Wild Fox. Photo by José Tomás Contreras, specialist engineer, Colbún's Division of Engineering and Projects.

## Certified Plants to reduce emissions

Currently, Colbún has five operating plants accredited to issue carbon credits, which in 2018 generated a reduction of CO<sub>2</sub> emissions estimated at 355,288 tons of CO<sub>2</sub>e.

This figure represents a 7% reduction compare to 2017 values, which is explained by the lower energy generation in Hornitos and Chacabuquito hydroelectric power plants, as well as an increase observed in SEN's CO<sub>2</sub> emission factor due to the drought in the south of Chile.

Of these five power plants, four are accredited under the Clean Development Mechanism (CDM) of the United Nations Kyoto Protocol, while La Mina Power Plant, and the San Pedro hydroelectric project are accredited under the Verified

Carbon Standard (VCS) to issue carbon credits.

As part of the Company's Climate Change Strategy, it was defined that any eligible project must be registered under carbon market standards. Under this precept, a sixth Colbún power plant – Ovejería Solar Plant-is in the process of accreditation, and its certification is expected to be obtained in the first months of 2019.

## Reduction of CO<sub>2</sub> Emissions in Colbún's CDM and VCS Power Plants (305-5)

Power Plant	Commissioning	MW Quantity	Accreditation Date	Ton CO <sub>2</sub> Reductions		
				2016	2017	2018
Chacabuquito	2002	25,7	2007	55,532	74,789	57,087
Hornitos	2008	61	2008	149,486	117,674	87,927
Quilleco	2007	70,8	2008	126,810	159,559	156,826
San Clemente	2010	5,9	2011	9,623	7,452	8,194
La Mina	2017	34	2017	-	22.219	45,254
<b>TOTAL REDUCTION OF CO<sub>2</sub> EMISSIONS</b>				<b>262,104</b>	<b>381,693</b>	<b>355,288</b>

**Note:**

A power generation plant is eligible for a carbon accreditation system when it is demonstrated that it reduces CO<sub>2</sub> emissions, meets "additionality" and "common practice," requirements, and contributes to the development of the electricity system. Both the CDM of the Kyoto Protocol, as well as the VCS, certify projects that help fight climate change, allowing them to issue carbon credits.



**-4,1%**

In 2018, Colbún reduced its Carbon Footprint in Chile (reduction of GHG emissions), mainly as result of increased hydraulic generation and a decrease in thermo generation.

## Our carbon footprint

In order to know the environmental impact of our operation on climate change and contribute to the industry's sustainable development, Colbún quantifies its direct and indirect emissions of Greenhouse Gases (GHG) each year, as from 2001 onwards, through an inventory of GHG emissions or Carbon Footprint. This measurement includes thermo and hydroelectric plants (both in Chile and Peru), as well as the corporate offices located in Santiago.

### Chile

To measure our Carbon Footprint, we use the criteria defined by the GHG Protocol, under an operational control approach. This International Measurement Protocol is the most widely used worldwide to quantify GHG emissions since it integrates most of the standards used to quantify emissions. Thus, at present, Colbún reports all CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions.

The results obtained for 2018 show a 4.1% reduction of direct GHG emissions (Scope 1) for Colbún operations in Chile, mainly due to an increased in hydroelectric generation and reduced generation by our thermal units.

Specifically, Santa Maria Power Plant generated 3.4% less than in 2017, consuming 2% less coal. This plant comprises almost 60% of Colbún emissions in Chile.

With respect to Scope 2, although all our power plants are energy-generating, at certain times they require consuming electricity from the grid (when they are out of service, during maintenance processes and to feed complementary equipment away from the main facility). In 2018, the energy required for the plants' operation increased by 6.4%, mainly due to energy consumption in the Nehuenco and Santa Maria plants from the grid, since they were not operating in late 2018, due to their respective annual major maintenance processes.

Finally, in relation to Scope 3, which mainly covers worker transportation, business travels, fuel transport (by land and maritime) and generation of solid waste, a decline is observed as compared to 2017, mainly due to better plants management.

It is important to clarify that, as has occurred from 2010 onwards, the Carbon Footprint reported in this document has been verified by an external entity, thereby corroborating

the scope and quality of calculations carried out.

In 2009, Colbún became the first Chilean company to report its GHG emissions at international level through the CDP (former Carbon Disclosure Project), having reported to date emissions from 2001 to 2017. These documents are available on the CDP website.

Emission factors used to calculate CO<sub>2</sub> equivalent emissions follow the guidelines provided by the GHG Protocol, and in most cases are obtained from IPCC reports, such as mobile and stationary combustion and fugitive emissions. SIC's, and now SEN's emission factors are obtained from reports by the Ministry of Energy of Chile, and other factors, such as those used for emissions from business travel, through parameters provided in USEPA reports. In some cases, factors considered are obtained from the Company's own calculations and measurements



Martín Pescador,  
Angostura  
Reservoir,  
Biobío Region

### Total Colbún GHG emissions in Chile

(302-2, 305-1, 305-2, 305-3)

	Scope 1 (Ton CO2e)	Scope 2 (ton CO2e)	Scope 3 (ton CO2e)	TOTAL (ton CO <sub>2</sub> e)
	Direct Emissions	Indirect Emissions	Indirect Emissions	
	<ul style="list-style-type: none"> <li>· Company vehicles</li> <li>· Thermoelectric generation units</li> <li>· SF6 leaks from Electrical equipment</li> <li>· Methane emissions in the reservoirs (they are low in Chile)</li> </ul>	<ul style="list-style-type: none"> <li>· Own Electricity Consumption</li> </ul>	<ul style="list-style-type: none"> <li>· Business trips</li> <li>· Maritime coal transport</li> <li>· Breakdown of organic waste</li> <li>· Leased assets</li> <li>· Coal and ashes movement</li> <li>· Transport of employees</li> </ul>	
2015	3,429,642	7,840	36,840	<b>3,474,321</b>
2016	3,669,270	5,167	28,399	<b>3,702,836</b>
2017	3,858,536	6,552	35,240	<b>3,900,328</b>
2018	3,693,728	8,954	32,828	<b>3,735,511</b>

### Good practices on climate change

In 2018, Colbún received the highest recognition from the HuellaChile program of the Ministry of the Environment and was awarded the hallmark of Excellence for the management of its Greenhouse Gas

emissions. This recognition is added to other distinctions received in the categories of Quantification, Reduction and Neutralization, highlighting Colbún’s commitment in climate change field.



## Peru

Due to the importance of monitoring the Company's internal carbon footprint, this measurement extended to the Fenix Plant in 2016. In 2018, the quantification of its emissions considered diesel and natural gas consumption, Company vehicles and SF6 leaks from electrical equipment (Scope 1), in addition to those generated by the plant's own electricity consumption (Scope 2), and GHG generation due to the breakdown of solid waste generated in the plants, as well as emissions from business trips (Scope 3).

# 8.3%

Fenix's total GHG emissions were reduced in 2018 as compared to 2017



## Total Colbún GHG emissions in Peru (305-1, 305-2, 305-3)

	Scope 1 (Ton CO <sub>2</sub> e)	Scope 2 (Ton CO <sub>2</sub> e)	Scope 3 (ton CO <sub>2</sub> e)	Total (ton CO <sub>2</sub> e)
	Direct Emissions	Indirect Emissions	Indirect Emissions	
	· Diesel and natural gas consumption for generation. · Diesel Consumption for Company vehicles. · SF6 Leaks in Electrical equipment	· Plant's own power consumption	· Breakdown of waste and business trips	
2016	1,255,796	311	292	<b>1,256,399</b>
2017	1,884,056	262	1,638	<b>1,885,956</b>
2018	1,727,088	268	1,005	<b>1,728,361</b>

## Colbún's greenhouse gas emission factor in Peru (305-4)

Emissions from fuel consumption	2016	2017	2018
Diesel (Ton CO <sub>2</sub> e)	4,089	0	7,983
Natural Gas (Ton CO <sub>2</sub> e)	1,251,707	1,883,993	1,719,040
Gross Generation (GWh)*	3,582	4,113	3,914
<b>Emission factor (Ton CO<sub>2</sub> /MWh)</b>	<b>0.351</b>	<b>0.458</b>	<b>0.441</b>

\*Generation reported to COES in 2018.

## 5.4 Development of renewable energies

EU8, 103-2, 103-3

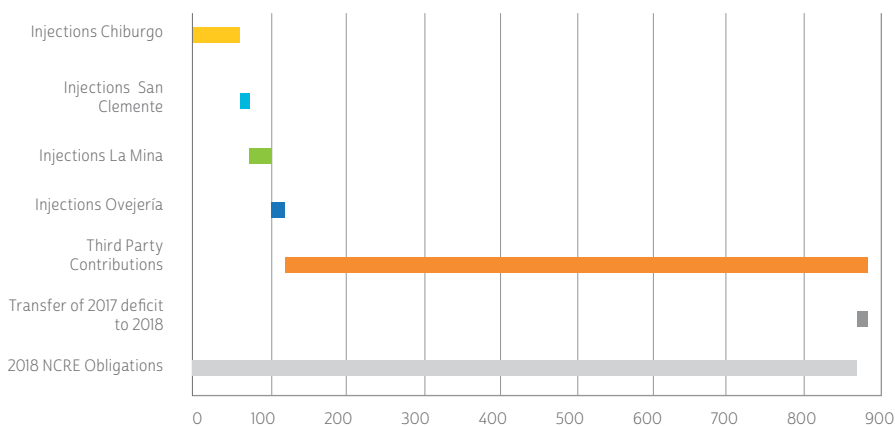
At the end of 2018, Colbún has 64.3 MW of installed capacity under the NCRE Law, which comprises four hydroelectric plants: Chiburgo (19.4 MW), San Clemente 5.9 (MW), La Mina (34 MW, of which 20 MW are recognized for purposes of the NCRE Law), and Ovejería solar plant (9 MW).

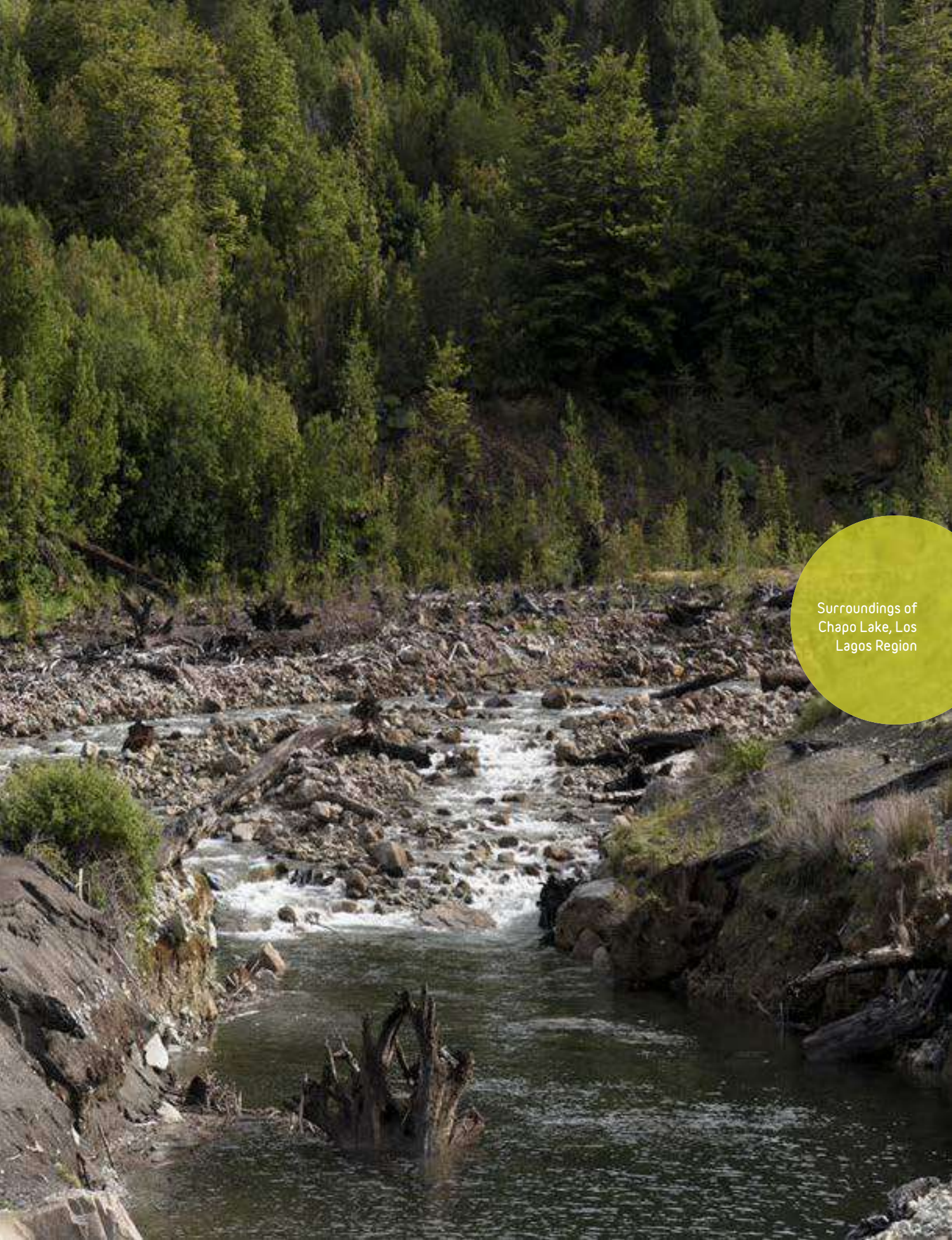
Its energy supply also includes 45 MW of NCRE capacity contracted with Acciona (Punta Palmeras wind farm) in addition to the purchase of NCRE attributes from third parties.

It is important to note that the company operates six other mini-hydro plants, which do not qualify officially as such because they were built before the NCRE law.

Finally, Colbún is promoting an important renewable energy portfolio of variable sources, which at the end of 2018 totals seven projects in initial phases of development, totaling approximately 1,800 MW (see more details in Chapter 3).

### 2018 NCRE Balance (GWh)





Surroundings of  
Chapo Lake, Los  
Lagos Region



## 5.5 Atmospheric emissions and air quality

305-7, 103-2, 103-3



Atmospheric emissions of local gases from all of Chile's thermoelectric power plants – and therefore also Colbún's – are governed by the emission standard for thermoelectric power plants DS 13 of 2011.

The application of this standard meant installing continuous emission monitoring systems (CEMS), to provide the authority with periodic reports on emissions information. In 2018, all Colbún's power plants met emission limits established in these regulations.

It should be noted that in the case of the Santa María plant that uses coal fuel, its emissions are well below standard limits for thermoelectric power plants. Thus, in 2018 particulate matter reached only 136% of the standard, 67.6% of the standard limit for NOx, and 43.3% of the standard for SO<sub>2</sub>.

Notwithstanding the foregoing, in 2018 SO<sub>2</sub> emissions increased, basically due to the characteristics of the fuel used in the Santa María thermoelectric power plant, particularly sulfur content in coal.

In the same way, MP emissions also increased in 2018, mainly due to an adjustment in correlation curves of continuous emission monitoring required by the authority in the Santa María Power Plant, which made it possible to specify the quantification of particulate matter over time, which in any case is still well below the emission standard.

During 2018, a characterization of Particulate Matter PM<sub>10</sub> established in this regulation was requested for air quality, in the area south from the Coronel Municipality, to study and measure the influence of the Santa María thermoelectric plant in the area's air quality. In this study, carried out

by an independent company, it was finally concluded that concentrations of Particulate Matter PM<sub>10</sub> in the area of Coronel South do not originate in particulate emissions from the Santa María thermoelectric plant and depend mainly on other emission sources (biomass combustion, automobile traffic, private heaters).

In addition, in 2018, a process was launched to renew the entire network of air quality and weather stations existing in Colbún's thermoelectric power plant locations, to conclude during the first semester of 2019.

Finally, at public policy level, the Company continued to be actively involved in the process of citizen participation in the Prevention and Decontamination Plan (PPDA in Spanish) of Concepción, and in the Environmental and Social Recovery Plan of Coronel (PRAS Coronel).

### Atmospheric emissions from Colbún's fixed sources in Chile

(ton/año) (305-7)

Type of emission	2015	2016	2017	2018
NOx	3,715	3,571	4,218	4,138
SO <sub>2</sub>	1,677	1,479	1,527	1,810
MP	79	50	72	106

### Atmospheric emissions from Colbún's fixed sources in Peru

(Ton/year) (305-7)

Type of emission	2016	2017	2018
NOx	948	1,112	1,124

**Notes:**

The figures for Colbún Chile were obtained through CEMS, while for Fenix Peru, a calculation methodology with emission factor EPA USA AP-42 was used, since there is no emission standard to establish a continuous measurement standard.

It should be noted that, since the Fenix plant operates with natural gas, PM and SO emissions are not relevant.

### Emissions level of Santa Maria Complex

	MP (mg/ Nm <sup>3</sup> )	Límite Norma MP (mg/Nm <sup>3</sup> )	NOx (mg/Nm <sup>3</sup> )	Límite Norma NOx (mg/Nm <sup>3</sup> )	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	Límite Norma SO <sub>2</sub> (mg/Nm <sup>3</sup> )
2017	2.1	50	326	500	142	400
2018	6.8		338		173	

### Emissions Level of Nehuenco Complex

Technology	Year	PM (mg/ Nm <sup>3</sup> )	PM Standard Limit (mg/Nm <sup>3</sup> )	NOx (mg/Nm <sup>3</sup> )	NOx Standard Limit (mg/Nm <sup>3</sup> )	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	SO Standard Limit (mg/Nm <sup>3</sup> )
Natural Gas	2017	Not applicable		6.2	50	Not applicable	
	2018			22.2			
Diesel	2017	2.43	30	106	200	1.1	30
	2018	0.25		80		1.3	

Pursuant to the requirements of Supreme Decree D.S.13/2011 MMA, specific Mercury samples must be analyzed of the exhaust gases of the power plants that use solid fuels. In the case of Colbún, the measurement

of heavy metals carried out at the Santa María Plant during 2018 indicated an average mercury concentration (Hg) of 0.002 mg / m<sup>3</sup>N. This value is well below the limit of DS.13 / 2011 corresponding to 0.1 mg / Nm<sup>3</sup>.



## Green Taxes

EU5

Although in Chile there is no allocating system and trade “cap & trade” emissions, the Tax Reform of 2014 established a tax on emissions from fixed sources with a thermoelectric power greater than or equal to 50 MWt (thermoelectric megawatts), usually known as green taxes.

This tax was first applied in 2017, and the first payment was made in 2018, with the closing of the previous fiscal year. Colbún disbursed for this concept US \$24.7 million.

In 2018, in the framework of a new Tax Reform posed by the Government of Sebastián Piñera, it was proposed to change the scope of the green tax, so that emissions from boilers and turbines were not the only ones affected, including all kinds of facilities with fixed sources generating particulate matter, nitrogen oxide, sulfur dioxide or carbon dioxide, thus extending to more effected facilities. In addition, it was proposed that the tax only apply when 100 or more tons of particulate matter are issued a year, or 25,000 or more tons a year of carbon dioxide.

Since the Tax Reform is still under process at the National Congress, it is not clear yet what final proposal will be adopted.





Apple Blossom.  
Photo by Joan  
Fernandez,  
Operation  
Assistant  
Aconcagua  
Complex

## 5.6 Biodiversity

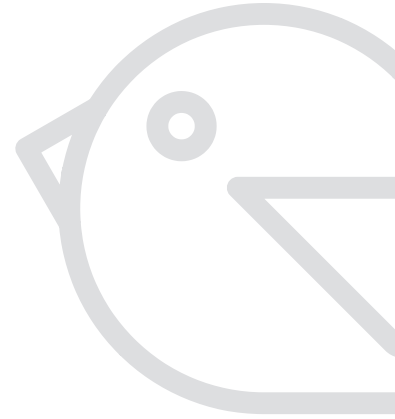
103-2, 103-3

With respect to our commitment with biodiversity and habitats of the ecosystems in which our projects and plants are located, we are aligned with the Principles of the Global Compact and the International Union for Conservation of Nature - IUCN - as a contribution to strengthening our work and care of natural resources.

The Company has developed a Biodiversity Strategy that includes four guidelines:

- 1. Consider the impact on biodiversity of projects in their early phases, using methodologies to address biodiversity comprehensively and applying the mitigation hierarchy in order to minimize residual impact;*
- 2. Maintain plans focused on the conservation of biodiversity, improving knowledge on endemic species or in conservation categories, and on their habitats in areas that may be impacted by our operations;*
- 3. Promote the conservation of biodiversity in situ through the protection or rehabilitation of natural or interest areas;*
- 4. Foster knowledge and understanding of biodiversity in all the Company's workers.*





## Main projects in the field of biodiversity

As part of our annual management, monitoring and monitoring plans are carried out in the various facilities, reporting on the species present and their evolution over time.

### Bird Watching

The creation of the Angostura reservoir resulted in the development of a cove in the central south bank of the mentioned water body, which has been progressively colonized by aquatic birds.

Based on this phenomenon, in 2018, Colbún, supported by experts, studied the composition, distribution and abundance of these birds, identified their main activities, prepared a photographic record and made recommendations to enhance this habitat.

Following the implementation of monitoring campaigns in April, August and October 2018, it was concluded that this cove and the arrival of birds has been a significant contribution to biodiversity.

The follow-up carried out throughout 2018 has registered about 50 native bird species, corresponding to 98% of total native birds and to 98% of total species observed; 3 of which are in conservation category. This sector represents an attractive habitat for bird feeding, rest and nesting.

The company is currently concluding a project that will allow bird watching through a system of cameras, connected online with screens located in Parque Angostura's Visitors Center. This way, in one of the interactive modules in the Visitors Center, people will be able to watch and learn about the birds in this place, in real time.



20

**Bee hives were installed to produce monofloral and organic honey aimed to help the community.**

## Honey Project in Yumbel

Colbún owns a total of 125 hectares of land in Yumbel (Biobío Region) where native reforestation is underway.

Since 2012, 80% of the land has been planted with quillay and 20% with oak and laurel trees, making up the largest plantation of quillay in Chile with these characteristics.

In order to give this plantation added value and to assess a possible contribution to the community, a

honey production pilot project is in progress.

This project was started in December 2018, installing 20 honeycombs with local agricultural consultant Aseta, and the directors of Cooperativa Apícola Campesina Las Camelias of Los Ángeles. The first honey was harvested in February 2019 and we are in the process of its accreditation as monofloral and organic honey.

## Fostering native species forestation

In the proximity of Los Pinos Power Plant, (Biobío Region) a 20 ha. pine forest started to be harvested in late 2018, to allow the planting of quillay trees. The goal is to renovate existing exotic plantations with native species and to generate habitats for honey projects or the production of saponins with the community.

Since 2017, in the proximity of the Nehuenco Complex, a native forest park is maintained and fostered for conservation purposes. New protected tree species were incorporated such as the Belloto del Norte. Maintenance and irrigation activities are carried out, fostering the appearance of protected wildlife such as quiques and foxes.

**20 ha**  
of pine were  
harvested to give  
way to quillay  
plantations.





# 06

## General Information





## 6.1 Scope of this Integrated Report

102-10, 102-49

This document includes the 2018 performance of Colbún S.A. and its subsidiaries in Chile and Peru. No indicators are shown herein for Electrogas or Transquillota, as these are Colbún's S.A. affiliated companies.

The Ovejería solar power plant is included, as it became part of the Aconcagua Complex in Valparaíso Region. It started commercial operations in June 2018.

The most significant business changes in 2018 were the following:

- Increase in the number of Colbún's clients from 47 to 161.
- The National Electricity System (SEN) became the relevant power market for Colbún, which was born from the merger between the Central Interconnected System (SIC) and the Great North Interconnected System (SING) in October

2017, and which reports its year-through operations since 2018

- On October 1, 2018, Colbún S.A. reorganized its assets, consolidating all its transmission (national, zonal and dedicated) assets in Colbún Transmisión S.A. Colbún Transmisión submits its own Financial Statements and main business data to the Financial Market Commission (CMF) on an annual basis.





## 6.2 Methodology

102-48, 102-50, 102-51, 102-52, 102-54

This report was prepared according to the principles of the International Integrated Reports Committee (IIRC), considering the mandatory requirements of the Financial Market Commission (CMF, per its acronym in Spanish). This report has been prepared in accordance with the GRI Standards: Comprehensive option.

In addition, the Integrated Report constitutes a communication of progress (CoP) for the United Nations Global Compact and links Colbún's performance with the Sustainable

Development Goals (SDG). We maintain the commitment to annually report our performance in the environmental, social, corporate and economic governance performance.

No relevant methodological changes were reported in 2018. With respect to the reinstatements done in the 2017 Annual Integrated Report upon informing water consumption in our facilities in Chile (standard 303-1), the seawater used by the Santa María power plant is not

included herein, as it is fully returned to the source and is not consumed. In addition, the greenhouse gas effect emission factor is recalculated for gross generation in order to make it comparable to the SEN's emission factor. Finally, for Fenix's suppliers, a distinction is made between the fuel, energy and transmission suppliers from other suppliers to allow a better understanding of the numbers, just as they have been always reported in Chile.

## 6.3 Our Challenges and Sustainability Integration

102-43

We are convinced that Sustainability is Colbún's business; hence, it must be integrated to all Company's areas and to the relationship with our stakeholders. Year on year, we identify our main gaps

and head for an action plan that allows us addressing these challenges.

We set ourselves the following goals and objectives for 2019:

### Colbún's public goals for 2019

Objectives	Indicator / KPI / Milestone	2019 Goal	Long-term goal
Growth based on renewable energy from variable sources (REVS)	Have available REVS options	-	4,000 MW al 2030
Climate Change: transition to a low-coal-intensive energy matrix **	% of reduction in GHG emission factor against the year 2018 in Chile	-	47% by 2030
Operational Excellence: power plant availability	% availability*	90.80%	
Environment: not having relevant environmental incidents	No. of relevant environmental incidents*	0	
Occupational Safety: excellent safety management and zero fatalities	Accident frequency indicators of workers and contractors*	1.4	
Commitment with our stakeholders	% of stakeholder satisfaction	Increase by%	
Diversity: increase women contracted in traditionally "masculine" areas and duties	% of women contracted in traditionally "masculine" areas and duties	22%	
People Development: Internal promotion	% of openings filled in by internal personnel	58%	

\* Consolidated indicators Chile-Peru

\*\*Subject to the development of the renewable energies' growth plan



Water  
Purification  
(Reverse  
Osmosis) Plant  
at the Nehuenco  
Complex,  
Valparaíso  
Region

## Colbún and the Sustainable Development Goals

With respect to the Sustainable Development Goals, in November 2015 Colbún adhered to the Global Compact Network and has actively participated in different work groups. At present, Colbún participates in the Human Rights Committee made up of various companies enrolled with the Global Compact, committee that has also been attended by government representatives.

In the study of the Global Compact Principles Integration System, study conducted by the Global Compact Network in Chile, version 2018, Colbún obtained 95% of compliance in the number of GRI contents included in the Global Compact Network in Chile (56 in total) reported by the Company in its Sustainability Report (Annual Integrated Report). It also obtained 95% of compliance in the indicator that measures the company's contribution to the Sustainable

Development Goals based on the Contents formally reported in the respective Sustainability Reports.

Chapter 2 of this Integrated Report describe the Sustainable Development Goals directly linked to Colbún's operation. However, it is worth noting that Colbún's management is linked with almost every Sustainable Development Goal.



## 6.4 How the Annual Integrated Report was built

102-32, 102-44, 102-46, 102-47

This report integrates in a single document the economic, governance, social and environmental performance. This is the fourth Annual Integrated Report prepared by the Company that merges in a single document what we used to publish separately in the Company's Annual Financial Report and Sustainability Report. Together with the materiality analysis explained below, the data and the information included herein were verified by the independent auditing firm EY.

### Materiality Exercise

Detail is provided of the construction process of the 2018 Annual Integrated Report, to which end we followed the "materiality data collection" process proposed by the methodology of the Global Reporting Initiative guidelines (GRI).

Materiality is the process whereby the relevant topics to be included in the Integrated Report are determined, either because they show the economic, environmental and social effects of the organization or because they have a significant influence on our stakeholders' decisions.

This process, which is conducted by an external consultant, consists of four stages. In the first stage, documents, interviews and public information on the electric power industry and Colbún were reviewed, from the internal and external perspective. Then, with the information collected the relevant matters (long list) were identified and grouped as major material themes. Finally, they were prioritized in the materiality matrix presented at the end of this chapter. The material aspects for Chile and Peru were validated by the CEO. At the end of the process, a review stage is included, which will feed back future preparation.





## Relevant information for the power industry and Colbún: External and Internal sources

In order to identify the characteristics, projections and main challenges of the energy sector and of Colbún the following information was analyzed:

External sources	Internal sources
Benchmark: reports and annual reports published by national and International power companies	Press analyses: News generated by Colbún (Chile)
Industry trends: "The Future of Energy in Chile"	Human Rights focus group (Chile)
Press analyses: news on Colbún from third party sources (Chile-Peru)	Public accounts rendered (Chile-Peru)
Analysis of queries received on the Telephone Helpline in Chile (913) and the Compliance Hotline in Peru (29)	2019 Strategic Planning (Chile-Peru)
Analysis of external stakeholders in Chile and Peru: <ul style="list-style-type: none"> <li>· Reputational Risks Survey in Chile (ESG):</li> <li>· Investors (6)</li> <li>· Contractors (183)</li> <li>· Energy Suppliers (9)</li> <li>· Generation and Transmission Clients (87)</li> <li>· Relevant national and local players (77)</li> <li>· Communities (301)</li> <li>· Surveys and feedback from the communities and relevant players at Colbún's public account renderings (Chile-Peru)</li> <li>· Surveys and feedback from the Meeting with Clients and Vendors (Chile)</li> <li>· Opinion polls</li> <li>· Fenix Customer Survey (10)</li> <li>· Community diagnosis and Fenix's leaderships</li> </ul>	Dow Jones Sustainability Chile Results Risk Matrix (Chile-Peru)



## Identification of relevant topics (long list)

Based on the information analyzed from external and internal sources, we identified 67 relevant topics for Colbún's value creation process. These topics revolve around a broad spectrum of challenges, from financial, operational concepts to community concerns and/or environmental opportunities or achievements, among others. These topics were broken down into 15 large topics, which were prioritized as shown below.



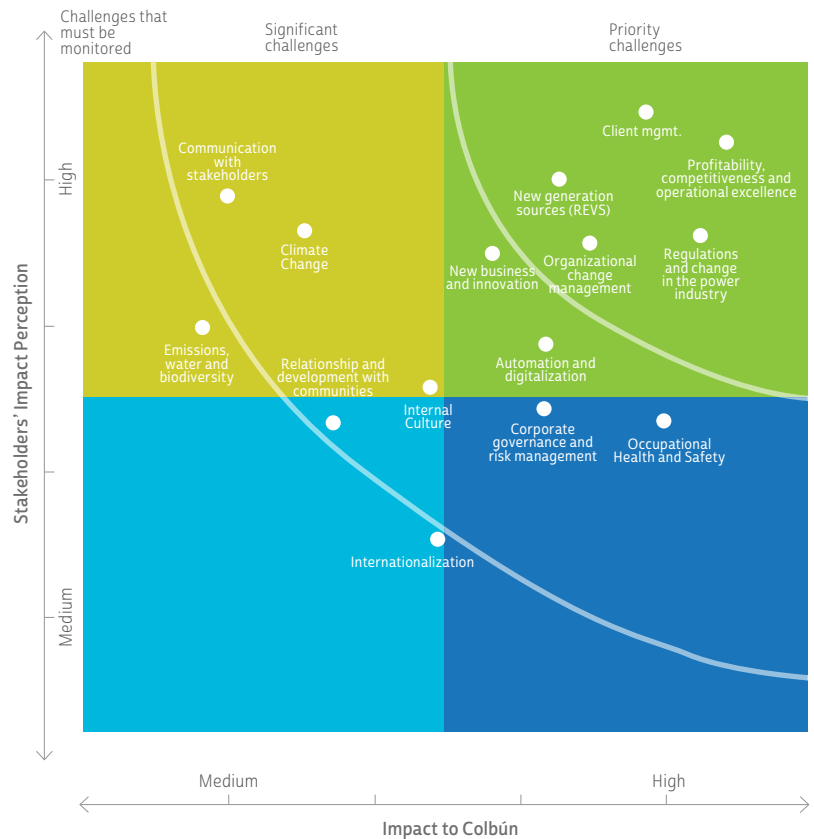
## Prioritization of material aspects

102-47

The following Materiality Matrix was reviewed and validated by Thomas Keller, CEO of Colbún, and the members of the Board, who received this Report for their review and comments.

On the "X" axis, the level of impact that the theme could have on the Company or -as inverse- the impact that the operation of the Company could have on the theme. On the "Y" axis, the level of relevance that the stakeholders gave to each of the 15 themes was established.

Materiality Matrix - Colbún 2018



## Description of the material topics

103-1, 102-44, 102-47

Below is the coverage of each material topic and the sub-topics that should be responded by Colbún (Scope) hereunder. The internal and/or external stakeholder group(s) who raised the topic is(are) mentioned. Finally, the Sustainable Development Goal(s) relating to each material topic is (are) also included.

List of Material Topics	Scope	Coverage	Stakeholder group that assigned greater importance	Related SDG Goal
Regulation and Change in the Power Industry	<ul style="list-style-type: none"> <li>• Power market regulation</li> <li>• Regulatory management</li> <li>• Flexibility, Distribution and Water Code</li> <li>• Change in the power industry</li> <li>• Decentralization</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors	 
Client Management	<ul style="list-style-type: none"> <li>• Customer Relations</li> <li>• Customer Satisfaction</li> <li>• Increase in the number of clients</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors Communities	 
New sources of generation	<ul style="list-style-type: none"> <li>• Renewable energy from variable sources (REVS)</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors Communities	  
Profitability, Competitiveness and Operational Excellence	<ul style="list-style-type: none"> <li>• Profitability and EBITDA</li> <li>• Fluctuation of the Company's share price</li> <li>• Economic performance</li> <li>• Energy oversupply</li> <li>• Competitive construction costs</li> <li>• Energy price</li> <li>• Cost efficiency</li> <li>• Quality, availability and reliability</li> <li>• Operational efficiency</li> <li>• Operational excellence</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors Communities	 
New Businesses and Innovation	<ul style="list-style-type: none"> <li>• Business Strategy</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors	
Automation and Digitalization	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Automation</li> <li>• Digitalization</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors	
Communication with Stakeholders	<ul style="list-style-type: none"> <li>• External communications</li> <li>• Stakeholder management</li> <li>• Prosumer citizens</li> <li>• Suppliers' management</li> </ul>	Internal / External	Workers Contractors Clients Investors Communities	

List of Material Topics	Scope	Coverage	Stakeholder group that assigned greater importance	Related SD Goal
Climate Change	<ul style="list-style-type: none"> <li>Climate change</li> <li>Decarbonization</li> </ul>	Internal / External	Workers Clients Investors Communities	 
Organizational Change Management	<ul style="list-style-type: none"> <li>Change management to face new challenges</li> <li>Way of doing business</li> </ul>	Internal / External	Colbún Workers Contractors Clients Investors Communities	
Occupational Health and Safety	Workers and contractors' health and safety.	Internal / External	Colbún Workers Contractors	 
Corporate Governance and Risk Management	<ul style="list-style-type: none"> <li>Corporate governance and business ethics</li> <li>Board members</li> <li>Transparency</li> <li>Integrity</li> <li>Conflict of interest</li> <li>Risk management</li> </ul>	Internal / External	Colbún Workers Contractors Investors	 
Internal Culture	<ul style="list-style-type: none"> <li>Human capital</li> <li>Labor practices</li> <li>Work climate</li> <li>Human rights</li> <li>Diversity and inclusion (gender and disability)</li> </ul>	Internal	Workers Contractors	 
Community Relations and Community Development	<ul style="list-style-type: none"> <li>Lago Chapo</li> <li>Santa María: emissions</li> <li>San Pedro: viability</li> <li>Social-environmental conflict</li> <li>Community Relations</li> <li>Education</li> <li>Local infrastructure</li> <li>Local tourism</li> <li>Local entrepreneurship</li> <li>Work opportunity</li> <li>Local safety</li> </ul>	Internal / External	Clients Communities	    
Emissions, water and biodiversity	<ul style="list-style-type: none"> <li>Emissions</li> <li>Noise</li> <li>Environmental care</li> <li>Water management</li> <li>Biodiversity</li> <li>Human Rights' impacts</li> <li>Decontamination</li> </ul>	Internal / External	Clients Communities	    
Internationalization	<ul style="list-style-type: none"> <li>Growth</li> </ul>	Internal / External	Colbún	

A photograph of an industrial facility, likely a pulp mill, featuring a large corrugated metal structure on the left and a tall, red and white striped chimney on the right. The facility is set against a backdrop of a forested hillside under a blue sky with light clouds. A green circular graphic is overlaid on the left side of the image, containing the text 'Santa María Plant, Coronel, Biobío Region'.

Santa María  
Plant, Coronel.  
Biobío Region

## 6.5 2018 Annual Integrated Report Verification

102-56

The Annual Integrated Report was reviewed by the external auditor EY to ensure the reliability of the information provided herein and the compliance with GRI guidelines. Likewise, this verification process included a detail review of the materiality data and enabled us to find opportunities for improvement. With respect to Colbún's Carbon Footprint, this was also verified by the external auditing firm EY. Similarly, it should be noted that the financial information relating to the Annual Report requirements by the Financial Market Commission (CMF) is audited by KPMG.



## Limited Assurance Statement of Colbún S.A. 2018 Integrated Memory (free translation from the original in Independent Spanish)

To the President and Directors of  
Colbún S.A.

### Scope

We have performed an independent limited assurance engagement on the information and data presented in Colbún S.A. 2018 Integrated Memory.

Preparation of the Integrated Memory is the responsibility of the Management of Colbún S.A. The Management of Colbún S.A. is also responsible for the data and affirmations included in the Integrated Memory, definition of the scope and management and control of the information systems that have provided the reported information.

### Standards and Assurance Procedures

Our review has been performed in accordance with the International Standard on Assurance Engagements ISAE 3000, established by the International Auditing and Assurance Board of the International Federation of Accountants and the version GRI Standards of the guidelines for the preparation of sustainability reports under the Global Reporting Initiative (GRI).

We conducted our assurance procedures in order to:

- Determine whether the information and data presented in the 2018 Integrated Memory are duly supported by evidence.
- Verify the traceability of the information disclosed by Colbún S.A. in its 2018 Integrated Memory.
- Determine whether Colbún S.A. has prepared its 2018 Integrated Memory in accordance with the Content and Quality Principles of the GRI Standards.
- Confirm Colbún S.A. self-declared "Core" option of the GRI Standards to its report.

### Work Performed

Our assurance procedures included enquiries to the Management of Colbún S.A. involved in the development of the Integrated Memory process, in addition to other analytical procedures and sampling methods as described below:

- Interviews with key Colbún S.A. personnel, in order to assess the 2018 Integrated Memory preparation process, the definition of its content and its underlying information systems.
- Review of supporting documents provided by Colbún S.A.
- Review of formulas and calculations by recalculation.
- Review of the 2018 Integrated Memory in order to ensure its phrasing and format does not mislead the reader regarding the information presented.

### Our Responsibility

Our responsibility is limited to the procedures mentioned above, corresponding to a limited assurance which is the basis for our conclusions.

### Conclusions

Subject to our limitations of scope noted above and on the basis of our procedures for this limited assurance of Colbún S.A. Integrated Memory, we conclude that nothing has come to our attention that would cause us to believe that:

- The information and data disclosed in Colbún S.A. 2018 Integrated Memory are not presented fairly.
- Colbún S.A. 2018 Integrated Memory has not been prepared in accordance with the GRI Standards for the preparation of sustainability reports under the Global Reporting Initiative.
- The Colbún S.A. self-declared option does not meet the GRI Standards requirements for this option.

### Improvement Recommendations

Without affecting our conclusions as set out above, we have detected some improvement opportunities for Colbún S.A. 2018 Integrated Memory, which are detailed in a recommendations report presented to Colbún S.A. Administration.

Truly Yours,

EY Consulting SpA



Eduardo Valente N.

March 27<sup>th</sup>, 2019.

I-00180/19  
RG/pmc  
60240664

## Limited Assurance Statement of Colbún Carbon Foot Print, period 2018 (free Translation from the original in Independent Spanish).

To the President and Directors of  
Colbún S.A.

### Scope

We have performed an independent limited assurance engagement on the information and data presented in the Inventory of Greenhouse Gases for the period between January 1, 2018, and December 31, 2018, by Colbún S.A.

The preparation of this inventory is the responsibility of the administration of Colbún S.A. Likewise, they are also responsible for the information presented, the supposed contents, the definition of the scope of the inventory and the management and control of the information systems that provide the reported data. Our responsibility is to issue our considerations on the reasonableness, consistency and reliability of the data and non-financial information included in this Emissions Inventory, based on the verification procedures and the defined scope, which are described below:

### Verification standards and procedures

Our review was carried out according to the international verification standard for non-financial information audits: ISAE 3000, which is established by the International Auditing and Assurance Board of the International Federation of Accountants.

This international verification standard allows a limited level of assurance to be obtained, according to the information gathered in the Greenhouse Gas Emissions Inventories of the period mentioned, and in addition, the assurance that the inventory is aligned with:

- I. The GHG Protocol Guidelines - which is supported by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI) -.
- II. As well as directions and corporate standards indicated by the Colbún administration.

In order for us to do this review, we visited the facilities of the Central Fenix and the Central Administrative Offices of Colbún, with the objective of knowing the productive processes, the physical scope and understanding the consolidation and information registration form of each installation, in order to validate the emission sources considered, and at the same time, understand the methodology of recording, calculating, and aggregation of fuel consumption, electricity, waste data, and all those that are input for the estimation of emissions. In the verification process, we examined the data and information contained in the Inventory of Effect Gases, through:

- The review of the supporting documentation provided by the administration of Colbún S.A.
- The inspection of the internal standards proposed for the evidence.
- The revision of the arithmetic reasonableness and logic of the estimates used in the calculate tool.
- The application of the guidelines established by the GHG Protocol standard.
- Review of the correct application of the Emission Factors used.

### Our responsibility

Our responsibility is limited exclusively to the procedures mentioned above, corresponding to a verification of limited and independent assurance, which serves as the basis for our considerations.

We do not apply extended verification or audit procedures, since these processes require a higher level of evidence and longer work times.

### Limitations

Considering the described methodology, the administration of Colbún S.A. has decided to exclude those emission sources related to:

- The purchase of assets, due to the high uncertainty regarding their emission factors.
- The fuel used in electric generators in power plants, due to its immateriality.
- The extraction and refining of fuels to the port of dispatch, due to the availability and traceability of the information.

### Conclusions

Considering the limitations mentioned above, and adhering to the effects that not including them may have on the Inventory of Greenhouse Gases, and based on the results of the procedures indicated in the scope of the verification, we conclude that no aspects have come to our knowledge that make us think that:


- The GHG emissions calculated by Colbún S.A. for the period between January 01, 2018, and December 31, 2018, do not have the backup documentation defined for the reported data.
- The inventory of emissions has not been prepared according to the established methodological guidelines.
- The estimation and arithmetic logic applied to the calculation is outside the standard.
- The information and data reviewed in the GHG Emissions Inventory for the period in question are not presented correctly.

### Improvement recommendations

Without affecting our conclusions, we have detected improvement opportunities, which are detailed in a separate recommendations report, presented to the technical counterpart of Colbún S.A.

Yours faithfully,

EY Consulting SpA



Eduardo Valenzuela,  
Solo Lider PI, Advisory  
March 08, 2019  
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FMS/man  
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## Liability Statement

In compliance with the General Standard No. 283 issued by the Financial Market Commission, the undersigned declare under oath that all the information included in this Annual Integrated Report is a faithful expression of the truth and, therefore, assume the legal responsibility thereof.



**JUAN EDUARDO CORREA GARCÍA**  
Chairman  
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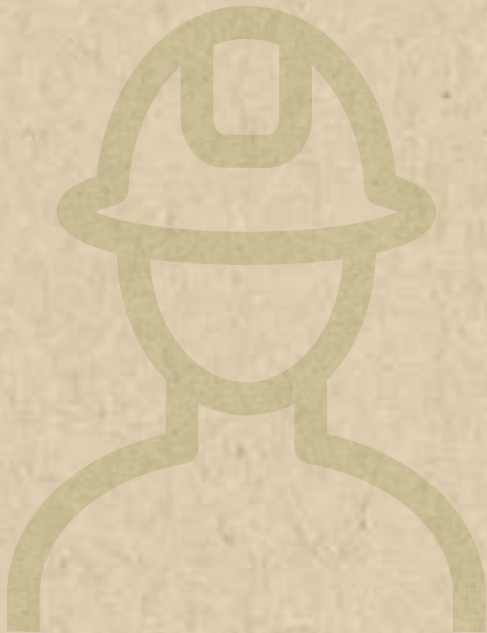
**JORGE MATTE CAPDEVILA**  
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GRI  
Standards  
Index



GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>General Content</b>					
<b>GRI 102: General Contents 2016</b>	102-1	Company Name	Identification of the Company		
	102-2	Activities, brands, products and services	Colbún in numbers 2018		
	102-3	Location of the Headquarters	Identification of the Company		
	102-4	Location of the operations	Colbún in numbers 2018		
	102-5	Ownership and legal form	2.4 Ownership and corporate structure / Appendices: Ownership and corporate structure		
	102-6	Markets served	Colbún in numbers 2018 / 2.3 Our facilities		
	102-7	Size of the organization	Colbún in numbers 2018		
	102-8	Information on employees and other workers	4.1 Workers / Appendices: Workers		Principle 6
	102-9	Supply chain	2.6 Value creation with a purpose / 4.2 Contractors and suppliers		
	102-10	Significant changes to the organization and its supply chain	2.4 Ownership and corporate structure / 6.1 Scope of this Integrated Report		
	102-11	Precautionary principle of approach	2.6 Value creation with a purpose		
	102-12	External initiatives	Appendices: Associations and collaboration instances in which we		
	102-13	Membership in associations	Appendices: Associations and collaboration opportunities in which we		
	102-14	Statement from senior decision-making executives	Letter from the Chairman		
	102-15	Main impacts, risks and opportunities	Letter from the Chairman / 2.7 Risk management / Appendices: Risk management		
	102-16	Values, principles, standards and rules of conduct	3.7 Ethics and Corporate Governance		Principle 10
	102-17	Mechanism of advice for ethical concerns	3.7 Ethics and Corporate Governance / 4.1 Workers / 4.4 Community Relations		Principle 10
	102-18	Governance Structure	2.5 Our Corporate Governance		
	102-19	Delegation of authority	2.5 Our Corporate Governance / 2.6 Value creation with a purpose / 2.7 Risk management / 3.7 Ethics and Corporate Governance		
	102-20	Executive-level responsibility for economic, environmental and social issues.	2.6 Value creation with a purpose		
	102-21	Consulting stakeholders on economic, environmental and social issues.	2.5 Our Corporate Governance / Value creation with a purpose		
	102-22	Composition of the highest governance body and its committees	2.5 Our Corporate Governance		
	102-23	Chair of the highest governance body	2.5 Our Corporate Governance		
	102-24	Nomination and selection of the highest governance body	2.5 Our Corporate Governance / Appendices: Effectiveness of the Board		
	102-25	Conflicts of interests	3.7 Ethics and Corporate Governance		
	102-26	Role of the highest governance body in setting purpose, values and strategy	2.7 Risk management / 3.7 Ethics and Corporate Governance		
	102-27	Collective knowledge of the highest governance body	2.5 Our Corporate Governance / 2.6 Value creation with a purpose / 2.7 Risk management / Appendices: Risk management		

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact	
<b>GRI 102: General Contents 2016</b>	102-28	Evaluation of the performance of the highest governance body	2.5 Our Corporate Governance			
	102-29	Identification and management of economic, environmental and social impacts	2.7 Risk management			
	102-30	Effectiveness of the risk management processes	2.7 Risk management / 3.7 Ethics and Corporate Governance / Appendices: Risk management			
	102-31	Evaluation of economic, environmental and social issues	2.7 Risk management / 3.7 Ethics and Corporate Governance			
	102-32	Role of the highest governance body in preparing sustainability reports.	6.4 How this Integrated Report was built			
	102-33	Communication of critical concerns	2.5 Our Corporate Governance			
	102-34	Nature and total number of critical concerns	2.5 Our Corporate Governance / 2.6 Value creation with a purpose / 3.7 Ethics and Corporate Governance			
	102-35	Remuneration policies	2.5 Our Corporate Governance / 4.1 Workers			
	102-36	Process for determining remunerations	2.5 Our Corporate Governance / 4.1 Workers			
	102-37	Stakeholders' involvement in remuneration	2.5 Our Corporate Governance			
	102-38	Annual total compensation rate			Confidentiality problem: strategic information.	
	102-39	Percentage increase rate of the annual total compensation			Confidentiality problem: strategic information.	
	102-40	List of stakeholders	2.6 Value creation with a purpose			
	102-41	Collective bargaining agreements	4.1 Workers / Appendices: Labor practices			Principle 3
	102-42	Identification and selection of stakeholders	2.6 Value creation with a purpose			
	102-43	Approach for stakeholders' involvement	2.11 Communication channels / 3.7 Ethics and Corporate Governance / 4.1 Workers / 6.3 Our challenges and integration of sustainability			
	102-44	Key topics and concerns raised	6.4 How this Integrated Report was built			
	102-45	Entities included in the consolidated financial statements	Colbún in numbers 2018			
	102-46	Definition of report contents and topic coverage	6.4 How this Integrated Report was built			
	102-47	List of material topics	6.4 How this Integrated Report was built			
	102-48	Reinstatement of information	6.2 Methodology			
	102-49	Changes in the preparation of the reports	6.1 Scope of this Annual Integrated Report			
	102-50	Reported period	6.2 Methodology			
	102-51	Date of last report	6.2 Methodology			
	102-52	Cycle of preparation of reports	6.2 Methodology			
	102-53	Contact point for questions about the report	Contact information			

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>GRI 102: General Contents 2016</b>	102-54	Statement of preparation of report in accordance with the GRI standards	6.2 Methodology		
	102-55	GRI Index of Contents	GRI Index of Contents		
	102-56	External Verification	6.5 2018 Annual Integrated Report Verification		
<b>Material Topic: Client Management</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of the material topic and its scope	Material issues, economic and governance risks and policies / 6.4 How the Integrated Report was built		
	103-2	Management approach and its components	Material issues, economic and governance risks and policies / 3.3 Business management: commercial policy and power supply		
	103-3	Management approach evaluation	Material issues, economic and governance risks and policies / 3.3 Business management: commercial policy and power supply		
<b>GRI 416: Customer Health and Safety 2016</b>	416-1	Assessment of health and safety impacts for the products and services categories		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	
	416-2	Cases of non-compliance relating to the health and safety impacts for the products and services categories		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	
<b>GRI 417: Marketing and labeling 2016</b>	417-1	Information requirements and labeling of products and services		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	
	417-2	Cases of non-compliance relating to the information and the labeling of products and services		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	
	417-3	Cases of non-compliance relating to marketing communications		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	
<b>GRI 418: Customer privacy 2016</b>	418-1	Substantiated claims relating to violation of customer privacy and data loss	3.3 Business management: commercial and power supply policy		
	EU3	Number of residential, industrial, institutional and commercial clients	3.3 Business management: commercial and power supply policy		

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Profitability, Competitiveness and Operational Excellence</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of the material topic and its scope	Material issues, economic and governance risks and policies / 6.4 How the Integrated Report was built		
	103-2	Management approach and its components	Material topics, economic and governance risks and policies / 3.1 Consolidated financial management / 3.3 Business management: commercial policy and power supply / 3.5 Growth prospects: focus on renewables / Appendices: Growth prospects / 5.2 Use of materials and efficiency		
	103-3	Evaluation of the management approach	Material topics, economic and governance risks and policies / 3.1 Consolidated financial management / 3.3 Business management: commercial policy and power supply / 3.5 Growth prospects: focus on renewables/ 3.6 Internationalization / Appendices: Growth prospects / 5.2 Use of materials and efficiency		
<b>GRI 201: Economic Performance 2016</b>	201-1	Direct and distributed economic value	3.1. Consolidated financial management		
	201-2	Financial implications and other risks and opportunities stemming from the Climate change	5.3 Climate change		Principle 7
	201-3	Obligations of the defined benefits plan and other retirement plans	Appendices: Workers eligible for retirement		
	201-4	Financial assistance received from the government	3.1. Consolidated financial management		
<b>GRI 307: Environmental compliance 2016</b>	307-1	Non-compliance with the environmental laws and regulations	Appendices: Detail of fines and sanction processes for the year 2018		Principle 8
<b>GRI 308: Environmental evaluation of suppliers 2016</b>	308-1	New suppliers that have passed through evaluation and selection filters in accordance with environmental criteria	4.2 Contractors and Suppliers		Principle 8
	308-2	Negative environmental impacts in the supply chain and measures adopted	4.2 Contractors and Suppliers		Principle 8
<b>GRI 410: Practices in safety matters 2016</b>	410-1	Security personnel trained on human rights policies or procedures	4.2 Contractors and Suppliers		Principle 1
<b>GRI 412: Human Rights' Evaluation 2016</b>	412-1	Operations submitted to reviews or evaluations of impact on human rights	2.9 Integrity plan and due diligence in Human Rights / 4.1 Workers / 4.2 Contractors and Suppliers / 4.3 Occupational safety and health / 4.4 Community Relations / Appendices: Due diligence in Human Rights.		Principle 1
	412-3	Significant investment agreements and contracts with clauses about human rights or submitted to evaluation of human rights	4.2 Contractors and Suppliers		Principle 2
<b>GRI 414: Social evaluation of suppliers 2016</b>	414-1	New suppliers that have passed through selection filters pursuant to social criteria	4.2 Contractors and Suppliers		Principle 2
	414-2	Negative social impacts in the supply chain and measures adopted	4.2 Contractors and Suppliers		Principle 2

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>GRI 419: Socio-Economic Compliance 2016</b>	419-1	Non-compliance with the social and economic laws and regulations	Appendices: Detail of fines and sanctioning processes of 2018		
	EU1	Installed capacity, analyzed by energy source and by regulatory regime	Colbún in numbers 2018 / 3.3 Business management: commercial policy and power supply		
	EU2	Net energy production broken down by energy source and country and by regulatory regime	3.3 Business management: commercial policy and power supply		
	EU4	Length of transmission lines and distribution by voltage	Colbún in numbers 2018 / 3.4 The power transmission business		
	EU6	Management to ensure the short and long-term availability and reliability of electricity	3.3 Business management: commercial policy and power supply		
	EU8	Research and development activities aimed at providing reliable and attainable electricity and at promoting sustainable development	5.4 Development of renewable energies		
	EU10	Planned capacity versus long-term projected demand of electricity, broken down by energy source and regulatory regime	Appendices: Growth Prospects		
	EU11	Average energy efficiency of the thermal power plants by energy source and regulatory regime	5.2 Use of materials and efficiency		
	EU12	Transmission and distribution loss as a percentage of the energy total	3.4 The power transmission business		
	EU 21	Contingency planning measures, disaster or emergency managing plan and training programs, and recovery and restoration plans	4.3 Occupational safety and health		
EU30	Average factor of availability of the power plant by energy source and regulatory regime.	3.3 Business management: commercial policy and power supply			
<b>Material Topic: New Generation Sources</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issues, economic and governance risks and policies / 6.4 How the Integrated Report was built		
	103-2	Management approach and its components	Material issues, economic and governance risks and policies / 3.5 Growth prospects: focus on renewables / 5.4 Development of renewable energies		
	103-3	Management approach evaluation	Material issues, economic and governance risks and policies / 3.5 Growth prospects: focus on renewables / 5.4 Development of renewable energies		
Colbún-6. EC	Describe the status of the Company projects, future perspectives and growth-related goals	3.5 Growth prospects: focus on renewables / 3.6 Internationalization / 5.4 Development of renewable energies			

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Regulations and Changes in the Energy Industry</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issues, Chile's and the energy industry risks and policies / 6.4 How the Integrated Report was built.		
	103-2	Management approach and its components	Material issues, Chile's and the energy industry risks and policies / 1.2 Regulatory Changes / Appendices: Regulatory Framework in Chile		
	103-3	Management approach evaluation	Material issues, Chile's and the energy industry risks and policies / 1.2 Regulatory Changes / Appendices: Regulatory Framework in Chile		
	Colbún-6. EC	Describe the status of the Company projects, future perspectives and growth-related goals	3.5 Growth prospects: focus on renewables / 3.6 Internationalization / 5.4 Development of renewable energies		
	Colbún-7. EC	Colbún's vision about the energy agenda and new regulations	1.1 General context / 1.2 Regulatory changes		
<b>Material Topic: New Businesses and Innovation</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issues, Company's risks and policies, who we are and what we do / 6.4 How this integrated report was built		
	103-2	Management approach and its components	Material issues, Company's risks and policies, who we are and what we do / 2.10 Innovation and digital transformation strategy		
	103-3	Management approach evaluation	Material issues, Company's risks and policies, who we are and what we do / 2.10 Innovation and digital transformation strategy		
<b>Material Topic: Automation and Digitalization</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issues, Company's risks and policies, who we are and what we do / 6.4 How this integrated report was built		
	103-2	Management approach and its components	Material issues, Company's risks and policies, who we are and what we do / 2.10 Innovation and digital transformation strategy		
	103-3	Management approach evaluation	Material issues, Company's risks and policies, who we are and what we do / 2.10 Innovation and digital transformation strategy		
<b>Material Topic: Communication with Stakeholders</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issues, social risks and policies / 6.4 How this integrated report was built		
	103-2	Management approach and its components	Material issues, social risks and policies / 2.11 Communication channels / 4.1 Workers / 4.2 Contractors and Suppliers / 4.4 Community Relations		
	103-3	Management approach evaluation	Material issues, social risks and policies / 2.11 Communication channels / 4.1 Workers / 4.2 Contractors and Suppliers / 4.4 Community Relations		



GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Climate change</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, environmental risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, environmental risks and policies / 5.3 Climate change		
	103-3	Management approach evaluation	Material issue, environmental risks and policies / 5.3 Climate change		
<b>GRI 302: Energy 2016</b>	302-1	In-house power consumption	Appendices: Use of materials and efficiency		Principle 7 / Principle 8
	302-2	Power consumption outside our facilities	5.3 Climate change		Principle 8
	302-3	Energy intensity		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	Principle 8
	302-4	Lower energy consumption	5.1 Use of the Water Resource / 5.2 Use of materials and efficiency		Principle 8 / Principle 9
	302-5	Lower energy requirement of products and services		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	Principle 8 / Principle 9
<b>GRI 305: Emissions 2016</b>	305-1	Direct GHG Emissions (scope 1)	5.3 Climate change		Principle 7 / Principle 8
	305-2	Indirect GHG emissions for generating energy (scope 2)	5.3 Climate change		Principle 7 / Principle 8
	305-3	Other indirect GHG emissions (scope 3)	5.3 Climate change		Principle 7 / Principle 8
	305-4	Intensity of GHG emissions	5.3 Climate change		Principle 8
	305-5	Lower GHG emissions	5.3 Climate change		Principle 7 / Principle 8 / Principle 9
	305-6	Emission of ozone-depleting substances	Appendices: Emission of ozone-depleting substances		Principle 7 / Principle 8
	EU5	Allocation of certified CO2 emissions, analyzed by regulatory regime	5.5 Atmospheric emissions of local gases		
<b>Material Topic: Change Management</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, social risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, social risks and policies / Letter from the Chairman / 2.6 Value creation with a purpose / 2.10 Innovation and digital transformation strategy		
	103-3	Management approach evaluation	Material issue, social risks and policies / Letter from the Chairman / 2.6 Value creation with a purpose / 2.10 Innovation and digital transformation strategy		

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Occupational Safety and Health</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, social risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, social risks and policies / 4.1 Workers		
	103-3	Management approach evaluation	Material issue, social risks and policies / 4.1 Workers		
<b>GRI 403: Occupational safety and health 2016</b>	403-1	Workers' representation in formal health and safety worker-company committees	4.2 Contractors and Suppliers / Appendices: Safety and Health		
	403-2	Types of accidents and accident frequency rates, occupational diseases, lost days, absenteeism and number of deaths due to workplace accidents or occupational diseases	4.3 Occupational safety and health		
	403-3	Workers with high incidence or risk of occupational illnesses	4.3 Occupational safety and health		
	403-4	Safety and health issues formally addressed in union agreements	Appendices: Unionization		
	EU21	Contingency planning measures, disaster or emergency managing plans and training programs, and recovery and restoration plans	4.3 Occupational safety and health		
	Colbún-12. TR	Percentage of workers with a healthy/normal health range	4.3 Occupational safety and health		
<b>Material Topic: Corporate Governance and Risk Management</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, economic and governance risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, economic and governance risks and policies / 2.7 Risk management / 3.7 Ethics and corporate governance		
	103-3	Management approach evaluation	Material issue, economic and governance risks and policies / 2.7 Risk management / 3.7 Ethics and corporate governance		
<b>GRI 202: Market presence 2016</b>	202-2	Ratio of top management executives retained from the local community local	2.5 Our Corporate Governance		Principle 6
<b>GRI 205: Anti-corruption 2016</b>	205-1	Operations evaluated for corruption related risks	3.7 Ethics and Corporate Governance		Principle 10
	205-2	Communication and training on anti-corruption policies and procedures"	3.7 Ethics and Corporate Governance / Appendices: Crime prevention model		Principle 10
	205-3	Corruption cases confirmed and measures taken	3.7 Ethics and Corporate Governance		Principle 10
<b>GRI 206: Unfair competition 2016</b>	206-1	Legal actions related to unfair competition, monopoly practices and practices against free competition	3.7 Ethics and Corporate Governance		
<b>GRI 415: Public policies 2016</b>	415-1	Contribution to political parties and/or representatives	4.4 Community Relations / Appendices: Value of political contributions		Principle 10
	NCG 386	Diversity of the Board of Directors and the Organization	2.5 Our Corporate Governance / 4.1 Workers / Appendices: Workers' Diversity / Appendices: Turnover rate in Chile		

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Internal Culture</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, social risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, social risks and policies / 4.1 Workers / Appendices: Communication Channels / Appendices: Labor Complaints		
	103-3	Management approach evaluation	Material issue, social risks and policies / 4.1 Workers / Appendices: Communication Channels / Appendices: Labor Complaints		
<b>GRI 202: Market Presence 2016</b>	202-1	Ratio of the salary of standard initial category by sex compared to the local minimum salary	Appendices: Competitive remunerations		Principle 6
<b>GRI 401: Employment 2016</b>	401-1	New employee contracting and employee turnover	Appendices: Personnel turnover		Principle 6
	401-2	Benefits to full-time employees that are not offered to part-time or temporary employees	4.1 Workers / Appendices: Work climate		
	401-3	Parental leave	Appendices: Parental leave		Principle 6
<b>GRI 402: Workers'-Company Relations 2016</b>	402-1	Minimum advance notice to inform of operational changes	4.1 Workers / Appendices: Communication Channels		Principle 3
<b>GRI 404: Training and education 2016</b>	404-1	Average annual training hours per employee	4.1 Workers		Principle 6
	404-2	Programs to improve employees' skills and transition assistance programs	4.1 Workers / Appendices: Training and development		
	404-3	Percentage of employees that receive periodic performance and professional development evaluations	4.1 Workers		Principle 6
<b>GRI 405: Diversity and equal opportunities</b>	405-1	Diversity in governance bodies and employees	2.5 Our Corporate Governance / 4.1 Workers		Principle 6
	405-2	Ratio of base salary and the remuneration of women compared to men	4.1 Workers		Principle 6
<b>GRI 406: Non-discrimination 2016</b>	406-1	Cases of discrimination and corrective measures applied	4.2 Contractors and Suppliers / 4.4 Community Relations		Principle 6
<b>GRI 407: Freedom of association and collective bargaining 2016</b>	407-1	Transactions with suppliers whose right of freedom of association and collective bargaining could be at stake	4.1 Workers / 4.2 Contractors and Suppliers		Principle 3
<b>GRI 408: Child Labor 2016</b>	408-1	Transactions with suppliers who are at significant risk of engaging in child labor	4.2 Contractors and Suppliers		Principle 5
<b>GRI 409: Forced or mandatory labor 2016</b>	409-1	Transactions with suppliers who are at significant risk of engaging in forced or mandatory labor practices	4.2 Contractors and Suppliers		Principle 4
<b>GRI 412: Human Rights' Assessment 2016</b>	412-1	Transactions subject to Human Rights impact reviews or assessments	2.9 Integrity and Human Rights due diligence plan / 4.1 Workers / 4.2 Contractors and Suppliers / 4.3 Occupational safety and health / 4.4 Community Relations / Appendices: Due Diligence in Human Rights		Principle 1
	412-2	Employees' training on Human Rights policies or procedures	4.2 Contractors and Suppliers		Principle 1

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
	EU14	Processes to ensure talent retention and renewal	4.1 Workers / Appendices: Processes to ensure talent retention and renewal		
	EU15	Percentage of employees eligible for retirement over the next 5 - 10 years, broken down by employment category and region	Appendices: Workers eligible for retirement		
	Colbún-8-TR	Work openings filled in through internal contests	4.1 Workers		
	Colbún-10-TR	Climate survey results / GPTW	4.1 Workers		
<b>Material Topic: Emissions, Water and Biodiversity</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, environmental risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, environmental risks and policies / 5.1 Use of the water resource / 5.5 Atmospheric emissions and air quality / 5.6 Biodiversity		
	103-3	Management approach evaluation	Material issues, environmental risks and policies / 5.1 Use of the water resource / 5.5 Atmospheric emissions and air quality / 5.6 Biodiversity		
<b>GRI 303: Water 2016</b>	303-1	Water extraction by source	5.1 Use of the water resource		Principle 7 / Principle 8
	303-2	Water sources significantly affected by water extraction	7.5 Appendices: Environmental performance and climate change		Principle 8
	303-3	Recycled and reused water	4.4 Community Relations / 5.1 Use of the water resource		Principle 8
<b>GRI 304: Biodiversity 2016</b>	304-1	Own, leased or managed operational assets located inside or next to protected areas, or zones of high biodiversity value outside of protected areas	Appendices: Biodiversity		Principle 8
	304-2	Significant impacts of the activities, products and services on biodiversity	Appendices: Biodiversity		Principle 8
	304-3	Protected or restored habitats	Appendices: Biodiversity		Principle 8
	304-4	Species that appear in the Red List of the International Union for Conservation of Nature, UICN and in national conservation lists whose habitats are in the areas affected by the operations	Appendices: Biodiversity		Principle 8
<b>GRI 305: Emissions 2016</b>	305-7	Nitrogen oxide (NOx), sulfur oxide (SOx) and other significant atmospheric emissions	5.5 Atmospheric emissions of local gases		Principle 7 / Principle 8

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Community Relations and Development</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, social risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, social risks and policies / 4.4 Community Relations		
	103-3	Management approach evaluation	Material issue, social risks and policies / 4.4 Community Relations		
<b>GRI 203: Direct economic impacts 2016</b>	203-1	Infrastructure and support services investments	4.4 Community Relations / Appendices: Community infrastructure development in Chile		
	203-2	Significant indirect economic impacts	4.1 Workers / 4.2 Contractors and Suppliers / 4.4 Community Relations / Appendices: Local development		
<b>GRI 204: Procurement practices 2018</b>	204-1	Ratio of expenses in local suppliers	4.2 Contractors and Suppliers / 4.4 Community Relations		
<b>GRI 411: Indigenous Peoples' Rights 2016</b>	411-1	Cases of violations of indigenous peoples' rights	4.4 Community Relations		Principle 1
<b>GRI 412: Human Rights' Evaluation 2016</b>	412-1	Transactions submitted to Human Rights' Impact reviews or assessments	2.9 Integrity plan and due diligence in Human Rights / 4.1 Workers / 4.2 Contractors and Suppliers / 4.3 Occupational safety and health / 4.4 Community Relations / Appendices: Due diligence in Human Rights		Principle 1
<b>GRI 413: Local Communities 2018</b>	413-1	Transactions with the involvement of local community, impact evaluations and development programs	4.4 Community Relations		Principle 1
	413-2	Transactions with significant negative impacts - actual or potential - on local communities	4.4 Community Relations		Principle 1
	EU19	Stakeholders' participation in the decision-making processes relating to Project planning and infrastructure development	4.4 Community Relations / Appendices: Citizen participation		
	EU21	Contingency planning measures, disaster or emergency management plan and training programs, and recovery and restoration plans.	4.3 Occupational safety and health		
	Colbún-3. SO	Social investment per type of initiative	4.4 Community Relations / Appendices: Citizen participation		
	Colbún-4. SO	Describe the main socio-environmental conflicts experienced in the year and how they were addressed	4.4 Community Relations		
	Colbún-5. SO	Mechanisms for the community to notify or ask information about spills or risk events	4.3 Occupational safety and health		

GRI standard	Content	Content Name	Section	Omissions	UN Global Compact
<b>Material Topic: Internationalization</b>					
<b>GRI 103: Management Approach 2016</b>	103-1	Explanation of material topic and its scope	Material issue, economic and governance risks and policies / 6.4 How this Integrated Report was built		
	103-2	Management approach and its components	Material issue, economic and governance risks and policies / 3.6 Internationalization		
	103-3	Management approach evaluation	Material issue, economic and governance risks and policies / 3.6 Internationalization		
	Colbún-6. EC	Describe the status of Company's projects, future perspectives and growth-related goals	3.5 Growth prospects: focus on renewables / 3.6 Internationalization / 5.4 Development of renewable energies		
<b>Relevant Organizational Contents. Standard Theme: Environmental</b>					
<b>GRI 301: Materials 2016</b>	301-1	Materials used by weight and volume	5.2 Use of materials and efficiency		Principle 7 / Principle 8
	301-2	Recycled raw materials used		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	Principle 8
	301-3	Reused products and packaging materials		Not applicable: It's a content that doesn't cover the specific impacts that make the topic material.	Principle 8
<b>GRI 306: Effluents and waste 2016</b>	306-1	Water discharge in function of its quality and use	Appendices: Waste water spills		Principle 8
	306-2	Waste by type and disposal method	Appendices: Waste generated and discharged		Principle 8
	306-3	Significant spills	4.4 Community Relations / Appendices: Waste water discharge		Principle 8
	306-5	Water bodies affected by waste water and/or runoff	Appendices: Biodiversity of water masses and related habitats		Principle 8

## Company Identification

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**Company Name:** Colbún S.A.

**Single Corporate Taxpayer Number:** 96.505.760-9

**Type of Entity:** Open Stock Corporation, Registered in the Securities' Registry: No. 0295

**Address:** Av. Apoquindo 4775, 11th floor, Santiago, Chile

**Telephone:** (56 2) 2460 4000

**Fax:** (56 2) 2460 4005

**Website:** [www.colbun.cl](http://www.colbun.cl)

**Twitter:** @ColbunEnergia

**Facebook:** [www.facebook.com/ColbunEnergia/](http://www.facebook.com/ColbunEnergia/)

**External Auditors of the Financial Statements:**  
KPMG Auditores Consultores Ltda.

**External Auditors of the Carbon Footprint:**  
EY Consulting SpA.

**External Auditors of the Economic, Social and Environmental Indicators:** EY Consulting SpA.

**Materiality:** GECCO SpA

**Photographers:**  
Cristobal Marambio, Colbún workers, Colbún files

**Graphic design:** Armstrong

**Printed out by:** Fyrma

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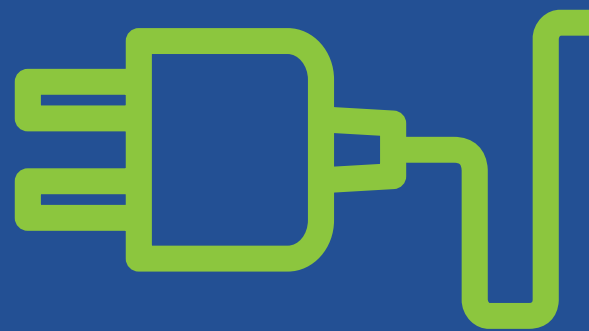
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# 07

## Appendixes







## 7.1 Chile and the energy industry context

## Regulatory Framework in Chile

103-2, 103-3

Chile's electricity sector and Colbún's operations are mainly ruled by the General Law on Electric Power Services, the General Environmental Law and the Water Code.

### General Law on Electric Power Services

DFL No.1 of 1982 which systematic and merged text is included under DFL No. 4-2006, which contains the main amendments thereto.

"Short Law 1" (Ley Corta 1) Law No 19,940 enacted in 2004. This law introduced (i) new regulation applicable to the transmission system, development of the transmission system and the rates transmission facility owners can charge to users of the system and (ii) regulation regarding reliability and ancillary services.

"Short Law 2" (Ley Corta 2), Law No 20,018 enacted in 2005. This law established, among other things, the framework of bids for energy supply to regulated customers through long-term contracts of up to 15 year-term. These contracts are indexed to the United States' CPI and other relevant fuel indexes.

Law No 20,257 an amendment to the Chilean Electricity Law enacted in 2008. This amendment promotes the use of non-conventional renewable energies ("NCRE"). The law defines the different types of technologies considered to be NCRE.

Under this law, power generation companies are required to supply 5.5% of their total contractual obligations in 2015 and will increase by 0.5% annually up to 2024, when the requirement will reach 10% of total contractual obligations. In addition, an amendment to this law was enacted in 2013, which will increase the magnitude of the obligation from 10% in 2024 to 20% in 2025, for all contracts entered after July 1, 2013. This new system contemplates a gradual application of the standard.

Law No. 20,805 enacted in January 2015, which improves the electric power supply bids for customers subject to price regulations. Law No. 20,928 enacted in June 2016, which provides for equity mechanisms on electricity rates.

Law No. 20,936 enacted in July 2016, which establishes a new electric power transmission system and sets a coordination entity independent from the National Electricity System.

### Environmental Law

The "General Environmental Law" (19,300) regulates and establishes the environmental framework in Chile. Among the main changes is the creation of the Environmental Ministry, Environmental Superintendence, the Environmental Tribunals and the Biodiversity and Wild Protected Area Service.

Among the main modifications is the reformulation of the fines. In addition, there are numerous laws, regulations,

decrees and municipal ordinances that may rule our operations or the development of new projects, which are aimed at protecting the environment.

### Water Code

Water rights are governed by the "Water Code" ("Código de Aguas"), which defines the means by which water rights may be obtained, the characteristics of these water rights and how such rights may be constituted and exercised. Water rights are granted by the Water Management Directorate ("Dirección General de Aguas" or "DGA"). The Water Code was modified for the last time in 2005, to establish, among other things, the payment of a permit for unused water rights.

### The transmission regulatory sector in Chile

In order to deliver our electric power to the system and to supply energy and capacity to our customers, we use transmission facilities of our own as well as those of third parties. The new legislation breaks down the transmission system into five types: National System (Ex Trunk Transmission System), Zone System (Ex Subtransmission System), Dedicated Transmission System (Ex Ancillary System), System for Development Poles and International Interconnection Systems that will be ruled by special norms.

In terms of planning, there are two processes: a long-term energy planning for an at least 30-year horizon to be determined every five years by the Ministry. Similarly, the National Energy Commission is responsible for carrying out an annual planning process for transmission, which will include the required expansion for the various transmission systems.

The law provides the Transmission Systems with an open access regime, and consequently this type of facilities may be used by third-party users under non-discriminatory technical and

economic conditions, where access to Dedicated Systems will be granted according to the available capacity of the lines, as determined by the System Coordinator.

A transparent, participative and regulated methodology was established to determine the tariffs associated with the use of the National and Zone Systems, leaving the use of Dedicated Systems to a bilateral negotiation between the owner and the user.

The new regulation establishes that transmission companies will recover

their investment through tariffs charged to the end users, this change in transmission charges will be gradually applied, so that starting in 2034, the transmission will be fully financed by the system's demand. For the systems operating at Development Poles, a charge will be applied to generation companies connected to such line, where in the long run the idle capacity of the lines will be paid by the end users.

## Regulatory framework in Peru

Since 1992, the electric power activities and businesses are regulated by the Law on Electric Concessions No. 25,844, which was amended and supplemented by other laws aimed at promoting investment and providing for specific aspects of the national energy policy.

Below is a description of the main standards that encourage investment in the Peruvian power sector, the technical standards relating to the safety at electric power facilities and quality assurance of the power services delivered to the end user:

### Law on electric concessions

Law No. 25,844. In agreement with this law, the Peruvian electricity sector is divided into three large segments: generation, transmission and distribution. Starting in October 2000, the Peruvian power sector is made up of a single National Interconnected System (SEIN), in addition to some isolated systems. At present, the Company develops its operations within the electric generation segment under the SEIN.

### Law to ensure an efficient power generation development

In 2006, Law No. 28,832 was enacted, which establishes among its main objectives: (a) assuring sufficient and efficient power generation to reduce the Peruvian electric system exposure to price volatility, lowering the risks due to lack of energy and providing the end consumer with more competitive rates, (b) decreasing the administrative intervention in the determination of generation prices by means of market solutions, and (c) encouraging actual competition in the generation market, (d) introducing a compensation mechanism between the SEIN and the Isolated Systems to have bar prices that incorporate the benefits of natural gas that help reducing their exposure to the volatility of the fuel markets.

### **Anti-monopoly and anti-oligopoly law in the power sector**

Law No. 26,876 ensures that vertical concentrations equal to or greater than 5%, or horizontal concentrations equal to or greater than 15% involved in the power generation, transmission and distribution activities are subject to preliminary authorization in order to avoid concentrations affecting free competition.

### **Law that promotes the efficient use of natural gas and investments in hydroelectric power plants**

The Law No. 1,041 published in June 2008 promotes investment in hydroelectric power plants, expanding the maximum term of 15 years to 20 years for electricity supply contracts from power tenders. It also promotes investment in combined open cycle power plants to improve efficiency in the use of natural gas and the transport infrastructure.

### **Law that promotes renewable energies**

The Law No. 1,002 published in May 2008 which grants competitive advantages to generation projects with renewable energy - RER. It also established that a 5% of the national energy demand should be covered by RER generation, excluding hydropower. Law No. 1,058, published in June 2008 grants the benefit of accelerated depreciation, up to 20% annually for investments in hydroelectric and other renewable resource projects.

Law No. 28,876 published in June 2006 establishes the early recovery of the national tax on power sales for companies using hydropower and renewable energies.

### **Regulation on electricity supply tenders**

They are aimed at establishing the standards applicable to electricity supply tenders to ensure the timely and efficient supply of the bidders' demands, and to encourage competition and investment in new power generation plants in agreement with the law.

### **Regulation on environmental protection against electric power activities**

(Supreme Decree No. 29-94-EM): The purpose of this standard is to regulate the interrelation of the generation, transmission and generation systems' activities with the environment, under a sustainable development framework.

In Perú, investors are entitled to enter into contracts that provide for legal and tax stability, and free availability of foreign currency. If necessary, they may undertake feasibility studies for public infrastructure or public facility services in the form of a private-public partnership to speed up the materialization of the private investment.

## 7.2 Colbún: who we are and what we do

## Requirements over the shares held by Management

Colbún does not set any limit on the ownership of shares as a multiple of the annual base salary. However, we are subject to a regulation that bans the trading of shares within specific periods of time to prevent insider trading.

The Information Management Manual certifies compliance by the Company with a series of standards issued by the Superintendence of Securities and Insurance of Chile (SVS) and rules the way in which an executive shall purchase or sell Company's shares.

## Ownership structure

102-5

In agreement with what is set forth in Title XV of Law 18,045 below is a list of the majority Company shareholders representing 49.96% of the capital with the right to vote as of December 31, 2018:

### Participation of the Majority Shareholders at December 31, 2018

Shareholder	No. of shares	%
MINERA VALPARAISO S.A.	6,166,879,733	35,17
FORESTAL COMINCO S.A.	2,454,688,263	14,00
FORESTAL CONST.Y COM. DEL PACIFICO SUR S.A.	34,126,083	0,19
FORESTAL Y MINERA CANADILLA S.A.	31,232,961	0,18
FORESTAL CAÑADA S.A.	22,308,320	0,13
FORESTAL BUREO S.A.	17,846,000	0,10
INVERSIONES ORINOCO S.A.	17,846,000	0,10
INVERSIONES COILLANCA LTDA.	16,473,762	0,09
INMOBILIARIA BUREO S.A.	38,224	0,00
	<b>8,761,439,346</b>	<b>49,96</b>

The Company control is exercised in agreement with a joint control and management agreement subscribed with respect to Forestal O'Higgins S.A and other affiliates whereby it controls the majority shareholders mentioned above. The Company is owned by members of the following companies Larraín Matte, Matte Capdevila and Matte Izquierdo, in the manner and in the proportions set forth below:

Patricia Matte Larraín, ID No. 4.333.299-6 (6.49%) and her children

María Patricia Larraín Matte, ID No. 9.000.338-0 (2.56%); María Magdalena Larraín Matte, ID No. 6.376.977-0 (2.56%); Jorge Bernardo Larraín Matte, ID No. 7.025.583-9 (2.56%), and Jorge Gabriel Larraín Matte, ID No. 10.031.620-K (2.56%).

Eliodoro Matte Larraín ID No. 4.436.502-2 (7.21%) and his children Eliodoro Matte Capdevila, ID No. 13.921.597-4 (3.27%); Jorge Matte Capdevila, ID No. 14.169.037-K (3.27%), and María del Pilar Matte Capdevila, ID No. 15.959.356-8 (3.27%)

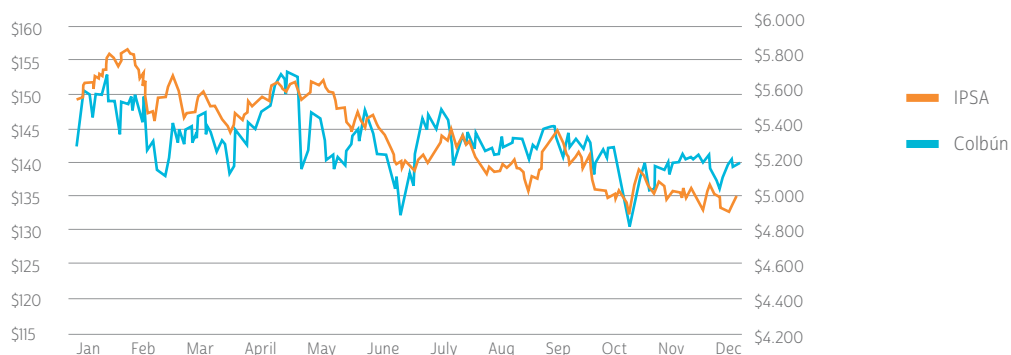
Bernardo Matte Larraín, ID No. 6.598.728-7 (7.79%) and his children Bernardo Matte Izquierdo, ID No. 15.637.711-2 (3.44%); Sofía Matte Izquierdo, ID No. 16.095.796-4 (3.44%), and Francisco Matte Izquierdo, ID No. 16.612.252-K (3.44%).

The shareholders mentioned above pertain by kinship to the same business group.

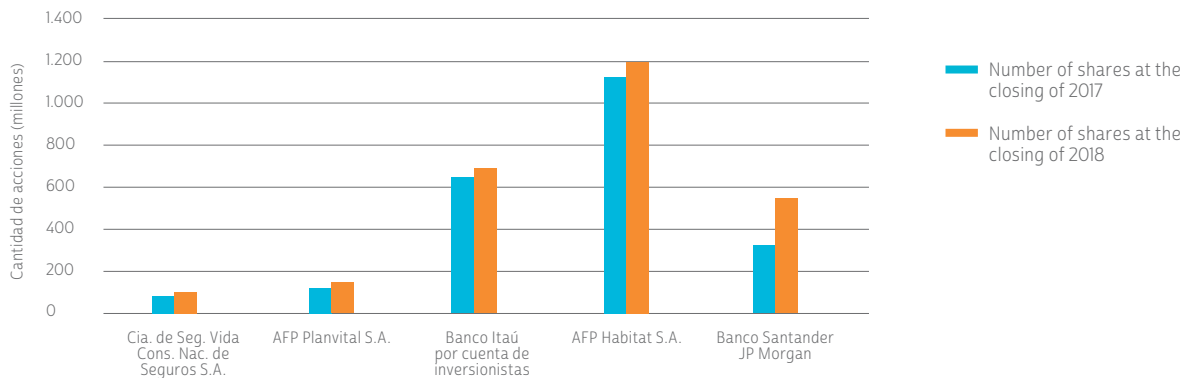
## Share transactions

The following graph shows the evolution of Colbún's share price and the IPSA index evolution over the last year.

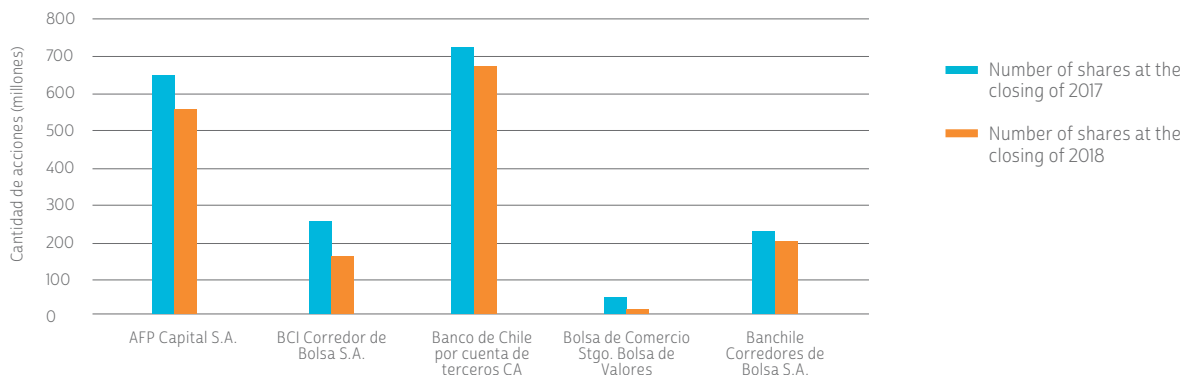
Colbún share price and IPSA index evolution over 2018



5 main increases in share ownership 2017-2018



5 main decreases in share ownership 2017-2018





## Colbún's shares

The Company's shares are traded on the Santiago Stock Exchange and the Electronic Stock Exchange. In both Stock Exchanges our stock market presence is 100%.

The following charts show information on the price, volumes and amounts in the stock exchanges where the Company's shares are traded.

### Electronic Stock Exchange

Period	Number (shares)	Total amount traded (CLP)	Avg. price (CLP)	Higher price (CLP)	Lower price (CLP)	Closing price (CLP)
1T 2017	23,614,211	\$ 3,203,963,092	\$ 149,9	\$ 123,3	\$ 135,7	\$ 144,6
2T 2017	35,940,358	\$ 5,293,096,614	\$ 155,5	\$ 142,0	\$ 147,3	\$ 142,0
3T 2017	26,938,482	\$ 4,043,231,068	\$ 154,5	\$ 146,0	\$ 150,1	\$ 152,0
4T 2017	23,465,446	\$ 3,348,065,010	\$ 156,5	\$ 127,0	\$ 142,7	\$ 141,5
1T 2018	26,258,475	\$ 3,803,181,982	\$ 152,3	\$ 140,0	\$ 144,8	\$ 144,8
2T 2018	23,594,735	\$ 3,370,601,860	\$ 152,6	\$ 131,9	\$ 142,9	\$ 131,9
3T 2018	20,468,267	\$ 2,921,526,936	\$ 147,0	\$ 137,4	\$ 142,7	\$ 142,0
4T 2018	24,076,833	\$ 3,367,481,825	\$ 147,3	\$ 130,6	\$ 139,9	\$ 137,4

### Santiago Stock Exchange

Period	Number (shares)	Total amount traded (CLP)	Avg. price (CLP)	Higher price (CLP)	Lower price (CLP)	Closing price (CLP)
1T 2017	492,840,865	\$ 66,428,240,000	\$ 147,3	\$ 151,0	\$ 121,7	\$ 146,6
2T 2017	560,877,956	\$ 83,354,850,000	\$ 142,5	\$ 156,0	\$ 138,3	\$ 142,8
3T 2017	498,531,989	\$ 74,885,380,000	\$ 154,5	\$ 157,0	\$ 142,8	\$ 154,8
4T 2017	650,069,404	\$ 94,521,490,000	\$ 141,8	\$ 158,0	\$ 120,0	\$ 141,5
1T 2018	442,227,357	\$ 63,815,470,000	\$ 140,9	\$ 155,0	\$ 135,0	\$ 144,7
2T 2018	489,614,422	\$ 70,354,610,000	\$ 133,5	\$ 153,9	\$ 131,0	\$ 135,0
3T 2018	474,919,572	\$ 67,960,320,000	\$ 141,8	\$ 148,5	\$ 135,0	\$ 142,0
4T 2018	550,537,790	\$ 76,690,980,000	\$ 138,2	\$ 144,4	\$ 125,0	\$ 139,4

### Dividends per share (CLP)

Management Period	Provisional	Definite	Total
2010	0,50	0,50	1,00
2011	-	-	-
2012	-	0,36	0,36
2013	-	0,58	0,58
2014	1,46	-	1,46
2015	1,62	0,44	2,06
2016	1,75	2,34	4,09
2017	1,75	2,08	3,83
<b>2018</b>	<b>2,16</b>	<b>7,42</b>	<b>9,57</b>

## Affiliated Companies

### Colbún's Affiliated Companies

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
TERMOELÉCTRICA ANTILHUE S.A.	Generation, transportation, transformation, distribution, supply or commercialization of electric power or operation of power plants.	Closed Stock Company. Established on December 14, 2007. Owner of Antilhue thermoelectric power plant.	99,9%	Juan Eduardo Correa G.	Carlos Luna C.	Juan Eduardo Correa G. Thomas Keller L. Juan Eduardo Vásquez M.
EMPRESA ELÉCTRICA INDUSTRIAL S.A.	Production, transportation, distribution, supply or commercialization of electric power and management or operation of power plants.	Closed Stock Company. Established on December 31, 1997. Owner of Carena hydroelectric power plant.	99,9%	Juan Eduardo Correa G.	Carlos Luna C.	Juan Eduardo Correa G. Thomas Keller L. L. Juan Eduardo Vásquez M.
TERMOELECTRICA NEHUENCO S.A.	Production, transportation, distribution, supply or commercialization of electric power and management or operation of power plants.	Closed Stock Company. Established on April 13, 2006. In charge of the operation of the power plants that make up the Nehuenco thermoelectric complex situated in Quillota, V Region, as well as of the Candelaria thermoelectric power plant situated in Mostazal, VI Region.	100,0%	Juan Eduardo Correa G.	Carlos Luna C.	Juan Eduardo Correa G. Thomas Keller L. L. Juan Eduardo Vásquez M.
SOCIEDAD HIDROELÉCTRICA MELOCOTÓN LTDA.	To conduct prefeasibility studies and develop projects for hydroelectric power plants and to operate the said power plants.	Limited Liability Company, established on July 1, 1980. This company although is not currently engaged in operating activities owns water rights to develop hydroelectric projects.	100,0%	Legal representative: Thomas Keller L.		
RIO TRANQUILO S.A.	Generation, transportation, distribution, purchase and sale of electric power and capacity.	Closed Stock Company. Established on May 20, 2005. Owner of the Hornitos hydroelectric power plant.	100,0%	Juan Eduardo Correa G.	Carlos Luna C.	Juan Eduardo Correa G. Thomas Keller L. L. Juan Eduardo Vásquez M.
COLBÚN TRANSMISIÓN S.A.	Electricity transmission; commercialization of power transportation and transformation capacity; management and operation of electric transmission installations and the delivery of services relating with its purpose.	Closed Stock Company. Established on June 28, 2012. Colbún S.A. owns 99% of its shares.	100,0%	Juan Eduardo Correa G.	Luis Le-Fort	Juan Eduardo Correa G. Thomas Keller L. L. Juan Eduardo Vásquez M.
COLBÚN DESARROLLO SPA	Generation, transportation, transformation distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy; management, operation and maintenance of hydraulic works and power generation plants; development of national and foreign power generation, transmission and distribution projects.	Closed Stock Company. Established in March 18, 2015. Colbún S.A. owns 100% of its shares.	100,0%	Thomas Keller L.		Thomas Keller L. L. Juan Eduardo Vásquez M. Sebastián Fernández C. Eduardo Lauer R. Sebastián Moraga Z.

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
INVERSIONES SUD SPA	Generation, transportation, transformation distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy; management, operation and maintenance of hydraulic works and power generation plants; development of national and foreign power generation, transmission and distribution projects.	Stock Company. Established on March 31, 2015. Colbún S.A. owns 100% of its shares.	100,0%	Juan Eduardo Correa G.	Juan Eduardo Vásquez M.	Juan Eduardo Correa G. Thomas Keller L. Juan Eduardo Vásquez M.
INVERSIONES ANDINAS SPA	Generation, transportation, transformation distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy; management, operation and maintenance of hydraulic works and power generation plants; development of national and foreign power generation, transmission and distribution projects.	Stock Company. Established on March 31, 2015. Colbún S.A. owns 100% of its shares.	100,0%	Juan Eduardo Correa G.	Juan Eduardo Vásquez M.	Juan Eduardo Correa G. Thomas Keller L. Juan Eduardo Vásquez M.
SANTA SOFIA SPA	Generation, supply, transmission, purchase and sale of electric power; construction, assembly and operation of electric equipment and power generation facilities based on NCRE; purchase, sale, import, export, manufacturing, sale and distribution of all kinds of services, goods or inputs relating to the energy business.	Stock Company. Established by public deed granted on July 31, 2015 at the Santiago Notary's Office of Mr. Iván Torrealba Acevedo. Colbún S.A. owns 100% of its shares.	100,0%	Legal representatives: Juan Eduardo Vásquez M. Rodrigo Pérez S. Eduardo Lauer R. Sebastián Moraga Z.	Note: This company has no Board of Directors or General Manager; it is exclusively run by Colbún S.A.	
COLBÚN PERÚ S.A.	Investment in all kinds of movable property, including the purchase of shares or rights in all kind of companies, communities, foundations or partnerships, all kinds of securities and credit or investment instruments together with the administration and operation of those investments and their fruits or products; and the generation, transportation, transformation, distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy, without limitation.	Closed Stock Company incorporated in agreement with the laws of the Republic of Peru, acquired by Colbún Desarrollo S.p.A. on September 28, 2015. Later, by means of Extraordinary Shareholders' Meeting held on December 15, 2015 Colbún S.A. joined this company, and currently holds 99.9996% of the shares, and Colbún Desarrollo S.p.A. owns the remaining 0.0004%.	100,0%	Thomas Keller L.	Sebastián Fernández C.	Juan Eduardo Correa G. (alternate Juan Eduardo Vásquez M.) Thomas Keller L. (alternate Rodrigo Pérez S.) Sebastián Fernández C. (alternate Eduardo Lauer R.)

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
FENIX POWER PERU S.A	Power generation, secondary transmission and commercialization activities in agreement with the law; engaging in any activity or civil, industrial and commercial operation or in any similar activity or operation directly or indirectly related to the compliance with the Company's purpose, as well as the exploitation of the natural resources produced as a result of such power generation, as necessary, adequate, and as permitted by the law on closed stock corporations.	Closed Stock Company incorporated in agreement with the laws of the Republic of Peru on September 15, 2004 by Enrique Víctor Macedo Abreu, Fernando Enrique Macedo Abreu, and Horace Alfred Sklar. At present Inversiones de Las Canteras S.A. owns 100% of the shares.	51,0%	Juan Miguel Cayo	Juan Miguel Cayo	Juan Eduardo Correa G (alternate Juan Eduardo Vásquez M. and Rodrigo Pérez S.) Thomas Keller L. (alternates Eduardo Lauer R. and Sebastián Moraga Z.) Sebastián Fernández C. Juan Miguel Cayo David Andrés Jana B. (alternate Mujeeb Ur Rehman Q.) Luis Pisco (alternate Laurent Bernard Fortino) Gonzalo de las Casas D.
INVERSIONES DE LAS CANTERAS S.A.	Investment in all kinds of movable property, including the purchase of shares or rights in all kind of companies, communities, foundations or partnerships, all kinds of securities and credit or investment instruments together with the administration and operation of those investments and their fruits or products; and the generation, transportation, transformation, distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy, without limitation.	Closed Stock Company incorporated in agreement with the laws of the Republic of Peru, on November 16, 2015 by Inversiones Hacienda Montalbán S.A. (currently Colbún Perú S.A.) and Juan Carlos Escudero Velano, who later transferred his share to the former. On December 18, 2015 the partners made a capital increase, and Colbún Perú S.A. subscribed and paid 51% of the shares, and Sigma Infrastructure Investment Fund joined the Company with 13% of the shares; and Blue Bolt A 2015 Limited, also joined the company with 36% of the shares	51,0%	Thomas Keller L.	Sebastián Fernández C.	Juan Eduardo Correa G. (alternate Juan Eduardo Vásquez M.) Thomas Keller L. (alternate Sebastián Moraga Z.) Sebastián Fernández C. (alternate Eduardo Lauer R.) Rodrigo Pérez S. (alternate Carlos Luna C.) Luis Miguel Azenha P. (alternate Mujeeb Rehman Q.) Andrés Jana B. (alternate Laurent Fortino) Luis Carranza U. (alternate Gonzalo de las Casas D.)

Colbún's subsidiaries companies

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
TRANSMISORA ELÉCTRICA DE QUILLOTA LTDA.	Transmission, distribution and supply of electric power.	Limited Liability Company owner of the San Luis substation located alongside of the Nehuenco thermoelectric complex, as well as of the 220 KV high tension line that connects this substation with the Quillota substation. The company began its operations in 1999. Colbún holds 50% stake in this company.	50,0%	Santiago Bradford Vicuña		Santiago Bradford Vicuña (alternate director Gastón Zepeda Carrasco) Goran Nakik (alternate director María Canales Nuñez) Sergio Avila Arancibia (alternate director Rodolfo Durán Figueroa) Pedro de la Sotta Sánchez. (alternate director Rodolfo Durán
ELECTROGAS S.A.	Buy, sell, invest and hold shares of Electrogas S.A.	Closed stock company incorporated by public deed of October 14, 1996 granted at the Santiago Notary's Office of Mr. Mario Baros González. Electrogas S.A.'s shareholders are Colbún S.A. (42.5%), Aerio Chile SpA (42.5%) and Enap (15%)	42,5%	Gonzalo Morais Soares.	Allan Fischer H.	Thomas Keller Lippold (alternate Rodrigo Pérez Stiepovic) Juan Eduardo Vásquez Moya (alternate Sebastián Fernández Cox) Joao Faria Conceicao (alternate Marta Almeida Alonso) Gonzalo Morais Soares (alternate Joao Pedro Pires) Rodrigo Azócar Hidalgo (alternate Oscar Santibáñez Letelier)
AYSÉN TRANSMISIÓN S.A., IN LIQUIDATION	Developing and alternatively or additionally, run the electric transmission systems required by the hydroelectric power generation project of Aysén S.A. hydroelectric power plants in the Aysén region.	Closed stock company incorporated by public deed of March 24, 2008. On December 7, 2017 the Extraordinary Shareholders' Meeting agreed to the early winding up of the Company and to the sale of the company's assets.	49%	Juan Eduardo Vasquez Moya	Rodrigo Pérez Stiepovic	Thomas Keller L. Luis Ignacio Quiñones S. Juan Eduardo Vásquez M. Carlo Carvallo Artigas Juan Pablo Schaeffer Fabres Claudio Helfmann S.
AYSÉN ENERGÍA S.A., IN LIQUIDATION	Supply electricity to the Aysén Region (General Carlos Ibáñez del Campo) through the development, financing, ownership and operation of power generation and transmission projects in the region.	Closed stock company incorporated on January 27, 2010. On December 7, 2017 the Extraordinary Shareholders' Meeting agreed to the early winding up of the Company and to the sale of the company's assets.	49%	Juan Eduardo Vasquez Moya	Rodrigo Pérez Stiepovic	Thomas Keller L. Luis Quiñones S. Juan Eduardo Vásquez M. Carlo Carvallo Artigas Juan Pablo Schaeffer Fabres Claudio Helfmann S.

**Subscribed and paid in capital, Colbún affiliates and related companies at December 31, 2018 (MUS\$)**

Filiales	Moneda	Capital Suscrito	Capital Pagado
Empresa Eléctrica Industrial S.A.	MUS\$	3,680	3,680
Sociedad Hidroeléctrica Melocotón Ltda.	MUS\$	1,114	1,114
Río Tranquilo S.A.	MUS\$	64	64
Termoeléctrica Nehuenco S.A.	MUS\$	212	212
Termoeléctrica Antilhue S.A.	MUS\$	3,332	3,332
Colbún Transmisión S.A.	MUS\$	99,235	99,235
Colbún Desarrollo SpA.	MUS\$	160	160
Inversiones SUD SpA	MUS\$	10	10
Inversiones Andinas SpA	MUS\$	10	10
Colbún Perú S.A.	MUS\$	219,635	219,635
Inversiones Las Canteras S.A.	MUS\$	428,835	428,835
Fenix Power Perú S.A.	MUS\$	435,093	435,093

**Colbún S.A. investments in affiliates at December 31, 2018 (MUS\$)**

Filiales	Moneda	Inversión	% sobre activos *
Empresa Eléctrica Industrial S.A.	MUS\$	10,988	0.1621%
Sociedad Hidroeléctrica Melocotón Ltda.	MUS\$	1,294	0.0191%
Río Tranquilo S.A.	MUS\$	25,471	0.3758%
Termoeléctrica Nehuenco S.A.	MUS\$	-14,229	-0.2099%
Termoeléctrica Antilhue S.A.	MUS\$	12,963	0.1912%
Colbún Transmisión S.A.	MUS\$	265,209	3.7470%
Colbún Desarrollo SpA.	MUS\$	160	0.0024%
Inversiones SUD SpA	MUS\$	69	0.0010%
Inversiones Andinas SpA	MUS\$	10	0.0001%
Soc. Santa Sofía SpA	MUS\$	-27	0.0004%
Colbún Perú S.A.	MUS\$	228,634	3.3730%
Inversiones Las Canteras S.A.	MUS\$	409,027	6.0343%
Fenix Power Perú S.A.	MUS\$	407,221	6.0077%

\* % over assets represents the investment in each affiliate over the total assets held by the parent company.

**Colbún S.A. investments in related companies at December 31, 2018 (MUS\$)**

Related Companies	Currency	Investment	% over assets *
Electrogas S.A.	MUS\$	16,603	0.2449%
Transmisora Eléctrica de Quillota Ltda.	MUS\$	13,635	0.2012%
Aysén Transmisión S.A.	MUS\$	-25	-0.0004%
Aysén Energía S.A.	MUS\$	-11	-0.0002%

\* % over assets represents the investment in each related company over the total assets held by the parent company.

## Biographies of Colbún's Board members

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### **MARÍA IGNACIA BENÍTEZ PEREIRA**

(passed away in February 2019)

*NATIONAL ID CARD NUMBER: 7.460.907-4*

Chemical civil engineer from the Universidad de Chile, with broad experience in the public, private, and the academic sector. She was the Ministry of the Environment throughout the first government period of President Sebastián Piñera.

She was a Regional Advisor to the Metropolitan Region from 2000 to 2008. She was the Senior Project Head and the Finance Assistant Manager of Gestión Ambiental Consultores (GAC). She joined Colbún's Board of Directors in 2016, being elected by the AFPs. Deeply engaged with her job and with the company's management, she stood out for her knowledge of environmental issues and sustainability, her broad view regarding the role of the corporations and her clear ideas on how the businesses should be managed and developed.

### **VIVIANNE BLANLOT SOZA**

*NATIONAL ID CARD NUMBER: 6.964.638-7*

She was born in 1955. She holds a Business Administration Major from the Pontificia Universidad Católica de Chile, and obtained a Master's in Applied Economics from the American University in the U.S.

She is director of Colbún since 2012, member of the Council on Transparency since 2011, and director of Antofagasta Minerals since 2014. She was previously the Minister of National Defense, Executive Secretary of the National Energy Commission and Executive Director of Chile's National

Environmental Commission (CONAMA). In addition, she was a member of the Board of Trustees of the Universidad de Santiago and Banco del Estado, and director of EMOS. She is currently a Board member of Antofagasta PLC and Empresas CMPC.

### **JUAN EDUARDO CORREA GARCÍA**

*NATIONAL ID CARD NUMBER: 12.231.796-K*

He was born in 1972. He is a civil industrial engineer from the Pontificia Universidad Católica de Chile.

He has a vast professional trajectory in companies such as Enersis, Quiñenco and IConstruye. He was the Director of the Santiago Stock Exchange for 5 years. Since 2005 he has worked in different companies of the Matte Group. He is currently the General Manager of the holding BICECORP S.A., the Chairman of BICE Vida Compañía de Seguros S.A., and the Vice-chairman of the Banco BICE's Board of Directors and director of Inmobiliaria Almahue S.A. He joined Colbún's Board of Directors in 2014, where in addition to his role has been a member of the Directors' Committee and the Auditing Committee. He undertook the Chairmanship of Colbún's Board of Directors in May 2017.

### **LUZ GRANIER BULNES**

*NATIONAL ID CARD NUMBER: 7.040.317-K*

She was born in 1965. She holds a Business Administration Major from the Universidad de Chile. She is currently an independent financial adviser. In the past, she was director of the CIMM (Research Center for Mining and Metallurgy), Loginsa, Eléctrica Guacolda and TermoAndes, among others. In

addition, she was the Undersecretary of Social Services, Head of Cabinet of the Ministry of Public Works and the Ministry of Mining and Energy. She had an 11-year professional trajectory in AES Gener as the Treasury Manager, Administration and Finance Manager of Norgener, and finally, as the Assistant Manager of International Investments.

### **BERNARDO LARRAÍN MATTE**

*NATIONAL ID CARD NUMBER: 7.025.583-9*

He was born in 1966. He holds a Business Administration Major from the Pontificia Universidad Católica de Chile, obtained a M.Sc. of Finance from the London School of Economics and a master's in business administration from the University of Stanford. He undertook as Colbún's General Manager in 2005, and from April 2012 to May 2017 he was the Chairman of Colbún's Board. He is also a Board member of Minera Valparaíso S.A. and of Puertos y Logística S.A. From 2008 to 2016 he was member of ICARE's Board of Directors, a non-for-profit organization. He is currently the President of the Sofofa

### **HERNÁN RODRÍGUEZ WILSON**

*NATIONAL ID CARD NUMBER: 7.051.490-7*

He was born in 1963. He is a civil industrial engineer from the Pontificia Universidad Católica de Chile and holds an MBA in Finance and International Businesses from the University of California (UCLA).

He joined the CMPC's Studies Management Department in 1987 where he participated in projects such as the Celulosa del Pacífico and the purchase of Química Estrella and the

Tissue product plant. He later overtook the position of Cristián Eyzaguirre in the Finance Management Department. From 2004 to 2011 he was the General Manager of Forestal Mininco and of the CMPC.

After 31 years in service, on July 31, 2018 he left his position in CMPC and starting in August of the same year he joined Colbún's Board of Directors.

#### **ANDRÉS LEHUEDÉ BROMLEY**

*National ID card number: 7.617.723-6*

He was born in 1968, holds a Business Administration Major from the Pontificia Universidad Católica de Chile and a Master in Business Administration from the University of California (UCLA), United States. In the past, he worked for Citicorp Chile, Cruz del Sur AGF and Cruz del Sur Compañía de Seguros de Vida. He is currently the general manager of Inversiones Siemel S.A. He is also the Director of Comercializadora Novaverde S.A. (Guallarauco); Atton

Hoteles S.A.; Red to Green S.A.; Woodtech S.A.; Agrícola Siemel Ltda and Valle Grande S.A.

#### **JORGE MATTE CAPDEVILA**

*National ID card number: 14.169.037-K*

He was born in 1981, holds a Business Administration Major from the Universidad de Los Andes. He is currently the Chairman of the Board of Directors of Forestal Mininco S.A. He is also a Board member of CMPC Celulosa S.A.; CMPC Tissue S.A.; Puertos y Logística S.A.; Inversiones Portoseguro S.P.A., and Chairman of the Board of Directors of Fundación Amulen.

#### **FRANCISCO MATTE IZQUIERDO**

*National ID card number: 16.612.252-K*

He was born in 1988; he is a lawyer from the Pontificia Universidad Católica de Chile and joined Colbún's Board in 2016. Currently he works as a lawyer in business and tax areas

#### **Note:**

*All Colbún's Board members are not Company's executives and they are members of four or less Board of Directors of companies whose shares are publicly traded.*



## Board of Directors' independence

Colbún meets the LSA (Law of Stock Corporations) 18,046, which in its Article 50 bis provides that open stock companies in Chile must appoint at least one independent director to seat it its Board of Directors, if its stock equity is equal to or greater than 1,500,000 UF, and at least 12.5% of its shares issued with right to vote are held by shareholders who individually control or own less than 10% of those shares.

Colbún fulfills this requirement, as its Board of Directors is made up of two independent directors according to the

Chilean law (María Ignacia Benítez P. and Luz Granier B.).

It should be mentioned that in agreement with international criteria Colbún's Board is made up of three independent directors (María Ignacia Benítez P., Luz Granier B. and Andrés Lehuedé B), who meet the following requirements:

- Not being employed as a Company's executive for the last five years.
- Not being a member of (or being

affiliated) to a company serving as Colbún's advisor or consultant or as a member of the Company's top management.

- Not being affiliated to a significant Colbún's client or supplier.
- Not holding personal service contracts with the Company or with a member of Colbún's top management.
- Not being a partner or an employee of Colbún's external auditor for the last three years.

## Board of Directors' effectiveness

The average attendance to the Board sessions in 2018 was 89%.

### Appointment and election of Board members

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With respect to the appointment and election of the governing body, any individual who freely administers his assets and is not included in any of the cases expressly indicated in Articles 35 and 36 of the LSA, may be elected Director of the Company. In addition, in order to be an Independent Director, being this understood in agreement with the provisions of Article 50 bis of the LSA, he/she must comply with the conditions established in the said article.

### Required information

The shareholders that wish to promote the nomination of a person to hold a position of Director or to apply directly may submit the following information to the General Manager of the Company:

1. Experience and professional profile of the candidate.
2. Statement by the candidate accepting the appointment and guaranteeing his compliance with all the requirements to fulfill the position established by the law and its regulations.
3. Declaration of the candidate's contractual, business relationships or others with the controlling company, the competitors or suppliers over the last 18 months.

The Company will not be responsible for ensuring the veracity of the information; the Company will only be responsible for receiving the information and making it available to the shareholders through its webpage.

### Delivery of information

The background information shall be sent to the Company's General Manager at least three days in advance of the Shareholders' Meeting holding date, through an email addressed to [rsperez@colbun.cl](mailto:rsperez@colbun.cl) or through a letter delivered at the Company's address.

## Application

The General Manager shall make available to the shareholders on the Company's webpage, at least two days in advance of the Shareholders' Meeting, the information delivered to the Company on the experience and professional profile of the candidates for Director received at such date.

The above does not preclude the possibility of promoting any interested individual to candidate for Director upon the holding of the corresponding Shareholders' Meeting.

## Election

At the Shareholders' Meeting, the shareholders vote to elect the board of directors. At least one Independent Director is appointed in compliance with Article 50 bis of the Law on Stock Corporations. In this regard, the proposals of the shareholders that represent one percent or more of the shares of the Company are received within the corresponding deadlines.

## Term

The Board members will hold office for a three-year period after which the Board shall be completely renewed. The directors may be indefinitely reelected. If there is an opening for a Board member position, the new director will be elected at the upcoming Regular Shareholders' Meeting and in the meantime the Board may designate a substitute.

## 2018 Management of the Directors' Committee

During 2018, the Committee held eleven meetings to review the proposals by the Management to the Board of Directors, in connection with transactions with related parties as per Article 147 of Law 18,046, where it agreed to propose their approval to the Board of Directors inasmuch as they were consistent with the fairness conditions prevailing in the market for this type of transactions or were part of customary transactions within the Company's line of business.

In particular, the Committee provided an opinion regarding the following transactions:

### *Binding power supply offer to Proex SpA.*

Binding offer for the supply of electric power to Proex SpA., including annual consumption, the start of the supply date, the supply contract term and the price offering. This operation was reviewed by the Committee as Mr. Sebastián Fernández C., Development Manager is a shareholder of Proex SpA.

### *Power supply contract to Compañía Minera Zaldívar*

Binding offer for the supply of electric power to Compañía Minera Zaldívar, including the price, the annual consumption, the supply contract term and the start date. This contract provides Compañía Minera Zaldívar with an early termination clause in exchange of a premium payment. It is left in the record that this transaction was reviewed by the Committee because the director Ms. Vivianne Blanlot S. is in turn the Director of Antofagasta Minerals, parent company of Compañía Minera Zaldívar.

### *Contribution or Financing for the Sociedad de Instrucción Primaria (SIP).*

Contribution by \$13,900,000 to the Sociedad de Instrucción Primaria SIP school network to finance the so called "Proyecto de Continuidad Orquesta Cámara Colegio Arturo Toro Amor". The Committee reviewed this operation because a director of the Sociedad de Instrucción Primaria is Magdalena Larraín M., sister of the President Bernardo Larraín M. and cousin of the Directors Mr. Jorge Matte C. and Francisco Matte I.

### *Donations to SOFOFA*

Renewal of the annual membership fee for UF 720, and contribution to the "Centro de Energía y Medioambiente" (Center for the Energy and the Environment") amounting to UF 750. The Committee reviewed this transaction because the Director Mr. Bernardo Larraín M. is in turn the President of the SOFOFA.

### *Asset transfer from the Ovejería project to Colbún S.A.*

Asset transfer from the project "Proyecto Ovejería", a 9MW PMGD solar photovoltaic project located in the district of Til-Til, Metropolitan Region from Inversiones Sud SpA to Colbún S.A.

The Committee reviewed this transaction because Inversiones Sud SpA is an affiliate of Colbún S.A.

### *2018 Budget approval for Fundación Colbún*

The Committee approved the annual budget of Fundación Colbún, which totals USD2,100,059 to fund a series of projects planned for 2018; it is left on the record that the budget falls within the scope of responsibility of Colbún

S.A. Public Affairs' Management, which had been previously approved by the Board.

The Committee reviewed this transaction as it involves a transfer of Colbún S.A funds to Fundación Colbún for the fulfillment of its objectives.

### **Renewal of the diesel transportation contract with Electrogas S.A.**

2-year term renewal of the diesel transport and maintenance contract with Electrogas S.A., which includes an investment to extend the service life of the Concón - Quillota oil pipeline for the supply of Nehuenco Thermolectric power plant in the amount of USD44,000, and an operating cost of USD 343,000.

The Committee reviewed this transaction as it involves related companies.

### **Power supply offer to Kúpfer Hermanos S.A.**

Binding power supply offer to Kúpfer Hermanos S.A, including annual consumption, supply start date, supply contract term and price offering.

This transaction was reviewed by the Committee because the General Manager, Mr. Thomas Keller L., is director of Kúpfer Hermanos S.A.

### **Car sale to Mr. Eduardo Lauer R.**

Sale of a Kia Besta 2.7 of 2002, equipped as ambulance, and which can be solely used for sanitary emergencies; it was sold because Colbún S.A. does not need that type of vehicles.

At the time of the sale, which was closed in \$3 million, the vehicle was fully dismantled.

This transaction was reviewed by the Committee because Mr. Eduardo Lauer R is in turn the Engineering and Project Manager of Colbún S.A.

### **Update of the SOFOFA membership fee.**

Update of the membership fee amount previously approved by the Committee, which increases from UF 720 to UF 1,104 annually. The Committee reviewed this transaction because the Director Mr. Bernardo Larraín M. is in turn the President of the SOFOFA.

### **Diesel supply contract with Compañía de Petróleos de Chile Copec S.A.**

Diesel supply contract with Compañía de Petróleos de Chile Copec S.A., on an annual fixed rate plus a variable rate, in agreement with the diesel requirements. We agreed to that modality as Copec S.A is the only company that may guarantee the delivery rate required by the Candelaria power plant for 10 days in a row, owns the largest truck fleet in the market, and is granted exclusive rights to use the Concón-Quillota oil pipeline if the Nehuenco Complex had to go on diesel; in addition, it owns maritime terminals and significant storage capacity close to Santiago.

The Committee reviewed this transaction as Mr. Andrés Lehuedé is the general manager of AntarChile S.A., the controller of Empresas Copec S.A., which is in turn the parent company of Petróleos de Chile Copec S.A.

### **Advertising Contract and Membership of Acción Empresas**

Advertising contract with Acción Empresas, which in Chile represents the "World Business Council for Sustainable

Development" aimed at promoting its annual event on climate change, and where Colbún will participate as a panel member, measuring the carbon footprint of the event and making available a carbon metering unit to be used by the attendees. The advertising contract is worth \$5 million, and its purpose is to position Colbún brand. Also, and as Colbún has adhered Acción Empresas' "Human Rights Laboratory", the company shall pay \$8 million in membership fees until the first half of 2020.

The Committee reviewed these transactions as Mr. Juan Pablo Schaeffer F. is a main executive of Colbún S.A., and in turn director of Acción Empresas.

### **Membership in the REIN Project and Advertising Contract.**

Payment of the annual membership fee of "Red de Empresas Inclusivas de Chile (REIN)", set up by the SOFOFA Center for Disability with the support of the International Labor Organization, which purpose is to support its members and represent before the authorities the interests and the contributions made by the companies in the formulation of cost-effective public policies, in the areas of social and workplace inclusion of disabled people aimed at promoting practices and incentives that will favor, expand and deepen the opportunities for disabled people who are eligible to work. REIN's 3-year term membership is worth \$450,000 annually, payable during the first quarter of each year. In addition, an advertising contract will be subscribed with SOFOFA during the launching of the initiative "Plataforma Sumando Valor" ("Adding Value"), which makes a geo-referential collection of all the

sustainability initiatives conducted by the corporations throughout Chile. The advertising contract fee amounts to \$ 4 million.

The Committee reviewed these transactions because Mr. Bernardo Larraín Matte is director of Colbún and President of the SOFOFA.

### **Donation to SIP Red de Colegios.**

\$9-million contribution to finance the participation of SIP Red de Colegios chorus (former Sociedad de Instrucción Primaria), in the opera "Cenicienta, Magia y Leyenda", jointly with the Panguipulli chorus and the Symphonic Orchestra of Panguipulli and of other players in a round of concerts in Panguipulli and in Teatro de Las Condes. The purpose of SIP Red de Colegios is to provide education of excellence to children and adolescents from low income families.

The Committee reviewed this transaction because Ms. Magdalena Larraín Matte, sister of Mr. Bernardo Larraín Matte, integrates the SIP Red de Colegios Board of Directors, which, in turn is part of Colbún's controller.

### **Contribution to Fundación Colbún**

Modification of the annual budget of the Foundation which had been previously approved by USD 1,434,769, to enable a more efficient execution of projects relating to its line of business which, as of that date, were being executed by Colbún S.A.

The Committee reviewed this transaction because several advisors of Fundación Colbún are in turn main executives of Colbún S.A.

### **Cession of the Pirque Substation Construction Contract, Maipo-CMPC Line.**

It is about the cession to Colbún S.A. of the EPC construction contract subscribed between CMPC Papeles Cordillera S.A. with the Spanish company PINE, for the compulsory execution of the work "Pirque substation load splitting"; the above pursuant to Decree 418/2017, from the Ministry of Energy. The contract contemplates the right of the facility's owner to assign or transfer the contract to its related companies. The assignment was made because in 1999, Colbún's affiliate, Empresa Eléctrica Industrial S.A., subscribed with CMPC Papeles Cordillera S.A. a framework agreement under which the former is entitled to operate the Maipo-CMPC Line, and hence, CMPC Papeles Cordillera S.A. may assign the EPC construction contract to Empresa Eléctrica Industrial S.A. or to Colbún Transmisión S.A., both affiliates of Colbún S.A.

The Committee reviewed this transaction because both CMPC Papeles Cordillera S.A. and Colbún S.A., parent company of Empresa Eléctrica Industrial S.A. and of Colbún Transmisión S.A., pertain to the same business group.

### **Transfer of Colbún S.A.'s power transmission facilities to the affiliates. Gauss Project.**

New stage in the process of reorganizing transmission assets of the Company (previously approved), which consists of transferring all the assets held by the affiliates Empresa Eléctrica Industrial S.A. and Río Tranquilo S.A., to Colbún Transmisión S.A., including the

transfer of some real estate properties associated with the transmission lines and the substations involved in the operation, in addition to the assignment of Colbún's contractual position in several power supply contracts subscribed with free clients and which are related to the lines and substations contributed.

The Committee reviewed this business reorganization process because Colbún S.A. is the parent company of Colbún Transmisión S.A., Empresa Eléctrica Industrial S.A. and Río Tranquilo S.A.

### **Modification of the power supply contract with CMPC.**

Modification of the power supply contract subscribed in 2017, which purpose is to increase the contracted power by 5%, so that the contracted power grows from 630 GWh/ year to 662 GWh/year; the other contractual clauses will remain unchanged.

This transaction was reviewed by the Committee as it involves companies that pertain to the same business group.

### **Commercial current account contracts between related companies.**

Updating of the contracts that substantiate customary transactions between Colbún S.A. and its Chilean affiliates, in agreement with the best market practices and the OECD's transfer price models prior to the corresponding review by Price WaterhouseCoopers Consultores, Auditores & Cía. Ltda. of the various activities conducted between the parent company (Colbún S.A.) and its various affiliates. This transaction was reviewed by the

Committee as it involves companies that pertain to the same business group.

### **Contrato de Mantenimiento con Orión Power**

Contract involving the operation and maintenance of Ovejería Photovoltaic power plant, which after a tender process was awarded to Orion Power S.A., company that fulfilled the required technical standards and submitted the best economic offer. The contract price amounts to UF 3,540 plus IVA and extends for a 3-year period.

The Committee reviewed this transaction, as the main shareholder of Orión Power S.A. is related within the second degree of affinity to the Director Mr. Bernardo Larraín M.

### **In addition, the Directors' Committee conducted the following activities in 2018:**

- Reviewed the Company's financial statements as at December 31, 2017;
- Met the representatives of the external auditing company Ernst & Young to discuss the scope of the services provided through 2017, accounting criteria used and the results of the audit as at December 31, 2017;

- Reported the activities conducted by the Committee during 2017 and issued the Annual Management Report.

- Evaluated the Management's proposals to designate the external auditing companies for 2018, and agreed to recommend the Board of Directors to propose the Shareholders' Committee to appoint as external auditors for the 2018 management period in the first place KPMG Auditores Consultores Ltda., and in the second place EY Servicios Profesionales de Auditoría y Asesorías SpA.;

- Reviewed the remunerations and the compensation plans of the Company's managers, executives and workers;

- Reviewed the background information and agreed to propose the Board of Directors to approve the external auditing company KPMG so that it: (a) verifies the information to be submitted to the Dow Jones Sustainability Index (DJSI), (b) verifies the information for the Pro-Pyme stamp, and (c) analyzes the transfer price of the services provided by Colbún to Fénix, where KPMG will be charged with auditing the renewable energy services and with conducting the sustainability audit.

In 2018, the Directors' Committee did not retain any consulting services or incur any expenses.

## Relevant facts reported to the CMF

Summary of the Relevant Facts reported to the Commission for the Financial Market in 2018.

**1.** The Board informed that in Regular Shareholders' Meeting held on March 28, 2018, agreement was made to call the shareholders of the Company to Regular Shareholders' Meeting to be held on April 27, 2018 to submit the following matters to the shareholders' consideration:

- Review of the Company's situation and report by the External Auditors and the Account Inspectors;
- Approval of the Annual Report and Financial Statements as of December 31, 2017;
- Profit and dividend distribution;
- Approval of the company's investment and financing policy;
- Profit and dividend policies and procedures;
- Appointment of the External Auditors for the 2018 management period;
- Appointment of account inspectors and their remunerations;
- Determination of the Board members' compensations;
- Directors' Committee activity report;
- Determination of the Directors' Committee compensations and budget;
- Information on Board agreements relating to acts and contracts ruled by Title XVI of Law 18,046

- Designation of the newspaper where shareholders' meeting calls should be published; and
- Other matters of interest to the Company that must be decided by the Board.

In addition, it was reported that the Board of Directors agreed to propose to the Ordinary Shareholders' Meeting that US\$270,984,893.91, equivalent to US\$0.01214 per share are taken from the 2017 Distributable Net Income, and allocated to the payment of a final and definitive dividend; this amount, along with the provisional dividend in the amount of US\$ 58,220,076.83, equivalent to US\$0,00332 per share, approved by the Board of Directors on November 28, 2017 and paid on December 20, 2017, would account for a distribution of 100% of the Distributable Net Income. It was also reported that the dividend proposed would be payable in pesos, national currency, at the exchange rate known as "observed dollar", published on the Official Gazette on May 2, 2018 through a bank deposit or an order check, in keeping with the regular procedures applied by the Company to the payment of dividends.

It was also reported that the Financial Statements of the Company as of December 31, 2017 would be available on the Company website ([www.colbun.cl](http://www.colbun.cl)).

Finally, it was reported that the Annual Report would be available to the shareholders and the general public on the same website, as from April 11, 2018.

**2.** On August 1, 2018, the Regular Shareholders' meeting informed that during the session held on July 31, 2018, the director Mr. Arturo Mackenna Iñiguez had submitted his resignation to the Board and that in the same meeting, Mr. Hernan Rodríguez Wilson had been appointed as his substitute until the next Regular Shareholders' meeting, time at which the new Company's Board shall be elected.

**3.** On November 28, 2018 the Board reported that in the meeting held on November 27, 2018, it had agreed to distribute a provisional dividend against withheld profits available to the Company from the period ended December 31, 2018, for the total amount of US\$84,235,885, corresponding to US\$ 0.00480 per share. The dividend would be paid from December 19, 2018 to the shareowners whose shares were registered with the Shareholders' Registry as of the fifth business day prior to such date.

## Collaborative associations and organizations we are part of

102-12, 102-13

### Collaborative organizations in which we participate in Chile, 2018:

Organization	Description	Admission date
Water Disclosure Project (Water CDP) www.cdp.net/water	Promotes the monitoring and the measurement in the global use of water.	2011
Programa Bota por mi Vida www.fundacionsanjose.cl	Paper recycling at the offices of the Metropolitan Region and the fifth region in Chile.	2011
Carbon Disclosure Project (CDP) www.cdp.net	Promotes the measurement of carbon emissions from private companies and government entities, at worldwide level.	2009
Concurso Junior del Agua www.juniordelagua.cl	It seeks to increase the interest, creativity and knowledge among high school students to promote water awareness in Chile	2009

**Note: Colbún S.A. participates these initiatives in a voluntary manner**

Organization	Description	Participation level	Admission date	Amount (US\$)
Asociación Chilena de Energías Renovables ACERA www.acera.cl	Promotes a regulatory framework that will allow NCRE to participate in equal conditions against other traditional sources.	Partners	2017	13,658
Club de Innovación (Redes de Innovación LTDA) www.clubdeinnovación.cl	It seeks to articulate the innovation processes among companies by means of connection, collaboration and co-creation	Partners	2016	8,565
Fundación Chilena Del Pacífico www.funpacifico.cl	Articulates integration pathways to the Pacific.	Partners	2016	8,293
Red de PACTO GLOBAL (Universidad Andrés Bello)	The Global Compact Network (Pacto Global) seeks to promote sustainable growth and the social responsibility of companies, which commit to adopt the ten universal principles in their daily actions,	Partners, BoD and work committees	2015	4,867
Corporación Regional de Desarrollo del Biobío www.desarrollabiobio.cl	It seeks to project itself towards the community as the promoter of public and private alliances to provide for the strategic guidelines and the monitoring of various development strategies	Partners, BoD and work committees	2015	0
Corporación Municipal de Desarrollo Coronel CORCORONEL	It seeks to facilitate the social work of the companies from the district of Coronel	Partners, BoD and work committees	2015	5,333
Cámara De Comercio E Industrias de Valdivia CCIV www.cciv.cl	Contributes to the well-being of the Chilean people by developing the construction sector and promoting the private and public sector initiatives, as agents of progress and equity.	Partners	2015	1,233
Cámara De Comercio E Industrias de Valdivia CCIV www.cciv.cl	Entity that represents the union interests of the business and industrial sector in Valdivia.	Partners	2015	1,582
Asociación Gremial de Generadoras De Chile AGG www.generadoras.cl	It promotes the development of electricity companies in Chile.	Partners, BoD and work committees	2011	300,030
Acción Empresas ACCIÓN www.accionempresas.cl	It promotes CSR and sustainable development work in Chile.	Partners, BoD, work committees, sponsoring of events	2011	10,632
Laboratorio Derechos Humanos (Acción Empresas) www.accionempresas.cl	Collaborative learning multi-stakeholder space that seeks to reinforce the respect for Human Rights by the corporations.	Partners	2018	5,062
Asociación De Industriales Del Centro ASICENT www.asicent.cl	It seeks to collaborate with the development of its associates and with the progress of the Maule Region.	Partners	2011	1,021

Organization	Description	Participation level	Admission date	Amount (US\$)
Cámara De La Producción y Comercio de Concepción CPCC www.cpcc.cl	It fosters the productive development of the Biobío Region.	Partners	2010	4,089
Corporación Industrial para el Desarrollo Regional del Biobío CIDERE www.ciderebiobio.cl	It works for the development of the Biobío Region.	Partners, BoD and innovation and CSR work groups	2010	25,708
Corporación para el Desarrollo de la Región de Los Ríos CODEPROVAL www.codeproval.cl	Corporation that works across multiple sectors and fosters the growth of Los Ríos Region	Partners and sponsoring of events	2010	11,389
Instituto de Ingenieros de Chile www.iing.cl	It seeks to contribute to the scientific and engineering development in Chile	Partners	2010	1,286
Sociedad de Fomento Fabril SOFOFA www.sofofa.cl	It promotes and disseminates best business practices	Socios y consejeros	2009	75,891
Centro de Medio Ambiente y Energía SOFOFA www.sofofa.cl	It designs, develops and implements pilot projects aimed at setting up cost-effective environmental and energy policies of a very high technical level.	Partners		8,337
Red Empresas Inclusivas REIN www.empresainclusiva.cl	It promotes the integration of handicapped people to the workplace.	Partners	2018	0
Corporación De Desarrollo Del Valle De Aconcagua PROACONCAGUA www.proaconcagua.cl	It promotes the sustainable development of the Aconcagua Valley in the Valparaiso Region.	Partners and BoD	2009	12,901
Centro de Líderes Empresariales para el Cambio Climático CLG (Universidad de Chile) www.clgchile.cl	It promotes policies and actions to address climate change in Chile.	Partners and BoD	2009	8,570
Centro de Estudios Públicos CEP www.cepchile.cl	Its purpose is the study and dissemination of values, principles and institutions that serve as the basis for a free society in Chile	Partners	2008	18,248
Instituto Chileno de Administración Racional de Empresas ICARE www.icare.cl	It promotes entrepreneurial excellence in Chile.	Partners	2008	1,263
Iniciativa de Paridad de Género (IPG) www.iniciativaparidadgenero.cl	It seeks to reduce gender gaps and to increase the economic participation and the progress of women in the Chilean labor market.	Partners, Executive Committee and Technical work group	2018	0
Prohumana www.prohumana.cl	It seeks to promote greater levels of awareness for the sustainable human development.	Partners	2018	3,180
World Energy Council Chilew (WEC) www.wec-chile.cl	It addresses the most relevant issues of the energy industry in Chile.	Partners and BoD	2018	7,197
Camara Chilena Norteamericana (AMCHAM) www.amchamchile.cl	It seeks to promote free trade, investment and a full integration between Chile and the United States, creating value to our partners and the society in full.	Partners	2018	4,410

### Unions and business associations in which we participate in Peru, 2018:

Organization	Description	Participation level	Admission date
Sociedad Nacional de Minería, Petróleo y Energía (SNMPE)	Trade union that gathers the electricity industry in Peru.	Partners and representatives of the generation companies' subcommittee	2013
Club de la Energía, Hay Group	International consultancy firm that works with Company leaders to enable the implementation of their strategies.	Member of the "Energy Club "	2012
Cámara de Comercio Americana (AmCham) www.amcham.org.pe	Promotes the free trade system, facilitating the trading, investment and exchange of goods and services between Peru and the United States.	Partners	2011
Asociación de Buenos Empleadores (ABE) de la Cámara Americana de Comercio	Institution pertaining to the American Chamber of Commerce that promotes social labor responsibility and good people's management practices.	Promoting partner	2017



## Human Rights Due Diligence

(412-1)

Risk Scenario	Description	Colbún's Statement	Due Diligence Results 2018
<b>1. Freedom of Association.</b>	Every employee may join a union, at the corporate and at the power plants.	We respect the freedom of association, union freedom and the right to collective bargaining.	<ul style="list-style-type: none"> <li>• 5 unions and other 4 collective bargaining agreements in Chile (45% of the workers). In Peru there are no unions.</li> <li>• 1 successful negotiation in Chile in 2018.</li> <li>• We have not had strikes in Chile, nor in Peru.</li> <li>• 80% of Colbún's contractors in Chile consider that there are not obstacles to join unions freely (11% do not know).</li> </ul>
<b>2. Occupational Safety and Health.</b>	Ensure the safety and health of its workers in the performance of their tasks.	We foster working conditions that allow our workers and contractors to perform in healthy, safe and reliable working environments, managing risks, training and demanding the skills required from the people that work with us.	<ul style="list-style-type: none"> <li>• 0.8 was the index of Frequency of accidents at Colbún in 2018, including our own workers and contractors in Chile and Peru, the lowest value in its history.</li> <li>• From all the workers who underwent their occupational health test, 87.4% were in the "fit" condition".</li> <li>• 94% of the programmed workers in Chile had their preventative health test in 2018; 100% in Peru.</li> <li>• 93% of the Colbún's contractors in Chile consider that Colbún takes care of their safety and health.</li> <li>• 96% of Colbún's contractors in Chile deems that Colbún takes care of their safety and health.</li> </ul>
<b>3. No workplace discrimination.</b>	Colbún rejects the discrimination based on race, color, sex, religion, gender, political opinion or any other type of discrimination.	We foster an environment of inclusion, promoting the diversity of people and ideas, while rejecting any type of discrimination based on sex, age, religion, gender, ethnicity, race, sexual orientation, gender identity, political tendency or any other condition. We favor fair treatment, we act with respect, responsibility, equity and transparency in our work relationships	<ul style="list-style-type: none"> <li>• 18% of Colbún's personnel in Chile are women, of which 35% work at the headquarters; 22% of the personnel in Peru are women.</li> <li>• More than 92% of the workers in Chile consider that at Colbún there is a fair treatment, regardless of sexual orientation, age, sex or social condition (in the average of the best companies in Chile); 93% in Peru.</li> <li>• 6.4% is the salary gap between women and men in Chile; 16% in Peru.</li> <li>• 5 people with disability credentials in Chile.</li> <li>• 0 allegations in Chile and Peru in the "diversity" category in 2018.</li> <li>• 17 foreign workers in Chile.</li> <li>• In November 2017, the Board requested the management to develop an Integrity Plan, including as one of its main axes Diversity and Workplace Inclusion. Within this framework, Colbún conducted the first Diversity Survey and lectures were organized at the parent company and at all the power plants in Chile and Peru to promote diversity and inclusion.</li> <li>• In 2018, Colbún set up the Gender Equality Workgroup, which lifted barriers and proposed an Action Plan for gender equality.</li> </ul>
<b>4. No forced labor. No child labor.</b>	The right to rest, leisure time, overtime payment, vacations. Minors under the age of 18 may not work, except if specific conditions are met.	We foster unrestricted respect to labor law, inasmuch as we disapprove forced, child, or any other type of labor that violates the dignity of people.	<ul style="list-style-type: none"> <li>• 89% of the workers in Chile took at least 10 days of vacation during 2018.</li> <li>• In the cases in which out of necessity or force majeure it's mandatory to work during days which for the average worker are for rest, these days are paid with a higher surcharge than the one that the labor legislation indicates.</li> <li>• 93% of Colbún's contractors in Chile consider that in their own company the regulation of minimum age to work is obeyed and 87% consider that the working hours are respected.</li> </ul>
<b>5. Right to be heard and to be informed.</b>	Colbún provides early and transparent information to the communities.	Every time we carry out a project, we build relationships with the surrounding communities for the purpose of generating trust, opportunities and future. This is a relationship that we maintain during the entire installation operation, conversing with the communities on a permanent basis.	<ul style="list-style-type: none"> <li>• Colbún has set up a dedicated team to encourage good community relations with the neighbors of each power plant, both in Chile and Peru.</li> <li>• 913 calls received on our Compliance Hotline during 2018 of which 9 were complaints. In Perú we received 4 formal complaints.</li> <li>• 10 town hall meetings in 14 districts in Chile and Peru during 2018.</li> <li>• 17.296 visits to our facilities in Chile during 2018.</li> <li>• 80% of the local stakeholders with whom Colbún relates to at the power plants consider that the company listens to community concerns and suggestions; 84% consider that the company meets its commitments with the community; 76% consider that the company builds trust relationships; 70% consider that Colbún timely informs its activities and projects; 76% consider that the Company provides timely response to their questions or requirements.</li> </ul>

Risk Scenario	Description	Colbún's Statement	Due Diligence Results 2018
<b>6. Community safety.</b>	Colbún safeguards community safety. No coercion or force may be used against the community.	We strive to adopt the measures to protect people's health from the risks that result from our operations.	<ul style="list-style-type: none"> <li>• The project "Seguridad con Comunidades en Centrales" (Safety of the Communities near the Power Plants) of the Sustainability Work group, carried out a detailed assessment of the safety risks to the communities adjacent to Colbún's plants in Chile and Peru in 2017. Those pressing risks such as sudden water discharges and channel falls were managed throughout 2018.</li> <li>(For further details, see Chapter 4, section "Management of Public Safety Issues in our communities".)</li> </ul>
<b>7. Water and Environment.</b>	Safe access to basic community needs.	In exercising our water rights, we consider sustainability criteria within the legal framework in force. We promote a healthy, balanced and safe environment during our operations, seeking the protection of the environment for the future generations. In addition, hydroelectric power plants do not use water or restrict human consumption.	<ul style="list-style-type: none"> <li>• Regarding the level of Colbún Reservoir, during the summers of 2017, 2018 and 2019 Colbún carried out a voluntary, temporary and experimental plan to render the use of the waters of the reservoir compatible with tourist purposes, considering that the reservoir was primarily built to generate energy, and also taking into consideration the existing irrigation restitution obligations. In the case of Machicura reservoir, in alliance with the Municipality of Colbún, the Machicura resort was implemented, a public beach that promotes tourism in the zone.</li> <li>• Regarding the level of Lake Chapo, Colbún has built some works to mitigate the effects that worry the neighbors and sent a proposal to the National Electricity Coordinator to set a new minimum water level for operation starting by the end of 2019.</li> <li>• 56% of the local stakeholders with whom Colbún relates to at the power plants consider that the company is responsible in the use of natural resources (30% do not know).</li> <li>• The Fenix power plant supplies close to 400,000 m3/year of desalinated and potable water to the Chilca community.</li> <li>• The reverse osmosis plant of the Nehuenco Complex allows up to 50% of water savings in periods of drought.</li> <li>• Colbún voluntarily subscribed to the Online Monitoring System launched by the Superintendence of the Environment (SMA) for thermoelectric plants.</li> <li>• The Candelaria power plant conducted a participative noise monitoring with the community.</li> <li>• The Fenix power plant in Peru carries out annual participative monitoring with representatives of different organizations from Las Salinas and Chilca, where an outsourced provider trains community volunteers in topics of their interest to have detailed and transparent monitoring.</li> </ul>
<b>8. Corruption and Ethics.</b>	Colbún promotes the principles of Good Corporate Governance.	We recognize corruption as one of the factors that undermines institutions and democracy, ethical values and justice and the wellbeing and development of society. For this reason, we reject corruption in all its forms. We have at our disposal a line for direct and anonymous complaints related to the compliance of the rules of ethical conduct. This mechanism is fully available to be used by our workers and third parties always ensuring confidentiality, as described above	<ul style="list-style-type: none"> <li>• 20 complaints received and managed through the Hotline in Chile; 9 in Peru.</li> <li>• 91% of the workers in Chile consider that managers exercise business in an honest and ethical manner; 87% consider that people avoid using dishonest means to achieve their goals.</li> <li>• 54% of the local stakeholders which Colbún relates at the power plants in Chile considers that Colbún is an ethical organization that is not involved in fraud, bribery nor acts of corruption (29% doesn't know).</li> <li>• 89% of the contractors in Chile consider that Colbún workers are ethical, transparent and reliable; 89% consider that Colbún is an ethical organization not involved in fraud, bribery or acts of corruption; and 67% consider that Colbún has confidential complaint channels (25% doesn't know).</li> </ul>
<b>9. Land rights.</b>	Colbún protects the institutions, property and culture of the people.	We respect the property rights of third parties over lands surrounding our projects, according to the legislation in force. In those cases when our projects require relocating people, these relocations will be carried out according to the law, making our best efforts to reach an agreement with all the parties.	<ul style="list-style-type: none"> <li>• In 2018, projects under development did not require the relocation of people.</li> <li>• In the Chapo Lake, and upon a request from the local neighbors' association which took into consideration the gradual decrease in precipitations over the past years, by mid-2018 Colbún proposed the National Electricity Coordinator to establish a higher minimum level for the operation of the Chapo Lake -where the Canutillar power plant operates, in order to generate the conditions for a better connectivity and development of the local tourism. So, Colbún, the Chapo Lake Neighbors' Association and the Municipality of Puerto Montt promoted the creation of the Chapo Lake Tourism Work group, which, in addition to these three parties, is attended by officials from the regional government and multiple social organizations from the zone.</li> </ul>

## 7.3 Economic Performance and Governance

## Taxation

Companies in Chile must fully comply with their tax obligations stemming from the business activities they undertake as corporations and which are hence subject to the payment of levies. These tax liabilities are clearly defined in the various laws governing the matter, for example, the Tax Code, the Income Tax Law (Statutory Decree 824), VAT Law (Statutory Decree 825), etc.

Therefore, Colbún fully meets the rules and regulations in force and there are no better means to develop a tax policy/strategy or guidelines than the law.

Colbún publishes quarterly Financial Statements and an Annual Report. These public reports sent to the Commission for the Financial Market (CMF, per its acronym in Spanish) contain an explanation of the tax policy and provide further detail on the Effective Tax Rate and the Tax Rate Reconciliation.

In addition, we send tax documentation to the regulatory service (IRS: Internal Revenue Service) broken down pursuant to the current legal requirements on a monthly and annual basis.

Fenix Power Perú S.A. fully meets the laws and regulations applicable hereto; and sends monthly and annual tax information to the Peruvian Regulatory Authority (SUNAT: Superintendencia Nacional de Administración Tributaria) appropriately broken down and containing all the details required by the applicable laws.

## Crime prevention model

Our company has implemented a Crime Prevention Model within the framework of Law 20,393 on Criminal Liability of Corporations that seeks to prevent the risk of bribery, money laundering, financing of terrorism and handling of stolen goods.

### Information and training on anti-corruption procedures in the organization

(205-2)

	Board of Directors	Workers
Total number of members	9	971
Members informed of anti-corruption procedures	9	971
% of members informed of anti-corruption	100%	100%
Members trained in anti-corruption procedures	9	348
% of members trained in anti-corruption	100%	36%

## Risk management

102-15, 102-30

### A. Risk management policy

Our Risk Management strategy is aimed at reinforcing the principles of stability and sustainability, identifying and managing the sources of uncertainty that could or may affect the Company.

Comprehensive risk management includes identifying, measuring, analyzing, mitigating and controlling the various risks faced by the different management areas of the Company, and estimating their impact on the Company's consolidated position, its follow-up and control over time. This process involves both Colbún's top management and the areas that are directly charged with managing the risks.

Tolerable risk levels, risk measurement metrics and the frequency of risk analyses are policies regulated by the Company's Board of Directors.

The risk management function is performed by the General Management and each Company division and management area with the support of the Corporate Risk Management Division and is supervised, followed-up and coordinated by the Risk and Sustainability Committee.

### B. Risk factors

The Company's activities are exposed to diverse risks that have been classified in business and financial risks.

#### B.1. Power business risks

##### B.1.1. Hydrological Risk

To be able to meet the contracts under dry hydrological conditions, Colbún must operate its combined cycle natural gas or diesel thermoelectric power plants, operate its supporting thermoelectric power plants or otherwise purchase energy on the spot market. This situation could increase Colbún's costs, raising the variability of its results based on the hydrological conditions.

The Company's exposure to hydrological risks is reasonably mitigated through a commercial policy whose purpose is to maintain a balance between the competitive base generation (hydraulic in a mild to dry year, and coal-fired and cost-efficient natural gas power plants, other cost-efficient renewable energies, duly supplemented by other generation sources as a result of their intermittence and volatility) and its commercial commitments. Under conditions of extreme and repeated droughts the eventual scarcity of water for refrigeration would affect the combined cycle generating capacity. Colbún has built a Reverse Osmosis Plant that allows reducing by 50% the water used in cooling down the Nehuenco combined cycle plant. The plant was completed in May 2017 and was commissioned during the third quarter of 2017.

In Peru, Colbún owns a combined cycle power plant and its business policy is aimed at selling such base energy through mid and long-term contracts. The exposure to dry hydrological

conditions is limited as it would only have an impact under eventual operational failures that force the company to resort to the spot market. In addition, the Peruvian power market offers an efficient thermal supply and enough natural gas availability.

##### B.1.2. Fuel price risks

In Chile, in situations of low hydraulic generation, Colbún must resort mainly to its thermoelectric power plants or purchase energy on the spot market at marginal costs. The above entails some risks due to the variation of international fuel prices. Part of this risk is mitigated with contracts which sale prices are indexed to fuel price variations. In addition, the Company has engaged in hedging transactions involving several derivative instruments, such as call and put options, among others, to provide for the remaining exposure, if any. On the contrary, in situations of high-water availability, the Company may find itself in a surplus situation on the spot market, which price is partly determined by the fuel prices.

In Peru, the cost of natural gas is less dependent on international prices due to a large domestic supply of this hydrocarbon, which allows limiting the exposure to this risk.

Just like in Chile, the proportion exposed to the variation of international prices is mitigated through indexation formulas of energy sale contracts. In consequence, our exposure to fuel price variations is partly mitigated.

### B.1.3. Fuel supply risks

In connection with the supply of liquid fuels, in Chile the Company holds agreements with suppliers and has own storage capacity that allows it high reliability in the availability of this type of fuel.

Regarding natural gas supply in Chile, Colbún has subscribed medium term contracts with ERSA and Metrogas, and for the long-term it is worth mentioning the new contract with ERSA for liquefied natural gas and reserved re-gasification capacity in effect from 2018 to 2030, and which will allow Colbún to have natural gas supply for its Nehuenco Complex. In addition, gas supply contracts have been signed with Argentine producers, which will allow Colbún to have access to the gas surpluses produced in the neighboring country.

In Peru, Fenix power plant has entered into long-term contracts with the consortium ECL88 (Pluspetrol, Pluspetrol Camisea, Hunt, SK, Sonatrach, Tecpetrol and Repsol) and into gas transport agreements with TGP.

With respect to coal purchases for Santa Maria's unit I thermoelectric power plant (the last in April 2018), the company has called to new tenders, inviting renown international vendors and awarding the supply to competitive and financially sound companies. The above is in line with an early purchase and an inventory management policy so as to substantially mitigate the risk of running out of this fuel.

### B.1.4. Equipment failures and maintenance risks

The availability and the reliability of Colbún's generation power plants and transmission facilities are fundamental for the business. Therefore, Colbún's policy reinforces scheduled, preventative and predictive maintenance of its equipment, pursuant to the manufacturers' recommendations, and holds insurance policies for all its physical assets including coverage for physical damages and business interruption losses.

### B.1.5. Project construction risks

The development of new projects may be affected by factors such as: delayed permitting, regulatory changes, litigations, higher equipment or labor prices, opposition from local and international stakeholders, unforeseen geographic conditions, natural disasters, accidents or other unforeseen events.

The Company's exposure to this type of risks is managed through a commercial policy that contemplates the effects of eventual project delays. Alternatively, term and construction cost estimates include certain allowances. In addition, the Company's exposure to this risk is partially covered by the contracting of "All Construction Risks" insurance policies that provide both for physical damages and for loss of income relating to the delayed commissioning as a result of a loss, both with standard deductibles for this type of insurance policies.

The sectoral companies face a very challenging power market, as

stakeholders from the neighboring communities and NGOs become more and more active in the search of more participation and relevance. As part of this complexity, the projects must go through long and uncertain environmental approval processes, followed by litigations of the same characteristics. The above has brought about a reduction in the number of large size projects.

Colbún has strived to harmoniously integrate the social and environmental dimensions to the development of its projects. The Company has developed a community relationship model enabling it to work with neighboring communities and the society in general starting an early citizen involvement and a confidence building process in the early stages that extends throughout the project life.

### B.1.6. Regulatory risks

Regulatory stability is fundamental for a sector such as power generation, where investment projects involve long development, execution and return on investment times. Colbún deems that regulatory changes must be made considering the complexities of the power system and the adequate investment incentives.

It is important to have a regulation that provides the industry players with clear and transparent rules.

In Chile, the current government is introducing regulatory changes that have been either inherited from the previous government or have been implemented during this mandate. Depending on how these changes are implemented they could entail

opportunities or risks to the Company.

Epecially relevant are the draft laws being currently discussed in Congress about the (i) the Water Code Reform, (ii) the law that promotes regionalization (iii) the draft law that creates the Ministry of Indigenous peoples, and (iv) the draft law that creates the National Council and the Aboriginal Peoples Council and (v) the Law on Biodiversity and Protected Areas. In addition, the Ministry of Energy has announced the establishment of a "Miscellaneous Law" that seeks to improve some aspects of the Transmission Law passed in 2016. The Ministry has not yet announced the content of this Law.

Similarly, the National Energy Commission and the Ministry of Energy have set up work groups to develop regulatory tasks, among them the Transmission System Regulation and the Transmission Planning work groups. Also, the Ministry is going ahead with its efforts to (i) set up a table to remove coal-fired operations from the electricity matrix, (ii) apply an energy route 2018-2022 in line with the Long-Term Energy Policy for the country (2050) driven by the previous government and (iii) implement the Annual Transmission Expansion Plan for 2018.

In Perú, by the end of September 2018, the Ministry of Energy and Mines (MINEM) approved new regulatory provisions that allow modifying the contracts between generation and distribution companies in terms of the contracted capacity, terms and/or prices agreed between generators and distributors. In addition, the MINEM is developing a procedure for the supervision and oversight of the natural gas rationing mechanism and is going

ahead with the discussion of the draft law that addresses the declaration of gas prices. The balanced development of the electricity market over the coming years -both in Chile and Peru - will largely rely on the quality of these regulations and the signals provided by the authority.

#### **B.1.7. Risk in the variation of electric power demand/supply and sale price**

The forecasted electric power demand is very relevant to determine the market price.

In Chile lower than forecasted growth in demand, the reduction in fuel prices and the increased entry of variable renewable solar and wind energy projects pushed down the short-term energy price (marginal cost) over the last few years.

Regarding to long-term prices, power supply tenders to regulated clients concluded in August 2016 and October 2017 and translated in a significant reduction of the prices presented and awarded, reflecting the greater competition in this market and the impact of the introduction of new technologies, mainly solar and wind, with a significant reduction in costs due to the massification of these energies. Although we may expect the factors that trigger this competition and the upward price trends to prevail in the future, it is hard to determine their precise impact on long-term energy prices.

In addition, given the difference in the prices between free and regulated clients, some regulated clients may want to turn into free clients. The above is mainly due to power legislation allows clients with a connected capacity from 500 kW to 5,000 kW to be classified

as regulated or free clients. Colbún owns some of the most efficient power generation plants in the Chilean system, and therefore, it can provide its clients with competitive conditions.

In Peru, a temporary unbalance between the supply and the demand has also been observed due mainly to the increase in efficient supply (hydroelectric and natural gas power plants).

The growth experienced by NCRE in the Chilean market (and potentially the Peruvian market), namely solar and wind power may entail integration costs and bring about impacts on the operational conditions of the whole power system, moreover in absence of a complementary services market that properly remunerates the services required to handle the variability of the above-mentioned generation sources.

### **B.2 Financial risks**

They are associated with the inability to perform transactions or meeting commitments from operating activities due to lack of funds, interest rate and exchange rate variations, bankruptcy of our counterparts or other financial market variables that may affect Colbún's equity.

#### **B.2.1 Exchange rate risk**

The exchange rate risk is due mainly to the exposure to currency variations coming from two sources. The first source of exposure comes from revenues, costs and investments denominated in currencies other than the Company's functional currency (U.S. dollar). The second source of risk is the accounting mismatch of assets and liabilities of the Statement of Financial

Position denominated in currencies other than the Company's functional currency.

Our exposure to the variation of currencies other than the U.S. dollar is quite restricted as virtually all Company's sales are either stated in dollars or indexed to the dollar. Likewise, the main costs relate to the purchase of diesel oil, natural gas and coal, which incorporate price setting formulas based on international prices stated in dollars. In connection with capital disbursements, the Company incorporates indexing factors to its contracts with suppliers and resorts to the use of derivatives to limit its expenses in currencies other than the U.S. dollar.

The Company mitigates its exposure to the mismatch of accounting accounts through the application of a maximum mismatch of assets and liabilities for structural entries stated in currencies other than the dollar. For purposes of the above, Colbún maintains a relevant proportion of its cash surplus in dollars and resorts to derivatives such as swaps and forwards to manage exchange rate risks.

### B.2.2 Interest rate risk

Interest rate risk is mainly related to the variation of the interest rate value of future flows stated at variable exchange rate, and to the variation in the fair value of assets and liabilities stated at a fixed interest rate that are recorded at fair value. To mitigate this risk, the Company uses fixed interest rate swaps.

The Company's financial debt, including the effect of interest rate derivatives contracted is as follows:

### Financial debt profile

Interest rate	Dec-17	Dec-18
Fidex	100%	100%
Variable	0%	0%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

As of December 31, 2018, financial debt is denominated 100% by fixed rate.

### B.2.3 Credit risk

The Company is exposed to credit risk as a result of a counterpart's failure to meet its contractual obligations thereby causing an economic or financial loss. Historically, all the counterparts that hold energy supply commitments with Colbún have timely met their obligations.

In connection with funds placed in treasury and derivative transactions, Colbún engages with entities having high credit ratings. In addition, the Company has established participation limits on each counterpart, which are approved by the Board of Directors and reviewed on a periodic basis.

As of December 31, 2018, cash surplus investments are held in mutual funds (of our bank affiliates) and term deposits in national and international banks.

The former are short term mutual funds with a term not exceeding 90 days known as "money market".

Our clients' risk rating information is disclosed in note 11.b of the Financial Statements.

### B.2.4 Liquidity risk

This risk is due mainly to the need for cash funds to meet investment and business expense commitments, debt maturities, etc. These cash disbursements are financed with own resources coming from Colbún's regular business activities and from the contracting of credit lines that ensure the availability of enough funds to face the needs foreseen for a period of time.

As of December 31, 2018, Colbún holds cash surpluses by approximately US\$788 million, invested in 108-day term deposits (including term deposits exceeding 90 day-terms, the latter are recorded under "Other Current Financial Assets" in the Consolidated Financial Statements) and in short-term mutual funds with a holding period of less than 90 days. Also, the Company has additional liquidity sources, namely: (i) two bond lines registered with the local market by a total amount of UF 7 million and (ii) uncommitted lines for approximately US\$150 million.

Over the next twelve months, the Company shall pay approximately US\$119 million on financial interests and debt amortization. This interest and amortization balances are expected to be covered with the generation of own cash flows.

As of December 31, 2018, at a national level Colbún was rated AA- by Fitch Ratings and AA by Standard & Poor's (S&P), both with stable perspectives. At an international level, the company was rated Baa2 by Moody's, BBB by S&P and BBB by Fitch Ratings, all with stable perspectives.



Similarly, at December 31, 2018, Fenix was rated Baa3 by Moody's, BBB- by Standard and Poor's (S&P) and BBB- by Fitch Ratings, all with stable perspectives.

Consequently, we deem that the Company's liquidity risk is currently limited.

For more information on the contractual maturity of the main financial liabilities see note 22.c.2 of the Financial Statements.

### B.2.5 Risk measurement

The Company periodically conducts analyses and measurements of its exposure to different risk variables, as presented in previous paragraphs. The risk management function is performed by a Risk Committee with the support of the Corporate Risk Management Division in coordination with the other Company divisions.

In connection with business risks, especially those relating to variations in commodity prices, Colbún has implemented mitigation measures consisting of indexation factors to energy sale contracts and hedge derivatives to provide for an eventual exposure. Hence, no sensitivity analyses are submitted.

In order to mitigate equipment failure or project construction risks, the Company has retained insurance policies that provide for physical damages, business interruption losses and loss of income resulting from delays in the commissioning of a project. So, this risk is reasonably limited.

Regarding financial risks, in order to measure its exposure Colbún prepares sensitivity and value-at-risk analyses to track the potential losses assumed by the Company in the event the exposure finally materializes.

The exchange rate risk is limited since the main Company flows (revenues, costs and capital expenditures) are either directly denominated in or indexed to the dollar.

The exposure to the mismatch of accounting accounts is mitigated through the application of a policy of maximum mismatch of assets and liabilities for structural entries stated in currencies other than the dollar. Based on the above, at December 31, 2018 the Company's exposure to this risk translates into a potential impact of approximately US\$4.3 million from the exchange rate difference, in quarterly terms, based on a sensitivity analysis with 95% of reliability.

No interest rate variation risk exists, as 100% of the Company's financial debt is contracted at fixed rate.

Credit risk is quite limited as Colbún only engages with national and international banking counterparts with high credit ratings and has established maximum participation limits on each counterpart that limit the specific concentration by these institutions. In the case of banks, local institutions have a local risk rating equal to or greater than BBB and the foreign entities have an international risk rating of investment degree.

At the closing of the period, the financial institution that holds the greatest share of cash surplus reaches 23%. With

respect to derivative instruments, Colbún's international counterparts show a risk equivalent to BBB+ or greater and the national counterparts have a local risk rating equal to BBB+ or greater. It should be mentioned that with respect to derivative instruments, no counterpart concentrates more than 21% in notional terms.

The liquidity risk is regarded as low by virtue of the Company's relevant cash position, the amount of financial obligations over the next twelve months and the access to additional financing sources

## Detail of fines and sanctioning processes in 2018

206-1, 419-1, 307-1

In 2018 no significant fines or monetary sanctions were recorded.

Description of the fine	Monetary Non-monetary	Amount US\$ (if any)	Date of the sanction	Affiliate that was fined	Description
Fine from the Labor Department	Monetary	2.363	March 6, 2018	Colbun S.A.	The Labor Department fined Colbún due to failure to meet the regular work hours at the Nehuenco power plant. Colbún filed an appeal arguing that as it provides a public service it needs to call employees who are off-duty, but the appeal was rejected, and the fine was finally applied.
Sence Fine	Monetary	208	Dec. 28.,2018	Colbun S.A.	Upon registering the course on the training platform that sends the information to the OTIC (entity that serves as intermediary between SENCE and the companies), an error occurred in the entry of the hourly schedule and the address. Colbún appealed within the terms contemplated by SENCE for these situations, but it was dismissed and Colbún was fined within the terms mentioned above.
Property tax fine	Monetary	1.102	Dec. 31.,2018	Colbun S.A.	Fine for delay.
IRS fine	Monetary	21	Dec. 28.,2018	Colbun Transmisión S.A.	Failure to provide timely notice of Company modifications to the IRS (Capital increase)
Fine from the Labor Department	Monetary	11.115	April 30.,2018	Termoeléctrica Nehuenco	The Labor Department fined Colbún due to failure to meet the regular work hours at the Nehuenco power plant. Colbún filed an appeal arguing that as it provides a public service it needs to call employees who are off-duty, but the appeal was rejected, and the fine was finally applied.
IRS fine	Monetary	63	Nov. 14.,2018	Santa Sofia	Failure to provide timely notice of Company's information to the IRS (Capital increase, change of partners, Change of representatives)

**Note:** There were no fines or non-monetary sanctions for non-compliance with environmental regulations during 2018.

During 2018 no legal claims have been reported against Colbún S.A. due to causes relating to anti-trust or free competition practices; however, two proceedings have been filed in which although Colbún is not involved, has been requested to provide information,

namely: a). Proceeding, court record number NC 427-14 from the Court for the Protection of Free Competition, triggered by a consultation by the Conadecus on the gas Market (resolved per Resolution 51/2018 of January 6, 2018), and b). Proceeding court record No. 2357-15 from the National Economic

Prosecutor's Office (FNE) on access and free competition conditions in the electric power market of the central zone of Chile. In both cases, the information requested was timely delivered. No fines or sanctioning processes were recorded in Peru during 2018.

## Growth perspectives

EU10, 103-2, 103-3

At Colbún we are committed to maximizing the value of our company, by exploring and identifying growth

opportunities in Chile that will enable us to meet electricity requirements in a competitive, safe and sustainable manner.

### Planned capacity (MW) and its maximum generation attainable versus the forecasted long-term demand for electricity, by energy source - Chile

(EU10)

Classification		2019	2020	2021
Energy source	Reservoir hydroelectric	1,065	1,065	1,065
	Run-of-the river	568	568	568
	Coal-fired thermoelectric	350	350	350
	Solar Photovoltaic	9	9	209
	Thermal LNG/ diesel	1,350	1,350	1,350
	Under construction	0	0	0
Total planned capacity (MW)		3,342	3,342	3,342
Maximum forecasted generation capacity P70 (GWh)		19,917	19,917	20,531
Total forecasted demand (GWh)		70,267	72,361	74,418
Maximum forecasted generation versus forecasted demand (%)		28%	28%	28%

**Note:**

Refer to Colbún's installed capacity at [HYPERLINK "http://www.colbun.cl"](http://www.colbun.cl) \h www.colbun.cl  
Forecasted demand of SEN defined by the National Energy Commission in the Final Forecasted Demand Report 2018-2038.

The peak generation capacity differs or may differ from the capacity generated by the Company in 2018 or from what it expects to generate in the future. P70 implies a medium to dry hydrological scenario.

### Planned capacity (MW) and its maximum generation attainable versus the forecasted long-term demand for electricity, by energy source - Peru

(EU10)

Classification		2019	2020	2021	2021
Energy source	Thermal LNG /diesel		565	565	565
Total planned capacity (MW)			565	565	565
Maximum forecasted generation capacity P70 (GWh)			4,173	4,173	4,173
Total forecasted demand (GWh)			53,100	56,200	59,700
Maximum forecasted generation versus forecasted demand (%)			8%	7%	7%

## 7.4 Social performance

## Workers

### Headcount by type of contract and work day

102-8

Of the total number of workers, as of December 31, 2018, there are 13 fixed-term contracts or contracts for specific works. Of these, 3 are women and 10 are men. Below is the breakdown of workers per type of contract and work day:

#### Chile:

Type of work day	2017		2018	
	Women	Men	Women	Men
Full-time	182	810	174	797
Part-time	0	0	0	0
<b>TOTAL</b>	<b>182</b>	<b>810</b>	<b>174</b>	<b>797</b>

Type of contract	2017		2018	
	Women	Men	Women	Men
Indefinite contract	171	796	171	787
Work based contract	7	9	3	4
Fixed-term contract	4	5	0	6
<b>TOTAL</b>	<b>182</b>	<b>810</b>	<b>174</b>	<b>797</b>

#### Perú:

Type of work day	2017		2018	
	Women	Men	Women	Men
Full-time	19	73	19	69
Part-time	0	0	0	0
<b>TOTAL</b>	<b>19</b>	<b>73</b>	<b>19</b>	<b>69</b>

Type of contract	2017		2018	
	Women	Men	Women	Men
Indefinite contract	19	71	19	68
Fixed-term contract	0	2	0	1
<b>TOTAL</b>	<b>182</b>	<b>810</b>	<b>174</b>	<b>797</b>

### Workers' diversity

NCG 386

#### Workers' headcount per seniority, as of December 31, 2018.

(NCG 386)

Seniority range	Women	Men
More than 12 years	19	189
9 - 12 years	42	152
More than 6 and less than 9 years	43	154
3 - 6 years	30	142
Less than 3 years	40	160
<b>TOTAL</b>	<b>174</b>	<b>797</b>

**Gender diversity indicators in Chile, Peru and consolidated**

(405-1)

Gender diversity indicators	CHILE % of women	PERU % of women	CONSOLIDATED % women
Women over the total headcount	17.9%	20.7%	18.2%
Women in leadership positions (as % over the total of leadership positions)	15.1%	28.6%	16.0%
Women in junior leadership positions, i.e. medium level (as % over the total of junior leadership positions)	13.8%	37.5%	15.0%
Women in top leadership positions, i.e. at most 2 levels away from the CEO (or comparable positions) (as % over the total of top mgmt. positions)	18.5%	16.7%	18.3%
Women in leadership positions in income-generating positions (e.g.: sales) as a % over the total of those leadership positions (i.e. excluding service areas such as HR, IT, Legal, etc.)	8.3%	14.3%	8.6%

**Notes:**

The following are considered leadership positions: managers, assistant managers, heads and supervisors.

The "income generating positions" for Chile are women who work in the Generation, Transmission, Engineering and Projects and Businesses areas. For Fenix, it relates to women who work in the Commercial area and the power plant.

**Turnover rate in Chile**

401-1, NCG 386

**Employee turnover rate by age and gender, as of December 31, 2018 in Chile (%)**

(NCG 386)

Position	<30			30-50			> 50			Total		Grand total
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	
Executive	-	-	-	13.3	-	10.3	3.3	50.0	6.3	8.3	9.1	8.5
Professional	3.4	14.3	7.0	7.4	5.6	6.9	16.0	33.3	17.2	9.2	8.3	9.0
Administrative	-	-	-	-	13	9.7	7.1	11.8	9.7	3.7	11.9	8.7
Other positions	6.1	20	7.9	3.2	14.3	3.5	5.0	-	5.0	3.9	16.7	4.3
<b>TOTAL</b>	<b>4.5</b>	<b>14.3</b>	<b>6.8</b>	<b>5.5</b>	<b>7.0</b>	<b>5.8</b>	<b>8.9</b>	<b>20.0</b>	<b>10.0</b>	<b>6.4</b>	<b>9.8</b>	<b>7.0</b>

**\*Note:**

In 2018, the contracting rate was lower than the turnover rate with 6.5% and 7.0%, respectively, which meant a reduction in the total Company headcount. In 2018, the turnover rate experienced no variations as compared to the previous year. The lower headcount was due mainly to the dismissal of the Engineering and Projects Division personnel due to the restructuring of the activities and the completion of Engineering Projects in the 7th Region. In connection with the contracting rate, it increased as compared to 2018, from 4.0 to 6.5%, being women contracted over men. An upturn was recorded in the contracting rate of workers under 30 and a greater turnover of workers older than 50; the latter was due to the reasons mentioned above.

**Turnover rate per geographic zones in Chile (%)**

(401-1)

Region	2017			2018		
	Mujeres	Hombres	Total	Mujeres	Hombres	Total
Metropolitana Region	7,9	5,1	6,0	9,8	12,0	11,3
V Region	28,6	11,0	12,4	6,7	1,8	2,2
VI Region	-	4,2	4,0	100,0	3,8	7,4
VII Region	66,7	14,6	16,2	-	11,8	11,1
VIII Region	5,0	1,5	1,8	5,9	1,5	1,8
X Region	50,0	-	4,8	100,0	-	5,0
XIV Region	-	-	-	-	-	-
<b>TOTAL</b>	<b>10,4</b>	<b>6,3</b>	<b>7,1</b>	<b>9,8</b>	<b>6,4</b>	<b>7,0</b>

**Employee turnover rate (entries, exits and new hires) in Chile**

(401-1)

Turnover rates	No. of workers 2016	No. of workers 2017	No. of workers 2018
Total Headcount	1,011	992	971
Total Exits	63	70	68
Total Entries	76	43	63
<b>TURNOVER RATE</b>	<b>6,2</b>	<b>7,1</b>	<b>7,0</b>
<b>NEW HIRES RATE</b>	<b>7,5</b>	<b>4,3</b>	<b>6,5</b>

**Employee turnover rate per age and gender, as of December 31, 2018 in Peru (%)**

	<30			30-50			> 50			Totales		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Grand total
Executive	-	-	-	100,0	-	66,7	-	-	-	50,0	-	40,0
Professional	50,0	25,0	33,3	15,6	33,3	18,4	-	-	-	17,6	25,0	19,6
Administrative	-	33,3	25,0	50,0	50,0	50,0	-	-	-	25,0	33,3	30,0
Other positions	33,3	-	33,3	12,5	-	12,5	-	-	-	14,8	-	14,8
<b>TOTAL</b>	<b>33,3</b>	<b>28,6</b>	<b>30,8</b>	<b>18,3</b>	<b>33,3</b>	<b>20,3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18,8</b>	<b>26,3</b>	<b>20,5</b>

**Employee turnover rate (entries, exits and new hires) in Peru**

(401-1)

Indicator	No. of workers 2016	No. of workers 2017	No. of workers 2018
Total Headcount	91	92	88
Total Exits	5	6	18
Total Entries	9	7	14
<b>TURNOVER RATE</b>	<b>5.5</b>	<b>6.5</b>	<b>20.5</b>
<b>NEW HIRES RATE</b>	<b>9.9</b>	<b>7.6</b>	<b>15.9</b>

**Workers eligible for retirement**

EU15, 201-3

In Chile, men are eligible for retirement upon turning 65 years old and women upon turning 60 years old. The following table shows the percentage of workers eligible for retirement over the next 5 to 10 years, broken down by job category and by region.

**Chile**

Region	Categories	2016	2017	2018
Metropolitan Region	Executives	1.38%	1.81%	1.85%
	Other workers	2.67%	2.72%	2.68%
	Professionals and Technicians	3.17%	3.33%	2.99%
V Region	Executives	0.20%	0.10%	0.10%
	Other workers	1.98%	1.71%	1.96%
	Professionals and Technicians	0.99%	1.01%	1.03%
VII Region	Executives	-	0.10%	0.10%
	Other workers	1.19%	1.31%	0.21%
	Professionals and Technicians	1.88%	1.92%	-
VIII Region	Executives	0.10%	0.20%	0.10%
	Other workers	0.20%	0.50%	1.34%
	Professionals and Technicians	0.99%	1.01%	1.34%
Other Regions	Executives	-	-	-
	Other workers	-	-	-
	Professionals and Technicians	-	0.30%	0.10%

In Peru, we have no workers who are eligible for retirement over the next 5 - 10 years, because the voluntary retirement age is 70 and the compulsory age is 75.

**Note:**

*Through its diverse collective contracts, the Company contemplates a higher voluntary retirement compensation to those who are in an age range close to retirement in order to improve their quality of life.*



## Competitive remunerations

202-1

Relación entre el salario inicial y el salario mínimo local.

### Chile

Locations with significant operations	Women (CLP)	Men (CLP)
Metropolitan Region	410,458	454,779
Valparaíso Region	740,548	568,709
Maule Region	801,596	549,858

### Perú

Locations with significant operations	Women (Peruvian Soles)	Men (Peruvian Soles)
Lima	7,847	9,425
Chilca	5,555	7,596

#### Notes:

**Minimum wage in Chile in 2018 was \$288,000 Chilean pesos.**

Colbún pays a higher remuneration than the minimum salary in all the positions. In general, women's minimum salary is higher than men's minimum salary. This is due mainly to the fact that the entry positions with lower remunerations are filled by men. In the Metropolitan Region, the contrary occurs, as the initial positions with lower expertise and remunerations are filled by women. Note: in the case of VI, X and XIV regions there is no minimum requirements (higher than 4) to inform the monthly gross salary. For the other regions, the lowest monthly gross salary is considered for both genders.

The minimum salary in Peru as of December 31, 2018 was \$930 Peruvian soles.

## Parental leave

401-3

In 2018, 11 women used their maternity leave in Chile and 2 in Peru (pre and post birth leaves). In the case of men, 26 workers in Chile used their parental leave (birth) benefit of 5 business days, while in Peru only 4 men used the

10-calendar day benefit given by the government.

The table below shows the work reinstatement and retention levels after parental leave, broken down by gender:

### Parental Leave in Chile

(401-3)

Gender	N° of leaves 2017 <sup>(1)</sup>	Re-entries 2017		N° of people reinstated to work in 2017 <sup>(4)</sup>	N° of leaves 2018 <sup>(1)</sup>	Re-entries 2018		N° of people reinstated to work in 2017 <sup>(4)</sup>
		2016 <sup>(2)</sup>	2017 <sup>(3)</sup>			2017 <sup>(2)</sup>	2018 <sup>(3)</sup>	
Men	-	-	-	-	-	-	-	-
Women	13	-	9	9	11	4	7	11
<b>TOTAL</b>	<b>13</b>	<b>-</b>	<b>9</b>	<b>9</b>	<b>11</b>	<b>4</b>	<b>7</b>	<b>11</b>

#### Note:

(1) Number of employees who used their maternity leave benefit.

(2) Number of employees reinstated to work after maternity leave in the previous period.

(3) Number of employees reinstated to work after a maternity leave in the same period.

(4) Number of employees reinstated to work during the indicated year, including the employees reinstated to work from previous periods.

**Parental Leave in Peru**

(401-3)

Gender	N° of leaves 2017 <sup>(1)</sup>	Re- entries 2017		N° of people reinstated to work in 2017 <sup>(4)</sup>	N° of leaves 2018 <sup>(1)</sup>	Re- entries 2018		N° of people reinstated to work in 2017 <sup>(4)</sup>
		2016 <sup>(2)</sup>	2017 <sup>(3)</sup>			2017 <sup>(2)</sup>	2018 <sup>(3)</sup>	
Men	-	-	-	-	-	-	-	-
Women	3	-	2	2	1*	1	-	1
<b>TOTAL</b>	<b>3</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>1</b>

**Note:**

\* 2018 maternity leave still in force; the worker will be reinstated to work in 2019.

(4) Number of employees who used their maternity leave.

(5) Number of employees reinstated to work after a maternity leave in the previous period.

**Unionizing**

403-4

**Identification of unions in Chile**

(102-41)

Power plants	Name of the collective agreement that covers OSH issues	Type of agreement
Carena Power Plant	Union Empresa Eléctrica Industrial S.A.	Collective Agreement
Biobío Complex	Union No 1 and Union No. 2	Union No. 1 (Collective Agreement); Union No.2 (Collective Agreement)
Colbún Complex	Union No. 1	Collective Agreement
Canutillar Plant	Canutillar Agreement	Collective Agreement
Aconcagua Complex	Union No. 2	Collective Agreement
Santa María Complex	Union No.1 Santa María	Collective Agreement
Candelaria Power Plant	Candelaria Agreement	Collective Agreement
Nehuenco Complex	Union No.1 Nehuenco	Collective Agreement
Antilhue Power Plant	Union No. 2	Collective Agreement
Los Pinos Power Plant	Union No. 2	Collective Agreement

Collective Agreements	Location	Nº of workers enrolled	% over the total plant employees	% Total Colbún	Date of last agreement	Term of the agreement
Union Empresa Eléctrica Industrial	Carena Plant	25	75.76%	2.57%	June 1, 2017	May 31, 2020
Los Pinos Agreement	Los Pinos Plant	13	76.47%	1.34%	March 1, 2017	Feb. 28, 2021
Canutillar Agreement	Canutillar Plant	13	68.42%	1.34%	Oct. 1, 2016	Sept. 30, 2020
	Santa María Plant	64	68.09%	6.59%	Jan. 1, 2015	Dec. 31, 2018
	Union Santa María	1	1.33%	0.10%		
			62.50%	1.03%	Sept. 1, 2016	August 30, 2020
Candelaria Agreement			83.08%	5.56%	Nov. 1, 2016	Oct. 31, 2020
Union No.1 Nehuenco	Biobío Complex	27	36.00%	2.78%	Sept. 1, 2017	August 31, 2020
	Colbún Plant	54	76.06%	5.56%		
	Santiago headquarters	20	5.32%	2.06%		
	Other facilities	7	100.00%	0.72%		
Union No.1 Colbún	Aconcagua Complex	93	97.89%	9.58%	Jan. 1, 2017	Dec. 31, 2020
	Antilhue Plant	11	78.57%	1.13%		
	Biobío Complex	24	32.00%	2.47%		
	Other facilities	23	100.00%	2.37%		
Union No. 2 Colbún	Aconcagua Complex	93	97.89%	9.58%		
	Antilhue Plant	11	78.57%	1.13%		
	Biobío Complex	24	32.00%	2.47%		
	Other facilities	23	100.00%	2.37%		

**Nota:**

El 45% de los trabajadores de la organización se encuentran acogidos a un instrumento colectivo, sea que esté pactado con alguna organización sindical o con un grupo de trabajadores organizados para negociar colectivamente beneficios comunes. En el transcurso del año 2018 se llevó a cabo una negociación colectiva con una organización sindical que involucró a 71 trabajadores cuya vigencia es a contar del mes de enero año 2019 hasta diciembre 2021 y que finalizó de manera exitosa. Al comparar los últimos tres años se aprecia un incremento en los trabajadores cubiertos por una negociación colectiva, lo que se compara positivamente con la realidad país que alcanza un porcentaje de entre un 10% al 11% en el sector privado, según documento Pulso de julio 2017, publicado en la página web de la Dirección del Trabajo.

## Communication channels with unions

402-1, 103-2, 103-3

Although there is no formal agreement with the unions to inform the organizational changes in advance, every time a relevant change is made it is informed through the corporate email or the intranet, providing the reason for the change, the name of the individuals involved, and requesting the employees' collaboration and support. In addition, every time there is an organizational change that involves unionized workers,

the respective union is informed of the situation. The company promotes the dialogue between workers' representatives and the upper management, and the Organization and People Management maintains a permanent dialogue with the leaders at bipartite meetings. In 2018 there were no special situations that would call for this type of communications.

In August 2018, a Union Day was held with the participation of several Colbún's Managers and Occupational Safety and Health specialists. The main topics revolved around the Company Purpose and Strategy, the New Businesses evaluated by Colbún, the Business Ethics Management, Diversity, Inclusion and Occupational Safety and Health issues, among others.

## Labor claims

103-2

Both in Chile and Peru, Colbún has a communication channel for direct and anonymous reports related to compliance with its ethical conduct standards, which are then referred to the respective area for analysis and resolution.

If there is a complaint, allegation or comment, they are analyzed by the Ethics Committee, entity made up of the Organization and People Manager;

the Legal Manager and the Internal Auditing Manager, which meets every month, or as necessary. Also, our Internal Order, Hygiene and Safety Regulations in its Article 48 sets forth a formal complaint procedure with its related terms and the instances properly identified.

In addition, the annual meeting with the union leaders organized by the Organization and People Management

have also been eventually used as a complaint channel.

In the course of 2018, we received 20 allegations, of which 7 were qualified as labor related. They were addressed and managed by the Ethics Committee. No additional labor related claims were received

## Training and development

404-2

The development and growth of our employees is essential to Colbún. The Company prioritizes internal formation, training and promotion as the

mechanisms to leverage people management excellence, one of the goals we have set ourselves as a corporate guideline.

## Chile

Training program	Description	2017		2018	
		N° of beneficiaries	% of beneficiaries as compared to the total	N° of beneficiaries	% of beneficiaries as compared to the total
Undergraduate scholarships	Technical or university studies	53	4.1%	48	4.9%
Graduate studies	Financing of postgraduate studies (Diplomas, Masters' Degrees and MBA)	56	4.3%	65	6.7%
Capacitate Program	Development of soft and technical skills among workers	46	3.5%	130	13.4%
English	Further improvement in English	56	4.3%	86	8.9%
Crime Prevention Program	Information on relevant aspects of Law 20,393	396	30.6%	348	35.8%
Company onboarding program e-learning	Information on relevant aspects of the business to individuals joining the company	53	4.1%	31*	3.2%
Company On-boarding program – Visits to Plants	Plant walk-through for both new employees and employees from our headquarters who have been with the company for years	53	4.1%	34	3.5%
Induction program visit to the power plants	Show the power plants to new personnel and to employees from the headquarters who have been with the Company for years.	16	1.2%	8	0.8%
Asset management	Development of technical skills in ISO 55,001 Internal Auditing	-	-	40	4.1%
Labor Legislation Workshop	Provide knowledge about the supervisory role as employer and the fundamental workers' rights	-	-	34	3.5%
Leader Competencies Development Program	Reinforce the exercise of leadership in positions with people in charge.	-	-	114	11.7%
Training on the Power Market	Provide theoretical and practical knowledge regarding the regulatory aspects, tenders, rate setting and business operations.	-	-	37	3.8%
		729	-	944	-

**Notes:**

-Total workers (indicator 102-8): 971

-The document attached hereto provides information of all the training sessions done in the company and was extracted from the "Digital Learning" online training platform. With respect to Undergraduate Scholarships, the information is recorded every six months. It is worth noting that all the information contained herein indicates the number of people who attended the various training activities.

The e-learning induction program includes an individual who was admitted in December 2017, but who received the induction in January 2018.

**Perú**

Training program	Description	2016		2017		2018	
		N° of beneficiaries	% of beneficiaries as compared to the total	N° of beneficiaries	% of beneficiaries as compared to the total	N° of beneficiaries	% of beneficiaries as compared to the total
Languages	Improvement in foreign languages	16	17.6%	6	6.5%	8	9.1%
Safe Driving Practices	Training in safe driving practices	1	1.1%	1	1.1%	1	1.1%
Leadership Program "Somos Jefes Fenix"	Company managerial leadership skills	-	-	17	18.5%	3	3.4%
Management, Regulations and Electricity Market	Business management technical competencies	-	-	-	-	9	10.2%
		17	-	24	-	21	-

**Processes aimed at ensuring the retention and the renewal of talents**

EU14

These programs focus on the specialization of workers at the plants, where this type of formation/training is delivered on a regular basis. Such programs are as follows:

**Chile**

Program Name	Program Description	Description of alliances if applicable, to the certification program	Women N° of workers trained	Men N° of workers trained
Technical knowledge program	Activities aimed at reinforcing the specialized knowledge about the different power plant areas. The program Will help the workers in developing the technical competencies required for the operation, including the Variable energy training course; the training will be delivered onsite and by e-learning,	Not applicable	3	379
Management tools program	Development of skills to facilitate workers' performance, such as improving the knowledge of English and reinforcing the learning of IT and management tools; the training will be delivered onsite and by e-learning,	Not applicable	20	250
Safety, Regulatory and Environmental Training	Provide the workers with knowledge that will allow them to protect our workers' safety and health, and the integrity of our facilities and the environment, ensuring compliance with legal aspects; the training will be delivered onsite and by e-learning,	Not applicable	70	897

**Note:**

The document attached hereto contains the record of training activities conducted at Colbún's power plants in 2018, which was extracted from the "Digital Learning" online training platform. For purposes of review, please refer to the Excel spreadsheet "Training in Power Plants". It should be mentioned that the data provided herein and in the attached document only correspond to the number of people who participated in the training activities.

**Perú**

Program name	Program description	Women	Men	Description of alliances if applicable, to the certification program
		N° of women trained	N° of men trained	
Training in GE Mark VI Control Systems	Training for Control Room operators in the supplier's system	-	4	-

**Performance assessment**

404-3

Percentage of employees who receive regular performance and professional development assessments, broken down by gender and professional category:

**Own personnel assessed in Chile (%)**

(404-3)

Position categories	2016			2017			2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executive	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional	99.3	99.0	99.3	99.1	99.0	99.0	100.0	100.0	100.0
Administrative	100.0	98.3	99.0	100.0	100.0	100.0	100.0	100.0	100.0
Other positions	99.2	100.0	99.2	99.7	100.0	99.7	100.0	100.0	100.0
<b>TOTAL</b>	<b>99.4</b>	<b>98.9</b>	<b>99.3</b>	<b>99.5</b>	<b>99.4</b>	<b>99.5</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The Performance Assessment Process is conducted for all personnel under indefinite contract. Personnel not assessed include workers under

contract for specific works, fixed-term contract and specific project; they are assessed in agreement with other evaluation criteria.

**Own personnel assessed in Peru (%)**

(404-3)

Position categories	2016			2017			2018		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Executive	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0
Professional	97.1	100.0	97.7	100.0	100.0	100.0	100.0	100.0	100.0
Administrative	100.0	100.0	100.0	100.0	100.0	100.0	75.0	83.3	80.0
Other positions	100.0	-	100.0	100.0	-	100.0	100.0	-	100.0
<b>TOTAL</b>	<b>98.6</b>	<b>100.0</b>	<b>98.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>98.6</b>	<b>94.7</b>	<b>97.7</b>

## Work environment

### Benefits and measures to reconcile work hours with family life

401-2

We believe that benefits established in keeping with the needs of our workers will contribute to a sense of belonging and pride in relation to the Company. For this reason, we have established special benefits and instances to include the families of our workers.

The social benefits package established for all Company workers hired for an indefinite term, regardless of their geographical location or facility, is better than those in other companies in the power sector in many ways; this benefit package along with our compensations and remunerations and

the competitive products make of ours an attractive place to work. Through the purchase of specialized studies, we continuously monitor new trends and new benefits that we can deliver to our workers, in order to cover the broadest spectrum in this area.

### List of benefits and number of workers who receive them in Chile

List of services /benefits	2016	2017	2018	Percentage over the total 2018
Supplementary health insurance	974	967	958	99%
Life insurance	974	967	958	99%
Remunerations maintained through sick leave	974	967	958	99%
Allowance for bereavement	919	945	849	87%
Christmas toys for children	1.011	992	971	100%
Christmas celebration for children	1.011	992	971	100%
Scholarships for children	946	945	945	97%
Birth, wedding allowances	946	874	945	97%
Disability coverage	974	967	958	99%
Birthday present	974	992	971	100%
Christmas food basket	1.011	992	971	100%
Dental allowance	946	945	958	99%
Medicine allowance	974	967	958	99%
Eye-glass allowance	974	967	958	99%
All-purpose or emergency loans	946	874	945	97%
Parental leave	NR	967	958	99%
Birth, maternity, death leave	NR	967	945	97%
Personal days	NR	967	932	96%
Children or spouse catastrophic illnesses leave	NR	NR	439	45%
All-event severance payment	NR	NR	414	43%
Sports allowance	NR	NR	293	30%
Pension savings incentive	NR	NR	13	1%

**Note:**

No discrimination is applied in the granting of benefits to the workers based on the type of work schedule (full-time, part-time or others).



### List of benefits and number of workers who receive them in Peru

List of services /benefits	2016	2017	2018	Percentage over the total 2018
Supplementary health insurance	91	92	88	100%
Life insurance	91	92	88	100%
Remunerations maintained through sick leave	91	92	88	100%
Christmas toys for children	51	54	55	63%
Christmas celebration for children	51	54	55	63%
Disability coverage	91	92	88	100%
Christmas food basket	91	92	88	100%
Parental leave	91	92	88	100%
Individual Health Insurance (EPS)	91	92	88	100%
Oncologic insurance policy	91	92	88	100%
Transport for outstanding collaborators	52	47	47	53%

### Specific benefits and reconciliation policies in Chile

Benefit	Detail
Academic excellence award	Tenth version; this symbolic and economic award is a recognition to the families of workers for academic performance, both at school and university. In 2018 and for the first time this award was granted to outperformers in the sports and arts categories.
Work day with children	Instance where children visit the office. It has been conducted for the tenth year in a row at all Colbún's power plants, in addition to Santiago.
Personal Days	Workers are given two administrative days a year to be used as needed. They can be divided into four half days.
Half-day on Fridays	At the headquarters, we work half a day on Fridays (1:30 pm). This modality is beginning to be implemented in some of the plants.
Free day between two holidays	Inter-holidays are granted Monday or Friday for a long weekend. That day must be previously recovered by working on Friday afternoon.
Flexible Schedule	In Santiago, employees have the option to advance or delay the clock-in time. Three new schedules are available, plus the current one. Employees must choose one schedule and maintain it throughout the year.
Quality of Life Program	Conducted in Santiago and power plants; it includes cultural talks and contestable funds for activities aimed at improving quality of life such as trekking, cooking classes, football, among others, the funds are administered

## Health and safety

403-1

A Parity Committee has been set up at each power plant that represents 100% of our workers.

### Workers represented in formal health and safety committees in Chile

(403-1)

Central	2017		2018	
	Workers represented	Contractors represented	Workers represented	Contractors represented
Canutillar Plant	20	52	19	64
Biobío Complex (Rucúe-Quilleco)	78	230	39	52
Biobío Complex (Angostura)			37	112
Colbún Complex	76	80	73	111
Carena Plant	33	47	34	13
Aconcagua Complex	97	109	94	103
Antihue Plant	15	12	14	10
Los Pinos Plant	17	65	17	60
Candelaria Plant	16	44	16	41
Nehuenco Complex	64	150	66	103
Santa María Complex	92	263	93	223
Santiago Headquarters	404	28	436	24
(*) Transmission	42	209	46	169
Other projects	42	603		-
<b>TOTAL</b>	<b>996</b>	<b>1.892</b>	<b>984</b>	<b>1.085</b>

### Workers with occupational illness risks in Chile

(403-3)

Power plant	Agents	N° of Colbún workers exposed to agents	
		Chile	Perú
All Colbún's power plants	Noise	115	22
	Ionizing radiation	9	16
	Ultraviolet A/B radiations	372	28
	Musculoskeletal disorders relating to the use of upper limbs (TMERT-EESS per its acronym in Spanish)	128	
	Load management manual	155	13
	Work at height	469	13
	Work in high geographic altitudes	75	
	Mobile equipment operator	21	11
	Confined space	324	10
	Psycho-social disorders	252	46
	Guards and watchmen	5	
	Food handlers	-	
	Operator of fixed equipment with mobile parts	124	

**Workers represented in formal health and safety committees in Peru**

(403-1)

2018				
Central	Parity Committee	No of participants	Workers covered	% of workers' coverage
Fenix	1	90	141	100%
<b>TOTAL</b>		<b>90</b>	<b>141</b>	<b>100%</b>

## Community Relations

### Community involvement

EU19

In terms of community infrastructure investment projects, Colbún has established working groups involving the respective territorial and functional organizations in order to collect information on the local visions. Under this methodology, initiatives have been developed such as the Santa Bárbara Historic and Cultural Center; the refurbishing of the Chapo Lake offices; multi-purpose courts at Coronel; new green areas at Los Álamos; Quilleco street lighting, just to name a few.

Fenix in Peru operates similarly. One example is the Lo Salinas Polyclinic: this initiative arose from the commitments assumed in the EIA for the plant, where the company assumed the commitment – in public hearings – to support the health of the residents through the installation of a polyclinic facility. The project was developed in consultation with the Municipality of Chilca, the health authorities, and other social organizations and residents.

#### *Working groups – Santa María and Los Pinos*

Since the beginning of the construction of Santa María thermoelectric power plant, Colbún started to build instances of dialogue and participation with the neighbors. Hence, working groups were gradually set up with the 13 neighbors' associations closer to the power plant (Mesa por el Desarrollo del Sector Sur – 2010), with 15 small scale fishermen unions (Mesa Pesca Futuro – 2013) and also with 9 functional organizations of the sector closest to the power plant (Mesa Estero Manco – 2014). Colbún has developed ongoing communication with them on environmental issues relating to the thermoelectric power plants, social projects and topics of common interest. All these working groups are still in operation and they have set the grounds for a growing respect and trust relationship.

A similar situation has occurred in the Charrúa sector, besides Los Pinos thermoelectric plant. The Charrúa working group has operated since 2014 with the neighbors' associations, functional organizations from the sector, the Municipality, the Ministry of Energy and 4 electric power companies from the zone.

#### *Working groups Zona Biobío*

The zone of Biobío has set up working groups to encourage dialogue, information and community integration; it participatively deals with environmental, operational and social issues placing special emphasis on issues around the local development: Mesa de Turismo de Antuco (since 2014), Mesa de Turismo Angostura (2011), CSR with the Municipality of Santa Bárbara (2010) and Quilaco (2010). In addition, it holds permanent meetings with communities from the zone of influence (for example: Committee Alto La Paz, Aguas Blancas and Los Notros).

#### *Working groups Ruta Internacional - Aconcagua*

The Aconcagua power plant is located by the international road that connects Los Andes and San Esteban districts and gathers 18 neighbors' associations which make up the Group of Neighbors' Association of the International Road.

Colbún and the neighbors have set up a working group to address community concerns relating to the operation of the power plant, neighbors' requests,

complaints, invitations and joint projects. Early in 2018, the first assembly was held in which all neighbor association leaders were interviewed to know their concerns and desires; the company will work to address and solve their concerns.

San Pedro Project Work Group. Colbún supported the implementation of tourism work groups in Los Lagos and Panguipulli with the participation of community organizations and the respective municipalities. In 2017 these work groups inaugurated tourism facilities by the banks of San Pedro river and the Panguipulli Lake and are currently drafting Tourism Development Policies and a project portfolio that could be financed with contestable funds.

In addition, joint work groups have been implemented with indigenous communities in the territory. A permanent relationship is maintained with the 13 indigenous organizations located near to the project which group altogether approximately 2,000 people. Ten long-term cooperation agreements have been signed, in abundance by the guidelines established by ILO Convention 169.

### Local development

203-1, 203-2, 413-1, Colbún -3.S0

In addition to the social programs outlined in the main body of the Integrated Year Book 2018, below are some of the other programs promoted by the Company.

### Programs associated with the promotion of productivity

#### • Community orchards:

Program focused on training small and medium size farmers from the districts of Santa Bárbara and Quilaco, through fully practical classes. The main purpose is to help participants establish and maintain sustainable farming practices. This initiative was carried out for the second time in 2018, and the workshops were done in a property adjacent to the Angostura plant reservoir. In these two years, 375 people have been trained in topics such as: use of water resources, fruit trees, grasslands, greenhouse crops and apiculture.

#### • Farming Productivity (Colbún Complex)

Colbún's focus in the Maule Region has been the promotion of better agricultural practices. In January 2018, the Stubbles Management and Incorporation Program was re-launched in partnership with the Municipality of Colbún, benefiting some 80 small farmers in the district.

In 2018, we also furthered the Field Days program, an initiative supported by the Ignacio Carrera Pinto Colbún High School; the purpose of the program is to train farmers in agricultural techniques. 2 sessions were conducted last year, attended by 36 farmers.

#### • Framework agreement with irrigators' associations (Colbún Complex)

In 2011, Colbún and the Maule Sur Irrigation Association subscribed an agreement whereby tools are created to encourage the saving of water resources and promote irrigation efficiency; this generates benefits for

farming and for power generation. For further details, see Chapter 5, page 239.

#### • Initiatives associated with tourism (Colbún Complex)

In 2017, the third version of the Certification in Nature Tourism was implemented; this initiative seeks to develop skills and knowledge among participants to be able to promote local tourism. This time, a total of 25 entrepreneurs from San Clemente, belonging to local tourism groups, were certified in Nature Tourism 2017, an initiative developed by the Colbún S.A. jointly with the Municipality of San Clemente and the professional institute Vertical.

#### • Tourism related start-ups (Angostura Plant)

In 2018, the "Incuba Turismo" program was developed through Colbún's Santa Bárbara and Quilaco entrepreneurial center in alliance with the NGO Acción Emprendedora, which provides personalized advisory to entrepreneurs from the tourist area, in addition to project development funds, namely the inauguration of a restaurant in the zone of Lo Nieve, district of Santa Bárbara, featuring typical food from the zone; the implementation of a craft beer show room ("Huequecura"); and the construction of domes in the sector of Loncopangue, municipality of Quilaco. Also, the advisories raised 3 Sercotec funds to expand the restaurant facilities, build a new restaurant and implement a Social Events Hall.

• **Pre-incubation (Santa María Complex)**

The program “Pre-incubation for the Coronel district: Supporting entrepreneurship” was developed in 2017, based on an alliance between the UCSC School of Engineering, Colbún and the NGO Acción Emprendedora (AE) through the Colbún Entrepreneurship Center AE in Coronel. This initiative involves senior students from the Civil Industrial Engineering School at the UCSC, who give advice to microentrepreneurs in the district. With the second version ended in the second half of 2018, a total of 67 senior students provided advisory to 25 micro-entrepreneurs of Coronel in the pre-incubation stage of their projects.

• **Pesca Futuro (Santa María Complex)**

This program was established in 2013 and seeks to support Coronel fishermen and their families in three areas: training, productivity promotion at union level, and scholarships for children or family members. In 2018, 121 students were benefited. In the four years since its creation, scholarships have been awarded to 258 fishermen relatives, allowing them to study in institutions recognized by the Ministry of Education.

In addition, as part of the Pesca Futuro program, various small entrepreneurs have raised funds for their startups, which is the case of the FAP. The total amount of resources awarded by both the public and the private sector for these projects already exceeds \$300 million since 2017.

*Programs associated with education*

• **Transformative leadership (Rucué – Quilleco Plant)**

The Citizen Formation Program in Transformative Leadership is a joint initiative with the Municipal Education Department of Quilleco and the educational consulting firm Engrana that convened 50 students from the Francisco Bascuñán Guerrero public school in Quilleco, and other 25 youngsters from the Isabel Riquelme school in Canteras. It's 90 weekly minutes of team work activities, including debates, talks, games and dynamics where the students improve their self-esteem, are encouraged to give personal opinions and to tolerate frustration, which reinforce the roles fulfilled by these youngsters at school, home and among their peers.

• **Community Program for Training in Trades (Santa María Complex)**

Since 2010, the company has developed an open trade formation program in Coronel using the Sence tax allowance provided by the community scholarship program. More than 250 people in Coronel, mainly from the neighbors' associations close to the power plant have benefited from this initiative. In 2018, 3 training courses were delivered to a group of 19 neighbors: Surface finishing, welding and interior coating and lining.

• **Cochamó Youth Orchestra (Canutillar Plant)**

The orchestra has been formed by students in the Cochamó district and supported for several years by Colbún. It has extended its recognition and presentations to different locations of the southern zone of our country,

based on the concept that music is an educational channel that reinforces personal values. In 2017, the group made a presentation in Bariloche, Argentina, with the support of the municipality, the government and Colbún. Then in 2018, the orchestra again went on tour to the north of the country, giving presentations in San Pedro de Atacama and Calama.

• **Leadership workshop (Aconcagua Complex)**

In 2018, 23 neighbors' association leaders of diverse social organizations from the International Road that harbor the 5 Colbún power plants of the Aconcagua Complex participated in the leadership workshop, which included leadership and practical skills and negotiation strategies; they learnt how to apply to contestable funds offered both by the state and by private companies.

The workshop is certified by Chile's national training and employment service (Sence) and delivered by the local company ChileCap in order to develop and support companies from the zone. The workshop was the result of a joint initiative between Colbún and local opinion leaders.

*Programs associated with the promotion of sports*

• **Promotion of sports in Coronel (Santa María Complex)**

For the fifth consecutive year, in 2018 Colbún supported the implementation of the Jaime Osorio Cup, in alliance with the Coronel Soccer Association; 8 educational entities participated in this version.

• **Soccer school “Energía para Campeones” (Aconcagua Complex)**

The Company continued to support the program “Energía para Campeones” in the Aconcagua Complex through 2018; the project was launched in 2016 and its purpose is to promote sports and a healthy lifestyle. During 2018, the school trained 100 children who participated in a local championship and ranked third in three different categories; in one of these categories, one of our players was awarded the “best player” distinction.

*Programs associated with quality of life*

• **Led Street Lighting Project in Charrúa (Los Pinos Plant)**

The project includes 2.5 kilometers of LED street lighting installed in 2018 on the access road to the town of Charrúa. The project was born as a result of the associative work developed by the Charrúa Associative Board integrated by Transelec, Orazul Energy, Generadora Metropolitana, GGO Los Guindos and Colbún. We were joined by the Municipality of Cabrero, the Ministry of Energy and the neighbors’ associations from the zone. The project involves the installation of 61 street led lights over these 2.5 kms, the installation of 3 substations and the corresponding connection to the electric network. The Charrúa community selected this project to reinforce the safety in the sector.

• **Cerro La Virgen Community Center (Santa María Plant)**

This Project was devised by the Board for the development of the Southern Sector, made up of 13 neighbors’ associations. The fund was set up in 2009, but since 2016 the work group

decided to promote participative projects that would generate greater impact. Since its foundation some 60 years ago, the inhabitants of Cerro La Virgen were expecting to have their own meeting place. The construction features 85 m2 and constitutes a landmark in the sector being welcomed by the neighbors. More than 300 users are expected to be benefited by this new facility.

• **Led Street Lighting in Quilleco 3rd stage (Quilleco Plant)**

The third and last stage of modernization of the public lighting in the district of Quilleco was completed in 2018; this is a joint initiative by Colbún and the local municipality. In the first year, 250 led street lights were installed in the urban area of the district; later in 2017, another 200 were added in the sectors of Las Canteras, El Hualle and San Lorencito; concluding with the installation of another 200 led lights in 2018 to cover other rural sectors such as Villa Mercedes and Canteras with public lighting.

• **Santa Bárbara Led Street Lighting Project (Angostura Plant)**

In the District of Santa Bárbara, the Company installed 18 led street lights in the sector of Los Junquillos (8) and Aguas Blancas (10). The Municipality and the respective neighbors’ associations define the location where the street lights will be installed, thus significantly improving the quality of life and the general safety of the residents.

• **El Médano Community Center and Thermal Baths (La Mina Power Plant)**

As part of the development and construction of the La Mina Plant, a new community center was implemented in Villa Las Asturias,

in the Baños del Médano sector, Maule Region. This project is the result of a participatory process involving the area residents and included, in addition to the center itself, all the necessary equipment. Also, footbridges, booths and other works were implemented in order to improve the thermal baths located at El Médano, thus promoting a better infrastructure for a sector with a high tourism potential.

• **Implementation of a Box Dental (Canutillar Plant)**

Together with the residents of the Pocolhuén Alto sector of the Cochamó district, in alliance with the municipality, a new dental service box was opened last year. The box includes a fully equipped fixed chair, acquired by the neighbors, in addition to the modernization of the physical space carried out by Colbún, which included lighting and electricity, as well as the drinking water and air networks.

*Others*

• **Supporting the Fire Department (several plants)**

Aware of the vital work carried out by Fire Departments across Chile, Colbún has been supporting various Fire Units in the areas where it operates, especially those located in the districts of Yervas Buenas (Colbún Complex), Los Andes and San Esteban (Aconcagua Complex) Quilleco (Rucúe-Quilleco Plants), Coronel (Santa María Complex) and Quilaco and Santa Bárbara (Angostura Plant) and Cochamó (Canutillar Power Plant).

## Community infrastructure investment in Chile

203-1

With respect to community infrastructure in Chile, the largest investment projects were those shown in the following tables.

In 2018, the infrastructure amount invested reached USD 200,000 in Chile and USD 40,000 in Peru.

Nombre del Proyecto	Nombre Comunidad	Descripción del Proyecto	Impacto de los proyectos de infraestructura y servicios de apoyo
San Esteban Rural Health Post	San Esteban	Construction of a medical health center	Significant increase in health care services
Las Vizcachas public lighting	Las Vizcachas de Los Andes	Replacement of public street lights	Higher safety perception among the residents
Quillota street lights	City of Quillota	1st stage of street light replacement	Higher safety perception among the residents
Antuco Herder Monument	Antuco	Construction of a monument that represents the Antuco community	Greater sense of belonging and identity.
Street lights in the District of Quilleco	Quilleco	Installation of street lights, 3rd stage	Improved quality of life and higher perception of safety among the residents
Street lights in the District of Santa Bárbara	Santa Bárbara	Installation and pole connection of 18 led street lights in the sector (8) Los Junquillos and (10) Aguas Blancas	Improved quality of life and higher perception of safety among the residents
Installation of safety signs	Santa Bárbara	Installation of 8 signs that warn of the variation of water levels at the banks of the Biobio river in the District of Santa Bárbara	Improved quality of life and higher perception of safety among the residents
Los Junquillos Community Center	Santa Bárbara	Improved community infrastructure	Improved community infrastructure
Charrúa Street Lights	Charrúa	Led Street Lights	Improved quality of life and higher perception of safety among the residents
Cerro La Virgen community center	Coronel	Community center	Greater participation and improved quality of life for the local people.
Implementation of green area, community center Rincón de Pataguas Oriente neighbors' association	Rincón de Pataguas Oriente	Improved green area for the Community center	Improved quality of life for the sector inhabitants
Machicura public resort	Colbún	Implementation of a public resort in the southwest bank of Machicura reservoir	Improved quality of life for the sector inhabitants
Expansion of the preschool classroom of School Llanada Grande	Canutillar	Preschool classroom	Improved quality of life and access to education for the sector inhabitants

**Community infrastructure investment in Peru**

(203-1)

Project Name	Community Name	Project Description	Impact of infrastructure projects and the supporting services
Las Salinas educational institutions	Las Salinas	Improved educational infrastructure: Las Salinas Educational Institutions	Higher educational service quality
Maternal and Child Health Center Nuestra Señora de Asunción de Chilca	Chilca	Improved health care infrastructure:	
Expansion of the Obstetrics Area at the Maternal and Child Health Center Nuestra Señora de la Asunción de Chilca	Better health care quality		
Installation of waste holders in Las Salinas populated center	Las Salinas	Improved tourism infrastructure: installation of waste holders in Las Salinas populated center	Improved street ornamentation, thus promoting tourism and economic development
Resting space at the Chilca police station	Las Salinas and Chilca	Improved safety infrastructure: construction of a resting space at the Chilca police station	Improved safety perception among the residents

**Community contributions in Chile and in Peru (consolidated)**

402-1

Type of contributions	Total Amount in USD, 2018
"Cash" contributions	5.928.841
Time: employee volunteering during remunerated work hours	6.269
In kind donations: donation of products or services, projects / similar associations	876.114
Overhead expenses	1.450.000

**Notes:**

· In the case of volunteering, the participation of 12 people was considered with an average dedication of 21 hours, 252 hours on an annual basis.

· The in-kind donations included desalinated and potable water delivered to the Municipality of Chilca in Peru, and the land owned by Colbún in Chile, which are delivered to third parties on a gratuitous bailment contract.

**Value of political contributions**

415-1

No political contributions were made by Colbún S.A. in 2018 in Chile or in Peru.



## 7.5 Environmental Performance and Climate Change

## Use of materials and efficiency

### Domestic energy consumption

302-1

### Power consumption at power plants and corporate offices in Chile

302-1

Power consumption at the power plants and corporate offices.

Source Types	Metering Unit	2015	2016	2017	2018
Electricity	Tera Joules	82	47	72	77

**Note:**

1 Tera Joule (TJ) = 277,78 MWh.

### Energy used by power generation plants in Chile

(302-1)

Source Types	Metering Unit	2015	2016	2017	2018
Diesel	Tera Joules	1,913	2,460	2,109	809
Natural gas	Tera Joules	23,043	24,434	25,231	25,581
Coal	Tera Joules	20,929	22,205	24,416	23,083
<b>TOTAL</b>	<b>Tera Joules</b>	<b>45,885</b>	<b>49,099</b>	<b>51,756</b>	<b>49,473</b>

The slight decrease in this indicator by 4% against 2017 is due mainly to the reduction in diesel (-62%) and coal (-5%) consumption explained by a lower consumption in thermoelectric power plants. Similarly, the consumption of LNG slightly increased by 1.04%, hence, this indicator did not experience much variation (Fenix is not considered herein).

### Power consumption at the power plants and corporate offices in Peru

(302-1)

Source Types	Metering Unit	2016	2017	2018
Electricity	Tera Joules	4.0	3.4	3.4

### Energy used by the Fenix power generation plant in Peru

(302-1)

Source Types	Metering Unit	2016	2017	2018
Diesel	Tera Joules	55	0	0
Natural gas	Tera Joules	22,290	25,557	26,676
Coal	Tera Joules	-	-	-
<b>TOTAL</b>	<b>Tera Joules</b>	<b>22,345</b>	<b>25,557</b>	<b>26,676</b>

## Atmospheric emissions

### Emission of ozone-depleting substances

(305-6)

Gas SF<sub>6</sub> is used as insulator in transformers, power breakers and other electric equipment. Although the eventual leaks of this gas are isolated events, they could be brought about as a result of failure in joints, seals or gaskets of the equipment mentioned above.

No SF<sub>6</sub> gas leaks occurred in 2018 at any

of our power facilities for the second year in a row, which reflects the effort of the maintenance area at our power plants.

However, it should be noted that every time a leak occurs a report is generated in the Incident Reporting System (SRI), which is classified as an environmental incident.

This situation gives rise to a preliminary incident report, which prompts an investigation to find out the root cause of the leak. Finally, a document or report is generated of lessons learnt on the fact investigated, and if necessary, an action plan is put in place to help prevent recurrence of the incident.

### SF<sub>6</sub> Gas Emissions

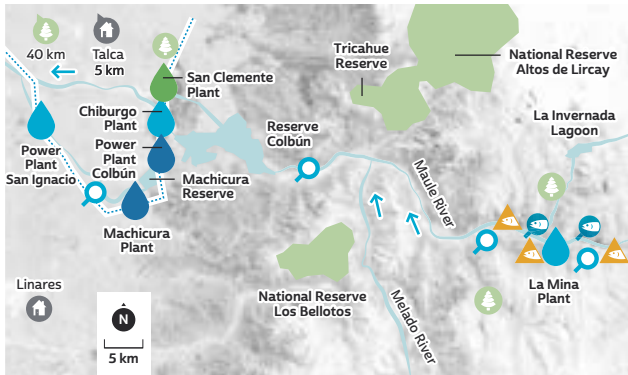
(305-6)

Emissions	Unit	2015	2016	2017	2018
SF <sub>6</sub>	Kg	9	35,6	0	0
% of coverage	%	100%	100%	100%	100%
<b>TOTAL EMISSIONS</b>	<b>TCO2E</b>	<b>209</b>	<b>837</b>	<b>0</b>	<b>0</b>

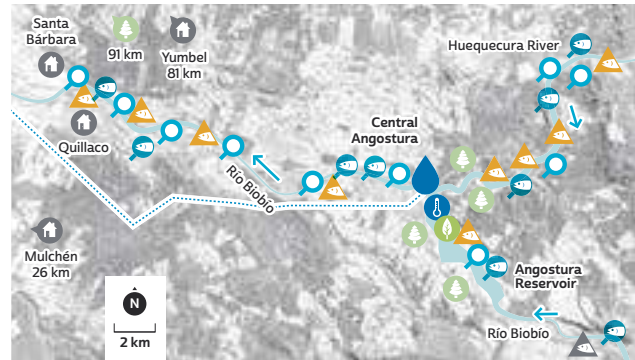
## Biodiversity

304-1; 304-2; 304-3, 304-4

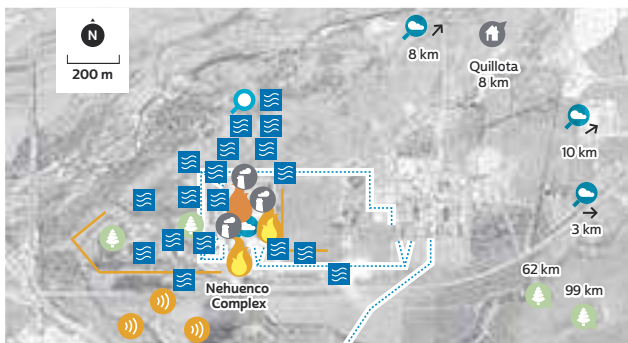
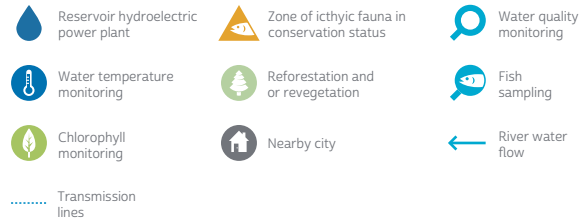
Colbún's biodiversity management maps are presented below:



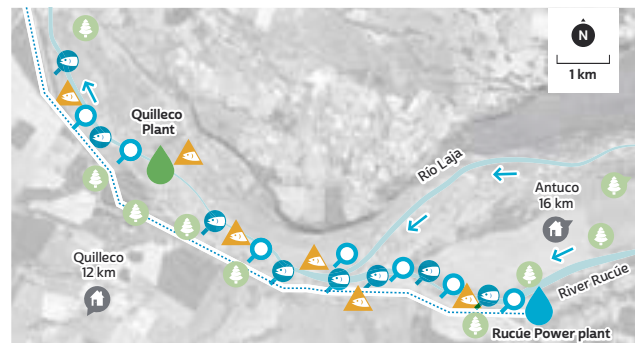
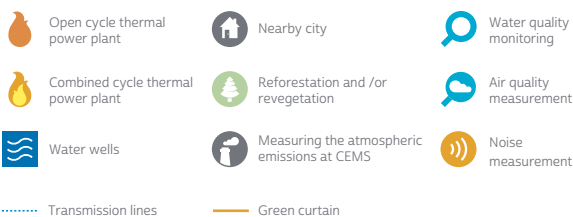
**COLBÚN COMPLEX**



**ANGOSTURA POWER PLANT**

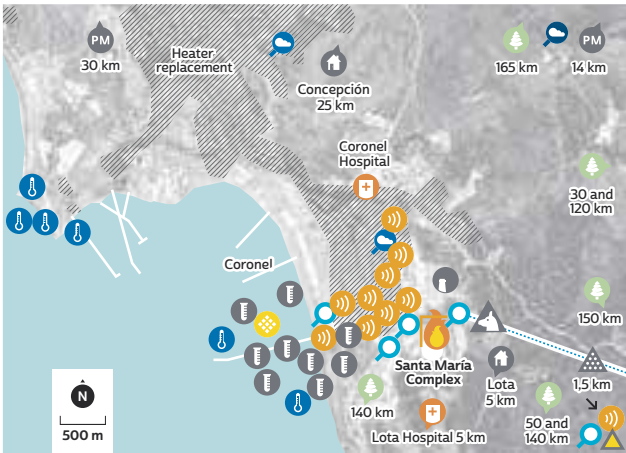


**NEHUENCO COMPLEX**



**RUCÚE AND QUILLECO POWER PLANTS**





**SANTA MARÍA POWER PLANT**

- Coal-fired thermal power plant
- Reforestation and /or revegetation
- Air quality measurement
- Noise measurement
- Nearby city
- Environmental surveillance plan
- Mesh filters, sea water intake
- Purchase of emission rights
- Transmission Lines
- Measuring atmospheric emissions at the CEMS chimney
- Water temperature monitoring
- Boiler replacement Coronel and Lota hospitals
- Ash stockpile yard
- Ash hazardousness analysis
- Green curtain
- Animal rescue and relocation plan
- Water quality monitoring

We don't have information of impacts regarding the reduction in the number of species or the disturbance thereof. The projects with an Environmental Impact Assessment on ichthyic fauna (Angostura, Rucúe-Quilleco, La Mina, Hornitos, and Santa María) have follow-up plans that have not shown project-related impacts or effects. Specifically, in the case of Canutillar, we have studies proving there are no significant effects.

**Facilities located on or close to protected areas or biodiversity rich areas**

(304-1, 304-3)

Property Name	Colbún's operation center	Geographic Location	Area or Surface in Km <sup>2</sup> (1)	Type of Operation	Company's location with respect to the protected area (2)	Area description (protected/not protected)
Alerce Andino National Park	Canutillar power plant	Los Lagos Region	392.5	Canutillar power plant civil works	Adjacent to the area	Protected (state)
Llanquihue National Reserve	Canutillar power plant	Los Lagos Region	339.7	Canutillar power plant civil works	Adjacent to the area	Protected (state)
Río Blanco Forest Reserve	Los Maquis - Hornitos HV line	Valparaiso Region	1901.8	Los Maquis - Hornitos transmission line	Inside the area	Protected (state)
Quebrada de la Plata Nature Sanctuary	Carena - Lo Prado HV line	Metropolitan Region	11.1	Carena - Lo Prado transmission line	Adjacent to the area	Protected (private)
Los Nogales Farm Sanctuary	Polpaico - Maitenes HV line	Metropolitan Region	110.23	Polpaico - Maitenes transmission line	Inside the area	Protected (private)

**Note:**

(1) Considers the whole protected area surface.

(2) It is regarded as "adjacent" when the Company facility is up to 1 km away from the protected area.

**Protected, restored or replanted habitats**

(304-3)

Name of the Habitat	Geographic Location	Area or Surface (Km <sup>2</sup> )	Protected/ Restored/ Replanted
Fdo. Villa Rivas	Contulmo, Prov. Arauco	0,0025	Enrichment with 4 species in conservation status
Fdo. Cabaña Eugenia	Angostura Power Plant, Sta. Bárbara, Prov. Biobío	0,36	Enrichment of degraded forest
Angostura reservoir banks	Angostura Power Plant, Sta. Bárbara, Prov. Biobío	0,075	Reforestation of reservoir banks for fauna sheltering
Native forest with melliferous potential	Angostura Power Plant, Yumbel, Prov. Biobío	1,25	Pilot project to study the possibility of producing honey from the quillay
Conversion of exotic plants to native forest	Los Pinos Power Plant, Cabrero, Prov. Biobío	0,2	Conversion of exotic plants (pine) to native forest
Nehuenco Native Park	Nehuenco Complex, Quillota, Prov. Quillota	0,036	Reforestation with conservation purposes that will incorporate flora and fauna

**Protected species within Colbún's area of influence in Chile**

(304-4)

Species	Geographic Location	Conservation Status
<i>Aegla abtao</i>	Chamiza River (Canutillar)	Least concern
<i>Samastacus spinifrons</i>	Chamiza River (Canutillar), Maule River	Least concern
<i>Galaxias maculatus</i>	Chamiza River and Chapo Lake (Canutillar), Huequecura and Biobío River (Angostura)	Least concern
<i>Geotria australis</i>	Chamiza River (Canutillar)	Vulnerable
<i>Trichomycterus areolatus</i>	Chamiza River and Chapo Lake (Canutillar), Rucúe and Laja River, Huequecura and Biobío River (Angostura), Maule River	Vulnerable
<i>Percichthys trucha</i>	Chapo Lake (Canutillar), Río Rucúe y Laja, Huequecura River y Biobío (Angostura)	Least concern
<i>Basilichthys australis</i>	Rucúe and Laja River, Maule River and Colbún Reservoir	Near threatened
<i>Percilia gillissi</i>	Maule River	Endangered
<i>Diplomystes nahuelbutaensis</i>	Rucúe and Laja River (Quilleco), Huequecura and Biobío River (Angostura), Maule River	Endangered
<i>Percilia irwini</i>	Rucúe and Laja River (Quilleco), Huequecura and Biobío River (Angostura)	Endangered
<i>Cheirodon galusdae</i>	Rucúe and Laja River, Maule River and Colbún Reservoir	Vulnerable
<i>Bullockia maldonadoi</i>	Huequecura and Biobío River (Angostura)	Endangered
<i>Nematogenys inermis</i>	Huequecura and Biobío River (Angostura)	Endangered
<i>Aegla pewenchaе</i>	Maule River	Least concern
<i>Aegla araucaniensis</i>	Maule River	Least concern
<i>Beilschmiedia miersii</i>	V-VI Region (Nehuenco)	Vulnerable
<i>Kageneckia angustifolia</i>	IV-VII Region (Aconcagua)	Least concern
<i>Porlieria chilensis</i>	IV-VI Region (Aconcagua)	Vulnerable
<i>Austrocedrus chilensis</i>	V-X Region (La Mina)	Least concern
<i>Eucryphia glutinosa</i>	VII-IX Region (Angostura)	Vulnerable
<i>Persea lingue</i>	V-X Region (Angostura)	Least concern
<i>Citronella mucronata</i>	IV-X Region (Angostura)	Vulnerable

Our facilities and operations do not affect any of the abovementioned protected species, in Chile or in Peru.

## Biodiversity of water masses and related habitats

303-2, 306-5

### Chile

No receiving water body or habitat has been “significantly affected” by our discharges. This is shown by the monitoring of quality variables conducted in the receiving water body and by our compliance with the corresponding emission standard (DS 90), in agreement with the monitoring programs defined for each facility by the competent authority.

The Company has self-control certificates that prove compliance with the emission standards for 2018 for each of the 4 thermoelectric power plants where liquid industrial waste waters (RILES) are generated and with the results of the water quality monitoring at the Coronel bay (per RCA 176\_CTSM), the Aconcagua river (Voluntary in Nehuenco) and the Overflow Channel (RCA 120\_ Los Pinos). It is worth mentioning the temperature monitoring conducted at the Coronel bay, where Santa María I power plant discharges its water, a voluntary follow-up conducted by the Company since 2010 based on a thermistor network at the water column.

It is worth mentioning that hydroelectric power plants do not modify the water quality, hence, they may not “significantly affect” downstream water masses and habitats.

### Perú

No receiving water body or habitat has been “significantly affected” by our discharge. This is proven by the quality variables monitoring results taken at the receiving bodies, in compliance with the corresponding emission standard.

### Sources of water intake

With respect to the water intake, Colbún power plants use water from different sources, depending on their location and technology.

For run-of-the river hydroelectric plants, the surface water of the river is diverted to generate power but is returned in the same volume and conditions at a downstream point. Since the late 90's the environmental qualification resolution has established minimum flows at the rivers disturbed, which may not be used to generate power. This is the case, for example, of Rucúe, Quilleco, Chacabuquito, La Mina and San Clemente power plants. For reservoir power plants, the water stored at the reservoir is used to generate power, but the resource is later returned to the basin where the facilities are located, for example, Colbún, Machicura, Angostura and Canutillar power plants. In the latter,

the power plant uses water from the Chapo Lake, which is located by the Alerce Andino National Park. This is the only Colbún facility located close to a territory of such characteristics.

In all its hydroelectric power plants Colbún has conducted ichthyic fauna studies of the basins where the facilities are located to determine the existing biodiversity conditions and their evolution.

Finally, Colbún's thermoelectric plants use water to operate the cooling system. In the case of Santa María plant and Fenix power plant (Peru), they use sea water which is later returned to the same water body. In the case of Santa Maria power plant, the Universidad de Concepción has conducted monitoring rounds at the Coronel Bay, which, so far, have not detected an impact on biodiversity.

In the case of gas-fired power plants (Nehuenco and Candelaria), they use underground waters from authorized wells, and several measures have been implemented to ensure a more efficient use. No negative impact on biodiversity has been recorded

### Consultants who support Colbún in the implementation of the biodiversity strategy

Consultant	Expertise
Centro EULA (Universidad de Concepción)	Ichthyic fauna, macrophytes, phyto and zoobentos, phyto and zoo plankton, water quality
Universidad de Talca	Flora in conservation status.
GEA Ambiental	Ichthyic fauna, water quality, macrophytes, phyto and zoobentos, phyto and zoo plankton
ERA Sustentable	Ichthyic fauna, macrophytes, phyto and zoobentos, phyto and zoo plankton, water quality
Centro de Ecología Aplicada	Ichthyic fauna, macrophytes, phyto and zoobentos, phyto and zoo plankton, water quality
Bioamerica	Follow-up of terrestrial fauna and birds
Templado	Biodiversity and conservation studies

## Waste generated

306-2

As a result of the industrial processes involved in power generation solid waste is generated, which is separated in categories at the power plants and managed independently, according to its hazardousness and its selling possibilities.

Hazardous waste resulting from the operation of our facilities is principally fabric contaminated with fuels, used industrial oils, fluorescent tubes, paint

containers, solvent containers and batteries. Non-hazardous waste corresponds to residential waste, plastic bags, plastic containers and others.

With respect to “Non-Hazardous Waste” in the thermoelectric power plants in Chile, there was a slight increase in 2017 which is due mainly to Nehuenco waste removal from the change of transformer made in that year, going back to the historic values in 2018.

The generation of “hazardous waste” in thermoelectric power plants in Chile recorded a significant reduction as compared to 2017, as a greater amount of hazardous waste was generated that year, mainly oily waters resulting from the maintenance and cleaning of collection chambers and oily water tank at Nehuenco.

### Total weight of waste generated

(306-2)

		Chile				Perú	
		2015	2016	2017	2018	2017	2018
Residential Non-Hazardous waste (Tons)	Thermoelectric power plants	341	327	911	383	335	135
	Hydroelectric power plants	68	71	67	65	-	-
	Santiago Headquarters	42	42	45	42	-	-
Hazardous waste (Tons)	Thermoelectric power plants	523	900	673	231	27	105
	Hydroelectric power plants	53	41	22	39	-	-
<b>TOTAL</b>		<b>1.028</b>	<b>1.381</b>	<b>1.673</b>	<b>718</b>	<b>362</b>	<b>240</b>



### Total weight and final disposal of Santa Maria Complex's ashes (306-2)

	Metering Unit	2015	2016	2017	2018
Ashes reutilized outside of Colbún	Ton	66,986	55,211	68,894	48,983
Ash Accumulation	Ton	30,348	33,969	28,813	53,979
<b>TOTAL</b>	<b>TON</b>	<b>97,334</b>	<b>89,180</b>	<b>97,707</b>	<b>102,962</b>

### Revenues from the sale of ashes in Chile (306-2)

Revenues from the sale of ashes	2015	2016	2017	2018
USD	345,985	257,601	371,174	377,407

## Waste water discharge

The power plants discharge waste waters in a planned manner as set forth in the environmental permits (RCAs) and the self-control resolutions, which are monitored and certified by the SMA and the Superintendence of Sanitary Services (SISS) and are specific for each power plant.

Also, the facilities that do not have the possibility of getting hooked to the sewage network have waste water treatment plants, under permanent review and monitoring.

Waters are used differently by the power plants, so their amount (flows),

physical-chemical characterization and treatment before disposal are specific and tailored to each facility. Similarly, waste water standards or limits also depend on the receiving water body, namely surface water flows, mains off the coast or infiltration in the subsoil.

### Total waste poured and final waste disposal in Chile (306-1)

Waste poured	Metering unit	2015	2016	2017	2018	Planned/Unplanned	Final disposal	Treatment method	Reutilized by other organization (Y/N)	Water quality
Candelaria Power Plant	m <sup>3</sup>	22,196	34,844	31,288	32,114	Planned (normal operation)	Surface flow	pH stabilization, activated slurry (PTAS), Neutralization/Disinfection	No	D.S. N°90/00
Los Pinos Power Plant	m <sup>3</sup>	95,555	59,751	48,052	44,262	Planned (normal operation)	Surface flow	pH stabilization, activated slurry (PTAS), Neutralization/Disinfection	No	D.S. N°90/00
Nehuenco Complex	m <sup>3</sup>	1,349,900	1,690,291	1,897,700	2,399,730	Planned (normal operation)	Surface flow	pH stabilization, activated slurry (PTAS), Neutralization/Disinfection	No	D.S. N°90/00
Antilhue Plant	m <sup>3</sup>	24,474	22,347	98,292	43,300	Planned (normal operation)	Underground	No treatment	No	NCh 1333
Santa Maria Plant	m <sup>3</sup>	313,124,801	316,705,253	336,714,557	343,677,118	Planned (normal operation)	Sea	No treatment	No	D.S. N°90/00
<b>TOTAL</b>		<b>314,616,926</b>	<b>318,512,486</b>	<b>338,789,889</b>	<b>346,196,524</b>					

**Total waste poured and final disposal in Peru**

(306-1)

Waste poured	Metering Unit	2016	2017	2018	Final disposal	Planned/Unplanned	Treatment method	Reutilized by other organization (Y/N)
Fenix	m <sup>3</sup>	255,840,933	290,786,513	287,459,463	Sea	Planned (normal operation)	Residual chlorine control	No

**Total number and volume of the most significant accidental spills in Chile and Peru**

(306-3)

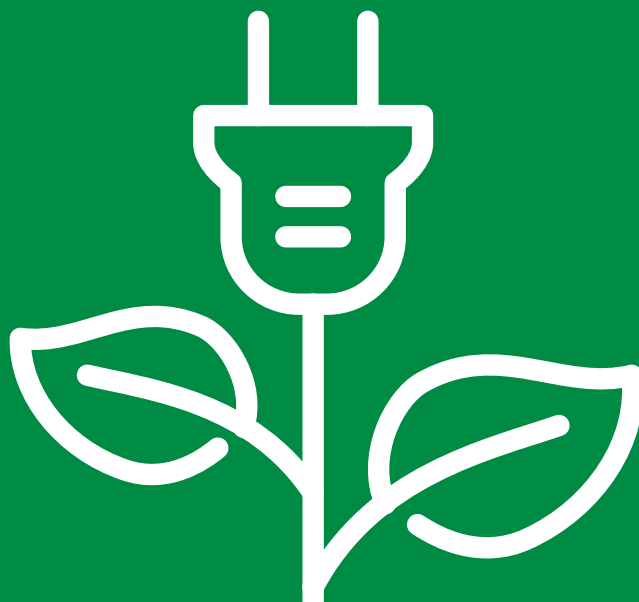
Spill (description)	Location	Spill volume (metering unit)	Spilled substance	Classification of the material	Body disturbed by the spill (water, soil)	Environmental consequences of the significant spills	Social consequences of the significant spills	Measures adopted by Colbún
Lubricant oil filtration during the assembly of Toshiba transformer	Nehuenco	3,300 L	Lubricant oil	Flammable chemical substance	Soil	Soil contamination	None	- The design of the wall was replaced with another of greater dimension (30 m3) and larger and more resistant asphaltic layers were installed. Stoppage of the works.



# 08



## Estados Financieros







## Informe de los Auditores Independientes

Señores Accionistas y Directores de Colbún S.A.:

Hemos efectuado una auditoría a los estados financieros consolidados adjuntos de Colbún S.A. y Subsidiarias, que comprenden los estados de situación financiera consolidados al 31 de diciembre de 2018 y 2017 y los correspondientes estados consolidados de resultados integrales, de cambios en el patrimonio y de flujos de efectivo por los años terminados en esas fechas y las correspondientes notas a los estados financieros consolidados.

### **Responsabilidad de la Administración por los estados financieros consolidados**

La Administración es responsable por la preparación y presentación razonable de estos estados financieros consolidados de acuerdo con Normas Internacionales de Información Financiera. Esta responsabilidad incluye el diseño, implementación y mantención de un control interno pertinente para la preparación y presentación razonable de estados financieros consolidados que estén exentos de representaciones incorrectas significativas, ya sea debido a fraude o error.

### **Responsabilidad del auditor**

Nuestra responsabilidad consiste en expresar una opinión sobre estos estados financieros consolidados a base de nuestras auditorías. Efectuamos nuestras auditorías de acuerdo con Normas de Auditoría Generalmente Aceptadas en Chile. Tales normas requieren que planifiquemos y realicemos nuestro trabajo con el objeto de lograr un razonable grado de seguridad que los estados financieros consolidados están exentos de representaciones incorrectas significativas.

Una auditoría comprende efectuar procedimientos para obtener evidencia de auditoría sobre los montos y revelaciones en los estados financieros consolidados. Los procedimientos seleccionados dependen del juicio del auditor, incluyendo la evaluación de los riesgos de representaciones incorrectas significativas de los estados financieros consolidados, ya sea debido a fraude o error. Al efectuar estas evaluaciones de los riesgos, el auditor considera el control interno pertinente para la preparación y presentación razonable de los estados financieros consolidados de la entidad con el objeto de diseñar procedimientos de auditoría que sean apropiados en las circunstancias, pero sin el propósito de expresar una opinión sobre la efectividad del control interno de la entidad. En consecuencia, no expresamos tal tipo de opinión. Una auditoría incluye, también, evaluar lo apropiadas que son las políticas de contabilidad utilizadas y la razonabilidad de las estimaciones contables significativas efectuadas por la Administración, así como una evaluación de la presentación general de los estados financieros consolidados.

Consideramos que la evidencia de auditoría que hemos obtenido es suficiente y apropiada para proporcionarnos una base para nuestra opinión de auditoría.

### **Opinión**

En nuestra opinión, los mencionados estados financieros consolidados presentan razonablemente, en todos sus aspectos significativos, la situación financiera de Colbún S.A. y Subsidiarias al 31 de diciembre de 2018 y 2017 y los resultados de sus operaciones y los flujos de efectivo por los años terminados en esas fechas de acuerdo con Normas Internacionales de Información Financiera.

  
Patricia Guzmán R.  
Santiago, 29 de enero de 2019

KPMG Ltda.

## Informe de los Inspectores de Cuenta

A los señores Accionistas:

Conforme al mandato que nos otorgó la Junta de Accionistas, celebrada el 25 de abril de 2018, hemos examinado el balance General de Colbún S.A. al 31 de diciembre de 2018 y los correspondientes Estados de Resultados por el ejercicio de 12 meses a esa fecha.

Nuestra labor como Inspectores de Cuenta se centró en la comprobación de la coincidencia, sobre una base efectiva, de los saldos de cuentas que reflejan los registros contables de la sociedad con las cifras de dicho Balance General y Estado de resultados, verificación que no mereció observación alguna.



**Leonardo Venegas**



**Gastón Cruzat**

**Estados Financieros  
Consolidados**

**Correspondientes a los años  
terminados al 31 de diciembre  
de 2018 y 2017.**

**COLBÚN S.A. Y SUBSIDIARIAS**



**Colbún S.A. y Subsidiarias**  
**Estados de Situación Financiera Consolidados, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
**(En miles de dólares)**

ACTIVOS	Nota N°	31 de Diciembre, 2018 MUS \$	31 de Diciembre, 2017 MUS \$
<b>Activos corrientes</b>			
Efectivo y equivalentes al efectivo	7	219.191	269.196
Otros activos financieros, corrientes	8	569.251	541.969
Otros activos no financieros, corrientes	19	19.796	29.392
Cuentas comerciales por cobrar y otras cuentas por cobrar	9	241.679	225.064
Cuentas por cobrar a entidades relacionadas, corrientes	11.b	1.117	240
Inventarios	12	44.249	62.911
Activos por impuestos corrientes	18.a	55.980	18.390
<b>Activos corrientes totales</b>		<b>1.151.263</b>	<b>1.147.162</b>
<b>Activos no corrientes</b>			
Otros activos financieros, no corrientes	8	8.797	21.167
Otros activos no financieros, no corrientes	19	26.930	29.009
Inversiones contabilizadas utilizando el método de la participación	15.a	30.202	38.298
Activos intangibles distintos de la plusvalía	16	127.940	132.067
Propiedades, planta y equipos	17	5.397.156	5.516.478
Activos por impuestos diferidos	20.b	36.061	38.361
<b>Activos no corrientes totales</b>		<b>5.627.086</b>	<b>5.775.380</b>
<b>ACTIVOS</b>		<b>6.778.349</b>	<b>6.922.542</b>

*Las notas adjuntas forman parte integral de estos estados financieros consolidados*

Colbún S.A. y Subsidiarias  
Estados de Situación Financiera Consolidados, Clasificados (continuación)  
al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

PATRIMONIO Y PASIVOS	Nota N°	31 de Diciembre, 2018 MUS\$	31 de Diciembre, 2017 MUS\$
<b>Pasivos corrientes</b>			
Otros pasivos financieros, corrientes	21.a	68.503	57.416
Cuentas por pagar comerciales y otras cuentas por pagar, corrientes	22	182.883	194.889
Cuentas por pagar a entidades relacionadas, corrientes	11.b	17.971	13.559
Otras provisiones	23	31.504	29.748
Pasivos por impuestos corrientes	18.b	74	19.785
Provisiones corrientes por beneficios a los empleados	24	20.462	22.921
Otros pasivos no financieros, corrientes	25	23.968	22.079
<b>Pasivos corrientes totales</b>		<b>345.365</b>	<b>360.397</b>
<b>Pasivos no corrientes</b>			
Otros pasivos financieros, no corrientes	21.a	1.534.760	1.602.036
Cuentas comerciales por pagar y otras cuentas por pagar, no corrientes	22	3.739	12.924
Otras provisiones no corrientes	23	34.948	33.389
Pasivo por impuestos diferidos	20.b	958.800	918.046
Provisiones no corrientes por beneficios a los empleados	24	30.786	32.833
Otros pasivos no financieros, no corrientes	25	13.013	12.210
<b>Pasivos no corrientes totales</b>		<b>2.576.046</b>	<b>2.611.438</b>
<b>Pasivos totales</b>		<b>2.921.411</b>	<b>2.971.835</b>
<b>Patrimonio</b>			
Capital emitido	26.a	1.282.793	1.282.793
Ganancias (pérdidas) acumuladas	26.f	1.550.677	1.601.772
Prima de emisión	26.c	52.595	52.595
Otras reservas	26.e	770.449	787.372
<b>Patrimonio atribuible a los propietarios de la controladora</b>		<b>3.656.514</b>	<b>3.724.532</b>
Participaciones no controladoras	-	200.424	226.175
<b>Patrimonio Total</b>		<b>3.856.938</b>	<b>3.950.707</b>
<b>PATRIMONIO Y PASIVOS</b>		<b>6.778.349</b>	<b>6.922.542</b>

Las notas adjuntas forman parte integral de estos estados financieros consolidados

Colbún S.A. y Subsidiarias  
Estados de Resultados Integrales Consolidados, por Naturaleza  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Nota N°	Enero - Diciembre	
		2018 MUS\$	2017 MUS\$
Ingresos de actividades ordinarias	6 y 27	1.571.347	1.548.412
Materias primas y consumibles utilizados	28	(773.603)	(755.680)
Gastos por beneficio a los empleados	29	(79.765)	(76.785)
Gastos por depreciación y amortización	30	(236.955)	(223.488)
Otros gastos, por naturaleza	-	(33.856)	(23.817)
Otras ganancias (pérdidas)	34	(53.568)	(84.805)
<b>Ganancia por actividades de operación</b>	-	<b>393.600</b>	<b>383.837</b>
Ingresos financieros	31	20.367	12.726
Costos financieros	31	(83.871)	(84.954)
Participación en las ganancias (pérdidas) de asociadas y negocios conjuntos que se contabilicen utilizando el método de participación	15 y 33	11.388	2.904
Diferencias de cambio	32	(12.641)	8.169
<b>Ganancia antes de impuesto</b>	-	<b>328.843</b>	<b>322.682</b>
Gasto (ingreso) por impuestos, operaciones continuadas	20.a	(98.418)	(34.080)
<b>Ganancia (pérdida) procedente de operaciones continuadas</b>		<b>230.425</b>	<b>288.602</b>
<b>GANANCIA</b>		<b>230.425</b>	<b>288.602</b>
<b>Ganancia atribuible a</b>			
Ganancia atribuible a los propietarios de la controladora	26.h	240.350	270.985
Ganancia atribuible a participaciones no controladoras	-	(9.925)	17.617
<b>GANANCIA</b>		<b>230.425</b>	<b>288.602</b>
<b>Ganancias por acción</b>			
Ganancias por acción básica en operaciones continuadas <b>US\$/acción</b>	26.h	0,01371	0,01545
<b>Ganancias por acción básica</b>		<b>0,01371</b>	<b>0,01545</b>
Ganancias diluida por acción procedente de operaciones continuadas <b>US\$/acción</b>	26.h	0,01371	0,01545
<b>Ganancias por acción diluida</b>		<b>0,01371</b>	<b>0,01545</b>

Las notas adjuntas forman parte integral de estos estados financieros consolidados

Colbún S.A. y Subsidiarias  
Estados de Otros Resultados Integrales Consolidados  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE OTROS RESULTADOS INTEGRALES	Nota N°	Enero - Diciembre	
		2018 MUS \$	2017 MUS \$
<b>Ganancia</b>		<b>230.425</b>	<b>288.602</b>
<b>Componentes de otro resultado integral que no se reclasificarán al resultado del periodo, antes de impuestos</b>			
Ganancias (pérdidas) por nuevas mediciones de planes de beneficios definidos	-	(765)	(2.551)
<b>Total Otro resultado integral que no se reclasificará al resultado del periodo, antes de impuestos</b>	-	<b>(765)</b>	<b>(2.551)</b>
<b>Componentes de otro resultado integral que se reclasificarán al resultado del periodo, antes de impuestos</b>			
Ganancias (pérdidas) por diferencias de cambio de conversión	15.a	(2.829)	1.911
Ganancias (pérdidas) por coberturas de flujos de efectivo	-	6.645	(4.675)
Participación de otro resultado integral de asociadas y negocios conjuntos contabilizados utilizando el método de la participación	-	46	120
<b>Total Otro resultado integral que se reclasificará al resultado del periodo, antes de impuestos</b>		<b>3.862</b>	<b>(2.644)</b>
<b>Otros componentes de otro resultado integral, antes de impuestos</b>		<b>3.097</b>	<b>(5.195)</b>
<b>Impuestos a las ganancias relativos a componentes de otro resultado integral que no se reclasificará al resultado del periodo</b>			
Impuesto a las ganancias relacionado con nuevas mediciones de planes de beneficios definidos	20.c	207	689
<b>Impuestos a las ganancias relativos a componentes de otro resultado integral que se reclasificará al resultado del periodo</b>			
Impuesto a las ganancias relacionado con Participación de otro resultado integral de asociadas y negocios conjuntos contabilizados utilizando el método de la participación	20.c	(12)	(31)
Impuesto a las ganancias relacionado con coberturas de flujo de efectivo	20.c	(1.794)	1.393
<b>Impuesto a las ganancias relativo a componentes de otro resultado integral</b>		<b>(1.599)</b>	<b>2.051</b>
<b>Otro resultado integral total</b>		<b>1.498</b>	<b>(3.144)</b>
<b>Resultado integral total</b>		<b>231.923</b>	<b>285.458</b>
<b>Resultado integral atribuible a</b>			
Resultado integral atribuible a los propietarios de la controladora		241.848	269.621
Resultado integral atribuible a participaciones no controladoras		(9.925)	15.837
<b>RESULTADO INTEGRAL TOTAL</b>		<b>231.923</b>	<b>285.458</b>

Las notas adjuntas forman parte integral de estos estados financieros consolidados

**Colbún S.A. y Subsidiarias**  
**Estados de Flujos de Efectivo Consolidados - Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
**(En miles de dólares)**

<b>ESTADOS DE FLUJOS DIRECTO</b>	<b>Nota</b>	<b>31 de Diciembre,</b>	<b>31 de Diciembre,</b>
	<b>N°</b>	<b>2018</b>	<b>2017</b>
		<b>MUS \$</b>	<b>MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>			
<b>Clases de cobros por actividades de la operación</b>			
Cobros procedentes de las ventas de bienes y prestación de servicios	-	1.822.652	1.815.398
Cobros procedentes de primas y prestaciones, anualidades y otros beneficios de pólizas suscritas	-	1.244	3.316
Otros cobros por actividades de la operación	-	6.442	19.579
<b>Clases de pago</b>			
Pagos a proveedores por el suministro de bienes y servicios	-	(948.339)	(944.013)
Pagos a y por cuenta de los empleados	-	(74.296)	(69.790)
Pagos por primas y prestaciones, anualidades y otras obligaciones derivadas de pólizas suscritas	-	(23.370)	(18.265)
Otros pagos por actividades de operación	-	(177.052)	(123.548)
<b>Flujos de efectivo netos procedentes de (utilizados en) la operación</b>	-	<b>607.281</b>	<b>682.677</b>
Dividendos recibidos	-	7.923	10.551
Intereses recibidos	-	18.095	12.145
Impuestos a las ganancias reembolsados (pagados)	-	(108.356)	(97.169)
Otras entradas (salidas) de efectivo	-	(8.613)	(7.265)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>		<b>516.330</b>	<b>600.939</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>			
Otros pagos para adquirir participaciones en negocios conjuntos	-	(4.100)	(2.926)
Compras de propiedades, plantas y equipos	-	(107.939)	(122.205)
Otras entradas (salidas) de efectivo	-	(34.392)	(471.686)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>		<b>(146.431)</b>	<b>(596.817)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>			
<b>Importes procedentes de préstamos</b>	-	-	<b>840.000</b>
Importes procedentes de préstamos de largo plazo	-	-	840.000
Pagos de préstamos	-	(35.388)	(872.139)
Dividendos pagados	-	(290.665)	(161.005)
Intereses pagados	-	(74.587)	(88.735)
Otras entradas (salidas) de efectivo	-	4.160	(56.529)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>7.c</b>	<b>(396.480)</b>	<b>(338.408)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>		<b>(26.581)</b>	<b>(334.286)</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>			
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente		(23.424)	9.762
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>		<b>(50.005)</b>	<b>(324.524)</b>
Efectivo y equivalentes al efectivo al principio del período		269.196	593.720
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>7</b>	<b>219.191</b>	<b>269.196</b>

Las notas adjuntas forman parte integral de estos estados financieros consolidados

**Colbún S.A. y Subsidiarias**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
**(En miles de dólares)**

Estados de Cambios en el Patrimonio	Nota	Patrimonio Atribuible a los Propietarios de la Controladora										Participaciones no controladoras	Patrimonio
		Cambios en otras reservas								Ganancias (pérdidas) acumuladas	Patrimonio atribuible a los propietarios de la controladora		
		Capital emitido	Primas de emisión	Reserva de diferencias de cambio en conversiones	Reserva de coberturas de flujo de efectivo	Reserva de ganancias o pérdidas actuariales en planes de beneficios definidos	Otras reservas varias	Otras reservas					
MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	
Saldo inicial al 01.01.2018		1.282.793	52.595	(263.495)	5.431	-	1.045.436	787.372	1.601.772	3.724.532	226.175	3.950.707	
<b>Cambios en Patrimonio</b>													
<b>Resultado integral</b>													
Ganancia (pérdida)									240.350	240.350	(9.925)	230.425	
Otro resultado integral				(2.829)	4.885	(558)		1.498	-	1.498	-	1.498	
Dividendos									(309.866)	(309.866)	(15.826)	(325.692)	
Incremento (disminución) por otros cambios		-	-	10.187	-	558	(29.166)	(18.421)	18.421	-	-	-	
Total de cambios en patrimonio		-	-	7.358	4.885	-	(29.166)	(16.923)	(51.095)	(68.018)	(25.751)	(93.769)	
<b>Saldo final al 31.12.2018</b>	<b>26</b>	<b>1.282.793</b>	<b>52.595</b>	<b>(256.137)</b>	<b>10.316</b>	<b>-</b>	<b>1.016.270</b>	<b>770.449</b>	<b>1.550.677</b>	<b>3.656.514</b>	<b>200.424</b>	<b>3.856.938</b>	

Estado de Cambios en el Patrimonio	Nota	Patrimonio Atribuible a los Propietarios de la Controladora										Participaciones no controladoras	Patrimonio
		Cambios en otras reservas								Ganancias (pérdidas) acumuladas	Patrimonio atribuible a los propietarios de la controladora		
		Capital emitido	Primas de emisión	Reserva de diferencias de cambio en conversiones	Reserva de coberturas de flujo de efectivo	Reserva de ganancias o pérdidas actuariales en planes de beneficios definidos	Otras reservas varias	Otras reservas					
MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	
Saldo inicial al 01.01.2017		1.282.793	52.595	(265.406)	6.846	-	1.074.633	816.073	1.424.924	3.576.385	213.447	3.789.832	
<b>Cambios en Patrimonio</b>													
<b>Resultado integral</b>													
Ganancia (pérdida)									270.985	270.985	17.617	288.602	
Otro resultado integral				1.911	(1.415)	(1.860)	-	(1.364)		(1.364)	(1.780)	(3.144)	
Dividendos									(121.473)	(121.473)	(3.110)	(124.583)	
Incremento (disminución) por otros cambios		-	-	-	-	1.860	(29.197)	(27.337)	27.336	(1)	1	-	
Total de cambios en patrimonio		-	-	1.911	(1.415)	-	(29.197)	(28.701)	176.848	148.147	12.728	160.875	
<b>Saldo final al 31.12.2017</b>	<b>26</b>	<b>1.282.793</b>	<b>52.595</b>	<b>(263.495)</b>	<b>5.431</b>	<b>-</b>	<b>1.045.436</b>	<b>787.372</b>	<b>1.601.772</b>	<b>3.724.532</b>	<b>226.175</b>	<b>3.950.707</b>	

Las notas adjuntas forman parte integral de estos estados financieros consolidados

## COLBÚN S.A. Y SUBSIDIARIAS

### NOTAS A LOS ESTADOS FINANCIEROS CONSOLIDADOS

(En miles de dólares)

#### 1. Información general

Colbún S.A. fue constituida por escritura pública de fecha 30 de abril de 1986, ante el Notario Público de Santiago Señor Mario Baros G., e inscrita en el Registro de Comercio del Conservador de Bienes Raíces de Talca, a fojas 86, el 30 de mayo de 1986. El Rol Único Tributario de la Sociedad es el N°96.505.760-9.

La Compañía se encuentra inscrita como Sociedad Anónima Abierta en el Registro de Valores con el número 0295, desde el 1° de septiembre de 1986, y por ello está sujeta a la fiscalización de la Comisión para el Mercado Financiero. Las acciones de Colbún S.A. se transan en la Bolsa de Comercio de Santiago y en la Bolsa Electrónica de Chile.

Colbún es una Compañía generadora de energía eléctrica, que al 31 de diciembre de 2018 es matriz del grupo (en adelante, la Compañía, la Sociedad o Colbún), formado por catorce sociedades: Colbún S.A. y trece Subsidiarias.

El domicilio comercial de Colbún se encuentra en Avenida Apoquindo 4775 piso 11, comuna de Las Condes, Santiago.

El objeto social de Colbún consiste en la generación, transporte y distribución de energía eléctrica, según se explica con mayor detalle en Nota 2.

El control de la Sociedad es ejercido en virtud de un pacto de control y actuación conjunta formalizado respecto de Forestal O'Higgins S.A. y otras sociedades. Se deja expresa constancia que el pacto de control y actuación conjunta antes indicado contempla limitaciones a la libre disposición de las acciones. Detrás del controlador figuran los siguientes integrantes de las familias Larraín Matte, Matte Capdevila y Matte Izquierdo, en la forma y proporciones que se señalan a continuación:

- Patricia Matte Larraín, RUT 4.333.299-6 (6,49%) y sus hijos María Patricia Larraín Matte, RUT 9.000.338-0 (2,56%); María Magdalena Larraín Matte, RUT 6.376.977-0 (2,56%); Jorge Bernardo Larraín Matte, RUT 7.025.583-9 (2,56%), y Jorge Gabriel Larraín Matte, RUT 10.031.620-K (2,56%).
- Eliodoro Matte Larraín, RUT 4.336.502-2 (7,21%) y sus hijos Eliodoro Matte Capdevila, RUT 13.921.597-4 (3,27%); Jorge Matte Capdevila, RUT 14.169.037-K (3,27%), y María del Pilar Matte Capdevila, RUT 15.959.356-8 (3,27%).
- Bernardo Matte Larraín, RUT 6.598.728-7 (7,79%) y sus hijos Bernardo Matte Izquierdo, RUT 15.637.711-2 (3,44%); Sofía Matte Izquierdo, RUT 16.095.796-4 (3,44%), y Francisco Matte Izquierdo, RUT 16.612.252-K (3,44%).

Las personas naturales identificadas precedentemente pertenecen por parentesco a un mismo grupo empresarial.

De acuerdo con lo definido en el Título XV de la Ley N°18.045, se detallan a continuación las sociedades titulares de acciones que representan el 49,96% del capital con derecho a voto, al 31 de diciembre de 2018:

Grupo Controlador	N° Acciones	Participación %
Mínera Valparaíso S.A.	6.166.879.733	35,17
Foreshal Cominco S.A.	2.454.688.263	14,00
Foreshal Constructora y Comercial del Pacífico Sur S.A.	34.126.083	0,19
Foreshal y Mínera Canadilla S.A.	31.232.961	0,18
Foreshal Cañada S.A.	22.308.320	0,13
Foreshal Bureo S.A.	17.846.000	0,10
Inversiones Orinoco S.A.	17.846.000	0,10
Inversiones Coillanca Ltda.	16.473.762	0,09
Inmobiliaria Bureo S.A.	38.224	0,00
<b>Total Participación</b>	<b>8.761.439.346</b>	<b>49,96</b>

## 2. Descripción del negocio

### Objeto de la Compañía

El objeto social de la Compañía es producir, transportar, distribuir y suministrar energía y potencia eléctrica, pudiendo para tales efectos adquirir y explotar concesiones y servirse de las mercedes o derechos que obtenga. Asimismo, está facultada para transportar, distribuir, suministrar y comercializar gas natural para su venta a procesos industriales o de generación. Adicionalmente, puede prestar asesorías en el campo de la ingeniería, tanto en el país como en el extranjero.

### Descripción del Negocio en Chile

#### Principales activos

El parque de generación está formado por centrales hidráulicas (de embalse y de pasada), térmicas a carbón, diésel y gas (ciclos combinados y convencionales), y en base a energías renovables de fuente variable que, en suma, aportan una capacidad instalada de 3.328 MW al Sistema Eléctrico Nacional (SEN).

Las centrales hidroeléctricas suman una capacidad de 1.634 MW y se distribuyen en 17 plantas: Colbún, Machicura, San Ignacio, Chiburgo, San Clemente y La Mina, ubicadas en la Región del Maule; Rucúe, Quilleco y Angostura, en la Región del Biobío; Carena, en la Región Metropolitana; Los Quilos, Blanco, Juncal, Juncalito, Chacabuquito y Hornitos, en la Región de Valparaíso; y Canutillar, en la Región de Los Lagos. Las centrales Colbún, Machicura, Canutillar y Angostura cuentan con sus respectivos embalses, mientras que las instalaciones hidráulicas restantes corresponden a centrales de pasada.

Las centrales térmicas suman una capacidad de 1.685 MW y se distribuyen en el complejo Nehuenco, ubicado en la Región de Valparaíso; la central Candelaria, en la Región de O'Higgins; la central Antihue, en la Región de los Ríos; y la central Los Pinos y central Santa María, ubicadas en la Región del Biobío.

Además, durante el año 2018 entró en operación comercial el parque fotovoltaico Ovejería (9 MW) ubicada en la comuna de Tiltil, región Metropolitana.

#### Política comercial

La política comercial de la Compañía es lograr un adecuado equilibrio entre el nivel de compromisos de venta de electricidad y la capacidad propia en medios de generación eficientes, con el objetivo de obtener un aumento y estabilización de los márgenes de operación, con un nivel aceptable de riesgos ante sequías. Para



ello se requiere también mantener un adecuado mix de generación térmica e hidráulica. Como consecuencia de esta política, la Compañía procura que las ventas o compras en el mercado spot no alcancen volúmenes demasiado relevantes, debido a que los precios en este mercado experimentan importantes variaciones, siendo la variable de mayor incidencia la condición hidrológica.

### Principales clientes

La cartera de clientes está compuesta por clientes regulados y libres:

Los principales clientes regulados suministrados durante el año 2018 son: CGE Distribución S.A., Enel Distribución Chile S.A., Sociedad Austral de Electricidad S.A., Empresa Eléctrica de la Frontera S.A., Cooperativa de Consumo de Energía Eléctrica Chillán Ltda., Compañía Eléctrica de Osorno S.A., Cooperativa Eléctrica de Curicó Ltda., Compañía Distribuidora de Energía Eléctrica Codiner Ltda., Cooperativa Eléctrica Los Ángeles Ltda., Cooperativa de Abastecimiento de Energía Eléctrica Curicó Ltda. y Cooperativa Eléctrica Paillaco Ltda.

Los principales clientes libres suministrados durante el año 2018 son: Codelco para sus divisiones Salvador, Andina, Ventanas y El Teniente, Anglo American Sur S.A. para sus faenas de Los Bronces/Las Tórtolas, Cartulinas CMPC.S.A., Forsac S.A., CMPC Pulp S.A., CMPC Maderas S.A., Forestal Mininco S.A., Walmart Chile S.A., Bio-Bío Cementos S.A., Essbio S.A., Nuevosur S.A., Sociedad Contractual Minera Franke, Viña Concha y Toro S.A., Viña Cono Sur S.A., Compañía Pesquera Camanchaca S.A., Salmones Camanchaca S.A., Camanchaca Pesca Sur S.A., Camanchaca Cultivos Sur S.A. y ASMAR Astilleros.

### El mercado eléctrico

El sector eléctrico chileno tiene un marco regulatorio de casi 3 décadas de funcionamiento. Este ha permitido desarrollar una industria muy dinámica con alta participación de capital privado. El sector ha sido capaz de satisfacer la creciente demanda de energía, la cual ha crecido en promedio en los últimos 10 años a una tasa promedio anual aproximada de un 2,8% levemente menor al crecimiento del PIB durante el mismo período.

Chile cuenta con 3 sistemas interconectados y Colbún opera en el de mayor tamaño, el Sistema Eléctrico Nacional (SEN), que se extiende desde Arica por el norte hasta la Isla Grande de Chiloé por el sur. El consumo de esta zona representa el 99% de la demanda eléctrica de Chile. Colbún tiene una participación de mercado del orden del 14% en el SEN.

El sistema de tarificación distingue distintos mecanismos para el corto y largo plazo. Para efectos de la tarificación de corto plazo, el sector se basa en un esquema de costo marginal, que incluye a su vez los criterios de seguridad y eficiencia en la asignación de los recursos. Los costos marginales de la energía resultan de la operación real del sistema eléctrico de acuerdo con la programación por mérito económico que efectúa el CEN (Coordinador Eléctrico Nacional) y que corresponde al costo variable de producción de la unidad más cara que se encuentra operando en cada instante. La remuneración de la potencia se calcula sobre la base de la potencia de suficiencia de las centrales, es decir, el nivel de potencia confiable que la central puede aportar al sistema para abastecer la demanda de punta, considerando la incertidumbre asociada a la disponibilidad de sus insumos, la indisponibilidad forzada y programada de sus unidades, y la indisponibilidad de las instalaciones que conectan la unidad al Sistema de Transmisión o Distribución. El precio de la potencia se determina como una señal económica, representativa de la inversión en aquellas unidades más eficientes para absorber la demanda de potencia, en las horas de mayor exigencia de suministro del sistema.

Para efectos de tarificación de largo plazo, los generadores pueden tener dos tipos de clientes: regulados y libres.

Con la entrada en vigencia de la Ley N° 20.018 (Ley Corta II), desde el 1° de enero de 2010, en el mercado de clientes regulados, constituido por empresas distribuidoras, los generadores venden energía a un precio resultante de licitaciones públicas y competitivas.

Los clientes libres son aquellos que tienen una potencia conectada superior a 5.000 KW, y negocian libremente sus precios con sus proveedores.

Cabe destacar que la regulación permite que los usuarios con una potencia conectada entre 500 KW y 5.000 KW, puedan optar por un régimen de precios libres o regulados, con un período de permanencia mínimo de cuatro años en cada régimen.

El mercado spot es aquel donde los generadores transan entre ellos a costo marginal los excedentes o déficit de energía (a un nivel horario) y potencia que resulten de su posición comercial, neta de su capacidad de producción, dado que las órdenes de despacho son por mérito económico y exógeno a cada generador.

Para inyectar su electricidad al sistema y suministrar energía y potencia eléctrica a sus clientes, Colbún utiliza instalaciones de transmisión de su propiedad y de terceros, conforme a los derechos que le otorga la legislación eléctrica.

En este contexto, cabe mencionar que con fecha 20 de julio de 2016, se publicó en el Diario Oficial la Nueva Ley que establece un nuevo Sistema de Transmisión Eléctrica y crea un organismo Coordinador Independiente del Sistema Eléctrico Nacional. Los cambios principales incluidos en esta Ley es que la remuneración de la transmisión será de cargo íntegro a la Demanda Eléctrica. Asimismo, se establece un nuevo Coordinador con personalidad jurídica propia para operar el Sistema Eléctrico Nacional, que comenzó a ejercer sus funciones a partir del 1 de enero de 2017.

## **Descripción del Negocio en Perú**

### **Principales activos**

Central termoeléctrica de ciclo combinado a gas natural de 565 MW ubicada en Las Salinas, distrito de Chilca, 64 kilómetros al sur de Lima, propiedad de la filial Fenix Power Perú. Su ubicación es estratégica, ya que se encuentra cerca del gaseoducto de Camisea y la subestación eléctrica Chilca, lo que permite la generación de energía a costos eficientes.

Esta central entró en operación comercial en diciembre de 2014, y está compuesta de dos turbinas duales (gas o diésel) General Electric que generan el 60% de la potencia de la planta, y una turbina a vapor General Electric que genera el restante 40%. Dadas sus características, esta central es un activo estratégico del mercado eléctrico peruano, ya que dentro de las centrales térmicas en el país es una de las más eficiente y la tercera de mayor tamaño.

### **Principales clientes**

Clientes regulados con contratos a Largo Plazo: Grupo Distriluz, conformado por Electro Norte S.A., Electro Noreste S.A. y Electrocentro S.A. e Hidrandina, COELVISAC, Enel Distribución S.A.A., Electricidad del Oriente S.A., Electro Dunas S.A.A. y Luz del Sur S.A.A.

Clientes con contratos de Corto Plazo: Celepsa S.A., Grupo Distriluz y GCZ Energía, Ege Junín y Enel Distribución S.A.A.

Clientes Libres: Pamolsa y Algeciras (Ex Centenario).

### **El mercado eléctrico**

Perú reestructuró el mercado energético el año 1992 (Ley de Electricidad 25.844: Ley de Concesiones Eléctricas) y en los últimos 4 años se han realizado importantes reformas al marco regulatorio del sector.

El mercado eléctrico peruano tiene a nivel nacional a diciembre de 2018, una capacidad instalada de aproximadamente 15,1 GW, de los cuales 13,0 GW corresponden a la capacidad instalada del Sistema Eléctrico Interconectado Nacional (SEIN), de esta última cifra cerca del 57% es capacidad térmica, 38% hidráulica y el restante 5% en base a energías renovables. Por lo anterior, el gas natural juega un rol fundamental en la generación térmica del país dadas las importantes reservas y pozos de exploración con que cuenta, siendo Camisea el principal yacimiento con aproximadamente 15,6 trillones de pies cúbicos.

El sistema de tarificación distingue dos categorías de clientes: usuarios regulados que consumen menos de 200 kW y clientes no regulados (grandes usuarios privados con consumos superiores a 2.500 kW). Los clientes con demanda entre 200 kW y 2.500 kW tienen la opción de ser clientes regulados o no regulados.

El Sistema Eléctrico Interconectado Nacional (SEIN) está administrado por un Comité de Operación Económica del Sistema (COES), este está constituido como una entidad privada sin fines de lucro y con personería de Derecho Público. El COES está conformado por todos los agentes del SEIN (Generadores, Transmisores, Distribuidores y Usuarios Libres) y sus decisiones son de cumplimiento obligatorio para todos los agentes. Su finalidad es coordinar la operación de corto, mediano y largo plazo del SEIN, preservando la seguridad del sistema, el mejor aprovechamiento de los recursos energéticos, así como planificar el desarrollo de la transmisión del SEIN y administrar el Mercado de Corto Plazo, éste último basado en costos marginales.

En términos de consumo, la demanda anual de energía para el año 2018 se situó en torno a los 50,8 TWh siendo el sector minero y residencial quienes concentran dicha demanda. En el año 2017 la demanda del sistema fue 49,0 TWh.

### 3. Resumen principales políticas contables

#### 3.1 Principios contables

Los presentes estados financieros consolidados de Colbún S.A. y subsidiarias al 31 de diciembre de 2018 han sido preparados de acuerdo con Normas Internacionales de Información Financiera (“NIIF” o “IFRS”, por sus siglas en inglés), emitidas por el International Accounting Standards Board (IASB).

Los presentes estados financieros consolidados han sido preparados siguiendo el principio de empresa en marcha y han sido aprobados por su Directorio en sesión celebrada con fecha 29 de enero de 2019.

A continuación, se describen las principales políticas contables adoptadas en la preparación de estos estados financieros consolidados.

**a. Bases de preparación y período** - Los presentes estados financieros consolidados de Colbún S.A. y subsidiarias comprenden:

- Estados de Situación Financiera al 31 de diciembre de 2018 y 2017.
- Estados de Resultados Integrales por los ejercicios terminados al 31 de diciembre de 2018 y 2017.
- Estados de Flujos de Efectivo por los ejercicios terminados al 31 de diciembre de 2018 y 2017.
- Estados de Cambios en el Patrimonio por los ejercicios terminados al 31 de diciembre de 2018 y 2017.
- Notas explicativas.

La información contenida en los presentes estados financieros consolidados es responsabilidad de la Compañía.

Los estados financieros consolidados han sido preparados bajo el criterio del costo histórico, con excepción, de aquellos activos y pasivos que se registran a valor razonable (nota 3 h. y 3 i).

**a.1 Moneda funcional** - La moneda funcional de la Sociedad es el dólar estadounidense, por ser esta la moneda que influye principalmente en los precios de venta de bienes y servicios en los mercados en los que opera la Compañía. Toda la información en los presentes estados financieros consolidados ha sido redondeada en miles de dólares (MUS\$) a la unidad más cercana, excepto cuando se indica de otra manera.

**b. Bases de consolidación** - Los estados financieros consolidados incorporan los estados financieros de la Sociedad Matriz y las sociedades controladas por la Compañía.

Se establece el control como la base para determinar qué entidades se consolidan en los estados financieros consolidados.

Las sociedades subsidiarias son aquellas en las que Colbún S.A. está expuesto, o tiene derechos, a rendimientos variables procedentes de su participación en estas sociedades y tiene la capacidad de influir en sus rendimientos a través de su poder sobre éstas. En el caso de la Compañía, en general, el poder sobre sus subsidiarias se deriva de la posesión de la mayoría de los derechos de voto otorgados por instrumentos de capital de las subsidiarias.

El detalle de las subsidiarias se describe en el siguiente cuadro:

Sociedad consolidada	País	Moneda funcional	RUT	Porcentaje de participación al			
				31.12.2018			31.12.2017
				Directo	Indirecto	Total	Total
Empresa Eléctrica Industrial S.A.	Chile	Dólar	96.854.000-9	100	-	100	99,9999
Sociedad Hidroeléctrica Melocotón Ltda.	Chile	Dólar	86.856.100-9	99,9000	0,1000	100	100
Río Tranquilo S.A.	Chile	Dólar	76.293.900-2	99,9999	0,0001	100	100
Termoeléctrica Nehuenco S.A.	Chile	Dólar	76.528.870-3	99,9999	0,0001	100	100
Termoeléctrica Antihue S.A.	Chile	Dólar	76.009.904-K	99,9998	-	99,9998	99,9998
Colbún Transmisión S.A. <sup>(1)</sup>	Chile	Dólar	76.218.856-2	95,7682	4,2315	100	100
Colbún Desarrollo SpA	Chile	Dólar	76.442.095-0	100	-	100	100
Inversiones SUD SpA	Chile	Dólar	76.455.649-6	100	-	100	100
Inversiones Andinas SpA	Chile	Dólar	76.455.646-1	100	-	100	100
Santa Sofía SpA	Chile	Dólar	76.487.616-4	100	-	100	-
Colbún Perú S.A.	Perú	Dólar	0-E	99,9996	0,0004	100	100
Inversiones de Las Canteras S.A.	Perú	Dólar	0-E	-	51	51	51
Fenix Power Perú S.A.	Perú	Dólar	0-E	-	51	51	51

### Variaciones en el perímetro de consolidación

En el ejercicio terminado al 31 de diciembre de 2018 se produjeron las siguientes variaciones en el perímetro de consolidación:

<sup>(1)</sup> Con fecha 1 de octubre de 2018, en el marco del proceso de reorganización societaria del grupo Colbún y con el objeto de concentrar en la subsidiaria Colbún Transmisión S.A. todos los activos y negocios relacionados con transmisión de energía, Colbún S.A., Empresa Eléctrica Industrial S.A. y Río Tranquilo S.A. aportaron determinados activos de transmisión eléctrica a Colbún Transmisión S.A. mediante un aumento de capital de esta última. Esta transacción no tiene efectos a nivel consolidado.

Con fecha 6 de junio de 2018, Colbún S.A. adquirió el 100% de las acciones de Santa Sofía SpA, sociedad por acciones constituida de acuerdo con las leyes vigentes la República de Chile. Por tanto, desde esa fecha la sociedad es una filial directa de Colbún S.A.

En el período 2017 no hubo variaciones en el perímetro de consolidación.

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En el período 2017 no hubo variaciones en el perímetro de consolidación.

Todas las transacciones y los saldos significativos intercompañías han sido eliminados al consolidar, como también se ha dado reconocimiento a la participación no controladora que corresponde al porcentaje de participación de terceros en las subsidiarias, el cual está incorporado en forma separada en el patrimonio de Colbún consolidado.

**b.1 Combinaciones de negocios y Plusvalía** – Las combinaciones de negocios se registran aplicando el método de adquisición. El costo de adquisición es la suma de la contraprestación transferida, valorada a valor razonable en la fecha de adquisición, y el importe de las participaciones no controladoras de la adquirida, si hubiera. Para cada combinación de negocios, la Compañía determina si valora la participación no controladora de la adquirida al valor razonable o por la parte proporcional de los activos netos identificables de la adquirida. Los costos de adquisición relacionados se contabilizan cuando se incurren, en otros gastos por naturaleza.

Cuando la Compañía adquiere un negocio, evalúa los activos financieros y los pasivos financieros asumidos para su adecuada clasificación en base a los acuerdos contractuales, condiciones económicas y otras condiciones pertinentes que existan en la fecha de adquisición. Esto incluye la separación de los derivados implícitos de los contratos principales de la adquirida.

Si la combinación de negocios se realiza por etapas, en la fecha de adquisición se valoran al valor razonable las participaciones previamente mantenidas en el patrimonio de la adquirida y se reconocen las ganancias o pérdidas resultantes en el estado de resultados.

Cualquier contraprestación contingente que deba ser transferida por el adquirente se reconoce por su valor razonable en la fecha de adquisición. Las contraprestaciones contingentes que se clasifican como activos o pasivos financieros de acuerdo con NIIF 9 Instrumentos Financieros se valoran a valor razonable, registrando los cambios en el valor razonable como ganancia o pérdida o como cambio en otro resultado integral. En los casos, en que las contraprestaciones contingentes no se encuentren dentro del alcance de NIIF 9, se valoran de acuerdo con la NIIF correspondiente. Si la contraprestación contingente clasifica como patrimonio no se revaloriza y cualquier liquidación posterior se registra dentro del patrimonio neto.

La plusvalía es el exceso de la suma de la contraprestación transferida registrada sobre el valor neto de los activos adquiridos y los pasivos asumidos. Si el valor razonable de los activos netos adquiridos excede al valor de la contraprestación transferida, la Compañía realiza una nueva evaluación para asegurarse de que se han identificado correctamente todos los activos adquiridos y todas las obligaciones asumidas y revisa los procedimientos aplicados para realizar la valoración de los importes reconocidos en la fecha de adquisición. Si esta nueva evaluación resulta en un exceso del valor razonable de los activos netos adquiridos sobre el importe agregado de la consideración transferida, la diferencia se reconoce como ganancia en el estado de resultados.

Después del reconocimiento inicial, la plusvalía se registra al costo menos cualquier pérdida por deterioro acumulada. A efectos de la prueba de deterioro, la plusvalía adquirida en una combinación de negocios es asignada, desde la fecha de adquisición, a cada unidad generadora de efectivo de la Compañía que se espera que se beneficie de la combinación, independientemente de si existen otros activos o pasivos de la adquirida asignados a esas unidades. Una vez que la combinación de negocios se complete (finaliza el proceso de medición) la plusvalía no se amortiza y la Compañía debe revisar periódicamente su valor en libros para registrar cualquier pérdida por deterioro.

Cuando la plusvalía forma parte de una unidad generadora de efectivo y una parte de las operaciones de dicha unidad se dan de baja, la plusvalía asociada a dichas operaciones enajenadas se incluye en el valor en libros de la operación al determinar la ganancia o pérdida obtenida en la enajenación de la operación. La plusvalía dada de baja en estas circunstancias se valora sobre la base de los valores relativos de la operación enajenada y la parte de la unidad generadora de efectivo que se retiene.

**b.2 Participaciones no controladoras** - El valor de la participación de los accionistas no controladores en el patrimonio y en los resultados integrales de las sociedades subsidiarias se presenta, respectivamente en los rubros “Patrimonio Total: Participaciones no controladoras” del estado de situación financiera consolidado y “Ganancia atribuible a participaciones no controladoras” y “Resultado integral atribuible a participaciones no controladoras” en el estado de resultados integrales.

**b.3 Participaciones en entidades estructuradas no consolidadas** - Con fecha 17 de mayo de 2010, según consta en el D.E. N° 3.024, el Ministerio de Justicia concede personalidad jurídica y aprueba los estatutos de la Fundación Colbún (en adelante “Fundación”). Dentro de los objetivos centrales de la Fundación están:

La promoción, fomento y apoyo de todas las clases de obras y actividades que tiendan al perfeccionamiento y mejoramiento de las condiciones de vida de los sectores de mayor necesidad de la población.

La investigación, el desarrollo y la difusión de la cultura y el arte. La Fundación podrá participar en la formación, organización, administración y soporte de todas aquellas entidades, instituciones, asociaciones, agrupaciones y organizaciones, sean públicas o privadas que tengan los mismos fines.

La Fundación apoyará a todas las entidades que tengan como objeto la difusión, investigación, el fomento y el desarrollo de la cultura y las artes.

La Fundación podrá financiar la adquisición de inmuebles, equipos, mobiliarios, laboratorios, salas de clases, museos y bibliotecas, financiar la readecuación de infraestructuras para apoyar el perfeccionamiento académico.

Además, podrá financiar el desarrollo de investigaciones, desarrollar e implementar programas de instrucción, impartir capacitación o adiestramiento para el desarrollo y financiar la edición y distribución de libros, folletos y cualquier tipo de publicaciones.

Esta persona jurídica no es considerada en el proceso de consolidación, dado que, por su naturaleza, sin fines de lucro, la Compañía no obtiene ni espera obtener beneficios económicos de la misma.

**c. Inversiones contabilizadas por el método de participación** - Corresponden a las participaciones en sociedades sobre las que Colbún posee control conjunto con otra sociedad o en las que ejerce una influencia significativa.

El método de participación consiste en registrar inicialmente al costo la participación y posteriormente se ajusta por los cambios de los activos netos de la participada.

Si el importe resultante fuera negativo se deja la participación en cero a no ser que exista el compromiso por parte de la Compañía de reponer la situación patrimonial de la sociedad, en cuyo caso se registra la correspondiente provisión para riesgos y gastos.

Los dividendos percibidos de estas sociedades se registran reduciendo el valor de la participación, y los resultados obtenidos por estas sociedades que corresponden a Colbún conforme a su participación se incorporan, netos de su efecto tributario, a la cuenta de resultados “Participación en las ganancias (pérdidas) de asociadas y negocios conjuntos que se contabilicen utilizando el método de participación”.

El detalle de las sociedades contabilizadas por el método de participación se describe en el siguiente cuadro:



Tipo de relación	Sociedad	País	Moneda funcional	RUT	Porcentaje de participación al	
					31.12.2018	31.12.2017
					Directo	Directo
Asociada	Electrogas S.A.	Chile	Dólar	96.806.130-5	42,5	42,5
Negocio conjunto	Centrales Hidroeléctricas de Aysén S.A. <sup>(1)</sup>	Chile	Pesos	76.652.400-1	-	49,0
Negocio conjunto	Aysén Transmisión S.A., en Liquidación <sup>(2)</sup>	Chile	Pesos	76.041.891-9	49,0	-
Negocio conjunto	Aysén Energía S.A., en Liquidación <sup>(2)</sup>	Chile	Pesos	76.091.595-5	49,0	-
Negocio conjunto	Transmisora Eléctrica de Quillota Ltda.	Chile	Pesos	77.017.930-0	50,0	50,0

<sup>(1)</sup> En Junta Extraordinaria de Accionistas de fecha 7 de diciembre de 2017, se aprobó la disolución anticipada. Con fecha 7 de septiembre de 2018 se materializó dicha disolución, de la cual los socios recibieron a prorrata de su participación, los terrenos que la sociedad mantenía como propiedad y otros activos menores.

Dado lo anterior, se ha reconocido en el resultado tributario la disolución de esta sociedad, de acuerdo con lo establecido en el artículo 38 Bis de la Ley de Impuesto a la Renta y la Resolución Ex. SII N° 74 del año 2016.

<sup>(2)</sup> Con fecha 7 de septiembre de 2018, en el proceso de liquidación de Centrales Hidroeléctricas de Aysén S.A., Colbún S.A. recibe la participación del 49% de las acciones de las sociedades Aysén Transmisión S.A. y Aysén Energía S.A.

**c.1 Inversiones en entidades asociadas** - Las entidades asociadas son aquellas entidades en donde la Compañía tiene influencia significativa, pero no control, sobre las políticas financieras y operacionales. En general, se asume que existe una influencia significativa cuando la Compañía posee entre el 20% y el 50% del derecho a voto de otra entidad.

**c.2 Inversiones en control conjunto** - Son aquellas entidades en que la Compañía posee control conjunto sobre sus actividades, establecido por acuerdos contractuales y que requiere el consentimiento unánime para tomar decisiones relevantes por las partes que comparten el control.

**d. Efectos de las variaciones en las tasas de cambio de la moneda extranjera** - Las transacciones en moneda local y extranjera, distintos de la moneda funcional, se convierten a la moneda funcional utilizando los tipos de cambio vigentes en las fechas de las transacciones.

Las pérdidas y ganancias en moneda extranjera que resultan de la liquidación de estas transacciones y de la conversión a los tipos de cambio de cierre de los activos y pasivos monetarios denominados en monedas distintas a la moneda funcional, se reconocen en el Estado de Resultados, excepto si se reconocen en otros resultados acumulados como las coberturas de flujos de efectivo y las coberturas de inversiones netas. Asimismo, la conversión de los saldos a cobrar o a pagar al cierre de cada ejercicio en moneda distinta de la moneda funcional en la que están denominados los estados financieros de las compañías que forman parte del perímetro de consolidación, se realiza al tipo de cambio de cierre. Las diferencias de valoración producidas se registran como resultados financieros en la cuenta diferencias de cambio.

**e. Bases de conversión** - Los activos y pasivos en pesos chilenos, euros, soles peruanos y unidades de fomento han sido traducidos a dólares a los tipos de cambio vigentes a la fecha de cierre de los estados financieros, de acuerdo con el siguiente detalle:

Paridad por un dólar	31.12.2018	31.12.2017
Pesos	694,77	614,75
Euros	0,8742	0,8317
Soles	3,3790	3,2450
Unidades de fomento	0,0252	0,0229

**f. Propiedades, planta y equipos** - Las propiedades, planta y equipos mantenidos para el uso en la generación de los servicios de electricidad o para propósitos administrativos, son presentados a su valor de costo menos la subsecuente depreciación y pérdidas por deterioro en caso que corresponda. Este valor de costo incluye - aparte del precio de compra de los activos - los siguientes conceptos, según lo permiten las NIIF:

- El costo financiero de los créditos destinados a financiar obras en ejecución se capitaliza durante el período de su construcción.
- Los gastos de personal relacionados directamente con las obras en curso.
- Los costos de ampliación, modernización o mejora que representan un aumento de la productividad, capacidad o eficiencia o un aumento de la vida útil de los bienes se capitalizan como mayor costo de los correspondientes bienes.
- Las sustituciones o renovaciones de elementos completos que aumentan la vida útil del bien, o su capacidad económica, se registran como mayor valor de los componentes de propiedades, planta y equipos, con el consiguiente retiro contable de los elementos sustituidos o renovados.
- Los costos de desmantelamiento, retiro o rehabilitación de Propiedades, planta y equipos se reconocen en función de la obligación legal de cada proyecto (nota 3.n.2).

Las obras en curso se traspasan al activo en explotación una vez finalizado el período de prueba, a partir de cuyo momento comienza su depreciación.

Los gastos periódicos de mantenimiento, conservación y reparación se imputan a resultados, como costos del ejercicio en que se incurren.

Las propiedades, planta y equipos, neto del valor residual de los mismos, se deprecian distribuyendo linealmente el costo de los diferentes elementos que componen dichos activos entre los años de sus vidas útiles técnicas estimadas (nota 5 a. (i)).

El valor residual y la vida útil de los activos se revisan a lo menos al final de cada ejercicio, y se ajustan si es necesario.

**g. Intangibles distintos de la plusvalía** - Los activos intangibles adquiridos individualmente se valoran inicialmente al costo. En el caso de los activos intangibles adquiridos en una combinación de negocios es el valor razonable de la fecha de adquisición. Después del reconocimiento inicial, se registran al costo menos su

amortización acumulada y las pérdidas por deterioro acumuladas.

La Compañía evalúa en el reconocimiento inicial si la vida útil de los activos intangibles es definida o indefinida.

Los activos con vida útil definida se amortizan a lo largo de su vida útil económica y se evalúa su deterioro cuando hay indicios de que puedan estar deteriorados. El período de amortización y el método de amortización para los activos intangibles con vida útil definida se revisan por lo menos al final de cada período. Los criterios para el reconocimiento de las pérdidas por deterioro de estos activos y en su caso, de las recuperaciones de las pérdidas por deterioro registradas se explican en nota 5 b.

Los cambios en la vida útil esperada o el patrón esperado de consumo de los beneficios económicos futuros materializados en el activo se toman en consideración a objeto de cambiar el período o método de amortización, si corresponde, y se tratan como un cambio de estimación contable. El gasto por amortización de los activos intangibles con vida útil definida se reconoce en el estado de resultados integrales.

## **h. Instrumentos financieros**

**h.1 Activos financieros** - Los activos financieros se clasifican en el momento de reconocimiento inicial en tres categorías de valoración:

- a) Costo amortizado
- b) Valor razonable con cambios en otro resultado integral (patrimonio)
- c) Valor razonable con cambios en ganancias y pérdidas

**h.1.1 Costo amortizado** - Busca mantener un activo financiero hasta obtener los flujos contractuales, en una fecha establecida. Los flujos esperados corresponden básicamente a los pagos del principal e intereses sobre el importe del principal pendiente.

**h.1.2 Valor razonable con cambios en otro resultado integral (patrimonio)** - Para la clasificación de un activo con valor razonable con efecto en los otros resultados integrales, se debe cumplir como principio la venta de activos financieros para los cuales se espera recuperar en un plazo determinado el importe principal además de los intereses si es que corresponde.

**h.1.3 Valor razonable con cambios en ganancias y pérdidas** - La última clasificación que entrega como opción NIIF 9, la aplicación de los activos financieros con valor razonable cuyo efecto se aplicará al resultado del ejercicio.

La Compañía, basado en su modelo de negocio mantiene activos financieros con costo amortizado como activo financiero principal, ya que busca la recuperación de sus flujos futuros en una fecha determinada, buscando el cobro de un principal más intereses sobre el capital si es que corresponde. Los préstamos y cuentas por cobrar son los principales activos financieros no derivados del grupo, estos activos poseen pagos fijos o determinables que no cotizan en un mercado activo. Los préstamos y cuentas por cobrar incluyen deudores comerciales y otras cuentas por cobrar en el Estado de Situación Financiera. Se deben contabilizar inicialmente a su valor razonable y posteriormente por su costo amortizado de acuerdo con el método del tipo de interés efectivo, menos la provisión por pérdidas por deterioro del valor.

**h.1.4 Baja de activos financieros** - La Compañía da de baja los activos financieros únicamente cuando los derechos a recibir flujos de efectivo han sido cancelados, anulados, expiran o han sido transferidos.

**h.1.5 Deterioro de activos financieros no derivados** - La Compañía aplica el enfoque simplificado y registra las pérdidas crediticias esperadas en todos sus títulos de deuda, préstamos y cuentas por cobrar comerciales, ya sea por 12 meses o de por vida, según lo establecido en NIIF 9.

La existencia de dificultades financieras significativas por parte del deudor, la probabilidad de que el deudor entre en quiebra o reorganización financiera y la falta o mora en los pagos se consideran, entre otros, indicadores de que la cuenta por cobrar se ha deteriorado. El deterioro es la diferencia entre el valor en libros del activo y el valor actual de los flujos futuros de efectivo estimados, descontados a la tasa de interés efectiva. La pérdida se reconoce en el estado de resultados integrales y se refleja en una cuenta de estimación.

Cuando una cuenta a cobrar se transforma en incobrable definitivamente, esto es que se hayan agotado todas las instancias razonables de cobro prejudicial y judicial, según informe legal respectivo; y corresponda su castigo financiero, se regulariza contra la cuenta de estimación constituida para las cuentas a cobrar deterioradas.

Cuando el valor razonable de un activo sea inferior al costo de adquisición, si existe evidencia objetiva de que el activo ha sufrido un deterioro que no pueda considerarse temporal, la diferencia se registra directamente en pérdidas del ejercicio.

Los activos financieros a valor razonable con cambios en ganancias y pérdidas no requieren de pruebas de deterioro.

## **h.2. Pasivos financieros**

**h.2.1 Clasificación como deuda o patrimonio** - Los instrumentos de deuda y patrimonio se clasifican ya sea como pasivos financieros o como patrimonio, de acuerdo con la sustancia del acuerdo contractual.

**h.2.2 Instrumentos de patrimonio** - Un instrumento de patrimonio es cualquier contrato que ponga de manifiesto una participación residual en los activos de una entidad una vez deducidos todos sus pasivos. Los instrumentos de patrimonio emitidos por Colbún S.A. se registran al monto de la contraprestación recibida, netos de los costos directos de la emisión. La Compañía actualmente solo tiene emitidas acciones de serie única.

**h.2.3 Pasivos financieros** - Los pasivos financieros se clasifican ya sea como pasivo financiero a “valor razonable con cambios en resultados” o como “otros pasivos financieros”.

**h.2.4 Pasivos financieros a valor razonable con cambios en resultados** - Los pasivos financieros son clasificados a valor razonable a través de resultados cuando estos, sean mantenidos para negociación o

cuando sean designados como tal en el reconocimiento inicial. Estos se miden al valor razonable y los cambios en el valor razonable incluido cualquier gasto por intereses, se reconocen en resultados.

**h.2.5 Otros pasivos financieros** - Otros pasivos financieros, entre los que se incluyen las obligaciones con instituciones financieras y las obligaciones con el público, se miden inicialmente por el monto de efectivo recibido, neto de los costos de transacción. Los otros pasivos financieros son posteriormente medidos al costo amortizado utilizando el método de tasa de interés efectiva.

El método de la tasa de interés efectiva corresponde al método de cálculo del costo amortizado de un pasivo financiero y de la asignación de los gastos por intereses durante todo el período correspondiente. La tasa de interés efectiva corresponde a la tasa que descuenta exactamente los flujos futuros de efectivo estimados por pagar durante la vida esperada del pasivo financiero o, cuando sea apropiado, un período menor cuando el pasivo asociado tenga una opción de prepago que se estime será ejercida.

**h.2.6 Baja de Pasivos financieros** - La Compañía da de baja los pasivos financieros únicamente cuando las obligaciones son canceladas, anuladas o expiran.

**i. Derivados** - La Compañía tiene firmados contratos de derivados a efectos de mitigar su exposición a la variación en las tasas de interés, en los tipos de cambio y en los precios de los combustibles.

Los cambios en el valor justo de estos instrumentos a la fecha de los estados financieros consolidados se registran en el estado de resultados integral, excepto que los mismos hayan sido designados como un instrumento de cobertura contable y se cumplan las condiciones establecidas en la NIC 39 para aplicar dicho criterio. Para efectos de contabilidad de Coberturas la Compañía continúa aplicando bajo los criterios de la NIC 39.

Las coberturas se clasifican en las siguientes categorías:

- Coberturas al valor razonable: es una cobertura de la exposición a los cambios en el valor razonable de activos o pasivos reconocidos o de compromisos en firme no reconocidos, que puede atribuirse a un riesgo en particular. Para esta clase de coberturas, tanto el valor del instrumento de cobertura como del elemento cubierto, se registran en el estado de resultados integrales neteando ambos efectos en el mismo rubro.
- Coberturas de flujo de efectivo: es una cobertura de la exposición a la variación de los flujos de efectivo que se atribuye a un riesgo particular asociado a un activo o pasivo reconocido, o a una transacción prevista altamente probable. Los cambios en el valor razonable de los derivados se registran, en la parte en que dichas coberturas son efectivas, en una reserva del Patrimonio denominada “Coberturas de flujo de efectivo”. La pérdida o ganancia acumulada en dicho rubro se traspa al Estado de Resultados Integrales en la medida que el subyacente tiene impacto en el Estado de Resultados Integrales por el riesgo cubierto, neteando dicho efecto en el mismo rubro del Estado de Resultados Integrales. Los resultados correspondientes a la parte ineficaz de las coberturas se registran directamente en el estado de resultado integral.

Una cobertura se considera altamente efectiva cuando los cambios en el valor razonable o en los flujos de caja del subyacente atribuibles al riesgo cubierto, se compensan con los cambios en el valor razonable o en los flujos de efectivo del instrumento de cobertura, con una efectividad que se encuentre en el rango de 80% - 125%. En los períodos cubiertos por los presentes estados financieros consolidados, la Compañía designó ciertos derivados como instrumentos de cobertura de transacciones previstas altamente probables o instrumentos de cobertura de riesgo de tipo de cambio de compromisos firmes (instrumentos de cobertura de flujos de caja).

La Compañía ha designado todos sus instrumentos derivados como instrumentos de cobertura contable.

**j. Inventarios** - En este rubro se registra el stock de gas, petróleo y carbón; y las existencias de almacén (repuestos y materiales), los que se registran valorizados a su costo, neto de posibles obsolescencias determinadas en cada período. El costo se determina utilizando el método del precio medio ponderado.

**j.1 Criterio de deterioro de los repuestos (obsolescencia)** - La estimación de deterioro de repuestos (obsolescencia), se define de acuerdo con un análisis individual y general, realizado por los especialistas de la Compañía, quienes evalúan criterios de rotación y obsolescencia tecnológica sobre el stock en almacenes de cada Central.

**k. Estado de flujos de efectivo** - Para efectos de la preparación del Estado de Flujos de Efectivo, la Compañía ha definido las siguientes consideraciones:

El efectivo y equivalentes al efectivo incluyen el efectivo en caja, los depósitos a plazo en entidades de crédito y otras inversiones a corto plazo de gran liquidez con un vencimiento original inferior de tres meses y que

están sujetos a un riesgo poco significativo de cambios en su valor. En el estado de situación financiera, los sobregiros bancarios se clasifican como pasivo corriente.

Actividades de operación: son las actividades que constituyen la principal fuente de ingresos ordinarios de la Compañía, así como otras actividades que no puedan ser calificadas como de inversión o financiación.

Actividades de inversión: Corresponden a actividades de adquisición, enajenación o disposición por otros medios de activos a largo plazo y otras inversiones no incluidas en el efectivo y sus equivalentes.

Actividades de financiación: Corresponden a actividades que producen cambios en el tamaño y composición del patrimonio neto y de los pasivos de carácter financiero.

**I. Impuesto a las ganancias** - La Sociedad y sus subsidiarias determinan la base imponible y calculan su impuesto a la renta de acuerdo con las disposiciones legales vigentes en cada período.

Los impuestos diferidos originados por diferencias temporarias y otros eventos que crean diferencias entre la base contable y tributaria de activos y pasivos se registran de acuerdo con las normas establecidas en la NIC 12 "Impuesto a las ganancias".

El impuesto corriente sobre las ganancias se registra en el estado de resultado o en el estado de otros resultados integrales en función de donde se hayan registrado las ganancias o pérdidas que lo hayan originado. Las diferencias entre, el valor contable de los activos y pasivos, y su base fiscal, respectivamente generan la base sobre la cual se calcula el impuesto diferido, utilizando las tasas fiscales que, se espera, estén en vigor cuando los activos se realicen y pasivos se cancelen.

Las variaciones producidas en el período en los impuestos diferidos de activo o pasivo se registran en la cuenta de resultado del estado de resultados integrales consolidados o en rubros de patrimonio total en el estado de situación financiera, en función de donde se hayan registrado las ganancias o pérdidas que lo hayan generado.

Los activos por impuestos diferidos se reconocen únicamente cuando se espera disponer de utilidades tributarias futuras suficientes para recuperar las deducciones por diferencias temporarias y utilizar las pérdidas tributarias.

En cada cierre contable se revisan los impuestos diferidos registrados, tanto activos como pasivos, con objeto de comprobar que se mantienen vigentes, efectuándose las oportunas correcciones a los mismos de acuerdo con el resultado del citado análisis.

A nivel de saldos en el estado de situación financiera consolidado, se ha realizado la compensación de los activos y pasivos por impuestos diferidos de Colbún y las subsidiarias si, y solo si, se relacionan con el impuesto a la renta correspondiente a la misma administración tributaria, siempre y cuando la entidad tenga el derecho legalmente aplicable de compensar los importes reconocidos en estas partidas.

**m. Indemnización por años de servicio (IAS)** - Las obligaciones reconocidas por concepto de indemnizaciones por años de servicios surgen como consecuencia de acuerdos de carácter colectivo e individual suscritos con los trabajadores de la Compañía en los que se establece el compromiso por parte de la Compañía y que califican como “beneficios definidos de post-empleo”. La Compañía reconoce el costo de beneficios del personal de acuerdo a un cálculo actuarial, según lo requiere NIC 19 “Beneficios del personal” el que incluye variables como la expectativa de vida, incremento de salarios, rotación entre otros.

El importe de los pasivos actuariales netos devengados al cierre del período se presenta en el ítem Provisiones por beneficios a los empleados corrientes y en Provisiones por beneficios a los empleados no corrientes del estado de situación financiera consolidado.

La Compañía reconoce todas las ganancias y pérdidas actuariales surgidas en la valoración de los planes de beneficios definidos en otros resultados integrales. En tanto, todos los costos relacionados con los planes de beneficios se registran en los gastos de personal en el estado de resultado integral.

**n. Provisiones** - Las obligaciones existentes a la fecha del estado de situación financiera, surgidas como consecuencia de sucesos pasados de los que pueden derivarse perjuicios patrimoniales de probable materialización para la Compañía cuyo importe y momento de cancelación pueden ser estimados de forma fiable, se registran como provisiones por el valor actual del importe más probable que, se estima, la Compañía tendrá que desembolsar para cancelar la obligación.

Las provisiones son revisadas periódicamente y se cuantifican teniendo en consideración la mejor información disponible a la fecha de cierre de los estados financieros consolidados.

**n.1 Reestructuración** - Una provisión por reestructuración es reconocida cuando la Compañía ha aprobado un plan de reestructuración detallado y formal, y la reestructuración en sí ya ha comenzado o ha sido públicamente anunciada. Los costos de operación futuros no son provisionados.

**n.2 Desmantelamiento** - Los desembolsos futuros a los que la Sociedad deberá hacer frente en relación con el cierre de sus instalaciones, se incorporan al valor del activo por el valor razonable, reconociendo contablemente la correspondiente provisión por desmantelamiento o restauración al momento de la puesta en funcionamiento de la planta. La Sociedad revisa anualmente su estimación sobre los mencionados desembolsos futuros, aumentando o disminuyendo el valor del activo en función de los resultados de dicha estimación (ver Nota 23 c).

**o. Vacaciones al personal** - El gasto de vacaciones se registra en el ejercicio en que se devenga el derecho, de acuerdo a lo establecido en la NIC N°19.

**p. Ingresos procedentes de Contratos con Clientes** - Los ingresos provenientes de la venta de energía eléctrica, tanto en Chile como en Perú, se valorizan a su valor justo del monto recibido o por recibir y representan los montos de los servicios prestados durante las actividades comerciales normales, reducido por cualquier descuento o impuesto relacionado, de acuerdo con NIIF 15.

Los ingresos se clasifican en las siguientes categorías:



**p.1 Venta de bienes** - Para contratos con clientes en los que la venta de equipos es la única obligación, la adopción de la NIIF 15 no tiene impacto en los ingresos y pérdidas o ganancias de la Compañía, dado que el reconocimiento de ingresos ocurre en un punto en el tiempo cuando el control del activo se transfiere al cliente, con la entrega de los bienes. La Compañía tiene impactos asociados a la venta de bienes de forma individual, ya que actualmente no se dedica a vender bienes como un contrato único de venta de bienes.

**p.2 Prestación de servicios** - La Compañía presta el servicio de suministro de energía y potencia a clientes libres y regulados. Reconoce los ingresos por servicio sobre la base de la entrega física de la energía y potencia. Los servicios se satisfacen a lo largo del tiempo dado que el cliente recibe simultáneamente y consume los beneficios provistos por la Compañía. En consecuencia, la Compañía reconoce los ingresos por estos contratos de servicio agrupados a lo largo del tiempo en lugar de un punto en el tiempo.

A continuación, se describen las principales políticas de reconocimiento de ingresos de la Compañía para cada tipo de cliente:

- Clientes regulados - compañías de distribución: Los ingresos por la venta de energía eléctrica se registran sobre la base de la entrega física de la energía y potencia, en conformidad con contratos a largo plazo a un precio licitado.
- Clientes no regulados - capacidad de conexión mayor a 5.000 KW en Chile y para Perú entre 200 KW y 2.500 KW: Los ingresos de las ventas de energía eléctrica para estos clientes se registran sobre la base de entrega física de energía y potencia, a las tarifas especificadas en los contratos respectivos.
- Clientes mercado spot: Los ingresos de las ventas de energía eléctrica y potencia se registran sobre la base de entrega física de energía y potencia, a otras compañías generadoras, al costo marginal de la energía y potencia. El mercado spot por ley está organizado a través de Centros de Despacho (CEN en Chile y COES en Perú) donde se comercializan los superávit y déficit de energía y potencia eléctrica. Los superávits de energía y potencia se registran como ingresos y los déficits se registran como gastos dentro del estado de resultado integral consolidado.

**p.3 Anticipos recibidos de los clientes** - La Compañía recibe solo anticipos a corto plazo de sus clientes relacionados con las operaciones y servicios de mantención. Se presentan como parte de los otros pasivos financieros. Sin embargo, de vez en cuando, la Compañía puede recibir anticipos a largo plazo de los clientes. Conforme a la política contable vigente, la Compañía presenta tales anticipos como ingresos diferidos en virtud de los pasivos no corrientes clasificados en el estado de situación financiera. No se acumularon intereses sobre los anticipos a largo plazo recibidos en virtud de la política contable vigente.

La Compañía debe determinar si existe un componente de financiamiento significativo en sus contratos. Sin embargo, la Compañía decidió utilizar el expediente práctico provisto en la NIIF 15, y no ajustará el importe comprometido de la contraprestación por los efectos de un componente de financiación significativo en los contratos, cuando la Compañía espera, al comienzo del contrato, que el periodo entre el momento en que la entidad transfiere un bien o servicio comprometido con el cliente y el momento en que el cliente paga por ese bien o servicio sea de un año o menos. Por lo tanto, a corto plazo la Compañía no contabilizará un componente de financiación, incluso si es significativo.

Con base en la naturaleza de los servicios ofrecidos y el propósito de los términos de pago, la Compañía concluye que no existe un componente de financiamiento significativo en estos contratos.

**p.4 Consideraciones de principal versus agente** - En los contratos de ventas de energía y potencia, la Compañía se considera que es el principal responsable de cumplir la promesa de proporcionar la entrega de los bienes o servicios especificados, principalmente porque la Compañía asume el riesgo de crédito en estas transacciones. Conforme a la política contable actual, en función de la existencia de riesgo de crédito y la

naturaleza de la contraprestación en el contrato, la Compañía tiene una exposición a los riesgos y beneficios significativos asociados y contabiliza por ende los contratos como un principal.

**p.5 Importes recaudados en nombre de terceros** - Cualquier impuesto recibido por cuenta de los clientes y remitidos a las autoridades gubernamentales (por ejemplo, IVA, impuestos por ventas o tributos, etc.) se registra sobre una base neta y por lo tanto se excluyen de los ingresos en el estado de resultados integral consolidado.

**p.6 Ingresos financieros** - Los ingresos financieros están compuestos por ingresos por intereses en fondos invertidos, ganancias por la venta de activos financieros disponibles para la venta, cambios en el valor razonable de los activos financieros al valor razonable con cambios en resultados y ganancias en instrumentos de cobertura que son reconocidos en resultados integrales. Los ingresos por intereses son reconocidos en resultados al costo amortizado, usando el método de interés efectivo.

**q. Dividendos** - El artículo N°79 de la Ley de Sociedades Anónimas establece que, salvo acuerdo diferente adoptado en la Junta Ordinaria de Accionistas, por la unanimidad de las acciones emitidas, las sociedades anónimas abiertas deberán distribuir anualmente como dividendo en dinero a sus accionistas a prorrata de sus acciones o en la proporción que establezcan los estatutos si hubiere acciones preferentes, a lo menos el 30% de las utilidades líquidas distribuibles del ejercicio, excepto cuando corresponda absorber pérdidas acumuladas provenientes de ejercicios anteriores.

Al cierre de cada año se determina el monto de la obligación con los accionistas, neta de los dividendos provisorios que se hayan aprobado en el curso del ejercicio, y se registra contablemente en el rubro "Cuentas por pagar comerciales y otras cuentas por pagar, corrientes" y en el rubro "Cuentas por pagar a entidades relacionadas", según corresponda, con cargo al Patrimonio.

Los dividendos provisorios y definitivos se registran como disminución del patrimonio en el momento de su aprobación por el órgano competente que, en el primer caso, generalmente es el Directorio de la Compañía, mientras que en el segundo caso la responsabilidad es de la Junta Ordinaria de Accionistas.

**r. Medio ambiente** - En el caso de existir pasivos ambientales se registran sobre la base de la interpretación actual de leyes y reglamentos ambientales, cuando sea probable que una obligación actual se produzca y el importe de dicha responsabilidad se pueda calcular de forma fiable.

Las inversiones en obras de infraestructura destinadas a cumplir requerimientos medioambientales son activadas siguiendo los criterios contables generales para Propiedades, planta y equipos.

**s. Clasificación de saldos en corrientes y no corrientes** - En el estado de situación financiera consolidado adjunto, los saldos se clasifican en función de sus vencimientos, es decir, como Corrientes aquellos con vencimiento igual o inferior a doce meses y como No corrientes los de vencimiento superior a dicho período.

**t. Arrendamientos** - La Compañía aplica CINIIF 4 para evaluar si un acuerdo es, o contiene, un arrendamiento. Los arrendamientos en los que se transfieren sustancialmente todos los riesgos y beneficios inherentes a la propiedad se clasifican como financieros. El resto de los arrendamientos se clasifican como operativos.

Los arrendamientos financieros en los que Colbún y subsidiarias actúa como arrendatario se reconocen al comienzo del contrato, registrando un activo según su naturaleza y un pasivo por el mismo monto e igual al valor razonable del bien arrendado, o bien al valor presente de los pagos mínimos por el arrendamiento, si éste fuera menor. Posteriormente, los pagos mínimos por arrendamiento se dividen entre gasto financiero y reducción de la deuda. La carga financiera se reconoce como gasto y se distribuye entre los ejercicios que constituyen el período de arrendamiento, de forma que se obtiene una tasa de interés constante en cada

ejercicio sobre el saldo de la deuda pendiente de amortizar. El activo se deprecia en los mismos términos que el resto de los activos depreciables similares, si existe certeza razonable de que el arrendatario adquirirá la propiedad del activo al finalizar el arrendamiento. Si no existe dicha certeza, el activo se deprecia en el plazo menor entre la vida útil del activo o el plazo del arrendamiento.

Las cuotas de arrendamiento operativo se reconocen como gasto de forma lineal durante el plazo del mismo, salvo que resulte más representativa otra base sistemática de reparto.

**u. Operaciones con partes relacionadas** - Las operaciones entre la Compañía y sus subsidiarias dependientes, que son partes relacionadas, forman parte de las transacciones habituales de la Sociedad en cuanto a su objeto y condiciones, y son eliminadas en el proceso de consolidación. La identificación de vínculo entre la Controladora, Subsidiarias, Negocios Conjuntos y Asociadas se encuentra detallada en la nota 3.1 letra b y c.

Todas las transacciones con partes relacionadas son realizadas en términos y condiciones de mercado.

**v. Subvenciones del gobierno** - Las subvenciones del gobierno se miden al valor razonable del activo recibido o por recibir. Una subvención sin condiciones de rendimiento futuras específicas se reconoce en ingreso cuando se reciban los importes obtenidos por la subvención. Una subvención que impone condiciones de rendimiento futuras específicas se reconoce en ingresos cuando se cumplen tales condiciones.

Las subvenciones del gobierno se presentan por separado de los activos con los que se relacionan. Las subvenciones del gobierno reconocidas en ingresos se presentan por separado en las notas. Las subvenciones del gobierno recibidas antes de que se cumplan los criterios de reconocimiento de ingresos se presentan como un pasivo separado en el estado de situación financiera.

No se reconoce importe alguno para aquellas formas de ayudas gubernamentales a las que no se les puede asignar valor razonable. Sin embargo, en la eventualidad de existir, la entidad revela información acerca de dicha ayuda.

**w. Costos por intereses** - Los costos por intereses que sean directamente atribuibles a la adquisición, construcción o producción de un activo cuya puesta en marcha o venta requiere necesariamente un período prolongado de tiempo son capitalizados como parte del costo del activo. La Compañía ha establecido como política capitalizar los intereses en base a la fase de construcción. El resto de los costos por intereses se reconocen como gastos en el período en el que se incurren. Los gastos financieros incluyen los intereses y otros costos en los que incurre la Compañía en relación con el financiamiento obtenido.

**x. Pasivos y activos contingentes** - Un pasivo contingente es una obligación posible, surgida a raíz de hechos pasados, cuya existencia ha de ser confirmada sólo por la ocurrencia, o en su caso por la no ocurrencia, de uno o más eventos inciertos en el futuro, que no están enteramente bajo el control de la entidad, o bien una obligación presente, surgida a raíz de hechos pasados, que no se ha reconocido contablemente porque:

- No es probable que la entidad tenga que satisfacerla, desprendiéndose de recursos que impliquen beneficios económicos, o bien

- El monto de la obligación no puede ser medido con la suficiente fiabilidad.

Un activo contingente es un activo de naturaleza posible, surgido a raíz de hechos pasados, cuya existencia ha de ser confirmada sólo por la ocurrencia, o por la no ocurrencia, de uno o más eventos inciertos en el futuro, que no están enteramente bajo el control de la Compañía. No se reconocerán en los estados financieros, pero sí deberán ser expuestos en notas a dichos estados.

**y. Reclasificaciones** – Para efectos comparativos se realizó la siguiente reclasificación al 31 de diciembre de 2017: Desde “Provisiones no corrientes por beneficios a los empleados” al rubro “Provisiones corrientes por beneficios a los empleados” correspondiente a las IAS porción de corto plazo por MUS\$ 5.596.

### 3.2 Nuevos pronunciamientos contables

Una serie de nuevas normas, modificaciones a normas e interpretaciones son aplicables a los períodos anuales que comienzan en o después del 1 de enero de 2019, y no han sido aplicadas en la preparación de estos estados financieros consolidados. Aquellas que pueden ser relevantes para el Grupo se señalan a continuación:

#### Nuevas Normas

Nuevas NIIF		Fecha de aplicación obligatoria
NIIF 16	Arrendamientos	1 de Enero de 2019
NIIF 17	Contratos de Seguro	1 de Enero de 2021

#### NIIF 16 “Arrendamientos”

Emitida el 13 de enero de 2016, esta Norma requiere que las empresas arrendatarias operativas contabilicen todos los arrendamientos en sus estados financieros a contar del 01 de enero de 2019. Las empresas con arrendamientos operativos tendrán más activos, pero también una deuda mayor. Mientras mayor es el portfolio de arrendamientos operativos de la empresa, mayor será el impacto en las métricas de reporte.

La Norma es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2019, permitiéndose la adopción anticipada.

#### NIIF 17 “Contratos de Seguro”

Emitida el 18 de mayo de 2017, esta Norma requiere que los pasivos de seguro sean medidos a un valor de cumplimiento corriente y otorga un enfoque más uniforme de presentación y medición para todos los contratos de seguro. Estos requerimientos son diseñados para generar una contabilización consistente y basada en principios.

La Norma es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2021, permitiéndose la adopción anticipada si se ha adoptado las normas NIIF 9 y NIIF 15.

#### Nuevas interpretaciones

Nuevas Interpretaciones		Fecha de aplicación obligatoria
CINIIF 23	Incertidumbre sobre Tratamientos Tributarios	1 de Enero de 2019

#### CINIIF 23: “Incertidumbre sobre tratamientos tributarios”

Esta interpretación, emitida el 7 de junio de 2017, orienta la determinación de utilidades (pérdidas) tributarias, bases tributarias, pérdidas tributarias no utilizadas, créditos tributarios no utilizados y tasas de impuestos cuando hay incertidumbre respecto de los tratamientos de impuesto a las ganancias bajo NIC 12.

Específicamente considera:

- Si los tratamientos tributarios debieran considerarse en forma colectiva.
- Los supuestos relativos a la fiscalización de la autoridad tributaria.
- La determinación de la ganancia (pérdida) tributaria, las bases imponibles, las pérdidas tributarias no utilizadas, los créditos tributarios no utilizados y las tasas de impuestos.
- El efecto de los cambios en los hechos y circunstancias.

La interpretación es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2019, permitiéndose la adopción anticipada.

La administración está evaluando la aplicación de CINIIF 23 la cual será adoptada en sus estados financieros para el período que comenzará el 1 de enero de 2019. Actualmente se encuentra estudiando el impacto de esta nueva interpretación.

### Enmiendas y/o modificaciones

Enmiendas a NIIF		Fecha de aplicación obligatoria
NIC 28	Participaciones de Largo Plazo en Asociadas y Negocios Conjuntos	1 de Enero de 2019
NIIF 9	Cláusulas de prepago con compensación negativa	1 de Enero de 2019
	Modificaciones de Planes, Reducciones y Liquidaciones (modificaciones a NIC 19, Beneficios a empleados)	1 de Enero de 2019
NIIF 10	Estados Financieros Consolidados, y NIC 28, Inversiones en Asociadas y Negocios Conjuntos: Transferencia o contribución de activos entre un inversionista y su asociada o negocio conjunto	Fecha efectiva diferida indefinidamente
	Ciclo de mejoras anuales a las Normas NIIF 2015-2017. Modificaciones a NIIF 3, NIIF 11, NIC 12 y NIC 23	1 de Enero de 2019
	Enmiendas a las referencias en el Marco Conceptual para la Información	1 de Enero de 2020
	Enmiendas a la definición de Negocio (Modificaciones a la NIIF 3)	1 de Enero de 2020
	Enmiendas a la definición de Material (Modificaciones a la NIC 1 y NIC 8)	1 de Enero de 2020

#### NIC 28: “Participaciones de Largo Plazo en Asociadas y Negocios Conjuntos”

Esta modificación contempla:

- La incorporación del párrafo 14A que clarifica que una entidad aplica la NIIF 9, incluyendo los requerimientos de deterioro, a las participaciones de largo plazo en una asociada o negocio conjunto que forma parte de la inversión neta en la asociada o negocio conjunto, pero a la que no se aplica el método de la participación.
- La eliminación del párrafo 41 pues el Consejo consideró que reiteraba requerimientos de NIIF 9 creando confusión acerca de la contabilización para las participaciones de largo plazo.

Esta modificación normativa es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2019, permitiéndose la adopción anticipada.

#### Modificación a NIIF 9 “Instrumentos Financieros: Cláusulas de prepago con compensación negativa”

El 12 de octubre de 2017, se emitió esta modificación que cambia los requerimientos existentes en NIIF 9 relacionados con los derechos de término para permitir la medición a costo amortizado (o, dependiendo del modelo de negocios, a valor razonable con cambios en Otros Resultados Integrales) incluso en el caso de pagos negativos de compensación.

La modificación es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2019, permitiéndose la adopción anticipada.

#### Modificaciones de Planes, Reducciones y Liquidaciones (Modificaciones a NIC 19, Beneficios a Empleados)

En febrero de 2018 IASB finaliza las modificaciones a la NIC 19 relacionadas con las modificaciones de planes, reducciones y liquidaciones.

Las modificaciones clarifican que:

- En una modificación, reducción o liquidación de un plan de beneficio definido una entidad ahora usa supuestos actuariales actualizados para determinar su costo corriente de servicio y el interés neto para el período; y
- El efecto del tope de activo no es considerado al calcular la ganancia o pérdida de cualquier liquidación del plan y es tratado en forma separada en Otros Resultados Integrales (ORI).

Las modificaciones aplican para modificaciones, reducciones o liquidaciones de planes que ocurran en, o después del, 1 de enero de 2019, o la fecha en que las modificaciones sean aplicadas por primera vez. La adopción anticipada es permitida.

Modificación a NIIF 10, “Estados Financieros Consolidados” y NIC 28, “Inversiones en Asociadas y Negocios Conjuntos”: Venta o contribución de activos entre un inversionista y su asociada o negocio conjunto

El 11 de septiembre de 2014, se emitió esta modificación que requiere que, al efectuarse transferencias de subsidiarias hacia una asociada o negocio conjunto, la totalidad de la ganancia se reconozca cuando los activos transferidos reúnan la definición de “negocio” bajo NIIF 3, Combinaciones de Negocios. La modificación establece una fuerte presión en la definición de “negocio” para el reconocimiento en resultados. La modificación también introduce nuevas e inesperadas contabilizaciones para transacciones que consideran la mantención parcial en activos que no son negocios.

Se ha postergado de manera indefinida la fecha efectiva de aplicación de esta modificación.

Ciclo de Mejoras Anuales 2015-2017: NIIF 3, NIIF 11, NIC 12 y NIC 23

NIIF 3, Combinaciones de Negocios, y NIIF 11, Acuerdos Conjuntos: Clarifica la contabilización de los incrementos en la participación en una operación conjunta que reúne la definición de un negocio.

- Si una parte mantiene (u obtiene) control conjunto, la participación mantenida previamente no se vuelve a medir.
- Si una parte obtiene control, la transacción es una combinación de negocios por etapas y la parte adquirente vuelve a medir la participación mantenida previamente, a valor razonable.

Además de clarificar cuándo una participación mantenida previamente en una operación conjunta se vuelve a medir, las modificaciones también proporcionan una guía acerca de qué constituye la participación previamente mantenida. Esta es la participación total mantenida previamente en la operación conjunta.

NIC 12, Impuesto a la Renta: Clarifica que todo el efecto de Impuesto a la Renta de dividendos (incluyendo los pagos de instrumentos financieros clasificados como patrimonio) se reconocen de manera consistente con las transacciones que generan los resultados distribuibles (es decir, en Resultados, Otros Resultados Integrales o Patrimonio).

Aun cuando las modificaciones proporcionan algunas clarificaciones, no intentan direccionar la pregunta subyacente (es decir, cómo determinar si un pago representa una distribución de utilidades). Por lo tanto, es posible que los desafíos permanezcan al determinar si se reconoce el impuesto a la renta sobre algunos instrumentos en Resultados o en Patrimonio.

NIC 23, Costos de Préstamos: Clarifica que el pool general de préstamos utilizado para calcular los costos de préstamos elegibles excluye solo los préstamos que financian específicamente activos calificados que están aún bajo desarrollo o construcción. Los préstamos que estaban destinados específicamente a financiar activos calificados que ahora están listos para su uso o venta (o cualquier activo no calificado) se incluyen en ese pool general.

Como los costos de la aplicación retrospectiva pueden superar los beneficios, los cambios se aplican en forma prospectiva a los costos de préstamos incurridos en, o desde, la fecha en que la entidad adopta las modificaciones.

Dependiendo de la política corriente de la entidad, las modificaciones propuestas pueden resultar en la inclusión de más préstamos en el pool general de préstamos.

Si esto resultará en la capitalización de más o menos préstamos durante un período, dependerá de:

- Si el costo promedio ponderado de cualquier préstamo incluido en el pool, como resultado de las modificaciones, es mayor o menor que aquel que se incluiría bajo el enfoque corriente de la entidad; y
- Los montos relativos de los activos calificados bajo desarrollo y los préstamos generales vigentes durante el período.

#### Enmiendas a las referencias en el Marco Conceptual para la Información Financiera

El Consejo de Normas Internacionales de Contabilidad (el Consejo) emitió en marzo de 2018 la modificación del Marco Conceptual para la Información Financiera (revisado). El Marco Conceptual sirve principalmente como una herramienta para que el Consejo desarrolle estándares y ayude al Comité de Interpretaciones de las NIIF a interpretarlos. No anula los requisitos de las NIIF individuales.

Los principales cambios a los principios del marco conceptual tienen implicaciones sobre cómo y cuándo se reconocen y se dan de baja los activos y pasivos en los estados financieros.

Algunos de los conceptos en el Marco modificado son completamente nuevos, como el enfoque de "capacidad práctica" de los pasivos. Los principales cambios incluyen:

#### **Nuevo enfoque de "conjunto de derechos" a los activos**

Un objeto físico puede ser "dividido y subdividido" desde una perspectiva contable. Por ejemplo, en algunas circunstancias, una entidad registraría como un activo el derecho a usar un avión, en lugar de un avión en sí. El desafío será determinar hasta qué punto un activo se puede dividir en diferentes derechos y el impacto en el reconocimiento y la baja en cuentas.

#### **Nuevo enfoque de "capacidad práctica" para reconocer pasivos**

Los anteriores umbrales de reconocimiento han desaparecido, se reconocerá un pasivo si una empresa no tiene capacidad práctica para evitarlo. Esto podría llevar al reconocimiento de algunos pasivos en el balance general antes de lo requerido en la actualidad.

Sin embargo, si existe incertidumbre sobre la existencia y la medición o una baja probabilidad de salida de recursos, podría llevar al no reconocimiento del pasivo o bien retrasar la oportunidad de reconocimiento del mismo.

El desafío será determinar en qué acciones y/o costos futuros una empresa no tiene "capacidad práctica" de evitar.



## Nuevo enfoque basado en el control para la baja en cuentas

Una entidad dará de baja un activo del balance cuando pierda el control sobre todo o parte de él, es decir, el enfoque ya no se centra en la transferencia de riesgos y recompensas.

El desafío será determinar qué hacer si la entidad retiene algunos derechos después de la transferencia.

La modificación es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2020.

### Enmiendas a la definición de Negocio (Modificaciones a la NIIF 3)

El Consejo de Normas Internacionales de Contabilidad emitió en octubre de 2018 enmiendas de alcance limitado a la NIIF 3 Combinaciones de negocios para mejorar la definición de un negocio y ayudar a las entidades a determinar si una adquisición realizada es un negocio o un grupo de activos.

Las enmiendas incluyen una elección para usar una prueba de concentración. Esta es una evaluación simplificada que da como resultado la adquisición de un activo si la totalidad del valor razonable de los activos brutos se concentra en un solo activo identificable o en un grupo de activos identificables similares. Si no se aplica la prueba de concentración, o la prueba falla, la evaluación se enfoca en la existencia de un proceso sustantivo.

Las modificaciones aclaran la definición de negocio, con el objetivo de ayudar a las entidades a determinar si una transacción debe contabilizarse como una combinación de negocios o como la adquisición de un activo. Las modificaciones:

- (a) aclaran que, para ser considerado un negocio, un conjunto adquirido de actividades y activos debe incluir, como mínimo, un insumo y un proceso sustantivo que juntos contribuyen de forma significativa a la capacidad de elaborar productos;
- (b) eliminan la evaluación de si los participantes del mercado pueden sustituir los procesos o insumos que faltan y continuar con la producción de productos;
- (c) añaden guías y ejemplos ilustrativos para ayudar a las entidades a evaluar si se ha adquirido un proceso sustancial;
- (d) restringen las definiciones de un negocio o de productos centrándose en bienes y servicios proporcionados a los clientes y eliminan la referencia a la capacidad de reducir costos; y
- (e) añaden una prueba de concentración opcional que permite una evaluación simplificada de si un conjunto de actividades y negocios adquiridos no es un negocio.

La modificación es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2020. Se permite su adopción anticipada.

La administración no ha tenido la oportunidad de considerar el potencial impacto de la adopción de esta modificación.

Enmiendas a la definición de Material (Modificaciones a la NIC 1 Presentación de Estados Financieros y NIC 8 Políticas Contables, Cambios en las Estimaciones Contables y Errores)

En octubre de 2018, el Consejo de Normas Internacionales de Contabilidad redefinió su definición de material. Ahora está alineado a través de las Normas Internacionales de Información Financiera y el Marco Conceptual. La nueva definición establece que "La información es material si se puede esperar razonablemente que la omisión, la distorsión o el ensombrecimiento de la misma influyan en las decisiones que los usuarios principales de los estados financieros de propósito general toman sobre la base de esos estados financieros, que proporcionan información financiera sobre una entidad de reporte específica".

El Consejo ha promovido la inclusión del concepto de "ensombrecimiento" en la definición, junto con las referencias existentes a "omitir" y "declarar erróneamente". Además, el Consejo aumentó el umbral de "podría influir" a "podría razonablemente esperarse que influya".

El Consejo también eliminó la definición de omisiones o errores de importancia de la NIC 8 Políticas Contables, Cambios en las Estimaciones Contables y Errores.

La modificación es efectiva para los períodos anuales que comienzan el, o después del, 01 de enero de 2020. Se permite su adopción anticipada.

La Administración está evaluando el impacto de la aplicación de las nuevas normas, interpretaciones y modificaciones de las NIIF. Sin embargo, no es posible proporcionar una estimación razonable de los efectos que estas normas tendrán hasta que la Administración finalice la revisión detallada.

## Cambios en las políticas contables significativas

La Compañía implementó NIIF 9 y NIIF 15 a partir del 1 de enero de 2018 y reveló los impactos en los Estados Financieros Consolidados Intermedios al y por los tres meses terminados al 31 de marzo de 2018. Debido a los métodos de transición escogidos por el Grupo al aplicar estas normas, la información comparativa incluida en estos estados financieros no fue reexpresada para reflejar los requerimientos de las nuevas normas.

La aplicación de otros pronunciamientos no ha tenido efectos significativos para Colbún. El resto de los criterios contables aplicados durante el periodo 2018 no han variado respecto a los utilizados en el ejercicio anterior.

## Transición a NIIF 16 “Arrendamientos”

La NIIF 16 se emitió en enero de 2016 y reemplaza la NIC 17 Arrendamientos a partir del 1 de enero de 2019, la CINIIF 4 Determinación de si un acuerdo contiene un arrendamiento, SIC-15 Arrendamientos operativos e incentivos y SIC-27 Evaluación de la sustancia de las transacciones que implican la forma legal de un arrendamiento.

La NIIF 16 establece los principios para el reconocimiento, medición, presentación y revelación de los arrendamientos y requiere que los arrendatarios contabilicen todos los arrendamientos bajo un único modelo en balance similar a la contabilización de los arrendamientos financieros según la NIC 17. La norma incluye dos exenciones de reconocimiento para los arrendatarios: arrendamientos de activos de "bajo valor" (p. ej., computadoras personales) y arrendamientos a corto plazo (es decir, arrendamientos con un plazo de 12 meses o menos).

En la fecha de inicio de un arrendamiento, el arrendatario reconocerá un pasivo por pagos de arrendamiento (es decir, el pasivo por arrendamiento) y un activo que representa el derecho a usar el activo subyacente durante el plazo del arrendamiento (es decir, el activo por derecho de uso). Se les exigirá a los arrendatarios que reconozcan por separado el gasto por intereses en el pasivo por arrendamiento y el gasto por amortización en el activo por derecho de uso. A los arrendatarios también se les exigirá que vuelvan a calcular el pasivo por arrendamiento ante la ocurrencia de ciertos eventos (por ejemplo, un cambio en el plazo del arrendamiento, un cambio en los pagos de arrendamiento futuros como resultado de un cambio en un índice o tasa utilizada para determinar dichos pagos).

El arrendatario generalmente reconocerá el monto de la nueva medición del pasivo por arrendamiento como un ajuste al activo por derecho de uso.

La contabilidad del arrendador según la NIIF 16 es sustancialmente igual a la contabilidad actual bajo la NIC 17.

Los arrendadores continuarán clasificando todos los arrendamientos utilizando el mismo principio de clasificación que en la NIC 17 y distinguirán entre dos tipos de arrendamientos: arrendamientos operativos y financieros.

La NIIF 16 también requiere que los arrendatarios y arrendadores realicen revelaciones más extensas que las previstas en la NIC 17.

La NIIF 16 es efectiva para períodos anuales que comiencen en o después del 1 de enero de 2019. Se permite su aplicación anticipada, pero no antes de que la entidad aplique la NIIF 15. El arrendatario puede elegir aplicar la norma utilizando un enfoque retrospectivo completo o uno retrospectivo modificado. Las disposiciones de transición de la norma permiten ciertos alivios. La Compañía estima usar la opción de valorizar el pasivo por arriendos reflejando los pagos futuros remanentes a partir del 1 de enero del 2019 y contabilizar un activo al valor igual al pasivo reconocido.

Durante el 2018 el Grupo evaluó el impacto que tendrá esta norma en sus estados financieros consolidados utilizando el enfoque retrospectivo modificado, cuyo impacto aproximado en estado de situación financiera (consolidado) sería de MUS\$ 9.870 (reconociendo de esta forma un activo por derecho de uso y un pasivo por arrendamiento), la norma se aplicará el 1 de enero del 2019, considerando los contratos vigentes al 31 de diciembre de 2018.

### 3.3 Responsabilidad de la información y estimaciones realizadas

La información contenida en los presentes estados financieros consolidados es responsabilidad del Directorio de la Compañía, que manifiesta expresamente que se han aplicado en su totalidad las NIIF, emitidas por el “IASB”.

En la preparación de los estados financieros consolidados se requiere el uso de juicios, estimaciones y supuestos que afectan los montos de activos y pasivos a la fecha de los estados financieros consolidados y los montos de ingresos y gastos durante el período reportado. Estas estimaciones y supuestos están basadas en el mejor saber de la administración sobre los montos reportados, eventos o acciones.

En la preparación de los estados financieros consolidados se han utilizado estimaciones tales como:

- Vidas útiles y valores residuales de propiedades, plantas y equipos e intangibles (ver notas 3.1.f y 5.a).
- La valoración de activos para determinar la existencia de pérdidas por deterioro (ver nota 5.b).
- Hipótesis empleadas para el cálculo del valor razonable de los instrumentos financieros (ver nota 3.1.h).
- Hipótesis utilizadas en el cálculo actuarial de los pasivos y obligaciones con empleados (ver nota 3.1.m).
- Probabilidad de ocurrencia y el monto de los pasivos de monto incierto o contingentes (ver nota 3.1.n).
- Los resultados fiscales de la Compañía y sus subsidiarias, que se declararán ante las respectivas autoridades tributarias en el futuro, que han sido de base para el registro de los distintos saldos relacionados con los impuestos sobre las ganancias en los presentes estados financieros consolidados (ver nota 3.1.l).
- Hipótesis financieras y vida económica estimada para el cálculo de la provisión de desmantelamiento (ver nota 3.n.2).
- Medición de la estimación para pérdidas crediticias esperadas por deudores comerciales y activos del contrato (3.h.1.5).

A pesar de que estas estimaciones se han realizado en función de la mejor información disponible en la fecha de emisión de los presentes estados financieros consolidados, es posible que acontecimientos que puedan tener lugar en el futuro obliguen a modificarlas (al alza o a la baja) en próximos ejercicios, lo que se aplicaría de forma prospectiva en el momento de conocida la variación, reconociendo los efectos del cambio de estimación en los correspondientes estados financieros consolidados futuros, de acuerdo a NIC 8.

## 4. Gestión de Riesgo

### 4.1 Política de Gestión de Riesgos

La estrategia de Gestión de Riesgo está orientada a resguardar los principios de estabilidad y sustentabilidad de la Compañía, identificando y gestionando las fuentes de incertidumbre que la afectan o puedan afectar.

Gestionar integralmente los riesgos supone identificar, medir, analizar, mitigar y controlar los distintos riesgos incurridos por las distintas gerencias de la Compañía, así como estimar el impacto en la posición consolidada de la misma, su seguimiento y control en el tiempo. En este proceso intervienen tanto la alta dirección de Colbún como las áreas tomadoras de riesgo.

Los límites de riesgo tolerables, las métricas para la medición del riesgo y la periodicidad de los análisis de riesgo son políticas normadas por el Directorio de la Compañía.

La función de gestión de riesgo es responsabilidad de la Gerencia General, así como de cada división y gerencia de la Compañía, y cuenta con el apoyo de la Gerencia de Control de Gestión y Riesgos y la supervisión, seguimiento y coordinación del Comité de Riesgos y Sostenibilidad.

### 4.2 Factores de Riesgo

Las actividades de la Compañía están expuestas a diversos riesgos que se han clasificado en riesgos del negocio eléctrico y riesgos financieros.

#### 4.2.1 Riesgos del Negocio Eléctrico

##### a. Riesgo Hidrológico

En condiciones hidrológicas secas, Colbún debe operar sus plantas térmicas de ciclo combinado con compras de gas natural o con diésel, o por defecto operar sus plantas térmicas de respaldo o bien recurrir al mercado spot. Esta situación podría encarecer los costos de Colbún, aumentando la variabilidad de sus resultados en función de las condiciones hidrológicas.

La exposición de la Compañía al riesgo hidrológico se encuentra razonablemente mitigada mediante una política comercial que tiene por objetivo mantener un equilibrio entre la generación competitiva (hidráulica en un año medio a seco, y generación térmica a carbón y a gas natural costo eficiente, y otras energías renovables costo eficientes y debidamente complementadas por otras fuentes de generación dada su intermitencia y volatilidad) y los compromisos comerciales. En condiciones de extremas y repetidas sequías, una eventual falta de agua para refrigeración afectaría la capacidad generadora de los ciclos combinados. Con el objetivo de minimizar el uso del agua y asegurar la disponibilidad operacional durante periodos de escasez hídrica, Colbún ha construido una Planta de Osmosis Inversa que permite reducir hasta en un 50% el agua utilizada en el proceso de enfriamiento de los ciclos combinados del Complejo Nehuencho. La planta terminó su construcción en mayo de 2017 y entró en operación durante el tercer trimestre del 2017.

En Perú, Colbún cuenta con una central de ciclo combinado y una política comercial orientada a comprometer a través de contratos de mediano y largo plazo, dicha energía de base. La exposición a hidrologías secas es acotada ya que sólo impactaría en caso de eventuales fallas operacionales que obliguen a recurrir al mercado spot. Adicionalmente el mercado eléctrico peruano presenta una oferta térmica eficiente y disponibilidad de gas natural local suficiente para respaldarla.

## **b. Riesgo de precios de los combustibles**

En Chile, en situaciones de bajos afluentes a las plantas hidráulicas, Colbún debe hacer uso principalmente de sus plantas térmicas o efectuar compras de energía en el mercado spot a costo marginal. Lo anterior genera un riesgo por las variaciones que puedan presentar los precios internacionales de los combustibles. Parte de este riesgo se mitiga con contratos cuyos precios de venta también se indexan con las variaciones de los precios de los combustibles. Adicionalmente, se llevan adelante programas de cobertura con diversos instrumentos derivados, tales como opciones call y opciones put, entre otras, para cubrir la porción remanente de esta exposición en caso de existir. En caso contrario, ante una hidrología abundante, la Compañía podría encontrarse en una posición excedentaria en el mercado spot cuyo precio estaría en parte determinado por el precio de los combustibles.

En Perú, el costo del gas natural tiene una menor dependencia de los precios internacionales, dada una importante oferta doméstica de este hidrocarburo, lo que permite acotar la exposición a este riesgo.

Al igual que en Chile, la proporción que queda expuesta a variaciones de precios internacionales es mitigada mediante fórmulas de indexación en contratos de venta de energía.

Por lo anteriormente expuesto, la exposición al riesgo de variaciones de precios de los combustibles se encuentra en parte mitigado.

## **c. Riesgo de suministro de combustibles**

Respecto del suministro de combustibles líquidos, en Chile la Compañía mantiene acuerdos con proveedores y capacidad de almacenamiento propio que le permiten contar con una adecuada confiabilidad en la disponibilidad de este tipo de combustible.

Respecto al suministro de gas natural en Chile, Colbún mantiene contratos de mediano plazo con ERSA y Metrogas y para el largo plazo destaca el nuevo contrato con ERSA por opciones de suministro de gas natural licuado y capacidad reservada de regasificación, vigente desde el año 2018 al 2030 que permitirá a Colbún disponer de gas natural para el Complejo Nehuenco. Adicionalmente, se han firmado contratos de suministro de gas con productores argentinos, lo que permite tener la opción de acceder a los excedentes de gas que se produzcan en el país vecino.

Por su parte, en Perú, Fenix cuenta con contratos de largo plazo con el consorcio ECL88 (Pluspetrol, Pluspetrol Camisea, Hunt, SK, Sonatrach, Tecpetrol y Repsol) y acuerdos de transporte de gas con TGP.

En cuanto a las compras de carbón para la central térmica Santa María Unidad I, se realizan licitaciones (la última en noviembre de 2018), invitando a importantes suministradores internacionales, adjudicando el suministro a empresas competitivas y con respaldo. Lo anterior siguiendo una política de compra temprana y una política de gestión de inventario de modo de mitigar sustancialmente el riesgo de no contar con este combustible.

## **d. Riesgos de fallas en equipos y mantención**

La disponibilidad y confiabilidad de las unidades de generación y de las instalaciones de transmisión de Colbún son fundamentales para el negocio. Es por esto que Colbún tiene como política realizar mantenimientos programados, preventivos y predictivos a sus equipos, acorde a las recomendaciones de sus proveedores, y mantiene una política de cobertura de este tipo de riesgos a través de seguros para sus bienes físicos, incluyendo cobertura por daño físico y perjuicio por paralización.

### e. Riesgos de construcción de proyectos

El desarrollo de nuevos proyectos puede verse afectado por factores tales como: retrasos en la obtención de permisos, modificaciones al marco regulatorio, judicialización, aumento en el precio de los equipos o de la mano de obra, oposición de grupos de interés locales e internacionales, condiciones geográficas imprevistas, desastres naturales, accidentes u otros imprevistos.

La exposición de la Compañía a este tipo de riesgos se gestiona a través de una política comercial que considera los efectos de los eventuales atrasos de los proyectos. Además, se incorporan niveles de holgura en las estimaciones de plazo y costo de construcción. Adicionalmente, la exposición de la Compañía a este riesgo se encuentra parcialmente cubierta con la contratación de pólizas del tipo “Todo Riesgo de Construcción” que cubren tanto daño físico como pérdida de beneficio por efecto de atraso en la puesta en servicio producto de un siniestro, ambos con deducibles estándares para este tipo de seguros.

Las compañías del sector enfrentan un mercado eléctrico muy desafiante, con mucha activación de parte de diversos grupos de interés, principalmente de comunidades vecinas y ONGs, las cuales legítimamente están demandando más participación y protagonismo. Como parte de esta complejidad, los plazos de tramitación ambiental se han hecho más inciertos, los que en ocasiones son además seguidos por extensos procesos de judicialización. Lo anterior ha resultado en una menor construcción de proyectos de tamaños relevantes.

Colbún tiene cómo política integrar con excelencia las dimensiones sociales y ambientales al desarrollo de sus proyectos. Por su parte, la Compañía ha desarrollado un modelo de vinculación social que le permita trabajar junto a las comunidades vecinas y la sociedad en general, iniciando un proceso transparente de participación ciudadana y de generación de confianza en las etapas tempranas de los proyectos y durante todo el ciclo de vida de los mismos.

### f. Riesgos regulatorios

La estabilidad regulatoria es fundamental para el sector de generación, donde los proyectos de inversión tienen largos plazos de desarrollo, ejecución y retorno de la inversión. Colbún estima que los cambios regulatorios deben hacerse considerando las complejidades del sistema eléctrico y manteniendo los incentivos adecuados para la inversión. Es importante disponer de una regulación que entregue reglas claras y transparentes que consoliden la confianza de los agentes del sector.

En Chile, el actual gobierno está llevando a cabo diversos cambios regulatorios que o bien, se han heredado del gobierno anterior, o se han iniciado durante el presente mandato. Estos cambios, dependiendo de la forma en que se implementen, podrían representar oportunidades o riesgos para la Compañía.

Respecto a los proyectos de Ley que están en discusión en el Congreso, destacan (i) la reforma al Código de Aguas, (ii) el proyecto de ley para modernizar el Sistema de Evaluación de Impacto Ambiental, (iii) el proyecto de ley que crea el Ministerio de Pueblos Indígenas, (iv) el proyecto de ley que crea el Consejo Nacional y los Consejos de Pueblos Indígenas, y (v) la Ley de Biodiversidad y Áreas Protegidas.

Adicionalmente, el Ministerio de Energía ha anunciado discusión y creación de una “Ley de Flexibilidad” y otra de “Mejoramientos a la Ley de Transmisión”, que buscarán perfeccionar aspectos de la Ley de Transmisión promulgada el 2016. Los contenidos específicos de estas leyes aún no han sido definidos.

Por otro lado, La Comisión Nacional de Energía y el Ministerio de Energía han continuado desarrollando Mesas de Trabajo para seguir con sus labores normativas, destacando la Mesa de Reglamento de los Sistemas de Transmisión y Planificación de la Transmisión, y varias Mesas para la elaboración de Normas



Técnicas. Adicionalmente, el Ministerio dio por concluida la Mesa de Descarbonización de la matriz eléctrica y el Plan Anual de Expansión de Transmisión del año 2017 y ha realizado avances en proceso de elaboración del Plan de Expansión Anual de Transmisión para el Año 2018.

En Perú, existen dos proyectos de ley en el Senado que buscan recuperar la eficiencia en su mercado eléctrico a través de modificaciones en la declaración de precios de gas. Además, se está discutiendo una ley que busca el reconocimiento de Potencia Firme a Energías Renovables. Paralelamente, el Ministerio de Energía de Perú dio a conocer su agenda de cambios normativos, los que incluyen (i) Modificaciones del Reglamento de licitaciones de Suministro, para promover la competitividad, (ii) Elaboración de un reglamento de Generación Distribuida, (iii) Proyecto de Ley para la promoción de vehículos eléctricos.

De la calidad de estas nuevas regulaciones y de las señales que por ello entregue la autoridad, dependerá - en buena medida - el necesario y equilibrado desarrollo del mercado eléctrico en los próximos años, tanto en Chile como en Perú.

#### **g. Riesgo de variación de demanda/oferta y de precio de venta de la energía eléctrica**

La proyección de demanda de consumo eléctrico futuro es una información muy relevante para la determinación del precio de mercado.

En Chile, un bajo crecimiento de la demanda, una baja en el precio de los combustibles y un aumento en el ingreso de proyectos de energías renovables variables solar y eólica determinaron durante los últimos años una baja en el precio de corto plazo de la energía (costo marginal).

Respecto de los valores de largo plazo, las licitaciones de suministro de clientes regulados concluidas en agosto de 2016 y octubre de 2017 se tradujeron en una baja importante en los precios presentados y adjudicados, reflejando la mayor dinámica competitiva que existe en este mercado y el impacto que está teniendo la irrupción de nuevas tecnologías -solar y eólica fundamentalmente- con una significativa reducción de costos producto de su masificación. Aunque se puede esperar que los factores que gatillan esta dinámica competitiva y tendencia en los precios se mantengan a futuro, es difícil determinar su alcance preciso en los valores de largo plazo de la energía.

Adicionalmente, y dada la diferencia de precios de la energía entre clientes libres y regulados, pudiese ocurrir que ciertos clientes regulados podrían acogerse a régimen de cliente libre. Lo anterior se puede producir dada la opción, contenida en la legislación eléctrica que permite que los clientes con potencia conectada entre 500 kW y 5.000 kW pueden ser categorizados como clientes regulados o libres. Colbún tiene uno de los parques de generación más eficientes del sistema chileno, por lo que tiene la capacidad de ofrecer condiciones competitivas.

En Perú, también se presenta un escenario de desbalance temporal entre oferta y demanda, generado principalmente por el aumento de oferta eficiente (centrales hidroeléctricas y a gas natural).

El crecimiento que se ha observado en el mercado chileno (y potencialmente en el peruano) de fuentes de generación renovables de fuentes variables como la generación solar y eólica, puede generar costos de integración y por lo tanto afectar las condiciones de operación del resto del sistema eléctrico, sobre todo en ausencia de un mercado de servicios complementarios que remunere adecuadamente los servicios necesarios para gestionar la variabilidad de las fuentes de generación indicadas.

#### 4.2.2 Riesgos Financieros

Son aquellos riesgos ligados a la imposibilidad de realizar transacciones o al incumplimiento de obligaciones procedentes de las actividades por falta de fondos, como también a las variaciones de tasas de interés, tipos de cambios, quiebra de contrapartes u otras variables financieras de mercado que puedan afectar patrimonialmente a Colbún.

##### a. Riesgo de tipo de cambio

El riesgo de tipo de cambio viene dado principalmente por fluctuaciones de monedas que provienen de dos fuentes. La primera fuente de exposición proviene de flujos correspondientes a ingresos, costos y desembolsos de inversión que están denominados en monedas distintas a la moneda funcional (dólar de los Estados Unidos).

La segunda fuente de riesgo corresponde al descalce contable que existe entre los activos y pasivos del Estado de Situación Financiera denominados en monedas distintas a la moneda funcional.

La exposición a flujos en monedas distintas al dólar se encuentra acotada por tener prácticamente la totalidad de las ventas de la Compañía denominada directamente o con indexación al dólar. Del mismo modo, los principales costos corresponden a compras de petróleo diésel, gas natural y carbón, los que incorporan fórmulas de fijación de precios basados en precios internacionales denominados en dólares. Respecto de los desembolsos en proyectos de inversión, la Compañía incorpora indexadores en sus contratos con proveedores y en ocasiones recurre al uso de derivados para fijar los egresos en monedas distintas al dólar.

La exposición al descalce de cuentas de Balance se encuentra mitigada mediante la aplicación de una Política de descalce máximo entre activos y pasivos para aquellas partidas estructurales denominadas en monedas distintas al dólar. Para efectos de lo anterior, Colbún mantiene una proporción relevante de sus excedentes de caja en dólares y adicionalmente recurre al uso de derivados, siendo los más utilizados swaps de moneda y forwards.

##### b. Riesgo de tasa de interés

Se refiere a las variaciones de las tasas de interés que afectan el valor de los flujos futuros referenciados a tasa de interés variable, y a las variaciones en el valor razonable de los activos y pasivos referenciados a tasa de interés fija que son contabilizados a valor razonable. Para mitigar este riesgo se utilizan swaps de tasa de interés fija.

La deuda financiera de la Compañía, incorporando el efecto de los derivados de tasa de interés contratados, presenta el siguiente perfil:

Tasa de interés	31.12.2018	31.12.2017
Fija	100%	100%
Variable	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Al 31 de diciembre de 2018, la deuda financiera de la Compañía se encuentra denominada en un 100% a tasa fija.

##### c. Riesgo de crédito

La Compañía se ve expuesta a este riesgo derivado de la posibilidad de que una contraparte falle en el cumplimiento de sus obligaciones contractuales y produzca una pérdida económica o financiera.

Históricamente todas las contrapartes con las que Colbún ha mantenido compromisos de entrega de energía han hecho frente a los pagos correspondientes de manera correcta.

Con respecto a las colocaciones en Tesorería y derivados que se realizan, Colbún efectúa las transacciones con entidades de elevados ratings crediticios. Adicionalmente, la Compañía ha establecido límites de participación por contraparte, los que son aprobados por el Directorio y revisados periódicamente.

Al 31 de diciembre de 2018, las inversiones de excedentes de caja se encuentran invertidas en fondos mutuos (de filiales bancarias) y en depósitos a plazo en bancos locales e internacionales.

Los primeros corresponden a fondos mutuos de corto plazo, con duración menor a 90 días, conocidos como “money market”.

La información sobre rating crediticio de los clientes se encuentra revelada en la nota 11.b de los Estados Financieros.

#### **d. Riesgo de liquidez**

Este riesgo viene dado por las distintas necesidades de fondos para hacer frente a los compromisos de inversiones y gastos del negocio, vencimientos de deuda, entre otros. Los fondos necesarios para hacer frente a estas salidas de flujo de efectivo se obtienen de los propios recursos generados por la actividad ordinaria de Colbún y por la contratación de líneas de crédito que aseguren fondos suficientes para soportar las necesidades previstas por un período.

Al 31 de diciembre de 2018, Colbún cuenta con excedentes de caja por aproximadamente US\$788 millones, invertidos en Depósitos a Plazo con duración promedio de 108 días (se incluyen depósitos con duración inferior y superior a 90 días, estos últimos son registrados como “Otros Activos Financieros Corrientes” en los Estados Financieros Consolidados) y en fondos mutuos de corto plazo con duración menor a 90 días. Asimismo, la Compañía tiene disponibles como fuentes de liquidez adicional al día de hoy: (i) dos líneas de bonos inscritas en el mercado local por un monto conjunto de UF 7 millones y (ii) líneas bancarias no comprometidas por aproximadamente US\$150 millones.

En los próximos doce meses, la Compañía deberá desembolsar aproximadamente US\$118 millones por concepto de intereses y amortizaciones de deuda financiera. Éste remanente de intereses y amortizaciones menores se espera cubrir con la generación propia de flujos de caja.

Al 31 de diciembre de 2018, Colbún cuenta con clasificaciones de riesgo nacional AA- por Fitch Ratings y AA por Standard & Poor’s (S&P), ambas con perspectivas estables. A nivel internacional la clasificación de la Compañía es Baa2 por Moody’s, BBB por S&P y BBB por Fitch Ratings, todas con perspectivas estables.

Por su parte, Fenix cuenta con clasificaciones de riesgo internacional Baa3 por Moody's, BBB- por Standard & Poor's (S&P) y BBB- por Fitch Ratings, todas con perspectivas estables.

Por lo anteriormente expuesto, se considera que el riesgo de liquidez de la Compañía actualmente es acotado.

Información sobre vencimientos contractuales de los principales pasivos financieros se encuentra revelada en la nota 21.c.2 de los Estados Financieros.

#### 4.3 Medición del riesgo

La Compañía realiza periódicamente análisis y mediciones de su exposición a las distintas variables de riesgo, de acuerdo a lo presentado en párrafos anteriores. La gestión de riesgo es realizada por un Comité de Riesgos con el apoyo de la Gerencia de Riesgo Corporativo y en coordinación con las demás divisiones de la Compañía.

Con respecto a los riesgos del negocio, específicamente con aquellos relacionados a las variaciones en los precios de los commodities, Colbún ha implementado medidas mitigatorias consistentes en indexadores en contratos de venta de energía y coberturas con instrumentos derivados para cubrir una posible exposición remanente. Es por esta razón que no se presentan análisis de sensibilidad.

Para la mitigación de los riesgos de fallas en equipos o en la construcción de proyectos, la Compañía cuenta con seguros con cobertura para daño de sus bienes físicos, perjuicios por paralización y pérdida de beneficio por atraso en la puesta en servicio de un proyecto. Se considera que este riesgo está razonablemente acotado.

Con respecto a los riesgos financieros, para efectos de medir su exposición, Colbún elabora análisis de sensibilidad y valor en riesgo con el objetivo de monitorear las posibles pérdidas asumidas por la Compañía en caso que la exposición exista.

El riesgo de tipo de cambio se considera acotado por cuanto los principales flujos de la Compañía (ingresos, costos y desembolsos de proyectos) se encuentran denominada directamente o con indexación al dólar.

La exposición al descalce de cuentas contables se encuentra mitigada mediante la aplicación de una política de descalce máximo entre activos y pasivos para aquellas partidas estructurales de Balance denominadas en monedas distintas al dólar. En base a lo anterior, al 31 de diciembre de 2018 la exposición de la Compañía frente al impacto de diferencias de cambio sobre partidas estructurales se traduce en un potencial efecto de aproximadamente US\$4,3 millones, en términos trimestrales, en base a un análisis de sensibilidad al 95% de confianza.

No existe riesgo de variación de tasas de interés, ya que el 100% de la deuda financiera se encuentra contratada a tasa fija.

El riesgo de crédito se encuentra acotado por cuanto Colbún opera únicamente con contrapartes bancarias locales e internacionales de alto nivel crediticio y ha establecido políticas de exposición máxima por contraparte que limitan la concentración específica con estas instituciones. En el caso de los bancos, las instituciones locales tienen clasificación de riesgo local igual o superior a BBB y las entidades extranjeras tienen clasificación de riesgo internacional grado de inversión.

Al cierre del período, la institución financiera que concentra la mayor participación de excedentes de caja alcanza un 23%. Respecto de los derivados existentes, las contrapartes internacionales de la Compañía tienen riesgo equivalente a BBB+ o superior y las contrapartes nacionales tienen clasificación local BBB+ o superior. Cabe destacar que en derivados ninguna contraparte concentra más del 21% en términos de notional.

El riesgo de liquidez se considera bajo en virtud de la relevante posición de caja de la Compañía, la cuantía de obligaciones financieras en los próximos doce meses y el acceso a fuentes de financiamiento adicionales.

## 5. Criterios contables críticos

La administración necesariamente efectúa juicios y estimaciones que tienen un efecto significativo sobre las cifras presentadas en los estados financieros consolidados. Cambios en los supuestos y estimaciones podrían tener un impacto significativo en los estados financieros. A continuación, se detallan las estimaciones y juicios críticos usados por la administración en la preparación de los presentes estados financieros consolidados:

### a. Cálculo de depreciación y amortización, y estimación de vidas útiles asociadas

Las propiedades, planta y equipos y los activos intangibles distintos de la plusvalía con vida útil definida, son depreciados y amortizados respectivamente en forma lineal sobre sus vidas útiles estimadas. Las vidas útiles han sido estimadas y determinadas, considerando aspectos técnicos, naturaleza del bien, y estado de los mismos.

Las vidas útiles estimadas al 31 de diciembre de 2018 son las siguientes:

#### (i) Vidas útiles Propiedades, planta y equipos:

El detalle de las vidas útiles de las principales Propiedades planta y equipos se presenta a continuación:

Clases de propiedades, planta y equipos	Intervalo de años de vida útil estimada	Vida útil remanente promedio años
Edificios	10 - 65	34
Maquinarias	4 - 20	10
Equipos de Transporte	5 - 15	7
Equipos de oficina	5 - 30	27
Equipos informáticos	3 - 10	5
Activos Generadores de Energía	2 - 100	41
Arrendamientos Financieros	20	15
Otras propiedades, planta y equipo	10 - 50	29

Para más información, se presenta una apertura adicional por clases de planta:

Clases de centrales	Intervalo de años de vida útil estimada	Vida útil remanente promedio años
<b>Instalaciones de generación</b>		
Centrales hidráulicas		
Obra civil	10 - 100	73
Equipo electromecánico	2 - 100	22
Centrales térmicas		
Obra civil	10 - 60	24
Equipo electromecánico	2 - 60	18
Central solar		
Equipo electromecánico	5 - 25	23
Obra civil	25	25

(ii) Vidas útiles activos intangibles distintos de la plusvalía (con vidas útiles definidas):

Los activos intangibles de relación contractual con clientes corresponden principalmente a contratos de suministro de energía eléctrica adquiridos.

Los otros activos intangibles materiales corresponden a software, derechos, concesiones y otras servidumbres con vidas útiles definidas. Estos activos se amortizan de acuerdo a sus vidas útiles esperadas.

Activos intangibles	Intervalo de años de vida útil estimada
Relaciones Contractuales de Clientes	2 - 15
Software	2 - 15
Derechos y Concesiones	1 - 10

A la fecha de cierre de cada período, se evalúa si existe algún indicio de que algún activo hubiera podido sufrir una pérdida por deterioro. En caso de existir, se realiza una estimación del monto recuperable de dicho activo para determinar, en su caso, el monto del deterioro.

**(iii) Activos intangibles con vidas útiles indefinidas:**

La Compañía efectuó un análisis de las vidas útiles de los activos intangibles, que tienen vidas útiles indefinidas (p. ej. ciertas servidumbres y derechos de aguas, entre otros), concluyendo que no existe un límite previsible de tiempo a lo largo del cual el activo genere entradas de flujos netos de efectivo. Para estos activos intangibles se determinó que sus vidas útiles tienen el carácter de indefinidas.

**b. Deterioro de activos no financieros (tangibles e intangibles distintos de la plusvalía, excluyendo el menor valor)**

A la fecha de cierre de cada año, o en aquella fecha en que se considere necesario, se analiza el valor de los activos para determinar si existe algún indicio de que dichos activos hubieran sufrido una pérdida por deterioro. En caso de que exista algún indicio se realiza una estimación del monto recuperable de dicho activo para determinar, en su caso, el importe del saneamiento necesario. Si se trata de activos identificables que no generan flujos de caja de forma independiente, se estima la recuperabilidad de la Unidad Generadora de Efectivo (“UGE”) a la que el activo pertenece. A estos efectos se ha determinado que todos los activos localizados en Chile conforman una sola UGE, mientras que los activos localizados en Perú conforman otra UGE.

En el caso de las UGE a las que se han asignado activos intangibles con una vida útil indefinida, el análisis de su recuperabilidad se realiza de forma sistemática al cierre de cada ejercicio o bajo circunstancias consideradas necesarias para realizar tal análisis, excepto cuando se considera que los cálculos más recientes, efectuados en el período anterior, del importe recuperable de una UGE podrían ser utilizados para la comprobación del deterioro del valor de esa unidad en el período corriente, puesto que se cumplen los siguientes criterios:

- a) Los activos y pasivos que componen esa unidad no han cambiado significativamente desde el cálculo del importe recuperable más reciente.
- b) El cálculo del importe recuperable más reciente dio lugar a una cantidad que excedía del importe en libros de la unidad por un margen significativo; y
- c) Basándose en un análisis de los hechos que han ocurrido y de las circunstancias que han cambiado desde que se efectuó el cálculo más reciente del importe recuperable, la probabilidad de que la determinación del importe recuperable corriente sea inferior al importe en libros corriente de la unidad, sea remota.

El monto recuperable es el mayor entre el valor justo menos los costos necesarios para la venta y el valor en uso, entendiendo por éste el valor actual de los flujos de caja futuros estimados generados por el activo o una UGE. Para el cálculo del valor recuperable del activo tangible e intangible, el valor en uso es el criterio utilizado por la Compañía.

Para estimar el valor de uso, la Compañía prepara las provisiones de flujos de caja futuros antes de impuestos a partir de los presupuestos más recientes aprobados por la Administración de la Compañía. Estos presupuestos incorporan las mejores estimaciones disponibles de ingresos y costos de las UGE utilizando la mejor información disponible a la fecha, la experiencia del pasado y las expectativas futuras.

Estos flujos se descuentan para calcular su valor actual a una tasa, antes de impuestos, que recoge el costo de capital del negocio en que se desarrolla. Para su cálculo se tiene en cuenta el costo actual del dinero y las primas de riesgo utilizadas de forma general para el negocio.

En el caso de que el importe recuperable sea inferior al valor neto en libros del activo, se registra la correspondiente provisión de pérdida por deterioro por la diferencia, con cargo al rubro “Otras Ganancias (pérdidas)” del Estado de Resultados Integrales.

Las pérdidas por deterioro reconocidas en un activo en ejercicios anteriores son revertidas cuando se produce un cambio en las estimaciones sobre su importe recuperable aumentando el valor del activo con abono a resultados con el límite del valor en libros que el activo hubiera tenido de no haberse realizado el saneamiento.

Al 31 de diciembre de 2018 la Compañía considera que no existen indicios significativos de deterioro del valor contable de aquellos activos tangibles e intangibles que pertenecen a las UGE definidas por la Compañía.

### **c. Valor justo de los derivados y otros instrumentos financieros**

Tal como se describe en la nota 3.1, la Administración usa su criterio al seleccionar una técnica de valorización apropiada de los instrumentos financieros que no se cotizan en un mercado activo. Se aplican las técnicas de valorización usadas comúnmente por los profesionales del mercado. En el caso de los instrumentos financieros derivados, se forman las presunciones basadas en las tasas cotizadas en el mercado, ajustadas según las características específicas del instrumento. Otros instrumentos financieros se valorizan usando un análisis de la actualización de los flujos de efectivo basado en las presunciones soportadas, cuando sea posible, por los precios o tasas observables de mercado.

## **6. Operaciones por segmentos**

El negocio básico de Colbún es la generación y venta de energía eléctrica. Para ello, la Compañía cuenta con activos que producen dicha energía, la que es vendida a diversos clientes con los cuales se mantienen contratos de suministros y a otros sin contrato de acuerdo con lo estipulado en las regulaciones vigentes.



El sistema de control de gestión de Colbún analiza el negocio desde una perspectiva de un mix de activos hidráulicos/térmicos que producen energía eléctrica para servir a una cartera de clientes. En consecuencia, la asignación de recursos y las medidas de desempeño se analizan en términos agregados.

Sin perjuicio de lo anterior, la gestión interna considera criterios de clasificación para los activos y para los clientes, para efectos meramente descriptivos, pero en ningún caso de segmentación de negocio de acuerdo con los criterios establecidos en NIIF 8.

Algunos de estos criterios de clasificación son, por ejemplo, la tecnología de producción: plantas hidroeléctricas (que a su vez pueden ser de pasada o de embalse) y plantas térmicas (que a su vez pueden ser a carbón, de ciclo combinado, de ciclo abierto, etc.). Los clientes, a su vez, se clasifican siguiendo conceptos contenidos en la regulación eléctrica chilena en clientes libres, clientes regulados y mercado spot, y en clientes regulados y clientes no regulados de acuerdo con la regulación eléctrica peruana (ver nota 2).

En general no existe una relación directa entre cada una de las plantas generadoras y los contratos de suministro, sino que estos se establecen de acuerdo con la capacidad total de Colbún, siendo abastecidos en cada momento con la generación más eficiente propia o de terceros comprando energía en el mercado spot a otras compañías generadoras. Una excepción a lo anterior es el caso de Codelco en Chile, que cuenta con dos contratos de suministro suscritos con la Compañía. Uno de estos contratos es cubierto con todo el parque generador y el otro tiene preferencialmente su suministro sobre la base de la producción de Santa María.

Colbún es parte del sistema de despacho del SEN en Chile y del sistema de despacho SEIN en Perú. La generación de cada una de las plantas en estos sistemas está definida por su orden de despacho, de acuerdo con la definición de óptimo económico en el caso de ambos sistemas.

La regulación eléctrica en los dos sistemas en que Colbún participa contempla una separación conceptual entre energía y potencia, pero no por tratarse de elementos físicos distintos, sino para efectos de tarificación económicamente eficiente. De ahí que se distinga entre energía que se tarifica en unidades monetarias por unidad de energía (KWh, MWh, etc.) y potencia que se tarifica en unidades monetarias por unidad de potencia - unidad de tiempo (KW-mes).

Dado que Colbún S.A. opera en dos sistemas eléctricos, en el Sistema Eléctrico Nacional en Chile, y en el Sistema Eléctrico Interconectado Nacional en el Perú, para efectos de la aplicación de la NIIF 8 la información por segmentos se ha estructurado siguiendo la distribución geográfica por país.

El cuadro siguiente presenta información por área geográfica:

Información a revelar sobre segmentos de operación al 31.12.2018	Chile	Perú	Segmentos de operación	Eliminación de importes inters egmentos	Total de la entidad por segmentos de operación
<b>Ingresos de actividades ordinarias</b>					
Ingresos de actividades ordinarias	1.369.868	201.479	1.571.347	-	1.571.347
<b>Total ingresos de actividades ordinarias procedentes de clientes externos y transacciones con otros segmentos de operación de la misma entidad</b>	<b>1.369.868</b>	<b>201.479</b>	<b>1.571.347</b>	-	<b>1.571.347</b>
Materias primas y consumibles utilizados	(617.394)	(156.209)	(773.603)	-	(773.603)
Gastos por beneficios a los empleados	(73.637)	(6.128)	(79.765)	-	(79.765)
Gastos por intereses	(66.993)	(16.878)	(83.871)	-	(83.871)
Ingresos por intereses	19.183	1.184	20.367	-	20.367
Gasto por depreciación y amortización	(203.416)	(33.539)	(236.955)	-	(236.955)
Participación en las ganancias (pérdidas) de asociadas y negocios conjuntos que se contabilicen utilizando el método de la participación	1.189	-	1.189	10.199	11.388
Gasto por impuestos a las ganancias, operaciones continuadas	(96.821)	(1.597)	(98.418)	-	(98.418)
Ganancia (pérdida), antes de impuestos	347.370	(28.726)	318.644	10.199	328.843
<b>Ganancia (pérdida) procedente de operaciones continuadas</b>	<b>250.549</b>	<b>(30.323)</b>	<b>220.226</b>	<b>10.199</b>	<b>230.425</b>
<b>Ganancia (pérdida)</b>	<b>250.549</b>	<b>(30.323)</b>	<b>220.226</b>	<b>10.199</b>	<b>230.425</b>
Activos	6.189.482	817.501	7.006.983	(228.634)	6.778.349
Inversiones contabilizadas utilizando el método de la participación	258.836	-	258.836	(228.634)	30.202
Incorporaciones de activos no corrientes distintas de instrumentos financieros, activos por impuestos diferidos, activos de beneficios definidos netos, y derechos que surgen de contratos de seguro	4.906.245	675.983	5.582.228	-	5.582.228
Pasivos	2.532.967	388.444	2.921.411	-	2.921.411
<i>Patrimonio</i>					
<b>Patrimonio y pasivos</b>					<b>6.778.349</b>
Pérdidas por deterioro de valor reconocidas en otro resultado integral	(28.394)	-	(28.394)	-	(28.394)
Flujos de efectivo procedentes de (utilizados en) actividades de operación	482.961	33.369	516.330	-	516.330
Flujos de efectivo procedentes de (utilizados en) actividades de inversión	(140.987)	(5.444)	(146.431)	-	(146.431)
Flujos de efectivo procedentes de (utilizados en) actividades de financiación	(369.492)	(26.988)	(396.480)	-	(396.480)

## Continuación

Información a revelar sobre segmentos de operación al 31.12.2017	Chile	Perú	Segmentos de operación	Eliminación de importes inters egmentos	Total de la entidad por segmentos de operación
<b>Ingresos de actividades ordinarias</b>					
Ingresos de actividades ordinarias	1.355.575	192.837	1.548.412	-	1.548.412
<b>Total ingresos de actividades ordinarias procedentes de clientes externos y transacciones con otros segmentos de operación de la misma entidad</b>	<b>1.355.575</b>	<b>192.837</b>	<b>1.548.412</b>	-	<b>1.548.412</b>
Materias primas y consumibles utilizados	(614.154)	(141.526)	(755.680)	-	(755.680)
Gastos por beneficios a los empleados	(70.937)	(5.848)	(76.785)	-	(76.785)
Gastos por intereses	(70.184)	(14.770)	(84.954)	-	(84.954)
Ingresos por intereses	12.093	633	12.726	-	12.726
Gasto por depreciación y amortización	(191.256)	(32.232)	(223.488)	-	(223.488)
Participación en las ganancias (pérdidas) de asociadas y negocios conjuntos que se contabilicen utilizando el método de la participación	9.181	-	9.181	(6.277)	2.904
Gasto por impuestos a las ganancias, operaciones continuadas	(37.913)	3.833	(34.080)	-	(34.080)
Ganancia (pérdida), antes de impuestos	319.465	9.494	328.959	(6.277)	322.682
<b>Ganancia (pérdida) procedente de operaciones continuadas</b>	<b>281.552</b>	<b>13.327</b>	<b>294.879</b>	<b>(6.277)</b>	<b>288.602</b>
<b>Ganancia (pérdida)</b>	<b>281.552</b>	<b>13.327</b>	<b>294.879</b>	<b>(6.277)</b>	<b>288.602</b>
Activos	6.313.953	847.422	7.161.375	(238.833)	6.922.542
Inversiones contabilizadas utilizando el método de la participación	277.131	-	277.131	(238.833)	38.298
Incorporaciones de activos no corrientes distintas de instrumentos financieros, activos por impuestos diferidos, activos de beneficios definidos netos, y derechos que surgen de contratos de seguro	5.011.080	704.772	5.715.852	-	5.715.852
Pasivos	2.583.949	387.886	2.971.835	-	2.971.835
<i>Patrimonio</i>					3.950.707
<b>Patrimonio y pasivos</b>	-	-	-	-	<b>6.922.542</b>
Pérdidas por deterioro de valor reconocidas en otros resultados integrales	(76.128)	-	(76.128)	-	(76.128)
Flujos de efectivo procedentes de (utilizados en) actividades de operación	523.445	77.494	600.939	-	600.939
Flujos de efectivo procedentes de (utilizados en) actividades de inversión	(587.076)	(9.741)	(596.817)	-	(596.817)
Flujos de efectivo procedentes de (utilizados en) actividades de financiación	(307.822)	(30.586)	(338.408)	-	(338.408)

## Información sobre productos y servicios

Segmentos de ventas principales mercados geográficos	Enero - Diciembre	
	2018	2017
	MUS \$	MUS \$
<b>Chile</b>		
Ventas de energía	1.078.663	1.028.860
Ventas de potencia	161.444	158.889
Otros ingresos	129.761	167.826
<b>Subtotal</b>	<b>1.369.868</b>	<b>1.355.575</b>
<b>Perú</b>		
Ventas de energía	115.638	113.491
Ventas de potencia	38.894	33.523
Otros ingresos	46.947	45.823
<b>Subtotal</b>	<b>201.479</b>	<b>192.837</b>
<b>Total ventas</b>	<b>1.571.347</b>	<b>1.548.412</b>

## Información sobre ventas a clientes principales

Clientes principales	Enero - Diciembre			
	2018		2017	
	MUS \$	%	MUS \$	%
<b>Chile</b>				
Corporación Nacional del Cobre Chile	422.385	27%	378.856	24%
CGE Distribución S.A.	308.504	20%	306.204	20%
Enel Distribución Chile S.A.	174.860	11%	204.567	13%
Anglo American S.A.	107.407	7%	90.871	6%
Sociedad Austral del Sur S.A.	72.176	5%	89.209	6%
Otros	284.536	18%	285.868	18%
<b>Subtotal</b>	<b>1.369.868</b>	<b>88%</b>	<b>1.355.575</b>	<b>87%</b>
<b>Perú</b>				
Luz del Sur	101.280	6%	104.714	7%
Empresa de Distribución Eléctrica de Lima Norte S.A.	36.128	2%	34.266	2%
Electronoroeste S.A.	9.076	1%	7.676	0%
Compañía Eléctrica El Platana S.A.	12.317	1%	13.351	1%
Otros	42.678	2%	32.830	2%
<b>Subtotal</b>	<b>201.479</b>	<b>12%</b>	<b>192.837</b>	<b>13%</b>
<b>Total ventas</b>	<b>1.571.347</b>	<b>100%</b>	<b>1.548.412</b>	<b>100%</b>

## 7. Clases de efectivo y equivalentes al efectivo

### a. Composición del rubro

La composición del rubro al 31 de diciembre de 2018 y 2017 es la siguiente:

Efectivo y equivalentes al efectivo	31.12.2018 MUS \$	31.12.2017 MUS \$
Efectivo en Caja	57	76
Saldos Bancos	68.933	20.354
Depósitos a Plazo	49.492	90.965
Otros Instrumentos Líquidos	100.709	157.801
<b>Total</b>	<b>219.191</b>	<b>269.196</b>

Los Depósitos a Plazo vencen en un plazo inferior a tres meses desde la fecha de adquisición y devengan el interés de mercado para este tipo de inversiones de corto plazo.

Los Otros Instrumentos Líquidos corresponden a fondos mutuos de renta fija en pesos, euros y dólares, de muy bajo riesgo, los cuales se encuentran registrados al valor de la cuota respectiva a la fecha de cierre de los presentes estados financieros consolidados.

Adicionalmente a estos instrumentos al 31 de diciembre de 2018 y 2017, la Compañía presenta otros Depósitos a Plazo que tenían vencimientos en un plazo superior a tres meses desde su adquisición, los cuales se presentan en la Nota 8.

### b. Detalle por tipo de moneda

El detalle de efectivo y equivalentes al efectivo, por tipo de moneda, considerando el efecto de derivados, es el siguiente:

Moneda	31.12.2018		31.12.2017	
	Saldo moneda de origen MUS \$	Saldo moneda con derivado <sup>(1)</sup> MUS \$	Saldo moneda de origen MUS \$	Saldo moneda con derivado <sup>(1)</sup> MUS \$
EUR	633	633	1.121	1.121
CLP	155.136	127.136	169.132	149.068
PEN	7.564	7.564	13.957	13.957
USD	55.858	83.858	84.986	105.050
<b>Total</b>	<b>219.191</b>	<b>219.191</b>	<b>269.196</b>	<b>269.196</b>

### c. Conciliación de los pasivos que surgen de las actividades de financiamiento

Pasivos que se originan de actividades de financiamiento	Saldo al 01.01.2018 MUS\$	Flujos de efectivo MUS\$	Cambios que no representan flujos de efectivo				Saldo al 31.12.2018 MUS\$
			Dividendos	Intereses	Valoración	Otros	
			MUS\$	MUS\$	MUS\$	MUS\$	
Pasivos por arrendamiento financiero <sup>(1)</sup>	15.071	(2.655)	-	2.228	-	-	14.644
Deuda bonos <sup>(1)</sup>	1.643.985	(107.320)	-	69.998	(29.665)	9.659	1.586.657
Dividendos por pagar	23.075	(290.665)	309.866	-	(4.325)	(1.950)	36.001
Otras cuentas por cobrar	(4.160)	4.160	-	-	-	-	-
<b>Total</b>	<b>1.677.971</b>	<b>(396.480)</b>	<b>309.866</b>	<b>72.226</b>	<b>(33.990)</b>	<b>7.709</b>	<b>1.637.302</b>

<sup>(1)</sup> Ver nota 21.a

## 8. Otros activos financieros

La composición del rubro al 31 de diciembre de 2018 y 2017, es la siguiente:

	Corrientes		No corrientes	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017
	MUS\$	MUS\$	MUS\$	MUS\$
Depósitos a Plazo <sup>(1)</sup>	568.897	541.019	-	-
Instrumentos Derivados cobertura <sup>(2)</sup> (ver nota 13.1)	354	950	8.706	20.829
Inversión por Acciones Rematadas	-	-	91	93
Inversión en el CEN	-	-	-	245
<b>Total</b>	<b>569.251</b>	<b>541.969</b>	<b>8.797</b>	<b>21.167</b>

<sup>(1)</sup> Al 31 de diciembre de 2018 y 2017 las inversiones en depósitos a plazo que fueron clasificadas en este rubro tienen un plazo promedio de inversión original menor a seis meses y el plazo remanente de vencimiento era de 105 días promedio. Los flujos de efectivo relacionados a estas inversiones se presentan en el Estado de Flujos de Efectivo como actividades de inversión en otras entradas (salidas) de efectivo.

<sup>(2)</sup> Corresponde al mark-to-market positivo actual de los derivados de cobertura vigentes al cierre de cada ejercicio.

## 9. Cuentas comerciales por cobrar y otras cuentas por cobrar

La composición del rubro al 31 de diciembre de 2018 y 2017, es la siguiente:

Rubro	Corrientes	
	31.12.2018	31.12.2017
	MUS\$	MUS\$
Deudores comerciales con contrato	217.680	200.257
Deudores varios <sup>(1)</sup>	23.999	24.807
<b>Total</b>	<b>241.679</b>	<b>225.064</b>

<sup>4)</sup> Al 31 de diciembre de 2018 el saldo corriente considera los impuestos por recuperar (Remanente crédito fiscal) por MUS\$ 21.902 y otros menores por MUS\$ 2.097. En tanto al 31 de diciembre de 2017 el saldo corriente considera los impuestos por recuperar (Impuesto general a las ventas (IGV)) por MUS\$ 16.804, garantía por colateral JP Morgan por MUS\$ 4.160 y otros menores por MUS\$ 3.843. La Compañía estima que el período de recuperación de estos activos es de 12 meses.

El período medio de cobro a clientes es de 30 días.

Considerando la solvencia de los deudores, la regulación vigente y en concordancia con la política de incobrables declarada en nuestras políticas contables (ver nota 3.1.h.1.5), la Compañía registra las pérdidas crediticias esperadas en todas sus cuentas por cobrar comerciales, ya sea por 12 meses o durante el tiempo de vida del activo aplicando el enfoque simplificado, según lo establecido en NIIF 9. Por lo tanto, ha constituido una provisión de incobrabilidad que en opinión de la Administración cubre adecuadamente el riesgo de pérdida de valor de estas cuentas por cobrar.

Los movimientos en la provisión de deterioro de cuentas comerciales, es la siguiente:

Movimiento Deterioro	31.12.2018 MUS\$	31.12.2017 MUS\$
Saldo inicial al 01.01.2018	277	11.187
Aumento (disminución) provisión	552	-
Pérdidas por deterioro de valor	(182)	-
Reversión de la pérdida por deterioro de valor	(24)	(10.910)
<b>Saldo final al 31.12.2018</b>	<b>623</b>	<b>277</b>

Los valores razonables de deudores comerciales y otras cuentas por cobrar no difieren de su valor contable.

Al 31 de diciembre de 2018 y 2017, el análisis de deudores comerciales es el siguiente:

a) Estratificación de cartera de los deudores comerciales: por antigüedad.

Facturado	Saldos al 31.12.2018					
	Al Día MUS \$	1-30 días MUS \$	31-60 MUS \$	61-90 MUS \$	91-más MUS \$	Total MUS \$
Deudores comerciales Regulados	931	2.560	698	27	1.363	5.579
Deudores comerciales Libres	5.376	1.322	336	361	435	7.830
Otros deudores comerciales	853	195	372	84	684	2.188
Provisión de deterioro	(209)	-	(11)	-	(403)	(623)
<b>Subtotal</b>	<b>6.951</b>	<b>4.077</b>	<b>1.395</b>	<b>472</b>	<b>2.079</b>	<b>14.974</b>
Facturas por emitir	Saldos al 31.12.2018					
	Al Día MUS \$	1-30 días MUS \$	31-60 MUS \$	61-90 MUS \$	91-más MUS \$	Total MUS \$
Deudores comerciales Regulados	97.211	-	-	-	-	97.211
Deudores comerciales Libres	92.650	-	-	-	-	92.650
Otros deudores comerciales	12.845	-	-	-	-	12.845
<b>Subtotal</b>	<b>202.706</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>202.706</b>
<b>Total Deudores Comerciales</b>	<b>209.657</b>	<b>4.077</b>	<b>1.395</b>	<b>472</b>	<b>2.079</b>	<b>217.680</b>
<b>N° de clientes (no auditado)</b>	<b>379</b>	<b>139</b>	<b>103</b>	<b>29</b>	<b>242</b>	

Facturado	Saldos al 31.12.2017					
	Al Día MUS \$	1-30 días MUS \$	31-60 MUS \$	61-90 MUS \$	91-más MUS \$	Total MUS \$
Deudores comerciales Regulados	5.804	5.114	4	1	141	11.064
Deudores comerciales Libres	5.247	19	16	-	-	5.282
Otros deudores comerciales	2.459	348	88	24	138	3.057
Provisión de deterioro	-	(109)	(6)	-	(162)	(277)
<b>Subtotal</b>	<b>13.510</b>	<b>5.372</b>	<b>102</b>	<b>25</b>	<b>117</b>	<b>19.126</b>
Facturas por emitir	Saldos al 31.12.2017					
	Al Día MUS \$	1-30 días MUS \$	31-60 MUS \$	61-90 MUS \$	91-más MUS \$	Total MUS \$
Deudores comerciales Regulados	50.539	-	-	-	-	50.539
Deudores comerciales Libres	39.725	-	-	-	-	39.725
Otros deudores comerciales	90.867	-	-	-	-	90.867
<b>Subtotal</b>	<b>181.131</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>181.131</b>
<b>Total Deudores Comerciales</b>	<b>194.641</b>	<b>5.372</b>	<b>102</b>	<b>25</b>	<b>117</b>	<b>200.257</b>
<b>N° de clientes (no auditado)</b>	<b>286</b>	<b>198</b>	<b>85</b>	<b>85</b>	<b>219</b>	

b) Clientes en cobranza judicial

No existen deudores comerciales y otras cuentas por cobrar registradas en la contabilidad que se encuentren en cobranza judicial.



## 10. Instrumentos financieros

### a. Instrumentos financieros por categoría

Las políticas contables relativas a instrumentos financieros se han aplicado a las categorías que se detallan a continuación:

#### a.1 Activos

31 de diciembre de 2018	Costo amortizado	Valor razonable	Total
	MUS \$	MUS \$	MUS \$
Efectivo en caja y saldos banco (ver nota 7)	-	68.990	68.990
Depósitos a Plazo y Otros Instrumentos Líquidos (ver nota 7)	49.492	100.709	150.201
Deudores comerciales y cuentas por cobrar <sup>(1)</sup> (ver nota 9)	219.777	-	219.777
Cuentas por cobrar a entidades relacionadas (ver nota 11.b.1)	1.117	-	1.117
Instrumentos financieros derivados (ver nota 13.1)	-	9.060	9.060
Otros activos financieros (ver nota 8)	568.897	-	568.897
<b>Total</b>	<b>839.283</b>	<b>178.759</b>	<b>1.018.042</b>

31 de diciembre de 2017	Costo amortizado	Valor razonable	Total
	MUS \$	MUS \$	MUS \$
Efectivo en caja y saldos banco (ver nota 7)	-	20.430	20.430
Depósitos a Plazo y Otros Instrumentos Líquidos (ver nota 7)	90.965	157.801	248.766
Deudores comerciales y cuentas por cobrar <sup>(1)</sup> (ver nota 9)	208.260	-	208.260
Cuentas por cobrar a entidades relacionadas (ver nota 11.b.1)	240	-	240
Instrumentos financieros derivados (ver nota 13.1)	-	21.779	21.779
Otros activos financieros (ver nota 8)	541.264	-	541.264
<b>Total</b>	<b>840.729</b>	<b>200.010</b>	<b>1.040.739</b>

- (1) Al 31 de diciembre de 2018 no considera los impuestos por recuperar MUS\$ 21.902. En tanto al 31 de diciembre de 2017 el saldo correspondiente a impuestos por recuperar corriente fue de MUS\$ 16.804.

a.2 Pasivos

31 de diciembre de 2018	Costo amortizado MUS \$	Valor razonable MUS \$	Total MUS \$
Préstamos que devengan interés (ver nota 21.c.2)	1.586.657	-	1.586.657
Obligaciones por leasing (ver nota 21.c.3)	14.644	-	14.644
Instrumentos financieros derivados (ver nota 13.1)	-	1.962	1.962
Cuentas por pagar comerciales y Otras cuentas por pagar (ver nota 22)	186.622	-	186.622
Cuentas por pagar a entidades relacionadas (ver nota 11.b.2)	17.971	-	17.971
<b>Total</b>	<b>1.805.894</b>	<b>1.962</b>	<b>1.807.856</b>

31 de diciembre de 2017	Costo amortizado MUS \$	Valor razonable MUS \$	Total MUS \$
Préstamos que devengan interés (ver nota 21.c.2)	1.643.985	-	1.643.985
Obligaciones por leasing (ver nota 21.c.3)	15.071	-	15.071
Instrumentos financieros derivados (ver nota 13.1)	-	396	396
Cuentas por pagar comerciales y Otras cuentas por pagar (ver nota 22)	207.813	-	207.813
Cuentas por pagar a entidades relacionadas (ver nota 11.b.2)	13.559	-	13.559
<b>Total</b>	<b>1.880.428</b>	<b>396</b>	<b>1.880.824</b>

## b. Calidad crediticia de Activos Financieros

La calidad crediticia de los activos financieros que todavía no han vencido y que tampoco han sufrido pérdidas por deterioro se puede evaluar en función de la clasificación crediticia (“rating”) otorgada a las contrapartes de la Compañía por agencias de clasificación de riesgo de reconocido prestigio local e internacional.

Calidad crediticia de Activos Financieros	31.12.2018 MUS\$	31.12.2017 MUS\$
<b>Cientes con clasificación de riesgo local</b>		
AAA	73.443	56.277
AA+	30.064	27.462
AA	14.389	15.269
AA-	4.494	39.802
A+	35.107	232
A	2.373	556
<b>Total</b>	<b>159.870</b>	<b>139.598</b>
<b>Cientes sin clasificación de riesgo local</b>		
<b>Total</b>	<b>57.810</b>	<b>60.659</b>
<b>Caja en bancos y depósitos bancarios a corto plazo Mercado Local</b>		
AAA	136.947	507.492
AA	-	75.602
AA-	-	11.049
A+o inferior	503.177	21.942
<b>Total</b>	<b>640.124</b>	<b>616.085</b>
<b>Caja en bancos y depósitos bancarios a corto plazo Mercado Internacional (*)</b>		
BBB- o superior	47.255	36.329
<b>Total</b>	<b>47.255</b>	<b>36.329</b>
<b>Activos Financieros derivados Contraparte Mercado Internacional (*)</b>		
A o Superior	9.060	21.779
<b>Total</b>	<b>9.060</b>	<b>21.779</b>

(\*) Clasificación de riesgo internacional

## 11. Información sobre partes relacionadas

Las operaciones entre la Compañía y sus subsidiarias dependientes, que son partes relacionadas, forman parte de las transacciones habituales de la Compañía en cuanto a su objeto y condiciones, y han sido eliminadas en el proceso de consolidación. La identificación de vínculo entre la Controladora, subsidiarias, asociadas, negocios conjuntos y entidades con cometido especial se encuentra detallada en la nota 3.1 letra b y c.

**a. Accionistas mayoritarios**

La distribución de los accionistas de la Compañía al 31 de diciembre de 2018 es la siguiente:

Nombre de los Accionistas	Participación %
Minera Valparaíso S.A. <sup>(*)</sup>	35,17
Forestal Cominco S.A. <sup>(*)</sup>	14,00
Antarchile S.A.	9,58
AFP Habitat S.A. <sup>(**)</sup>	6,82
AFP Provida S.A. <sup>(**)</sup>	4,69
AFP Cuprum S.A. <sup>(**)</sup>	4,02
Banco Itaú por cuenta de inversionistas	3,89
Banco de Chile por cuenta de terceros	3,82
AFP Capital S.A. <sup>(**)</sup>	3,17
Banco Santander - J.P. Morgan	3,07
Otros accionistas	11,77
<b>Total</b>	<b>100,00</b>

<sup>(\*)</sup> Sociedades pertenecientes al grupo controlador (grupo Matte)

<sup>(\*\*)</sup> Corresponde a la participación consolidada por cada Administradora de Fondos de Pensiones

## b. Saldo y transacciones con entidades relacionadas

Las operaciones por cobrar, pagar y transacciones con entidades relacionadas fueron realizadas en términos y condiciones de mercado y se ajustan a lo establecido en el artículo N° 44 de la Ley N° 18.046, sobre Sociedades Anónimas.

### b. 1. Cuentas por cobrar a entidades relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corrientes	
					31.12.2018 MUS \$	31.12.2017 MUS \$
96.806.130-5	Electrogas S.A.	Chile	Asociada	Dólar	690	-
96.532.330-9	CMPC Celulosa S.A.	Chile	Grupo empresarial común	Pesos	13	-
77.017.930-0	Transmisora Eléctrica de Quillota Ltda.	Chile	Negocio conjunto	Pesos	11	-
96.731.890-6	Cartulinas CMPC S.A.	Chile	Grupo empresarial común	Pesos	275	164
65.027.584-5	Fundación Colbún	Chile	Entidad con cometido especial	Pesos	128	76
<b>Total</b>					<b>1.117</b>	<b>240</b>

### b. 2. Cuentas por pagar a entidades relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corrientes	
					31.12.2018 MUS \$	31.12.2017 MUS \$
77.017.930-0	Transmisora Eléctrica de Quillota Ltda.	Chile	Negocio conjunto	Pesos	211	212
99.520.000-7	Compañía de Petróleos de Chile Copec S.A.	Chile	Director y Ejecutivo accionista mayoritario	Pesos	15	1.965
97.080.000-K	Banco Bice	Chile	Director común	Pesos	3	-
96.806.980-2	Entel PCS Telecomunicaciones S.A.	Chile	Grupo empresarial común	Pesos	32	36
90.412.000-6	Minera Valparaíso S.A.	Chile	Accionista mayoritario	Dólar	12.662	8.116
79.621.850-9	Forestal Cominco S.A.	Chile	Accionista mayoritario	Dólar	5.040	3.230
96.806.130-5	Electrogas S.A.	Chile	Asociada	Dólar	8	-
<b>Total</b>					<b>17.971</b>	<b>13.559</b>

No existen garantías, otorgadas o recibidas por las transacciones con partes relacionadas.

### b. 3 Información a revelar sobre transacciones entre partes relacionadas

Rut	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero - Diciembre			
						2018		2017	
						Monto MUS\$	Efecto en resultados (cargo) abono MUS\$	Monto MUS\$	Efecto en resultados (cargo) abono MUS\$
77.017.930-0	Transmisora Eléctrica de Quillota Ltda.	Chile	Negocio conjunto	Pesos	Peaje uso de instalaciones	2.606	(3.101)	2.212	(1.859)
				UF	Ingresos por servicios prestados	145	122	141	119
76.652.400-1	Centrales Hidroeléctricas de Aysén S.A. (4)	Chile	Negocio conjunto	Pesos	Aportes de Capital (1)	-	-	2.923	-
96.806.130-5	Electrogas S.A.	Chile	Asociada	Dólar	Servicio de transporte de gas	9.342	(7.850)	9.483	(7.969)
				Dólar	Servicio de transporte de diésel	515	(433)	815	(685)
				Dólar	Dividendo declarado (2)	690	-	-	-
				Dólar	Dividendo recibido (2)	5.931	-	10.484	-
97.080.000-K	Banco Bice	Chile	Director común	Pesos	Gastos por servicios recibidos	100	(84)	35	(30)
96.731.890-6	Cartulinas C M P C S.A.	Chile	Director común en matriz	Pesos	Servidumbre	923	776	1.068	897
				Pesos	Venta de energía y potencia	6.709	5.638	-	-
79.621.850-9	Forestal Cominco S.A.	Chile	Accionista mayoritario	Dólar	Dividendos (3)	41.583	-	22.215	-
90.412.000-6	Minera Valparaíso S.A.	Chile	Accionista mayoritario	Dólar	Dividendos (3)	104.467	-	55.810	-
99.520.000-7	Compañía de Petróleos de Chile Copec S.A.	Chile	Director y Ejecutivo accionista mayoritario	Pesos	Servicio de Abastecimiento de diésel	14.681	(11.087)	35.200	(29.580)
96.806.980-2	Entel PCS Telecomunicaciones S.A.	Chile	Grupo empresarial común	Pesos	Servicios de telefonía	371	(312)	377	(317)
96.697.410-9	Entel Telefonía Local S.A.	Chile	Director común	Pesos	Servicios de telefonía	62	(52)	92	(77)
96.925.430-1	Sercor S.A.	Chile	Director común	Pesos	Servicio de Administración de Acciones	112	(94)	122	(102)
4.523.287-5	Arturo Mackenna	Chile	Director	Pesos	Servicios de Asesoría	-	-	52	(47)
76.158.513-4	Puerto Central S.A.	Chile	Director común	Pesos	Suministro Eléctrico	1.564	1.314	-	-

(1) Aportes a Centrales Hidroeléctricas de Aysén S.A.

- Con fecha 17 de febrero de 2017 Colbún realizó el primer aporte de capital a Centrales Hidroeléctricas de Aysén S.A. por MM\$ 1.764 (MUS\$ 2.763), según lo acordado en la junta extraordinaria de accionistas de Hidroaysén con fecha 29 de diciembre de 2016.
- Con fecha 7 de septiembre de 2018 se liquida la sociedad. De la liquidación, los socios recibieron a prorrata de su participación, los terrenos que la sociedad mantenía como propiedad y otros activos menores.

(2) Dividendos declarados y pagados por Electrogas S.A.

- En marzo 2018, Electrogas S.A. declaró un dividendo provisorio con cargo a la utilidad del 2017 por MMUS\$ 14,0 de los cuales a Colbún le corresponde MUS\$ 5.931 (42,5%). En marzo 2017, Electrogas S.A. declaró un dividendo provisorio con cargo a la utilidad del 2016 por MMUS\$ 13,1 de los cuales a Colbún le corresponde MUS\$ 5.554 (42,5%).
- En mayo 2018, se recibe un pago por MUS\$ 2.550, quedando un saldo pendiente de cobro de MUS\$ 3.381.
- En septiembre 2018, se canceló el saldo del dividendo declarado el año anterior por MUS\$ 3.381
- En diciembre 2018, Electrogas acordó un dividendo provisorio a cuenta del resultado 2018 por MUS\$ 4.000; correspondiéndole a Colbún la suma de MUS\$ 1.700. Este dividendo fue recibido el 11 de diciembre de 2018.

(3) Dividendos declarados y pagados a Minera Valparaíso S.A. y Forestal Cominco S.A.

- Corresponde al dividendo provisorio acordado en Sesión de Directorio de fecha 20 de diciembre de 2016 y pagado con fecha 9 de enero de 2017.
- Corresponde al dividendo definitivo acordado en Junta de Accionistas de fecha 27 de abril de 2018 y pagado con fecha 08 de mayo de 2018.
- Corresponde al dividendo provisorio acordado en Sesión de Directorio de fecha 27 de noviembre de 2018 y pagado con fecha 19 de diciembre de 2018.

(4) Ver nota 3.1.c

### **c. Administración y Alta Dirección**

Los miembros de la Alta Dirección y demás personas que asumen la gestión de Colbún, así como los accionistas o las personas naturales o jurídicas a las que representan, no han participado al 31 de diciembre de 2018 y 2017, en transacciones inhabituales y/o relevantes de la Sociedad.

La Compañía es administrada por un Directorio compuesto por 9 miembros, los que permanecen por un período de 3 años con posibilidad de ser reelegidos.

En Sesión Ordinaria de Directorio realizada el día 31 de julio de 2018, el Director Sr. Arturo Mackenna Iñiguez presentó su renuncia al cargo de director de esta Sociedad. Asimismo, en dicha sesión se designó como reemplazante a don Hernán Rodríguez Wilson, quien ejerce su cargo desde el 1º de agosto de 2018 hasta la próxima Junta Ordinaria de Accionistas de Colbún S.A., oportunidad en la que se elegirá el nuevo directorio de la Sociedad.

### **d. Comité de Directores**

En conformidad con lo dispuesto en el Artículo 50 bis de la Ley N°18.046 sobre Sociedades Anónimas, Colbún y subsidiarias cuenta con un Comité de Directores compuesto de 3 miembros, que tienen las facultades contemplados en dicho artículo.

### **e. Remuneración y otras prestaciones**

En conformidad a lo establecido en el Artículo 33 de la Ley N°18.046 de Sociedades Anónimas, los Directores serán remunerados por sus funciones y la cuantía de su remuneración es fijada anualmente por la Junta General Ordinaria de Accionistas de la Compañía.

El detalle de los montos pagados al 31 de diciembre de 2018 y 2017 que incluye a los miembros del Comité de Directores, se presenta a continuación:

### e.1 Remuneración del Directorio

Nombre	Cargo	Enero - Diciembre					
		2018			2017		
		Directorio de Colbún MUS \$	Remuneración Variable <sup>(2)</sup> MUS \$	Comité de Directores MUS \$	Directorio de Colbún MUS \$	Remuneración Variable MUS \$	Comité de Directores MUS \$
Juan Eduardo Correa García <sup>(1)</sup>	Presidente	153	236	-	124	86	8
Vivianne Blanlot Soza <sup>(1)</sup>	Vice-presidente	76	141	-	74	86	-
Bernardo Larraín Matte <sup>(1)</sup>	Director	76	190	-	98	172	-
Luz Granier Bulnes <sup>(1)</sup>	Director	76	141	26	74	86	25
María Ignacia Benítez Pereira <sup>(1)</sup>	Director	76	141	26	74	47	25
Francisco Matte Izquierdo <sup>(1)</sup>	Director	76	141	26	74	47	17
Jorge Matte Capdevila <sup>(1)</sup>	Director	76	141	-	74	47	-
Andrés Lehuédé Bromley <sup>(1)</sup>	Director	76	141	-	74	7	-
Arturo Mackenna Ñiguez	Director	46	141	-	74	86	-
Hernán Rodríguez Wilson <sup>(1)</sup>	Director	31	-	-	-	-	-
Eduardo Navarro Beltrán	Director	-	-	-	-	79	-
Luis Felipe Gazitúa Achondo	Director	-	-	-	-	35	-
Eliodoro Matte Larraín	Director	-	-	-	-	35	-
Juan Hurtado Vicuña	Director	-	-	-	-	35	-
<b>TOTALES</b>		<b>762</b>	<b>1.413</b>	<b>78</b>	<b>740</b>	<b>848</b>	<b>75</b>

<sup>(1)</sup> Directores vigentes al 31 de diciembre de 2018.

<sup>(2)</sup> Con fecha 04 de mayo de 2018 se hizo efectivo el pago de la remuneración variable calculada en base a la utilidad del ejercicio 2017.

En Junta de Ordinaria de Accionistas celebrada con fecha 27 de abril de 2018 se acordó el pago de una remuneración variable anual igual al 0,75% de las utilidades provenientes del ejercicio 2018, a la cual se le deduce la remuneración fija pagada en el ejercicio 2018. Al 31 de diciembre de 2018 se registró una provisión de MUS\$ 1.010 por este concepto.

### e.2 Gastos en Asesoría del Directorio

En los períodos terminados al 31 de diciembre de 2018 y 2017, el Directorio no realizó gastos por asesorías.

### e.3 Remuneración de los miembros de la Alta Dirección que no son Directores

Nombre	Cargo
Thomas Keller Lippold	Gerente General
Juan Eduardo Vásquez Moya	Gerente División Negocios y Gestión de Energía
Carlos Luna Cabrera	Gerente División Generación
Sebastián Moraga Zúñiga	Gerente División Finanzas y Administración
Eduardo Lauer Rodríguez	Gerente División Ingeniería y Proyectos
Rodrigo Pérez Stjepovic	Gerente Legal
Paula Martínez Osorio	Gerente de Organización y Personas
Sebastián Fernández Cox	Gerente de Desarrollo
Heraldo Alvarez Arenas	Gerente de Auditoría Interna
Daniel Gordon Adam	Gerente de Medio Ambiente
Pedro Vial Lyon	Gerente de Asuntos Públicos

Las remuneraciones devengadas por el personal clave de la gerencia ascienden a:



Concepto	Enero - Diciembre	
	2018 MUS\$	2017 MUS\$
Beneficios a los empleados a corto plazo	4.352	4.726
Otros beneficios a largo plazo	883	946
Beneficios por terminación	95	117
<b>Total</b>	<b>5.330</b>	<b>5.789</b>

#### e.4 Cuentas por cobrar y pagar y otras transacciones

Al 31 de diciembre de 2018 y 2017 no existen cuentas por cobrar y pagar entre la Compañía, sus Directores y Gerencias.

#### e.5 Otras transacciones

No existen otras transacciones entre la Compañía y sus Directores y Gerencias del Grupo.

#### e.6 Garantías constituidas por la Compañía a favor de los Directores

Durante los períodos terminados al 31 de diciembre de 2018 y 2017, la Compañía no ha realizado este tipo de operaciones.

#### e.7 Planes de incentivo a los principales ejecutivos y gerentes

La Compañía tiene para toda su plana ejecutiva, bonos fijados en función de la evaluación de su desempeño individual y cumplimiento de metas a nivel divisional y corporativo.

### e.8 Indemnizaciones pagadas a los principales ejecutivos y gerentes

Durante el ejercicio terminado al 31 de diciembre de 2018 se pagaron MUS\$ 92 por concepto de indemnizaciones por años de servicio, en tanto al 31 de diciembre de 2017 no se realizaron pagos por este concepto.

### e.9 Cláusulas de garantía: Directorio y Gerencia de la Compañía

La Compañía no tiene pactado cláusulas de garantía con sus directores y gerencia.

### e.10 Planes de retribución vinculados a la cotización de la acción

La Compañía no mantiene este tipo de operación.

## 12. Inventarios

La composición del rubro al 31 de diciembre de 2018 y 2017, es el siguiente:

Clases de inventarios	31.12.2018 MUS \$	31.12.2017 MUS \$
Repuestos para Mantenimiento	25.562	39.684
Carbón	18.620	14.659
Existencias en Tránsito	163	7.226
Petróleo	4.506	4.495
Gas Line Pack	951	274
Provisión Obsolescencia <sup>(1)</sup>	(5.553)	(3.427)
<b>Total</b>	<b>44.249</b>	<b>62.911</b>

<sup>(1)</sup> Corresponde a la estimación por deterioro sobre el stock de repuestos, aplicado de acuerdo a la Política.

No existen inventarios entregados en prenda para garantía de cumplimiento de deudas.

### Costo de inventarios reconocidos como gasto

Los consumos de inventarios reconocidos como gastos durante los ejercicios terminados al 31 de diciembre de 2018 y 2017 respectivamente, se presentan en el siguiente detalle:

Costo inventario	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Consumos almacén	9.462	10.412
Petróleo (ver nota 28)	16.429	31.145
Gas (ver nota 28)	355.478	308.369
Carbón (ver nota 28)	86.799	73.813
<b>Total</b>	<b>468.168</b>	<b>423.739</b>

### 13. Instrumentos derivados

La Compañía, siguiendo la política de gestión de riesgos financieros descrita en la Nota 4, realiza contrataciones de derivados financieros para cubrir su exposición a la variación de tasas de interés, moneda (tipo de cambio) y precios de combustibles.

Los derivados de tasas de interés son utilizados para fijar o limitar la tasa de interés variable de obligaciones financieras y corresponden a swaps de tasa de interés.

Los derivados de moneda se utilizan para fijar la tasa de cambio del dólar respecto al Peso (CLP), Unidad de Fomento (UF) y Soles Peruanos (PEN), producto de inversiones u obligaciones existentes en monedas distintas al dólar. Estos instrumentos corresponden principalmente a Forwards y Cross Currency Swaps.

Los derivados sobre precios de combustibles se emplean para mitigar el riesgo de variación de ingresos por venta y costos de la producción de energía de la Compañía producto de un cambio en los precios de combustibles utilizados para tales efectos. Los instrumentos utilizados corresponden principalmente a opciones y forwards.

Al 31 de diciembre de 2018, la Compañía clasifica todas sus coberturas como “Cobertura de flujos de efectivo”.

#### 13.1 Instrumentos de Cobertura

El detalle de este rubro al 31 de diciembre de 2018 y 2017, que recoge la valorización de los instrumentos financieros a dichas fechas, es el siguiente:

Activos de Cobertura		Corrientes		No Corrientes	
		31.12.2018 MUS\$	31.12.2017 MUS\$	31.12.2018 MUS\$	31.12.2017 MUS\$
Cobertura de tipo de cambio	Cobertura flujo de efectivo	-	883	8.706	20.829
Cobertura de precio de combustibles	Cobertura flujo de efectivo	354	67	-	-
<b>Total (ver nota 8)</b>		<b>354</b>	<b>950</b>	<b>8.706</b>	<b>20.829</b>
Pasivos de Cobertura		Corrientes			
		31.12.2018 MUS\$	31.12.2017 MUS\$		
Cobertura de tipo de cambio	Cobertura flujo de efectivo	1.091	396		
Cobertura de tasa de interés	Cobertura flujo de efectivo	871	-		
<b>Total (ver nota 21.a)</b>		<b>1.962</b>	<b>396</b>		
<b>Instrumentos de Cobertura Neto</b>		<b>7.098</b>	<b>21.383</b>		

El detalle de la cartera de instrumentos de cobertura de Colbún S.A. y subsidiarias es el siguiente:

Instrumento de cobertura	Valor Razonable		Subyacente Cubierto	Riesgo Cubierto	Tipo de cobertura
	Instrumento de Cobertura				
	31.12.2018 MUS \$	31.12.2017 MUS \$			
Forwards de moneda	(1.092)	(396)	Inversiones Financieras	Tipo de cambio	Flujo de efectivo
Cross Currency Swaps	7.836	21.712	Obligaciones con el Público (Bonos)	Tipo de cambio y Tasa de interés	Flujo de efectivo
Opciones de Petróleo	-	67	Compras de Petróleo y Gas	Precio del petróleo	Flujo de efectivo
Opciones de Carbón	354	-	Ventas de energía	Precio del Carbón	Flujo de efectivo
<b>Total</b>	<b>7.098</b>	<b>21.383</b>			

En relación con las coberturas de flujo de efectivo presentadas al 31 de diciembre de 2018, la Compañía no ha determinado ganancias o pérdidas que registrar en resultado por ineffectividad de las coberturas.

### 13.2 Jerarquía de valor razonable

El valor razonable de los instrumentos financieros reconocidos en el Estado de Situación Financiera ha sido determinado siguiendo la siguiente jerarquía, según los datos de entrada utilizados para realizar la valoración:

Nivel 1: Precios cotizados en mercados activos para instrumentos idénticos.

Nivel 2: Precios cotizados en mercados activos para activos o pasivos similares u otras técnicas de valoración para las cuales todos los inputs importantes se basen en datos de mercado que sean observables.

Nivel 3: Técnicas de valoración para las cuales todos los inputs relevantes no estén basados en datos de mercado que sean observables.

Al 31 de diciembre de 2018, el cálculo del valor razonable de la totalidad de los instrumentos financieros sujetos a valoración se ha determinado en base al Nivel 2 de la jerarquía antes presentada.

### 14. Inversiones en subsidiarias

Los estados financieros consolidados incorporan los estados financieros de la Compañía Matriz y las sociedades controladas. A continuación, se incluye información detallada de las subsidiarias al 31 de diciembre de 2018 y 2017.

Subsidiaria	31.12.2018						Importe de Ganancia (pérdida) neta MUS \$
	Activos Corrientes MUS \$	Activos No Corrientes MUS \$	Pasivos Corrientes MUS \$	Pasivos No Corrientes MUS \$	Patrimonio MUS \$	Ingresos Ordinarios MUS \$	
Empresa Eléctrica Industrial S.A.	2.996	26.607	2.155	16.460	10.988	5.112	718
Sociedad Hidroeléctrica Melocotón Ltda.	4	2.482	127	1.065	1.294	3.504	2.649
Río Tranquilo S.A.	2.490	46.050	1.340	21.729	25.471	12.950	7.792
Termoeléctrica Nehuenco S.A.	229	3.189	1.826	15.821	(14.229)	8.529	2.269
Termoeléctrica Antilhue S.A.	366	27.955	3.366	11.992	12.963	4.800	(745)
Colbún Transmisión S.A.	15.575	368.173	55.993	62.546	265.209	40.060	15.509
Colbún Desarrollo SpA	11	149	-	-	-	160	-
Inversiones SUD S.pA	120	-	-	51	69	-	20
Inversiones Andinas SpA	10	-	-	-	-	-	-
Santa Sofía SpA <sup>(1)</sup>	-	153	-	180	(27)	-	(532)
Colbún Perú S.A.	20.058	208.604	28	-	228.634	-	(10.199)
Inversiones de Las Canteras S.A.	22.369	409.707	22.316	733	409.027	-	(20.254)
Fenix Power Perú S.A.	71.836	712.136	43.461	333.290	407.221	201.479	(19.921)
Subsidiaria	31.12.2017						Importe de Ganancia (pérdida) neta MUS \$
	Activos Corrientes MUS \$	Activos No Corrientes MUS \$	Pasivos Corrientes MUS \$	Pasivos No Corrientes MUS \$	Patrimonio MUS \$	Ingresos Ordinarios MUS \$	
Empresa Eléctrica Industrial S.A.	1.602	18.001	1.351	12.705	5.547	5.615	2.435
Sociedad Hidroeléctrica Melocotón Ltda.	746	8.591	48	144	9.145	3.504	2.714
Río Tranquilo S.A.	2.218	46.901	1.063	19.810	28.246	16.760	9.810
Termoeléctrica Nehuenco S.A.	267	3.992	1.620	19.028	(16.389)	8.311	913
Termoeléctrica Antilhue S.A.	253	32.976	3.217	16.304	13.708	4.400	(5.305)
Colbún Transmisión S.A.	4.429	121.628	16.011	23.033	87.013	29.546	15.555
Colbún Desarrollo SpA	10	150	-	-	160	-	-
Inversiones SUD S.pA	5.749	2.173	1.187	6.686	49	-	39
Inversiones Andinas SpA	10	-	-	-	10	-	-
Colbún Perú S.A.	3.428	235.406	1	-	238.833	-	6.257
Inversiones de Las Canteras S.A.	202	462.204	10	815	461.581	-	35.953
Fenix Power Perú S.A.	110.323	736.378	33.208	354.052	459.441	192.837	13.062

<sup>(1)</sup> Ver nota 31.b.

## Inversiones contabilizadas utilizando el método de la participación

## a. Método de participación

A continuación, se presenta un detalle de las sociedades contabilizadas por el método de la participación y los movimientos en las mismas al 31 de diciembre de 2018 y 2017:

Tipo de relación	Sociedad	Número de acciones	Porcentaje de participación	Saldo al	Aportes	Resultado devengado	Dividendos	Reserva patrimonio			Liquidación	Otro incremento (decremento)	Total	
								Diferencia de cambio de conversión	Reserva Derivados de cobertura					
			31.12.2018	01.01.2018	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$
Asociada	Electrogas S.A.	175.076	42,5%	17.220	-	7.670	(8.321)	-	34	-	-	-	16.603	
Negocio conjunto	Centrales Hidroeléctricas de Aysén S.A. <sup>(1)</sup>	8.731.996	0,0%	6.733	-	2.756	-	(1.157)	-	(8.332)	-	-	-	
Negocio conjunto	Aysén Transmisión S.A., en Liquidación <sup>(2)</sup>	4.900	49,0%	-	-	(42)	-	35	-	-	-	(18)	(25)	
Negocio conjunto	Aysén Energía S.A., en Liquidación <sup>(2)</sup>	4.900	49,0%	-	-	(15)	-	22	-	-	-	(18)	(11)	
Negocio conjunto	Transmisora Eléctrica de Quillota Ltda.	-	50,0%	14.345	-	1.019	-	(1.729)	-	-	-	-	13.635	
<b>Totales</b>				<b>38.298</b>	<b>-</b>	<b>11.388</b>	<b>(8.321)</b>	<b>(2.829)</b>	<b>34</b>	<b>(8.332)</b>	<b>(36)</b>		<b>30.202</b>	
			31.12.2017	01.01.2017	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	MUS \$	
Asociada	Electrogas S.A.	175.076	42,5%	17.049	-	8.187	(8.104)	-	88	-	-	-	17.220	
Negocio conjunto	Centrales Hidroeléctricas de Aysén S.A.	8.731.996	49,0%	9.245	2.923	(6.202)	-	767	-	-	-	-	6.733	
Negocio conjunto	Transmisora Eléctrica de Quillota Ltda.	-	50,0%	12.282	-	919	-	1.144	-	-	-	-	14.345	
<b>Totales</b>				<b>38.576</b>	<b>2.923</b>	<b>2.904</b>	<b>(8.104)</b>	<b>1.911</b>	<b>88</b>	<b>-</b>	<b>-</b>		<b>38.298</b>	

<sup>(1)(2)</sup> Ver nota 3.1c

**b. Información financiera de las inversiones asociadas y negocios conjuntos**

A continuación, se incluye información al 31 de diciembre de 2018 y 2017 de los estados financieros de asociadas y negocios conjuntos en las que la Compañía tiene participación:

Tipo de relación	Sociedad	31.12.2018							
		Activo Corrientes MUS \$	Activo no corrientes MUS \$	Pasivo Corrientes MUS \$	Pasivo no corrientes MUS \$	Patrimonio MUS \$	Ingresos Ordinarios MUS \$	Gastos Ordinarios MUS \$	Ganancias (Pérdidas) MUS \$
Asociada	Electrogas S.A.	7.073	51.345	6.679	12.674	39.065	35.146	(3.326)	18.049
Negocio conjunto	Aysén Transmisión S.A., en Liquidación <sup>(1)</sup>	5	-	57	(52)	-	-	-	-
Negocio conjunto	Aysén Energía S.A., en Liquidación <sup>(1)</sup>	1	-	23	(22)	-	-	-	-
Negocio conjunto	Transmisora Eléctrica de Quillota Ltda.	13.433	16.636	339	2.459	27.271	4.323	(779)	2.039

Tipo de relación	Sociedad	31.12.2017							
		Activo Corrientes MUS \$	Activo no corrientes MUS \$	Pasivo Corrientes MUS \$	Pasivo no corrientes MUS \$	Patrimonio MUS \$	Ingresos Ordinarios MUS \$	Gastos Ordinarios MUS \$	Ganancias (Pérdidas) MUS \$
Asociada	Electrogas S.A.	7.742	56.095	7.468	15.855	40.514	36.152	(3.385)	19.264
Negocio conjunto	Centrales Hidroeléctricas de Aysén S.A.	579	15.063	226	-	13.416	40	(1.669)	(12.658)
Negocio conjunto	Transmisora Eléctrica de Quillota Ltda.	12.631	19.626	716	2.850	28.691	4.577	(1.124)	1.837

<sup>(1)</sup> Ver nota 3.1.c



## Información adicional

### **i) Electrogas S.A.:**

Empresa dedicada al transporte de gas natural y otros combustibles. Cuenta con un gasoducto entre el “City Gate III” ubicado en la comuna de San Bernardo en la Región Metropolitana y el “Plant Gate” ubicado en la comuna de Quillota - Quinta Región, y un gasoducto desde “Plant Gate” a la zona de Colmo, comuna de Concón. Sus principales clientes son Gas Atacama Chile S.A., Colbún S.A., Empresa de Gas Quinta Región (Gasvalpo), Energas S.A. y Enap Refinerías Concón.

Colbún participa de un 42,5% en la propiedad de esta Sociedad en forma directa.

### **ii) Centrales Hidroeléctricas de Aysén S.A. (HidroAysén), Liquidada:**

El 17 de noviembre de 2017, la sociedad Hidroaysén S.A., de la cual Colbun S.A. posee el 49%, informó el cese de actividades y cancelación del "Proyecto Hidroeléctrico Hidroaysen" debido a que no es factible en términos económicos, en el contexto de la actual situación del mercado eléctrico y sus perspectivas futuras; procediéndose a la disolución de la sociedad y liquidación de bienes, el desistimiento de las acciones judiciales pendientes y la renuncia a los derechos de agua del Proyecto.

De acuerdo con lo informado en el Hecho Esencial el día 17 de noviembre de 2017, en el cierre del ejercicio 2014, Colbún S.A. registró una provisión por el deterioro de su participación en Hidroaysén S.A. por un monto aproximado de US\$102 millones, por lo tanto, la disolución no tendrá efectos contables adversos que sean materiales.

La disolución de la sociedad fue acordada en Junta General Extraordinaria de Accionistas celebrada con fecha 7 de diciembre de 2017, la que fue reducida a escritura pública con fecha 14 de agosto de 2018 en la notaría de Santiago de don Germán Rousseau del Río.

La liquidación de la sociedad y adjudicación de sus activos a cada socio fue realizada con fecha 7 de septiembre de 2018. En el proceso de liquidación de Centrales Hidroeléctricas de Aysén S.A., Colbún S.A. recibe la participación del 49% de las acciones de las sociedades Aysén Transmisión S.A. y Aysén Energía S.A.

### **iii) Transmisora Eléctrica de Quillota Ltda.:**

Empresa creada por Colbún S.A. y San Isidro S.A. (hoy Gas Atacama Chile S.A.), en junio de 1997, con el objeto de desarrollar y operar en conjunto las instalaciones necesarias para evacuar la potencia y la energía generadas por sus respectivas centrales hasta la Subestación Quillota de propiedad de Transelec S.A.

Transmisora Eléctrica de Quillota Ltda. es propietaria de la subestación San Luis, ubicada junto a las centrales de ciclo combinado Nehuenco y San Isidro, además de la línea de alta tensión de 220 KV que une dicha subestación con la subestación Quillota del SIC.

Colbún participa de un 50% en la propiedad de esta sociedad.

## 15. Activos intangibles distintos de la plusvalía

## a. Detalle por clases de intangibles

A continuación, se presenta el detalle al 31 de diciembre de 2018 y 2017:

<b>Activos Intangibles, Neto</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
		MUS \$	MUS \$
<b>Derechos no generados internamente</b>	Derechos Emisión Material Particulado	9.582	9.582
	Concesiones	202	87
	Derechos de Agua	17.436	17.440
	Servidumbres	58.246	58.145
	Activos intangibles relacionados con clientes	40.186	43.362
<b>Licencias</b>	Software	2.288	3.451
<b>Total</b>		<b>127.940</b>	<b>132.067</b>
<b>Activos Intangibles, Bruto</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
		MUS \$	MUS \$
<b>Derechos no generados internamente</b>	Derechos Emisión Material Particulado	9.582	9.582
	Concesiones	228	113
	Derechos de Agua	17.455	17.455
	Servidumbres	59.749	59.474
	Activos intangibles relacionados con clientes	46.815	46.815
<b>Licencias</b>	Software	13.889	12.799
<b>Total</b>		<b>147.718</b>	<b>146.238</b>
<b>Amortización Acumulada</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
		MUS \$	MUS \$
<b>Derechos no generados internamente</b>	Concesiones	(26)	(26)
	Derechos de Agua	(19)	(15)
	Servidumbres	(1.503)	(1.329)
	Activos intangibles relacionados con clientes	(6.629)	(3.453)
<b>Licencias</b>	Software	(11.601)	(9.348)
<b>Total</b>		<b>(19.778)</b>	<b>(14.171)</b>

### b. Movimiento de intangibles

La composición y movimiento del activo intangible al 31 de diciembre de 2018 y 2017 ha sido la siguiente:

Movimientos período 2018	Derechos no generados internamente						Licencias	Intangibles, Neto MUS \$
	Derechos Emisión Material Particulado MUS \$	Concesiones MUS \$	Derechos de Agua MUS \$	Servidumbres MUS \$	Activos intangibles relacionados con clientes MUS \$	Software MUS \$		
Saldo inicial al 01.01.2018	9.582	87	17.440	58.145	43.362	3.451	132.067	
Adiciones	-	115	-	30	-	37	182	
Incrementos (disminuciones) por otros cambios	-	-	-	13	-	-	13	
Desapropiaciones	-	-	-	(43)	-	-	(43)	
Trasladados de Obras en Ejecución	-	-	-	275	-	966	1.241	
Trasladados entre Activos	-	-	-	-	-	87	87	
Gastos por Amortización (ver nota 30)	-	-	(4)	(174)	(3.176)	(2.253)	(5.607)	
<b>Saldo final al 31.12.2018</b>	<b>9.582</b>	<b>202</b>	<b>17.436</b>	<b>58.246</b>	<b>40.186</b>	<b>2.288</b>	<b>127.940</b>	
Movimientos ejercicio 2017	Derechos no generados internamente						Licencias	Intangibles, Neto MUS \$
	Derechos Emisión Material Particulado MUS \$	Concesiones MUS \$	Derechos de Agua MUS \$	Servidumbres MUS \$	Activos intangibles relacionados con clientes MUS \$	Software MUS \$		
Saldo inicial al 01.01.2017	9.582	96	18.510	58.118	46.539	5.284	138.129	
Adiciones	-	-	87	667	-	33	787	
Incrementos (disminuciones) por otros cambios	-	-	-	(466)	-	-	(466)	
Desapropiaciones	-	-	(1.154)	-	-	-	(1.154)	
Trasladados de Obras en Ejecución	-	-	-	-	-	(123)	(123)	
Amortización Acumulada Trasladados	-	-	-	-	-	123	123	
Gastos por Amortización (ver nota 30)	-	(9)	(3)	(174)	(3.177)	(1.866)	(5.229)	
<b>Saldo final al 31.12.2017</b>	<b>9.582</b>	<b>87</b>	<b>17.440</b>	<b>58.145</b>	<b>43.362</b>	<b>3.451</b>	<b>132.067</b>	

La administración de la Compañía, de acuerdo con lo explicado en nota 5.b, en su evaluación considera que no existe deterioro del valor contable de los activos intangibles. La Compañía no posee activos intangibles que estén afectados como garantías al cumplimiento de obligaciones.

## 16. Clases de Propiedad, Planta y Equipos

## a. Detalle por clases de Propiedad, Planta y Equipos

A continuación, se presenta el detalle de propiedades, planta y equipos al 31 de diciembre de 2018 y 2017

<b>Clases de Propiedades, Planta y Equipos, Neto</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
Terrenos	306.894	297.742
Edificios, Construcciones e Instalaciones	112.707	225.930
Maquinarias	1.186	574
Equipos de Transporte	626	755
Equipos de Oficina	3.168	3.410
Equipos Informáticos	1.439	1.472
Activos Generadores de Energía	4.233.043	4.068.854
Construcciones en Proceso	314.410	530.185
Arrendamientos Financieros	10.558	11.307
Otras Propiedades, Planta y Equipos	413.125	376.249
<b>Total</b>	<b>5.397.156</b>	<b>5.516.478</b>
<b>Clases de Propiedades, Planta y Equipos, Bruto</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
Terrenos	306.894	297.742
Edificios, Construcciones e Instalaciones	134.587	284.277
Maquinarias	1.640	882
Equipos de Transporte	1.663	1.730
Equipos de Oficina	9.087	9.013
Equipos Informáticos	9.001	8.266
Activos Generadores de Energía	5.887.279	5.475.436
Construcciones en Proceso	398.480	595.431
Arrendamientos Financieros	15.154	15.154
Otras Propiedades, Planta y Equipos	516.612	464.558
<b>Total</b>	<b>7.280.397</b>	<b>7.152.489</b>
<b>Clases de Depreciación Acumulada y Deterioro del Valor de Propiedades, Planta y Equipos</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
Edificios, Construcciones e Instalaciones	(21.880)	(58.347)
Maquinarias	(454)	(308)
Equipos de Transporte	(1.037)	(975)
Equipos de Oficina	(5.919)	(5.603)
Equipos Informáticos	(7.562)	(6.794)
Activos Generadores de Energía	(1.654.236)	(1.406.582)
Construcciones en Proceso	(84.070)	(65.246)
Arrendamientos Financieros	(4.596)	(3.847)
Otras Propiedades, Planta y Equipos	(103.487)	(88.309)
<b>Total</b>	<b>(1.883.241)</b>	<b>(1.636.011)</b>

**b. Movimiento de propiedades, planta y equipos**

La composición y movimiento de propiedad, planta y equipos, neto al 31 de diciembre de 2018 y 2017, ha sido la siguiente:

Movimientos período 2018	Terrenos	Edificios, Construcciones e Instalaciones	Maquinarias	Equipos de Transporte	Equipos de oficina	Equipos Informáticos	Activos generadores de energía	Construcciones en proceso	Arrendamientos Financieros	Otras propiedades, planta y equipo	Propiedades, planta y equipos, Neto
	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$
Saldo inicial al 01.01.2018	297.742	225.930	574	755	3.410	1.472	4.068.854	530.185	11.307	376.249	5.516.478
Adiciones	9.042	-	5	-	-	224	283	99.628	-	-	109.182
Incrementos (disminuciones) por otros cambios	(22)	-	-	-	-	-	-	-	-	24.475	24.453
Desapropiaciones	-	(384)	-	(67)	(41)	(46)	(4.035)	-	-	-	(4.573)
Depreciación Acumulada Desapropiaciones	-	373	-	67	26	6	2.470	-	-	-	2.942
Pérdidas por deterioro de valor reconocidas en el resultado del período	-	-	-	-	-	-	-	(18.824)	-	-	(18.824)
Traslados des de Obras en Ejecución	132	886	730	-	115	543	265.582	(296.579)	-	27.350	(1.241)
Traslados entre Activos	-	(150.192)	23	-	-	14	150.013	-	-	229	87
Depreciación Acumulada Traslados entre Activos	-	40.428	(1)	-	-	-	(40.427)	-	-	-	-
Gastos por Depreciación (ver nota 30)	-	(4.334)	(145)	(129)	(342)	(774)	(209.697)	-	(749)	(15.178)	(231.348)
Total Movimiento	9.152	(113.223)	612	(129)	(242)	(33)	164.189	(215.775)	(749)	36.876	(119.322)
<b>Saldo final al 31.12.2018</b>	<b>306.894</b>	<b>112.707</b>	<b>1.186</b>	<b>626</b>	<b>3.168</b>	<b>1.439</b>	<b>4.233.043</b>	<b>314.410</b>	<b>10.558</b>	<b>413.125</b>	<b>5.397.156</b>
Movimientos ejercicio 2017	Terrenos	Edificios, Construcciones e Instalaciones	Maquinarias	Equipos de Transporte	Equipos de oficina	Equipos Informáticos	Activos generadores de energía	Construcciones en proceso	Arrendamientos Financieros	Otras propiedades, planta y equipo	Propiedades, planta y equipos, Neto
MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$	MUS\$
Saldo inicial al 01.01.2017	296.368	230.010	400	591	3.394	1.620	4.136.815	558.480	12.064	412.012	5.651.754
Adiciones	1.427	-	62	347	-	529	34.419	137.252	-	93	174.129
Incrementos (disminuciones) por otros cambios	(51)	-	-	-	-	-	-	-	-	(23.509)	(23.560)
Desapropiaciones	(2)	-	-	(222)	-	(121)	(8.220)	-	-	-	(8.565)
Depreciación Acumulada Desapropiaciones	-	-	-	163	-	117	2.104	-	-	-	2.384
Pérdidas por deterioro de valor reconocidas en el resultado del período	-	-	-	-	-	-	-	(63.002)	-	-	(63.002)
Traslados des de Obras en Ejecución	-	5.315	179	24	323	(67)	94.772	(102.545)	-	2.122	123
Depreciación Acumulada Traslados	-	3	-	-	-	67	1.354	-	-	50	1.474
Traslados entre Activos	-	(224)	-	-	24	-	281	-	-	(81)	-
Gastos por Depreciación (ver nota 30)	-	(9.174)	(67)	(148)	(331)	(673)	(192.671)	-	(757)	(14.438)	(218.259)
Total Movimiento	1.374	(4.080)	174	164	16	(148)	(67.961)	(28.295)	(757)	(35.763)	(135.276)
<b>Saldo final al 31.12.2017</b>	<b>297.742</b>	<b>225.930</b>	<b>574</b>	<b>755</b>	<b>3.410</b>	<b>1.472</b>	<b>4.068.854</b>	<b>530.185</b>	<b>11.307</b>	<b>376.249</b>	<b>5.516.478</b>

### c. Otras revelaciones

i) Colbún S.A. y subsidiarias tienen formalizadas pólizas de seguros para cubrir los posibles riesgos a los que están sujetos los diversos elementos de sus Propiedades, planta y equipos, así como las reclamaciones que se le puedan presentar por el ejercicio de su actividad, entendiéndose que dichas pólizas cubren de manera suficiente los riesgos a los que están sometidos.

Adicionalmente, a través de los seguros tomados por la Compañía, está cubierta la pérdida de beneficio que podría ocurrir como consecuencia de un siniestro.

ii) Durante el segundo trimestre de 2018 fueron entregados al Coordinador Eléctrico Nacional (CEN) los siguientes proyectos:

- Con fecha 5 de junio de 2018 comenzó su operación comercial la PMGD de generación fotovoltaica en Ovejería con una potencia instalada de 9 MW.
- Con fecha 15 de junio de 2018 comenzó su operación comercial la Central Hidráulica La Mina con una capacidad instalada de 37 MW.

iii) La Compañía mantenía al 31 de diciembre de 2018 y 2017, compromisos de adquisición de bienes de activo fijo relacionados con contratos de construcción por un importe de MUS\$ 36.612 y MUS\$ 36.612 respectivamente. Las compañías con las cuales opera son: Abb S.A., Siemens S.A., Construcción Maquinarias Pulmahue SpA, Andritz Hydro S.R.L., Toshiba America do Sul Ltda., Consorcio Isotron S.A., Ingeniería Agrosonda Ltda., Soc. Com. e Ingeniería y Gestión Ind. Ingher Ltda., Rhona S.A., Tadeo Czi S.A., IMCD Ingeniería y Construcción SpA, entre otros.

iv) Los costos por intereses capitalizados acumulados (NIC 23) al 31 de diciembre de 2018 y 2017, han sido los siguientes:

Concepto	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Costos por préstamos</b>		
Costos por préstamos capitalizados (ver nota 31)	-	304
Costos por préstamos reconocidos como gasto	8.587	8.840
<b>Total costos por préstamos incurridos</b>	<b>8.587</b>	<b>9.144</b>
<b>Costos por intereses</b>		
Costos por intereses capitalizados (ver nota 31)	-	3.660
Gastos por intereses	74.846	84.954
<b>Total costos por intereses incurridos</b>	<b>74.846</b>	<b>88.614</b>
Tasa de capitalización de costos por préstamos susceptibles de capitalización	5,20%	5,29%

## v) Arrendamientos operativos

La Compañía al 31 de diciembre de 2018 y 2017, mantiene arrendamientos implícitos operativos correspondientes a:

1. Contratos por Líneas de Transmisión (Alto Jahuel-Candelaria 220 KV y Candelaria-Minero 220 KV), efectuados entre la Compañía y Corporación Nacional del Cobre de Chile. Dichos contratos tienen una duración de 30 años.
2. Contratos de Peaje Adicional (Líneas de Transmisión - Subestación Polpaico con la Subestación Maitenes), efectuados entre la Compañía y Anglo American Sur. Dichos contratos tienen una duración de 21 años.
3. Contrato de Suministro de Energía y Potencia Eléctrica entre Colbún y Corporación Nacional del Cobre de Chile. El contrato tiene una duración de 30 años.

Los cobros futuros estimados derivados de dichos contratos son los siguientes:

<b>31 de diciembre de 2018</b>	<b>Hasta un año</b>	<b>Entre uno y cinco años</b>	<b>Más de cinco años</b>	<b>Total</b>
	MUS \$	MUS \$	MUS \$	MUS \$
Pagos mínimos de arrendamientos por cobrar bajo arrendamientos operativos no cancelables	120.863	483.435	2.407.864	3.012.162
<b>Total</b>	<b>120.863</b>	<b>483.435</b>	<b>2.407.864</b>	<b>3.012.162</b>

<b>31 de diciembre de 2017</b>	<b>Hasta un año</b>	<b>Entre uno y cinco años</b>	<b>Más de cinco años</b>	<b>Total</b>
	MUS \$	MUS \$	MUS \$	MUS \$
Pagos mínimos de arrendamientos por cobrar bajo arrendamientos operativos no cancelables	118.313	473.242	2.473.271	3.064.826
<b>Total</b>	<b>118.313</b>	<b>473.242</b>	<b>2.473.271</b>	<b>3.064.826</b>

## vi) Arrendamiento financiero

Al 31 de diciembre de 2018, las Propiedades, Planta y equipo incluyen MUS\$ 10.558, correspondiente al valor neto contable de activos que son objeto de contratos de arrendamiento financiero. En tanto al 31 de diciembre de 2017 incluían MUS\$ 11.307 por este concepto.

Los activos en leasing provienen de la filial Fenix y corresponden a un contrato firmado con Consorcio Transmataro S.A. (en adelante CTM), en el cual CTM se obliga a brindar el servicio de operación y mantenimiento de la línea de transmisión de aproximadamente 8 kilómetros de la subestación Chilca a la planta térmica de Fenix. Dicho contrato tiene una duración de 20 años y devenga intereses a una tasa anual de 12%. Adicionalmente, CTM se obliga a construir las instalaciones para la prestación del servicio de transmisión.

El valor presente de los pagos futuros derivados de dichos contratos al 31 de diciembre de 2018 y 2017 es el siguiente:

31 de diciembre de 2018	Hasta un año MUS \$	Entre uno y cinco años MUS \$	Más de cinco años MUS \$	Total MUS \$
Bruto	2.473	10.316	28.748	41.537
Intereses	(1.990)	(7.720)	(17.183)	(26.893)
Valor presente (ver nota 21.a)	483	2.596	11.565	14.644

31 de diciembre de 2017	Hasta un año MUS \$	Entre uno y cinco años MUS \$	Más de cinco años MUS \$	Total MUS \$
Bruto	2.415	9.660	31.646	43.721
Intereses	(1.987)	(7.318)	(19.345)	(28.650)
Valor presente (ver nota 21.a)	428	2.342	12.301	15.071

## vii) Información adicional requerida por taxonomía XBRL

## 1. Desembolsos reconocidos en el curso de su construcción

Desembolsos reconocidos en el curso de su construcción, Bruto	31.12.2018 MUS \$	31.12.2017 MUS \$
Construcciones en proceso	106.431	119.574
<b>Total</b>	<b>106.431</b>	<b>119.574</b>

## 2. Activos depreciados en su totalidad todavía en uso

Activos depreciados en su totalidad todavía en uso, Bruto	31.12.2018 MUS \$	31.12.2017 MUS \$
Edificios	63	32
Maquinarias	47	36
Equipos de Transporte	587	474
Equipos de Oficina	3.991	3.942
Equipos Informáticos	6.330	5.642
Activos Generadores de Energía	12.481	9.688
Otras propiedades, Planta y Equipos	1.430	1.430
<b>Total</b>	<b>24.929</b>	<b>21.244</b>

Activos depreciados en su totalidad todavía en uso, Depreciación acumulada y Deterioro de valor	31.12.2018 MUS \$	31.12.2017 MUS \$
Edificios	(63)	(32)
Maquinarias	(47)	(36)
Equipos de Transporte	(585)	(472)
Equipos de Oficina	(3.991)	(3.942)
Equipos Informáticos	(6.330)	(5.642)
Activos Generadores de Energía	(12.470)	(9.688)
Otras propiedades, Planta y Equipos	(1.430)	(1.430)
<b>Total</b>	<b>(24.916)</b>	<b>(21.242)</b>



## viii) Detalle de Otras propiedades, planta y equipos

Al 31 de diciembre de 2018 y 2017 el detalle de Otras propiedades, planta y equipos es la siguiente:

Otras Propiedades Plantas y Equipos, Neto	31.12.2018 MUS \$	31.12.2017 MUS \$
Subestaciones	150.725	149.746
Líneas Transmisión	137.577	127.635
Repuestos clasificados como activos fijos	116.839	90.655
Otros Activos Fijos	7.984	8.213
<b>Otras Propiedades Plantas y Equipos, Neto</b>	<b>413.125</b>	<b>376.249</b>

Otras Propiedades Plantas y Equipos, Bruto	31.12.2018 MUS \$	31.12.2017 MUS \$
Subestaciones	218.417	207.047
Líneas Transmisión	170.000	155.732
Repuestos clasificados como activos fijos	116.839	90.655
Otros Activos Fijos	11.356	11.124
<b>Otras Propiedades Plantas y Equipos, Bruto</b>	<b>516.612</b>	<b>464.558</b>

Depreciación Acumulada y Deterioro del Valor de Otras Propiedades Plantas y Equipos	31.12.2018 MUS \$	31.12.2017 MUS \$
Subestaciones	(67.692)	(57.301)
Líneas Transmisión	(32.423)	(28.097)
Otros Activos Fijos	(3.372)	(2.911)
<b>Total Depreciaciones y Deterioro del Valor</b>	<b>(103.487)</b>	<b>(88.309)</b>

ix) Detalle de Activos Generadores de Energía

<b>Activos Generadores De Energía, Neto</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
		MUS \$	MUS \$
<b>Obras Civiles Generación</b>	Hidroeléctrica	1.683.169	1.672.750
	Térmica Carbón	284.275	220.808
	Térmica Gas /Petróleo	43.420	44.124
	Solar	158	-
<b>Maquinarias y Equipos Generación</b>	Hidroeléctrica	650.133	558.498
	Térmica Carbón	472.991	491.163
	Térmica Gas /Petróleo	1.089.736	1.081.511
	Solar	9.161	-
<b>Saldo Activos Generadores de Energía, Neto</b>		<b>4.233.043</b>	<b>4.068.854</b>

<b>Activos Generadores De Energía, Bruto</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
		MUS \$	MUS \$
<b>Obras Civiles Generación</b>	Hidroeléctrica	2.227.502	2.206.842
	Térmica Carbón	358.731	260.852
	Térmica Gas /Petróleo	54.700	54.501
	Solar	162	-
<b>Maquinarias y Equipos Generación</b>	Hidroeléctrica	934.531	759.889
	Térmica Carbón	620.012	612.995
	Térmica Gas /Petróleo	1.682.223	1.580.357
	Solar	9.418	-
<b>Total Activos Generadores de Energía, Bruto</b>		<b>5.887.279</b>	<b>5.475.436</b>

<b>Depreciación Acumulada y Deterioro del Valor de Activos Generadores De Energía</b>		<b>31.12.2018</b>	<b>31.12.2017</b>
		MUS \$	MUS \$
<b>Obras Civiles Generación</b>	Hidroeléctrica	(544.333)	(534.092)
	Térmica Carbón	(74.456)	(40.044)
	Térmica Gas /Petróleo	(11.280)	(10.377)
	Solar	(4)	-
<b>Maquinarias y Equipos Generación</b>	Hidroeléctrica	(284.398)	(201.391)
	Térmica Carbón	(147.021)	(121.832)
	Térmica Gas /Petróleo	(592.487)	(498.846)
	Solar	(257)	-
<b>Total Depreciaciones y Deterioro del Valor</b>		<b>(1.654.236)</b>	<b>(1.406.582)</b>

## 17. Impuestos Corrientes

El saldo de los impuestos corrientes por recuperar y por pagar presentado en el activo y pasivo corriente al 31 de diciembre de 2018 y 2017, respectivamente se detallan a continuación:

### a. Activos por Impuestos Corrientes

	Corrientes	
	31.12.2018 MUS \$	31.12.2017 MUS \$
Impuestos por recuperar ejercicios anteriores	12.733	11.284
Impuestos por recuperar del ejercicio (Ver nota 20.a.1)	43.247	7.106
<b>Total</b>	<b>55.980</b>	<b>18.390</b>

### b. Pasivos por Impuestos Corrientes

	Corrientes	
	31.12.2018 MUS \$	31.12.2017 MUS \$
Impuestos por pagar del ejercicio (Ver nota 20.a.1)	74	19.785
<b>Total</b>	<b>74</b>	<b>19.785</b>

## 18. Otros activos no financieros

Los otros activos no financieros al 31 de diciembre de 2018 y 2017, se detallan a continuación:

	Corrientes		No corrientes	
	31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
Primas de seguros por instalaciones y responsabilidad civil	14.440	15.542	-	-
Pagos anticipados <sup>(1)</sup>	5.222	13.741	21.816	19.875
Patentes por no uso derechos de agua <sup>(2)</sup>	-	-	3.916	7.774
Otros activos varios	134	109	1.198	1.360
<b>Total</b>	<b>19.796</b>	<b>29.392</b>	<b>26.930</b>	<b>29.009</b>

<sup>(1)</sup> Corresponde a pagos por anticipos a proveedores nacionales y extranjeros.

<sup>(2)</sup> Crédito según artículo N° 129 bis 20 del Código de Aguas DFL N°1.122. Al 31 de diciembre de 2018, se han reconocido cargos de deterioro por MUS\$ 8.076, en tanto al 31 de diciembre de 2017, se reconocieron MUS\$ 5.928. El pago de estas patentes se encuentra asociado a la implementación de proyectos que utilizarán estos derechos de agua, por lo tanto, es una variable económica que la Compañía evalúa permanentemente. En este contexto, la Compañía controla adecuadamente los pagos realizados y conoce las estimaciones de puesta en marcha de los proyectos, a objeto de registrar el deterioro del activo, si se visualiza que la utilización será posterior al rango de aprovechamiento del Crédito Fiscal.

## 19. Impuestos a las ganancias

## a. Resultado por impuesto a las ganancias

Resultado por Impuestos a las Ganancias	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Resultado por impuestos corrientes a las ganancias</b>		
Impuestos corrientes	(53.647)	(87.313)
Ajustes al impuesto corriente del período anterior	(2.185)	11.538
<b>Gasto por impuestos corrientes, neto, total</b>	<b>(55.832)</b>	<b>(75.775)</b>
<b>Resultado por impuestos diferidos a las ganancias</b>		
Resultado en impuestos diferidos producto de diferencias temporarias <sup>(1)</sup>	(42.586)	41.695
<b>Resultado por impuestos diferidos, neto, total</b>	<b>(42.586)</b>	<b>41.695</b>
<b>Resultado por impuestos a las ganancias</b>	<b>(98.418)</b>	<b>(34.080)</b>

<sup>(1)</sup> Ver nota 3.1.c

El (gasto) ingreso por impuesto a las ganancias y diferidos por partes extranjeras y nacionales, al 3 diciembre de 2018 y 2017, es el siguiente

Resultado por Impuestos a las Ganancias	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Impuestos corrientes nacionales	(55.804)	(76.725)
Impuestos corrientes extranjero	(28)	950
<b>Total Impuestos Corrientes</b>	<b>(55.832)</b>	<b>(75.775)</b>
Impuestos diferidos nacionales	(41.018)	38.812
Impuestos diferidos extranjero	(1.568)	2.883
<b>Total Impuestos Diferidos</b>	<b>(42.586)</b>	<b>41.695</b>
<b>Resultados por Impuestos a las ganancias</b>	<b>(98.418)</b>	<b>(34.080)</b>

### a.1 Conciliación impuestos corrientes

Al 31 de diciembre de 2018 y 2017 la conciliación de los impuestos corrientes con la renta es la siguiente:

Conciliación impuestos corrientes									
31.12.2018									
Sociedad	Impuestos Corrientes (Resultado) MUS\$	Impuestos Corrientes ajuste patrimonio MUS\$	PPM MUS\$	Otros Créditos MUS\$	Impuesto único (Resultado) MUS\$	Activos por Impuestos MUS\$	Pasivos por Impuestos MUS\$		
Colbún S.A.	(41.487)	(1.120)	77.158	1.065	(29)	35.587	-		
Colbún Transmisión S.A.	(7.224)	-	8.247	-	-	1.023	-		
Río Tranquilo S.A.	(2.893)	-	3.248	-	-	355	-		
Soc. Hidroeléctrica Meloación Ltda.	(980)	-	933	-	-	-	(47)		
Termoeléctrica Antilhue S.A.	(790)	-	904	-	-	114	-		
Empresas Eléctrica Industrial S.A.	(209)	-	440	1	-	232	-		
Colbún Perú S.A.	(28)	-	1	-	-	-	(27)		
Inversiones SUD SpA	(7)	-	73	-	-	66	-		
Fenix Power S.A.	-	-	2.740	3.130	-	5.870	-		
<b>Totales</b>	<b>(53.618)</b>	<b>(1.120)</b>	<b>93.744</b>	<b>4.196</b>	<b>(29)</b>	<b>43.247</b>	<b>(74)</b>		
Conciliación impuestos corrientes									
31.12.2017									
Sociedad	Impuestos Corrientes (Resultado) MUS\$	Impuestos Corrientes ajuste patrimonio MUS\$	PPM MUS\$	Otros Créditos MUS\$	Impuesto único (Resultado) MUS\$	Activos por Impuestos MUS\$	Pasivos por Impuestos MUS\$		
Colbún S.A.	(74.889)	(30)	55.246	501	(207)	-	(19.379)		
Colbún Transmisión S.A.	(6.532)	-	6.186	-	-	-	(346)		
Río Tranquilo S.A.	(3.628)	-	4.186	-	-	558	-		
Soc. Hidroeléctrica Meloación Ltda.	(927)	-	880	-	-	-	(47)		
Termoeléctrica Antilhue S.A.	(761)	-	850	-	-	89	-		
Empresas Eléctrica Industrial S.A.	(355)	-	749	-	(1)	393	-		
Inversiones SUD SpA	(13)	-	-	-	-	-	(13)		
Fenix Power S.A.	-	-	3.087	2.979	-	6.066	-		
<b>Totales</b>	<b>(87.105)</b>	<b>(30)</b>	<b>71.184</b>	<b>3.480</b>	<b>(208)</b>	<b>7.106</b>	<b>(19.785)</b>		

Al 31 de diciembre de 2018, la sociedad Colbún S.A. junto a sus filiales generó utilidades tributarias, por lo cual se registró una Provisión de Impuesto a la Renta consolidada, neta de pagos provisionales mensuales (PPM) y créditos por MUS\$ 74.

En el caso de la filial extranjera Fénix Power Perú S.A. registra al 31 de diciembre de 2018 pérdidas tributarias acumuladas por un monto de MUS\$ 167.456. A su vez la filial nacional Termoeléctrica Nehuenco S.A. presenta al cierre del período pérdidas tributarias por un monto ascendente a MUS\$ 9.241. Respecto de las filiales mencionadas que mantienen pérdidas tributarias, se esperan revertirlas en el futuro, por lo que se reconoció un activo por impuestos diferidos.

De acuerdo con lo indicado en la NIC 12, se reconoce un activo por impuesto diferido por pérdidas tributarias, cuando la administración de la compañía ha determinado que es probable la existencia de utilidades imponibles futuras, sobre las cuales se puedan imputar, situación que ocurre en las subsidiarias con pérdidas tributarias.

## a.2 Conciliación del gasto por impuestos consolidado y cálculo de tasa efectiva

Al 31 de diciembre de 2018 y 2017 el cargo total se puede conciliar con la utilidad contable de la siguiente manera:

Resultado por Impuestos a las Ganancias	Enero - Diciembre			
	2018		2017	
	Monto MUS\$	Tasa %	Monto MUS\$	Tasa %
Ganancia antes de impuesto	328.843		322.682	
<b>Gasto por impuestos utilizando la tasa legal <sup>(1)</sup></b>	<b>(88.788)</b>	<b>27,0%</b>	<b>(82.284)</b>	<b>25,5%</b>
Diferencias entre contabilidad financiera en dólares y tributaria en moneda local con efecto en impuestos diferidos <sup>(2)</sup>	(6.500)	2,0%	5.711	-1,8%
Efecto impositivo por diferencial de tasas en otras jurisdicciones	-	0,0%	-	0,0%
Otras diferencias	(3.130)	1,0%	42.493	-13,2%
<b>Resultado por impuesto a las ganancias</b>	<b>(98.418)</b>	<b>29,9%</b>	<b>(34.080)</b>	<b>10,6%</b>

<sup>(1)</sup> Al 31 de diciembre del 2018 el impuesto fue calculado con la tasa impositiva 27% (Ley N° 20.780) en las operaciones en Chile y con tasa impositiva del 29,5% en Perú. Al 31 de diciembre del 2017 el impuesto fue calculado con la tasa impositiva 25,5% (Ley N° 20.780) en las operaciones en Chile y con tasa impositiva del 29,5% en Perú.

<sup>(2)</sup> De acuerdo con las Normas Internacionales de Información Financiera (NIIF) la Compañía y sus filiales registran sus operaciones en su moneda funcional que es el dólar. Respecto de las filiales extranjeras se mantiene para fines tributarios la moneda local.

## b. Impuestos diferidos

Los activos y pasivos por impuestos diferidos al cierre de cada ejercicio se detallan a continuación:

<b>Activo por Impuesto Diferido</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
Impuestos Diferidos Pérdidas Fiscales	51.908	47.332
Impuestos Diferidos Ingresos Anticipados	3.763	3.539
Impuestos Diferidos Existencias	1.918	1.753
Impuestos Diferidos Provisiones	19.895	20.418
Impuestos Diferidos Resultado No Realizado	292	292
Impuestos Diferidos Contingencias	663	46
Impuestos Diferidos a Instrumentos de Cobertura	99	(987)
Impuestos Diferidos Obligaciones por Beneficios Post-Emplo	7.503	7.641
Impuestos Diferidos Inversiones en Asociadas <sup>(1)</sup>	-	39.980
<b>Activos por Impuestos Diferidos</b>	<b>86.041</b>	<b>120.014</b>
<b>Pasivo por Impuesto Diferido</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
Impuestos Diferidos Depreciaciones	(979.537)	(967.128)
Impuestos Diferidos Intangibles	(13.482)	(14.599)
Impuestos Diferidos Gastos Financieros	(15.761)	(17.972)
<b>Pasivos por Impuestos Diferidos</b>	<b>(1.008.780)</b>	<b>(999.699)</b>
<b>Activos y pasivos por Impuestos diferidos netos</b>	<b>(922.739)</b>	<b>(879.685)</b>
<b>Cambios en Impuestos Diferidos</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
<b>Impuestos Diferidos, saldo inicial 01 de enero</b>	<b>(879.685)</b>	<b>(950.844)</b>
Propiedades, planta y equipo	(12.409)	39.657
Contingencias	617	(659)
Obligaciones por Beneficios Post-Emplo	(138)	2.682
Pérdidas Fiscales	4.576	4.295
Intangibles	1.117	(10.175)
Inversiones en Asociadas <sup>(1)</sup>	(39.980)	39.980
Resultado no Realizado	-	(291)
Ingresos Anticipados	224	255
Instrumentos de Coberturas	1.086	(703)
Gastos Financieros	2.211	(12.411)
Existencias	165	(1.080)
Provisiones	(523)	13.548
Gastos Tributarios	-	(3.939)
<b>Saldo Final</b>	<b>(922.739)</b>	<b>(879.685)</b>

<sup>(1)</sup> Ver nota 3.1.c

La posición neta de los impuestos diferidos para cada Sociedad es la siguiente:

Posición neta impuestos diferidos por sociedad				
Sociedad	Posición neta			
	Activo no corriente		Pasivo no corriente	
	31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
Fenix Power Perú S.A.	32.719	34.369	-	-
Termoeléctrica Nehuenco S.A.	3.189	3.992	-	-
Santa Sofía SpA	153	-	-	-
Soc. Hidroeléctrica Melocotón Ltda.	-	-	(144)	(144)
Empresa Eléctrica Industrial S.A.	-	-	(766)	(405)
Inversiones de Las Canteras S.A.	-	-	(733)	(815)
Termoeléctrica Antihue S.A.	-	-	(5.250)	(6.316)
Río Tranquilo S.A.	-	-	(10.388)	(10.642)
Colbún Transmisión S.A.	-	-	(62.546)	(23.033)
Colbún S.A.	-	-	(878.973)	(876.691)
<b>Subtotal</b>	<b>36.061</b>	<b>38.361</b>	<b>(958.800)</b>	<b>(918.046)</b>
<b>Impuestos diferidos netos</b>			<b>(922.739)</b>	<b>(879.685)</b>

### c. Impuesto a las ganancias relacionado con Otro Resultado Integral

	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Relacionado con coberturas de flujos de efectivo	(1.794)	1.393
Relacionado con planes de beneficios definidos	207	689
<b>Impuesto a las ganancias relacionado con componentes de otro resultado integral</b>	<b>(1.587)</b>	<b>2.082</b>
Relacionado con participación de otro resultado integral de asociadas y negocios conjuntos contabilizados utilizando el método de la participación	(12)	(31)
<b>Impuesto a las ganancias relativo a componentes de otro resultado integral</b>	<b>(1.599)</b>	<b>2.051</b>



## 20. Otros pasivos financieros

Al 31 de diciembre de 2018 y 2017, el detalle es el siguiente:

### a. Obligaciones con entidades financieras

Otros pasivos financieros	Corrientes		No corrientes	
	31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
Obligaciones por leasing	483	428	14.161	14.643
Obligaciones con el público (Bonos, Efectos de comercio) <sup>(1)</sup>	66.058	56.592	1.520.599	1.587.393
Derivados de cobertura <sup>(2)</sup>	1.962	396	-	-
<b>Total</b>	<b>68.503</b>	<b>57.416</b>	<b>1.534.760</b>	<b>1.602.036</b>

<sup>(1)</sup> Los intereses devengados por las obligaciones con el público se han determinado a una tasa efectiva.

<sup>(2)</sup> Ver detalle nota 13.1

### b. Deuda financiera por tipo de moneda

El valor de la deuda financiera de Colbún (pasivos bancarios, bonos y leasing) considerando sólo el efecto de los instrumentos de derivados posición pasiva, es el siguiente:

Deuda financiera por tipo de moneda	31.12.2018 MUS \$	31.12.2017 MUS \$
Dólar US \$	1.523.196	1.560.803
Unidades de Fomento	80.067	98.649
<b>Total</b>	<b>1.603.263</b>	<b>1.659.452</b>

## c. Vencimiento y moneda de las obligaciones con entidades financieras

## c.1 Obligaciones con bancos

Al 31 de diciembre de 2018 la Compañía no tiene obligaciones con bancos.

## c.2 Obligaciones con el público (bonos)

Al 31.12.2018							
Rut entidad deudora	96.505.760-9	96.505.760-9	96.505.760-9	96.505.760-9	96.505.760-9	0-E	
Nombre entidad deudora	Colbún S.A.	Colbún S.A.	Colbún S.A.	Colbún S.A.	Colbún S.A.	Fenix Power Perú S.A.	
País de la empresa deudora	Chile	Chile	Chile	Chile	Chile	Perú	
Número de inscripción	234	499	538	-	-	-	
Serie	Serie C	Serie F	Serie I	144A/R egS	144A/R egS	144A/R egS	
Fecha de vencimiento	15-10-2021	01-05-2028	10-06-2029	10-10-2027	10-07-2024	20-09-2027	
Moneda o unidad de reajuste	UF	UF	UF	US\$	US\$	US\$	
Periodicidad de la amortización	Semestral	Semestral	Semestral	Bullet	Bullet	Semestral	
Tipo de interés	Fija	Fija	Fija	Fija	Fija	Fija	
Base	Fija	Fija	Fija	Fija	Fija	Fija	
Tasa Efectiva	8,10%	4,46%	5,02%	5,11%	4,80%	4,57%	
Tasa Nominal	7,00%	3,40%	4,50%	3,95%	4,50%	4,32%	
<b>Montos nominales</b>	<b>MUS \$</b>						<b>Totales MUS \$</b>
hasta 90 días	-	-	-	-	10.625	10.017	<b>20.642</b>
más de 90 días hasta 1 año	7.968	16.706	11.104	4.334	-	6.000	<b>46.112</b>
<b>más de 1 año hasta 3 años</b>	<b>16.424</b>	<b>31.746</b>	<b>21.646</b>	-	-	<b>42.000</b>	<b>111.816</b>
más de 1 año hasta 2 años	8.009	15.873	10.823	-	-	18.000	52.705
más de 2 años hasta 3 años	8.415	15.873	10.823	-	-	24.000	59.111
<b>más de 3 años hasta 5 años</b>	-	<b>31.746</b>	<b>21.646</b>	-	-	<b>55.000</b>	<b>108.392</b>
más de 3 años hasta 4 años	-	15.873	10.823	-	-	27.000	53.696
más de 4 años hasta 5 años	-	15.873	10.823	-	-	28.000	54.696
<b>más de 5 años</b>	-	<b>71.429</b>	<b>59.524</b>	<b>500.000</b>	<b>500.000</b>	<b>226.000</b>	<b>1.356.953</b>
<b>Subtotal montos nominales</b>	<b>24.392</b>	<b>151.627</b>	<b>113.920</b>	<b>504.334</b>	<b>510.625</b>	<b>339.017</b>	<b>1.643.915</b>
<b>Valores contables</b>	<b>MUS \$</b>						<b>Totales MUS \$</b>
hasta 90 días	-	-	-	-	10.624	10.017	<b>20.641</b>
más de 90 días hasta 1 año	7.865	16.297	10.922	4.333	-	6.000	<b>45.417</b>
<b>Obligaciones con el público corrientes</b>	<b>7.865</b>	<b>16.297</b>	<b>10.922</b>	<b>4.333</b>	<b>10.624</b>	<b>16.017</b>	<b>66.058</b>
<b>más de 1 año hasta 3 años</b>	<b>16.201</b>	<b>30.926</b>	<b>21.282</b>	-	-	<b>40.755</b>	<b>109.164</b>
más de 1 año hasta 2 años	7.900	15.463	10.641	-	-	17.367	51.371
más de 2 años hasta 3 años	8.301	15.463	10.641	-	-	23.388	57.793
<b>más de 3 años hasta 5 años</b>	-	<b>30.926</b>	<b>21.282</b>	-	-	<b>53.892</b>	<b>106.100</b>
más de 3 años hasta 4 años	-	15.463	10.641	-	-	26.424	52.528
más de 4 años hasta 5 años	-	15.463	10.641	-	-	27.468	53.572
<b>más de 5 años</b>	-	<b>69.584</b>	<b>58.516</b>	<b>459.549</b>	<b>493.906</b>	<b>223.780</b>	<b>1.305.335</b>
<b>Obligaciones con el público no corrientes</b>	<b>16.201</b>	<b>131.436</b>	<b>101.080</b>	<b>459.549</b>	<b>493.906</b>	<b>318.427</b>	<b>1.520.599</b>
<b>Obligaciones con el público total</b>	<b>24.066</b>	<b>147.733</b>	<b>112.002</b>	<b>463.882</b>	<b>504.530</b>	<b>334.444</b>	<b>1.586.657</b>

## Obligaciones con el público (bonos)

Al 31.12.2017							
Rutentidad deudora	96.505.760-9	96.505.760-9	96.505.760-9	96.505.760-9	96.505.760-9	0-E	
Nombre entidad deudora	Colbún S.A.	Colbún S.A.	Colbún S.A.	Colbún S.A.	Colbún S.A.	Fenix Power Perú S.A.	
País de la empresa deudora	Chile	Chile	Chile	Chile	Chile	Perú	
Número de inscripción	234	499	538	-	-	-	
Serie	Serie C	Serie F	Serie I	144A/R egS	144A/R egS	144A/R egS	
Fecha de vencimiento	15-10-2021	01-05-2028	10-06-2029	10-10-2027	10-07-2024	20-09-2027	
Moneda o unidad de reajuste	UF	UF	UF	US\$	US\$	US\$	
Periodicidad de la amortización	Semestral	Semestral	Semestral	Bullet	Bullet	Semestral	
Tipo de interés	Fija	Fija	Fija	Fija	Fija	Fija	
Base	Fija	Fija	Fija	Fija	Fija	Fija	
Tasa Efectiva	8,10%	4,46%	5,02%	5,15%	4,97%	4,55%	
Tasa Nominal	7,00%	3,40%	4,50%	3,95%	4,50%	4,32%	
<b>Montos nominales</b>	<b>MUS\$</b>						<b>Totales MUS\$</b>
hasta 90 días	-	-	-	-	10.625	4.158	<b>14.783</b>
más de 90 días hasta 1 año	8.464	18.448	6.268	4.334	-	5.000	<b>42.514</b>
<b>más de 1 año hasta 3 años</b>	<b>17.172</b>	<b>34.874</b>	<b>23.778</b>	-	-	<b>30.000</b>	<b>105.824</b>
más de 1 año hasta 2 años	8.374	17.437	11.889	-	-	12.000	49.700
más de 2 años hasta 3 años	8.798	17.437	11.889	-	-	18.000	56.124
<b>más de 3 años hasta 5 años</b>	<b>9.244</b>	<b>34.874</b>	<b>23.778</b>	-	-	<b>51.000</b>	<b>118.896</b>
más de 3 años hasta 4 años	9.244	17.437	11.889	-	-	24.000	62.570
más de 4 años hasta 5 años	-	17.437	11.889	-	-	27.000	56.326
más de 5 años	-	<b>95.902</b>	<b>77.275</b>	<b>500.000</b>	<b>500.000</b>	<b>254.000</b>	<b>1.427.177</b>
<b>Subtotal montos nominales</b>	<b>34.880</b>	<b>184.098</b>	<b>131.099</b>	<b>504.334</b>	<b>510.625</b>	<b>344.158</b>	<b>1.709.194</b>
<b>Valores contables</b>	<b>MUS\$</b>						<b>Totales MUS\$</b>
hasta 90 días	-	-	-	-	10.625	4.158	<b>14.783</b>
más de 90 días hasta 1 año	8.341	17.980	6.154	4.334	-	5.000	<b>41.809</b>
<b>Obligaciones con el público corrientes</b>	<b>8.341</b>	<b>17.980</b>	<b>6.154</b>	<b>4.334</b>	<b>10.625</b>	<b>9.158</b>	<b>56.592</b>
<b>más de 1 año hasta 3 años</b>	<b>16.909</b>	<b>33.934</b>	<b>23.322</b>	-	-	<b>24.705</b>	<b>98.870</b>
más de 1 año hasta 2 años	8.246	16.967	11.661	-	-	10.342	47.216
más de 2 años hasta 3 años	8.663	16.967	11.661	-	-	14.363	51.654
<b>más de 3 años hasta 5 años</b>	<b>9.103</b>	<b>33.934</b>	<b>23.322</b>	-	-	<b>45.281</b>	<b>111.640</b>
más de 3 años hasta 4 años	9.103	16.967	11.661	-	-	20.376	58.107
más de 4 años hasta 5 años	-	16.967	11.661	-	-	24.905	53.533
más de 5 años	-	<b>93.320</b>	<b>75.792</b>	<b>455.258</b>	<b>492.704</b>	<b>259.809</b>	<b>1.376.883</b>
<b>Obligaciones con el público no corrientes</b>	<b>26.012</b>	<b>161.188</b>	<b>122.436</b>	<b>455.258</b>	<b>492.704</b>	<b>329.795</b>	<b>1.587.393</b>
<b>Obligaciones con el público total</b>	<b>34.353</b>	<b>179.168</b>	<b>128.590</b>	<b>459.592</b>	<b>503.329</b>	<b>338.953</b>	<b>1.643.985</b>

## c.3 Obligaciones por leasing

Al 31.12.2018		
Rut entidad deudora	0-E	
Nombre entidad deudora	Fenix Power Perú S.A.	
País de la empresa deudora	Perú	
Rut entidad acreedora	0-E	
Nombre entidad acreedora	Consorcio Trans m antaro S.A.	
País de la empresa acreedora	Perú	
Moneda o unidad de reajuste	USD	
Tipo de Amortización	Trimestral	
Tipo de interes	Fijo	
Base	-	
Tasa Efectiva	12,00%	
Tasa Nominal	12,00%	
Montos nominales	MUS\$	Totales
has ta 90 días	-	-
más de 90 días hasta 1 año	483	<b>483</b>
<b>más de 1 año hasta 3 años</b>	<b>1.163</b>	<b>1.163</b>
más de 1 año hasta 2 años	544	544
más de 2 años hasta 3 años	619	619
<b>más de 3 años hasta 5 años</b>	<b>1.432</b>	<b>1.432</b>
más de 3 años hasta 4 años	696	696
más de 4 años hasta 5 años	736	736
<b>más de 5 años</b>	<b>11.565</b>	<b>11.565</b>
<b>Subtotal montos nominales</b>	<b>14.643</b>	<b>14.643</b>
Valores contables	MUS\$	Totales
has ta 90 días	-	-
más de 90 días hasta 1 año	483	<b>483</b>
<b>Obligaciones por Leasing corrientes</b>	<b>483</b>	<b>483</b>
<b>más de 1 año hasta 3 años</b>	<b>1.163</b>	<b>1.163</b>
más de 1 año hasta 2 años	544	544
más de 2 años hasta 3 años	619	619
<b>más de 3 años hasta 5 años</b>	<b>1.433</b>	<b>1.433</b>
más de 3 años hasta 4 años	697	697
más de 4 años hasta 5 años	736	736
<b>más de 5 años</b>	<b>11.565</b>	<b>11.565</b>
<b>Obligaciones por Leasing no corrientes</b>	<b>14.161</b>	<b>14.161</b>
<b>Obligaciones por Leasing total</b>	<b>14.644</b>	<b>14.644</b>

## Obligaciones por leasing

Al 31.12.2017		
Rut entidad deudora	0-E	
Nombre entidad deudora	Fenix Power Perú S.A.	
País de la empresa deudora	Perú	
Rut entidad acreedora	0-E	
Nombre entidad acreedora	Consorcio Transmantaro S.A.	
País de la empresa acreedora	Perú	
Moneda o unidad de reajuste	USD	
Tipo de Amortización	Trimestral	
Tipo de interes	Fijo	
Base	-	
Tasa Efectiva	12,00%	
Tasa Nominal	12,00%	
Montos nominales	MUS \$	Totales
has ta 90 días	-	-
más de 90 días hasta 1 año	428	428
<b>más de 1 año hasta 3 años</b>	<b>1.026</b>	<b>1.026</b>
más de 1 año hasta 2 años	482	482
más de 2 años hasta 3 años	544	544
<b>más de 3 años hasta 5 años</b>	<b>1.316</b>	<b>1.316</b>
más de 3 años hasta 4 años	619	619
más de 4 años hasta 5 años	697	697
<b>más de 5 años</b>	<b>12.301</b>	<b>12.301</b>
<b>Subtotal montos nominales</b>	<b>15.071</b>	<b>15.071</b>
Valores contables	MUS \$	Totales
has ta 90 días	-	-
más de 90 días hasta 1 año	428	428
<b>Obligaciones por Leasing corrientes</b>	<b>428</b>	<b>428</b>
<b>más de 1 año hasta 3 años</b>	<b>1.026</b>	<b>1.026</b>
más de 1 año hasta 2 años	482	482
más de 2 años hasta 3 años	544	544
<b>más de 3 años hasta 5 años</b>	<b>1.316</b>	<b>1.316</b>
más de 3 años hasta 4 años	619	619
más de 4 años hasta 5 años	697	697
<b>más de 5 años</b>	<b>12.301</b>	<b>12.301</b>
<b>Obligaciones por Leasing no corrientes</b>	<b>14.643</b>	<b>14.643</b>
<b>Obligaciones por Leasing total</b>	<b>15.071</b>	<b>15.071</b>

c.4 Intereses proyectados por moneda de las obligaciones con entidades financieras:

Pasivo	Moneda Origen	Intereses al 31.12.2018		Capital	Fecha Vencimiento	Vencimiento					Total intereses	Total deuda
		devengados	proyectados			Hasta 3 meses	3 a 12 meses	1 a 3 años	3 a 5 años	más de 5 años		
Bono 144AR eG\$ 2017 (Fenix Power Perú)	US \$	4.057	92.179	335.000	20-09-2027	7.231	7.101	26.657	22.502	32.745	96.236	431.236
Leasing Financiero (Fenix Power Perú)	US \$	-	16.248	15.976	28-03-2033	446	1.318	3.560	3.088	8.036	16.248	32.224
Bono Serie C	UFR	9	65	606	15-04-2021	-	38	36	-	-	74	680
Bono Serie F	UFR	21	620	3.800	01-05-2028	-	125	209	155	152	641	4.441
Bono Serie I	UFR	7	693	2.864	10-06-2029	-	124	212	164	200	700	3.564
Bono 144AR eG\$ 2014	US \$	10.625	124.375	500.000	10-07-2024	11.250	11.250	45.000	45.000	22.500	135.000	635.000
Bono 144AR eG\$ 2017	US \$	4.334	212.916	500.000	11-10-2027	-	19.750	39.500	39.500	118.500	217.250	717.250
Pasivo	Moneda Origen	Intereses al 31.12.2017		Capital	Fecha Vencimiento	Vencimiento					Total intereses	Total deuda
		devengados	proyectados			Hasta 3 meses	3 a 12 meses	1 a 3 años	3 a 5 años	más de 5 años		
Bono 144AR eG\$ 2017 (Fenix Power Perú)	US \$	4.159	106.756	340.000	20-09-2027	7.339	7.339	28.082	24.747	43.408	110.915	450.915
Leasing Financiero (Fenix Power Perú)	US \$	-	18.059	15.976	28-03-2033	457	1.354	3.474	3.232	9.542	18.059	34.035
Bono Serie C	UFR	11	114	789	15-04-2021	-	51	63	11	-	125	914
Bono Serie F	UFR	23	756	4.200	01-05-2028	-	138	236	182	223	779	4.979
Bono Serie I	UFR	7	827	3.000	10-06-2029	-	134	237	188	275	834	3.834
Bono 144AR eG\$ 2014	US \$	10.625	146.875	500.000	10-07-2024	11.250	11.250	45.000	45.000	45.000	157.500	657.500
Bono 144AR eG\$ 2017	US \$	4.334	193.166	500.000	11-10-2027	-	19.750	39.500	39.500	98.750	197.500	697.500

#### d. Líneas de crédito comprometidas y no comprometidas

La Compañía dispone de líneas bancarias no comprometidas por un monto aproximado de US\$ 150 millones.

Otras Líneas:

La Compañía mantiene inscrita en la CMF dos líneas de bonos por un monto conjunto de hasta UF 7 millones, con vigencia a diez y treinta años respectivamente (desde su aprobación en agosto 2009), y contra las que no se han realizado colocaciones a la fecha.

Por su parte Fenix Power cuenta con una línea de crédito comprometida por US\$ 20 millones, con un año plazo de vigencia y nueve meses de plazo remanente, contratada con un banco local.

#### 21. Cuentas por pagar comerciales y otras cuentas por pagar

Los acreedores comerciales y otras cuentas por pagar al 31 de diciembre de 2018 y 2017, respectivamente se detallan a continuación:

	Corrientes		No Corrientes	
	31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
Acreedores comerciales	171.292	176.127	-	-
Dividendos por pagar	584	11.986	-	-
Otras cuentas por pagar	11.007	6.776	3.739	12.924
<b>Total</b>	<b>182.883</b>	<b>194.889</b>	<b>3.739</b>	<b>12.924</b>

Los principales acreedores comerciales al 31 de diciembre de 2018 son:

Principales Acreedores Comerciales	%
Siemens Energy, Inc.	5,02
Mapfre Cía. Seguros de Chile S.A.	4,30
Chubb Seguros Chile S.A.	3,84
Enap Refinerías S.A.	3,49
GE Packaged Power, Inc.	1,87
Punta Palmeras S.A.	1,86
Otros	79,62
	<b>100,00</b>

Estratificación de cartera de cuentas por pagar comerciales:

Concepto	SalDOS al 31.12.2018	
	Vigente MUS\$	Total MUS\$
Bienes	45.382	45.382
Servicios	99.548	99.548
Otros	26.362	26.362
<b>Subtotal</b>	<b>171.292</b>	<b>171.292</b>

Concepto	SalDOS al 31.12.2017	
	Vigente MUS\$	Total MUS\$
Bienes	56.732	56.732
Servicios	107.616	107.616
Otros	11.779	11.779
<b>Subtotal</b>	<b>176.127</b>	<b>176.127</b>

Al 31 de diciembre de 2018 el valor a pagar por concepto de facturas por recibir de bienes y servicios asciende a MUS\$ 104.641; en tanto al 31 de diciembre de 2017 alcanza a MUS\$ 113.289.

El plazo promedio de pago a proveedores es de 30 días desde la fecha de recepción de la factura, por lo que el valor razonable no difiere de forma significativa de su valor contable.

## 22. Otras Provisiones

### a. Clases de provisiones

El detalle de las provisiones al 31 de diciembre de 2018 y 2017, es el siguiente:

Provisiones	Corrientes		No Corrientes	
	31.12.2018 MUS\$	31.12.2017 MUS\$	31.12.2018 MUS\$	31.12.2017 MUS\$
Por procesos legales	7.433	4.461	-	-
Por costos de dejar fuera de servicio, restauración y rehabilitación	-	-	34.948	33.389
Relacionada con el medioambiente	24.071	25.287	-	-
<b>Total</b>	<b>31.504</b>	<b>29.748</b>	<b>34.948</b>	<b>33.389</b>



## b. Movimiento de las provisiones durante el período

El movimiento de las provisiones corrientes y no corrientes durante los períodos terminados al 31 de diciembre de 2018 y 2017, es el siguiente:

Movimiento en Provisiones	Por procesos legales <sup>(1)</sup> MUS \$	Por costos de dejar fuera de servicio, restauración y rehabilitación MUS \$	Relacionada con el medioambiente <sup>(2)</sup> MUS \$	Otras provisiones diversas <sup>(3)</sup> MUS \$	Total MUS \$
Saldo inicial al 01.01.2018	4.461	33.389	25.287	-	63.137
Aumento de provisiones existentes, otras provisiones	2.972	1.559	24.071	-	28.602
Provisiones utilizadas, otras provisiones	-	-	(25.287)	-	(25.287)
<b>Saldo final al 31.12.2018</b>	<b>7.433</b>	<b>34.948</b>	<b>24.071</b>	<b>-</b>	<b>66.452</b>

Movimiento en Provisiones	Por procesos legales <sup>(1)</sup> MUS \$	Por costos de dejar fuera de servicio, restauración y rehabilitación MUS \$	Relacionada con el medioambiente <sup>(2)</sup> MUS \$	Otras provisiones diversas <sup>(3)</sup> MUS \$	Total MUS \$
Saldo inicial al 01.01.2017	5.160	-	-	2.233	7.393
Provisiones nuevas, otras provisiones	-	33.389	25.287	-	58.676
Aumento de provisiones existentes, otras provisiones	2.232	-	-	-	2.232
Provisiones utilizadas, otras provisiones	(2.931)	-	-	(2.233)	(5.164)
<b>Saldo final al 31.12.2017</b>	<b>4.461</b>	<b>33.389</b>	<b>25.287</b>	<b>-</b>	<b>63.137</b>

<sup>(1)</sup> Provisiones constituidas por diferencias y/o contingencias administrativas y tributarias. (ver nota 35.c)

<sup>(2)</sup> Corresponde a la provisión del gasto por impuesto que grava las Emisiones de Centrales Térmicas (Ley 20.780), las cuales empezaron a regir en enero de 2017.

<sup>(3)</sup> Provisiones que tienen su origen en diferencias relacionadas a suministros pactados con clientes.

## c. Desmantelamiento

El saldo no corriente de esta provisión corresponde al desembolso relacionado al cierre de algunas instalaciones, y a los costos futuros asociados al retiro de ciertos activos y rehabilitación de determinados terrenos.

## d. Reestructuración

La Compañía no ha estimado ni registrado provisiones por este concepto.

## e. Litigios

Al 31 de diciembre de 2018 y 2017, la Compañía registra provisiones para litigios, de acuerdo a NIC37 (ver nota 35, letra c).

## 23. Provisiones por beneficios a los empleados

### a. Beneficios a los Empleados

La Compañía reconoce provisiones de beneficios y bonos para sus trabajadores, tales como provisión de vacaciones, beneficios por término de contrato en proyectos e incentivos de producción.

El detalle de las provisiones al 31 de diciembre de 2018 y 2017, es el siguiente:

Beneficios empleados	Corriente		No Corriente	
	31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
Provisión vacaciones, corrientes	3.989	4.272	-	-
Incentivo de desempeño, corrientes	10.843	13.053	-	-
Término de contrato proyectos	-	-	-	426
Otros beneficios	175	-	3.428	4.669
Provisión por reserva IAS	5.455	5.596	27.358	27.738
<b>Total</b>	<b>20.462</b>	<b>22.921</b>	<b>30.786</b>	<b>32.833</b>

### b. Movimiento de las provisiones durante el período

El movimiento de las provisiones corrientes durante los períodos terminados al 31 de diciembre de 2018 y 2017, es el siguiente:

Movimiento en Provisiones	Provisión vacaciones, corrientes MUS \$	Incentivo de desempeño, corrientes MUS \$	Otros beneficios, corrientes MUS \$	Provisión por reserva IAS MUS \$	Total MUS \$
Saldo inicial al 01.01.2018	4.272	13.053	-	5.596	22.921
Aumento de provisiones existentes, otras provisiones	295	10.991	175	(141)	11.320
Provisiones utilizadas, otras provisiones	(578)	(13.201)	-	-	(13.779)
<b>Saldo final al 31.12.2018</b>	<b>3.989</b>	<b>10.843</b>	<b>175</b>	<b>5.455</b>	<b>20.462</b>

Movimiento en Provisiones	Provisión vacaciones, corrientes MUS \$	Incentivo de desempeño, corrientes MUS \$	Otros beneficios, no corrientes MUS \$	Provisión por reserva IAS MUS \$	Total MUS \$
Saldo inicial al 01.01.2017	3.783	11.213	-	-	14.996
Provisiones nuevas, otras provisiones	-	-	-	5.596	5.596
Aumento de provisiones existentes, otras provisiones	489	1.840	-	-	2.329
Provisiones utilizadas, otras provisiones	-	-	-	-	-
<b>Saldo final al 31.12.2017</b>	<b>4.272</b>	<b>13.053</b>	<b>-</b>	<b>5.596</b>	<b>22.921</b>

### c. Provisiones no corrientes por beneficios a los empleados

La Compañía y algunas subsidiarias han constituido provisión para cubrir la obligación por indemnización por años de servicios que será pagado a su personal, de acuerdo con los contratos colectivos e individuales suscritos con sus trabajadores. Esta provisión representa el total de la provisión devengada (ver nota 3.1. m.).

La Compañía evalúa permanentemente las bases utilizadas en el cálculo actuarial de las obligaciones con empleados. Al 31 de diciembre de 2018 la Compañía actualizó algunos indicadores a modo de reflejar de mejor manera las condiciones actuales de mercado.

i) **Composición de la provisión de beneficios al personal** - El detalle de los principales conceptos incluidos al 31 de diciembre de 2018 y 2017, es el siguiente:

<b>Provisión beneficios al personal</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
	MUS \$	MUS \$
Indemnización años de servicio del personal	32.813	33.334
<b>Total</b>	<b>32.813</b>	<b>33.334</b>
<b>Valor presente obligación plan de beneficios definidos</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
	MUS \$	MUS \$
Saldo inicial	33.334	26.441
Costo de servicio corriente	4.471	2.387
Costo por intereses	527	517
Diferencia de conversión de moneda extranjera	(3.839)	2.354
Ganancias (pérdidas) actuariales	726	3.128
Pagos	(2.406)	(1.493)
<b>Saldo final</b>	<b>32.813</b>	<b>33.334</b>

ii) **Hipótesis actuariales** - Los principales supuestos utilizados para propósitos del cálculo actuarial son las siguientes:

<b>Bases actuariales utilizadas</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Tasa de descuento	1,85%	2,17%
Tasa esperada de incrementos salariales	1,62%	1,62%
Índice de rotación	Voluntario	2,30%
	Despido	3,70%
Edad de retiro	Hombres	65
	Mujeres	60
Tabla de mortalidad	RV-2014	RV-2014

**Tasa de descuento:** Corresponde al tipo de interés a utilizar para traer al momento actual los desembolsos que se estima se efectuarán en el futuro. Esta es determinada de acuerdo a la tasa de descuento de los Bonos en UF del Banco Central de Chile a 20 años plazo al 31 de diciembre de 2018. La fuente de obtención de la tasa de referencia es Bloomberg.

**Tasa Crecimiento Salarial:** Es la tasa de crecimiento salarial estimada por la Compañía, para las remuneraciones de sus trabajadores, en función de la política interna de compensaciones.

**Tasas de Rotación:** Corresponde a las tasas de rotación calculadas por la Compañía, en función de su información histórica.

Edad de jubilación: Edad de jubilación (lo anterior subrayado): Corresponde a las edades legales para jubilación, tanto de hombres como de mujeres, según lo señalado en DL 3.500, que contiene las normas que rigen el actual sistema de pensiones.

Tabla de Mortalidad: Corresponde a la tabla de mortalidad publicada por la Comisión para el Mercado Financiero.

iii) **Sensibilización a supuestos actuariales** - Para efectos de sensibilización, se ha considerado como parámetro relevante, solo la tasa de descuento. A continuación, se presentan los resultados de los cambios en el pasivo actuarial, producto de sensibilizar la tasa de descuento:

Sensibilización	Tasa		Monto de la obligación	
	31.12.2018 %	31.12.2017 %	31.12.2018 MUS \$	31.12.2017 MUS \$
Tasa del periodo	1,85	2,17	33.196	33.779
Tasa con disminución de 50 p.b.	1,35	1,67	35.652	36.256
Tasa con incremento de 50 p.b.	2,35	2,67	30.980	31.542

## 24. Otros pasivos no financieros

Los otros pasivos al 31 de diciembre de 2018 y 2017, respectivamente, se detallan a continuación:

	Corriente		No corriente	
	31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
Retenciones	23.101	21.180	-	-
Ingreso anticipado <sup>(1)</sup>	867	899	13.013	12.210
<b>Total</b>	<b>23.968</b>	<b>22.079</b>	<b>13.013</b>	<b>12.210</b>

<sup>(1)</sup> Corresponde a anticipos recibidos, relacionados con las operaciones y servicios de mantención. El ingreso es reconocido cuando el servicio es prestado. El saldo presentado como No Corriente incluye MUS\$ 6.469 correspondiente al reconocimiento del leasing que la Compañía mantiene con Anglo American (vencimiento contrato al año 2030).

## 25. Información a revelar sobre el patrimonio

### a. Capital suscrito y pagado y número de acciones

En Junta General de Accionistas de Colbún S.A., celebrada con fecha 29 de abril de 2009 se aprobó el cambio de moneda en que se encuentra expresado el capital social desde el 31 de diciembre de 2008, quedando este expresado en dólares de los Estados Unidos de América, utilizando el tipo de cambio de cierre al 31 de diciembre de 2008, dividido en 17.536.167.720 acciones ordinarias, nominativas, de igual valor cada una y sin valor nominal.

Al 31 de diciembre de 2018 y 2017, el detalle del capital suscrito y pagado y número de acciones es el siguiente:

**Número de acciones**

Serie	Número acciones suscritas	Número acciones pagadas	Número acciones con derecho a voto
Única	17.536.167.720	17.536.167.720	17.536.167.720

**Capital (Monto US \$)**

Serie	Capital suscrito MUS \$	Capital pagado MUS \$
Única	1.282.793	1.282.793

### a.1 Conciliación de acciones

A continuación, se presenta una conciliación entre el número de acciones en circulación al principio y al final de los períodos informados:

Acciones	31.12.2018	31.12.2017
Número de acciones en circulación al inicio del ejercicio	17.536.167.720	17.536.167.720
<b>Cambios en el número de acciones en circulación</b>		
Incremento (disminución) en el número de acciones en circulación	-	-
Número de acciones en circulación al final del ejercicio	17.536.167.720	17.536.167.720

### a.2 N° de accionistas

Al 31 de diciembre de 2018, el número de accionistas es 2.891.

### b. Capital social

El capital social corresponde al capital pagado indicado en la letra a.

### c. Primas de emisión

Al 31 de diciembre de 2018 y 2017, el rubro primas de emisión asciende a MUS\$52.595 y se compone de un monto de MUS\$30.700, correspondiente al sobreprecio percibido en el período de la suscripción de emisión de acciones aprobada en la Junta Extraordinaria de Accionistas del 14 de marzo de 2008, más un sobreprecio en venta de acciones propias por MUS\$21.895, producto de aumentos de capital anteriores al año 2008.

### d. Dividendos

La política general y procedimiento de distribución de dividendos acordada por la Junta de Accionistas del 27 de abril del 2018, estableció la distribución de un dividendo mínimo de un 50% de la utilidad líquida distribuible. En conformidad a lo establecido en NIIF, existe una obligación legal y asumida que requiere la contabilización de un pasivo al cierre de cada ejercicio por concepto de dividendo mínimo legal.

En sesión de Directorio de fecha 28 de noviembre de 2017 se acordó la distribución de un dividendo provisorio con cargo a la utilidad líquida distribuible del ejercicio terminado al 31 de diciembre de 2017, pagadero en dinero ascendente a la cantidad total de MUS\$ 58.220, correspondiente a US\$ 0,003320 por acción. Este dividendo se comenzó a pagar el 20 de diciembre de 2017.

En sesión de Directorio de fecha 27 de marzo de 2018 se acordó proponer a la Junta de Accionistas distribuir como dividendo el 100% de la utilidad líquida distribuible del ejercicio 2017, por un total de MUS\$ 270.985. El monto anterior se compone de un dividendo provisorio por MUS\$ 58.220 antes mencionado, pagado en diciembre de 2017, y MUS\$ 212.765 a un dividendo definitivo.

En Junta de Accionistas de fecha 27 de abril de 2018 se aprobó distribuir un dividendo definitivo N° 50, con cargo a las utilidades del ejercicio terminado el 31 de diciembre de 2017, por la cantidad total de MUS\$ 212.765 correspondiente a US\$ 0,01214 por acción, el que se comenzó a pagar el 8 de mayo de 2018.

En sesión de Directorio de fecha 27 de noviembre de 2018 se acordó la distribución de un dividendo provisorio con cargo a la utilidad líquida distribuible del ejercicio terminado al 31 de diciembre de 2018, pagadero en dinero ascendente a la cantidad total de MUS\$ 84.236, correspondiente a US\$ 0,00480 por acción. Este dividendo se comenzó a pagar el 19 de diciembre de 2018.

## e. Composición de Otras reservas

El siguiente es el detalle de las otras reservas:

Otras reservas	31.12.2018 MUS \$	31.12.2017 MUS \$
Efecto primera adopción deflactación capital pagado	517.617	517.617
Efecto primera adopción conversión NIC 21	(230.797)	(230.797)
Revaluación propiedades, planta y equipos	428.893	445.137
Impuesto diferido revaluación	(115.780)	(120.187)
Reserva fusión	213.024	232.153
Efecto conversión asociadas	(40.680)	(48.038)
Reserva subsidiarias	(12.142)	(13.942)
Reserva de cobertura	10.124	5.273
Efecto cobertura coligadas	190	156
<b>Total</b>	<b>770.449</b>	<b>787.372</b>

Efecto primera adopción deflactación capital pagado: Oficio Circular N°456 de la Comisión para el Mercado Financiero y efecto primera adopción conversión NIC 21: Reservas generadas por adopción por primera vez de las Normas Internacionales de Información Financiera (NIIF), las cuales se consideran susceptibles de ser capitalizadas, si las normas contables y la ley lo permiten.

Revaluación Propiedades, planta y equipo: La metodología utilizada para cuantificar la realización de este concepto, correspondió a la aplicación de las vidas útiles por clase de activo usadas para el proceso de depreciación al monto de revalorización determinado a la fecha de adopción.

Impuestos diferidos: Los ajustes en la valuación de los activos y pasivos generados por la aplicación de NIIF, han significado la determinación de nuevas diferencias temporarias que fueron registradas contra la cuenta Ganancias acumuladas en el Patrimonio. La realización de este concepto se ha determinado en la misma proporción que lo han hecho las partidas que le dieron origen.

Reserva fusión: Corresponde a reserva por revaluación de activos a valor justo registradas en fusiones de años anteriores, cuyos montos no han sido realizados.

Efecto conversiones asociadas: Corresponde a la diferencia de cambio generada por las variaciones de cambio de la moneda extranjera sobre las inversiones en asociadas y negocios conjuntos, las cuales mantienen como moneda funcional el Peso chileno.

Reserva subsidiaria: Reserva originada en la fusión y variación en la participación de subsidiarias, se consideran susceptibles de ser capitalizadas, si las normas contables y la ley lo permiten.

Efecto reserva de cobertura: Representan la porción efectiva de aquellas transacciones que han sido designadas como coberturas del flujo de efectivo, a la espera de reconocimiento de la partida cubierta en resultados.

## f. Ganancias (pérdidas) acumuladas

El movimiento de la reserva por resultados acumulados al 31 de diciembre de 2018 y 2017 es el siguiente:

<b>Ganancias acumuladas distribuibles</b>	<b>31.12.2018</b> MUS \$	<b>31.12.2017</b> MUS \$
Saldo inicial	1.601.772	1.424.924
Resultado del ejercicio	240.350	270.985
Efecto ganancias (pérdidas) actuariales	(558)	(1.912)
Dividendos	(309.866)	(121.473)
Resultado acumulado realizado	20.899	29.248
Reserva Legal Filiales (art N°229 LGS, Perú) <sup>(1)</sup>	(1.920)	-
<b>Total ganancias acumuladas distribuibles</b>	<b>1.550.677</b>	<b>1.601.772</b>

<sup>(1)</sup> De acuerdo con la Ley General de Sociedades, la reserva legal se constituye transfiriendo como mínimo 10 por ciento de la utilidad neta de cada ejercicio, después de deducir pérdidas acumuladas, hasta que alcance un monto equivalente a la quinta parte del capital. En ausencia de utilidades no distribuidas o reservas de libre disposición, la reserva legal debe ser aplicada a compensar pérdidas, pero debe ser repuesta. La reserva legal puede ser capitalizada, pero igualmente debe ser repuesta.

## g. Gestión de capital

La Gestión de Capital se enmarca dentro de las Políticas de Inversiones y de Financiamiento que mantiene la Compañía, las cuales establecen entre otras materias que las inversiones deberán contar con financiamiento apropiado de acuerdo al proyecto de que se trate, conforme a la Política de Financiamiento.

La Compañía procurará mantener una liquidez suficiente que le permita contar con una holgura financiera adecuada para hacer frente a sus compromisos y a los riesgos asociados a sus negocios. Los excedentes de caja que mantenga la Sociedad se invertirán en títulos emitidos por instituciones financieras y valores negociables de acuerdo con los criterios de selección y diversificación de cartera que determine la administración de la Sociedad.

El control de las inversiones será realizado por el Directorio, quien aprobará las inversiones específicas, tanto en su monto como en su financiamiento, teniendo como marco de referencia lo dispuesto en los Estatutos de la Sociedad y lo que aprobare la Junta de Accionistas, si fuere el caso.

El financiamiento debe procurar proveer los fondos necesarios para una adecuada operación de los activos existentes, así como para la realización de nuevas inversiones conforme a la Política de Inversiones expuesta. Para ello se utilizarán los recursos internos que se dispongan y recursos externos hasta un límite que no comprometa la posición patrimonial de la Compañía o que limite su crecimiento.

Consistente con lo anterior, el nivel de endeudamiento debe procurar no comprometer la calificación crediticia "investment grade" de los instrumentos de deuda emitidos por Colbún en los mercados nacionales e internacionales.

La Compañía procurará mantener abiertas múltiples opciones de financiamiento, para lo cual se preferirán las siguientes fuentes de financiamiento: créditos bancarios, tanto internacional como nacional, mercado de bonos de largo plazo, tanto internacional como doméstico, crédito de proveedores, utilidades retenidas y aumentos de capital.



Los ratios de endeudamiento al 31 de diciembre de 2018 y 2017 son los siguientes:

	31.12.2018 MUS \$	31.12.2017 MUS \$
<b>Total pasivos</b>	<b>2.921.411</b>	<b>2.971.835</b>
Total pasivos corrientes	345.365	360.397
Total pasivos no corrientes	2.576.046	2.611.438
<b>Patrimonio total</b>	<b>3.856.938</b>	<b>3.950.707</b>
Patrimonio atribuible a la controladora	3.656.514	3.724.532
Participaciones no controladoras	200.424	226.175
<b>Razón de endeudamiento</b>	<b>0,76</b>	<b>0,75</b>

La Compañía debe informar trimestralmente el cumplimiento de compromisos contraídos con entidades financieras. Al 31 de diciembre de 2018 la Compañía está en cumplimiento con todos los indicadores financieros exigidos en dichos contratos (Ver nota 36).

#### h. Ganancias por acción y utilidad líquida distribuible

El resultado por acción se ha obtenido dividiendo el resultado atribuido a los accionistas de la controladora por el promedio ponderado de las acciones ordinarias en circulación durante los ejercicios informados.

	31.12.2018	31.12.2017
Ganancia (Pérdida) Atribuible a los Tenedores de Instrumentos de Participación en el Patrimonio Neto de la Controladora (MUS \$)	240.350	270.985
Resultado Disponible para Accionistas Comunes, Básico (MUS \$)	240.350	270.985
Promedio Ponderado de Número de Acciones, Básico (N° de acciones)	17.536.167.720	17.536.167.720
<b>Ganancias Básicas por Acción (dólares por acción)</b>	<b>0,01371</b>	<b>0,01545</b>

La Compañía no ha realizado ningún tipo de operación de potencial efecto dilutivo que suponga una ganancia por acción diluida diferente del beneficio básico por acción durante el período informado.

En virtud a lo dispuesto en la Circular N°1.945 del 29 de septiembre de 2009, Colbún S.A., acordó establecer como política general que la utilidad líquida distribuible a considerar para el cálculo del Dividendo Mínimo Obligatorio y Adicional, se determina sobre la base efectivamente realizada, depurándola de aquellas variaciones relevantes del valor razonable de los activos y pasivos que no estén realizados, las cuales deben ser reintegradas al cálculo de la utilidad líquida del ejercicio en que tales variaciones se realicen.

En consecuencia, los agregados y deducciones a realizar a la utilidad líquida distribuible por variaciones del valor razonable de los activos o pasivos que no estén realizados y que hayan sido reconocidos en la “ganancia (pérdida) atribuible a tenedores de instrumentos de participación en el patrimonio neto de la controladora”, corresponden a los eventuales efectos generados por las variaciones del valor justo de los instrumentos derivados que mantenga la Compañía al cierre de cada período, netas del impuesto a la renta correspondiente.

El cálculo de la utilidad líquida distribuible es el siguiente, a la fecha que indica:

Cálculo utilidad líquida distribuible (Flujos de caja)	31.12.2018	31.12.2017
	MUS \$	MUS \$
<b>Ganancia atribuible a los propietarios de la controladora</b>	<b>240.350</b>	<b>270.985</b>
Flujos de caja en el ejercicio con cargo a ejercicios anteriores	-	-
Efecto en resultado financiero no realizado que no generó flujo de caja	-	-
<b>Flujo neto del ejercicio</b>	<b>-</b>	<b>-</b>
<b>Utilidad líquida distribuible</b>	<b>240.350</b>	<b>270.985</b>
<b>Dividendo mínimo obligatorio</b>	<b>120.175</b>	<b>81.296</b>

La política general y procedimiento de distribución de dividendos acordada por la Junta de Accionistas del 27 de abril del 2018, estableció la distribución de un dividendo mínimo de un 50% de la utilidad líquida distribuible.

## 26. Ingresos de actividades ordinarias

Los ingresos ordinarios por los ejercicios terminados al 31 de diciembre de 2018 y 2017, respectivamente, se presentan en el siguiente detalle:

	Enero - Diciembre	
	2018	2017
	MUS \$	MUS \$
Ventas clientes distribuidoras	706.566	796.942
Ventas clientes industriales	587.953	425.347
Peajes	138.233	189.541
Ventas a otras generadoras	111.037	112.474
Otros ingresos	27.558	24.108
<b>Total</b>	<b>1.571.347</b>	<b>1.548.412</b>

## 27. Materias primas y consumibles utilizados

El consumo de materias primas y materiales secundarios por los ejercicios terminados al 31 de diciembre de 2018 y 2017, respectivamente, se presentan en el siguiente detalle:

	Enero - Diciembre	
	2018	2017
	MUS \$	MUS \$
Consumo petróleo (ver nota 12)	(16.429)	(31.145)
Consumo gas (ver nota 12)	(355.478)	(308.369)
Consumo carbón (ver nota 12)	(86.799)	(73.813)
Compra energía y potencia	(45.513)	(46.004)
Peajes	(170.111)	(194.087)
Trabajo y suministro de terceros	(99.273)	(102.262)
<b>Total</b>	<b>(773.603)</b>	<b>(755.680)</b>

## 28. Gasto por beneficios a los empleados

Los gastos por beneficios a los empleados por los ejercicios terminados al 31 de diciembre de 2018 y 2017, respectivamente, se presentan en el siguiente detalle (ver nota 3.1.m. y 3.1.o.):

	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Sueldos y salarios	(60.722)	(60.467)
Beneficios a corto plazo a los empleados	(6.203)	(6.044)
Indemnización por término de relación laboral	(6.259)	(3.583)
Otros gastos de personal	(6.581)	(6.691)
<b>Total</b>	<b>(79.765)</b>	<b>(76.785)</b>

## 29. Gastos por depreciación y amortización

La depreciación y amortización por los ejercicios terminados al 31 de diciembre de 2018 y 2017, respectivamente, se presentan en el siguiente detalle:

	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Depreciaciones (ver nota 17.b)	(231.348)	(218.259)
Amortizaciones de intangibles (ver nota 16.b)	(5.607)	(5.229)
<b>Total</b>	<b>(236.955)</b>	<b>(223.488)</b>

## 30. Resultado de ingresos y costos financieros

El resultado financiero por los ejercicios terminados al 31 de diciembre de 2018 y 2017, respectivamente, se presenta en el siguiente detalle:

Ingreso (Pérdida) procedente de Inversiones	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de efectivo y otros medios equivalentes	20.367	12.726
<b>Total Ingresos Financieros</b>	<b>20.367</b>	<b>12.726</b>
Costos Financieros	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Gastos por bonos	(72.868)	(69.186)
Gasto por provisiones financieras	(8.587)	(8.073)
Gasto/Ingresos por valoración derivados financieros netos	(1.978)	(2.089)
Gastos por préstamos bancarios	-	(9.356)
Gasto por otros (gastos bancarios)	(438)	(214)
Gastos financieros activados (ver nota 17.c.iv)	-	3.964
<b>Total Costo Financiero</b>	<b>(83.871)</b>	<b>(84.954)</b>
<b>Total resultado financiero</b>	<b>(63.504)</b>	<b>(72.228)</b>

### 31. Diferencia de cambio neta y Resultado por unidades de reajuste

Las partidas que originan los efectos en resultados por los conceptos diferencia de cambio neta y resultado por unidades de reajuste se detallan a continuación:

Diferencia de cambio	Moneda	Enero - Diciembre	
		2018 MUS \$	2017 MUS \$
Efectivo y equivalentes al efectivo	Pesos	(24.199)	12.543
Efectivo y equivalentes al efectivo	Soles	839	327
Deudores comerciales y otras cuentas por cobrar	Pesos	(10.680)	11.726
Deudores comerciales y otras cuentas por cobrar	Soles	467	139
Activos por impuestos corrientes	Pesos	247	(1.315)
Activos por impuestos corrientes	Soles	615	957
Otros activos no financieros no corrientes	Pesos	(1.242)	1.907
Otros activos no financieros no corrientes	Soles	19	902
Cuentas por cobrar a entidades relacionadas no corrientes	Pesos	-	(800)
<b>Diferencia de cambio activo</b>		<b>(33.934)</b>	<b>26.386</b>
Otros pasivos financieros corrientes	UF	8.159	(9.489)
Otros pasivos financieros corrientes	Soles	24	(39)
Cuentas por pagar comerciales otras cuentas por pagar	Pesos	7.166	(2.467)
Cuentas por pagar comerciales otras cuentas por pagar	Soles	52	(13)
Otros pasivos no financieros	Pesos	82	(3.296)
Provisiones por beneficios a los empleados	Pesos	5.810	(2.913)
<b>Diferencia de cambio pasivo</b>		<b>21.293</b>	<b>(18.217)</b>
<b>Total Diferencia de Cambio</b>		<b>(12.641)</b>	<b>8.169</b>

### 32. Ingresos (pérdidas) por inversiones contabilizadas por el método de participación

Los ingresos por inversiones contabilizadas por el método de participación por los ejercicios terminados al 31 de diciembre de 2018 y 2017 respectivamente, se presentan en el siguiente detalle:

Participación neta en ganancia de asociadas	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Electrogas S.A.	7.670	8.187
Centrales Hidroeléctricas de Aysén S.A. <sup>(1)</sup>	2.756	(6.202)
Aysén Transmisión S.A., en Liquidación <sup>(2)</sup>	(42)	-
Aysén Energía S.A., en Liquidación <sup>(2)</sup>	(15)	-
Transmisora Eléctrica de Quillota Ltda.	1.019	919
<b>Total</b>	<b>11.388</b>	<b>2.904</b>

<sup>(1) (2)</sup> Ver nota 3.1.c

### 33. Otras ganancias (pérdidas)

Las otras ganancias (pérdidas) al 31 de diciembre de 2018 y 2017 respectivamente, se presentan en el siguiente detalle:

Otros Ingresos distintos de los de operación	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Seguros	71	1.269
Otros ingresos	1.556	3.029
Combinación de Negocios	-	23.352
<b>Total otros ingresos</b>	<b>1.627</b>	<b>27.650</b>
Otros Gastos distintos de los de operación	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Deterioro patentes derechos de agua no utilizados	(8.076)	(5.928)
Deterioro derechos de agua	-	(1.154)
Deterioro proyectos varios <sup>(1)</sup>	(18.823)	(63.002)
Resultados contratos derivados	(832)	(1.840)
Honorarios atención de juicios	(1.118)	(1.303)
Bajas bienes propiedades, planta y equipo	(1.495)	(7.198)
Cas tigos y multas	(1.018)	(51)
Cláus ula de salida, término contrato GNL-C hile	-	(2.356)
Emisiones de centrales térmicas <sup>(2)</sup>	(9.663)	(10.907)
Comisión prepago bono 2020 (Make Whole)	-	(12.648)
Ajus te provisión contingencia Termochilca	-	2.047
Obs oles cencia de exis tencias	(2.126)	-
Costo des mantelamiento	(1.288)	-
Donaciones y aportes comunitarios	(3.167)	-
Otros <sup>(3)</sup>	(7.589)	(8.115)
<b>Total otros gastos</b>	<b>(55.195)</b>	<b>(112.455)</b>
<b>Total otras ganancias (pérdidas )</b>	<b>(53.568)</b>	<b>(84.805)</b>

<sup>(1)</sup> Corresponde al registro de provisiones por deterioro parcial de Proyectos hídricos en estudio por MUS\$16 millones; el monto restante son diversos otros cargos que acumulan un monto por US\$2,8 millones.

<sup>(2)</sup> Corresponde a la provisión del gasto por impuesto que grava las Emisiones de Centrales Térmicas (Ley 20.780), las cuales comenzaron a regir a partir de enero 2017.

<sup>(3)</sup> Durante junio de 2018 se registró una provisión por deterioro por MMUS\$ 4,1 asociado a la adquisición de la Sociedad Santa Sofia

34. Garantías comprometidas con terceros, activos y pasivos contingentes

a. Garantías comprometidas con terceros

a.1 Garantías directas

Acreedor de la garantía	Deudor		Relación	Activos comprometidos			Saldos pendientes 31.12.2018		2019	2022	2025	2099
	Nombre	Tipo de garantía		Tipo moneda	Valor Contable	MUS\$						
						2018	2019					
Dirección Regional de Viabilidad del Bio-Bío	Colbún S.A.	Boleta de Garantía	CLP	600.000.000	864	-	-	-	-	-	-	
Hospital Guillermo Grant Benavente	Colbún S.A.	Boleta de Garantía	CLP	135.415.080	195	-	-	-	-	195	-	
Hospital Las Higueras	Colbún S.A.	Boleta de Garantía	CLP	125.069.734	180	-	-	-	-	180	-	
Complejo Asistencial Dr. Víctor Ríos Ruiz	Colbún S.A.	Boleta de Garantía	CLP	123.921.099	178	-	-	-	-	178	-	
Hospital Herminia Merín	Colbún S.A.	Boleta de Garantía	CLP	87.962.609	127	-	-	-	-	127	-	
Asfíltero y Maestranza de La Armada	Colbún S.A.	Boleta de Garantía	CLP	80.000.000	115	-	-	-	-	-	-	
Hospital Penco-Lirquén	Colbún S.A.	Boleta de Garantía	CLP	32.544.993	47	-	-	-	-	47	-	
Hospital San Carlos	Colbún S.A.	Boleta de Garantía	CLP	23.370.206	34	-	-	-	-	34	-	
Hospital Trauma biológico de Concepción	Colbún S.A.	Boleta de Garantía	CLP	23.058.502	33	-	-	-	-	33	-	
Hospital Tomé	Colbún S.A.	Boleta de Garantía	CLP	15.700.562	23	-	-	-	-	23	-	
Ciribank NA	Fenix Power Perú S.A.	Boleta de Garantía	USD	13.250.000	13.250	-	-	-	-	-	-	
Gobierno Regional de la Región del Bio-Bío	Colbún S.A.	Boleta de Garantía	CLP	6.730.719	10	-	-	-	-	10	-	
Universidad de Concepción	Colbún S.A.	Boleta de Garantía	CLP	5.000.000	7	-	-	-	-	7	-	
Centro de Sangre Concepción	Colbún S.A.	Boleta de Garantía	CLP	4.794.720	7	-	-	-	-	7	-	
Consorcio Transmataro	Fenix Power Perú S.A.	Boleta de Garantía	USD	3.000.000	3.000	-	-	-	-	-	-	
Cementos Bio-Bío del Sur S.A.	Colbún S.A.	Boleta de Garantía	USD	1.021.726	1.022	-	-	-	-	-	-	
Coordinador Independiente del Sistema Eléctrico Nacional	Colbún S.A.	Boleta de Garantía	USD	890.000	890	-	-	-	-	-	-	
Empresas CMPC S.A.	Colbún S.A.	Boleta de Garantía	UF	378.000	14.998	-	-	-	-	-	-	
Compañía Minera Zaldívar SpA	Colbún S.A.	Boleta de Garantía	UF	250.000	9.919	-	-	-	-	-	-	
Ministerio de Bienes Nacionales	Colbún S.A.	Boleta de Garantía	UF	47.672	1.891	-	-	-	-	1.891	-	
Cemento Polpaico S.A.	Colbún S.A.	Boleta de Garantía	UF	22.500	893	-	-	-	-	-	-	
Ministerio de Obras Públicas Dirección de Aguas	Colbún S.A.	Boleta de Garantía	UF	15.361	609	-	-	-	-	-	-	
Asociación Chilena de Seguridad	Colbún S.A.	Boleta de Garantía	UF	7.720	306	-	-	-	-	-	-	
Corporación Nacional del Cobre	Colbún S.A.	Boleta de Garantía	USD	1.200	48	-	-	-	-	-	-	
Enel Distribución Chile S.A. <sup>(1)</sup>	Colbún S.A.	Boleta de Garantía	UF	100	4	-	-	-	-	-	4	
<b>Total</b>							<b>48.650</b>					

(1) Garantía con fecha de vencimiento indefinido.

## b. Caucciones obtenidas de terceros

## b.1 Garantías vigentes en Dólares al 31 de diciembre de 2018

Depositado por	Relación con la sociedad	Total MUS\$
Siemens Financial Services Inc	Proveedores	9.000
Consorcio Isotron Sacyr S.A.	Proveedores	6.200
Ingeniería Agrosonda SpA	Proveedores	3.275
Tsgf SpA	Proveedores	2.892
Soc.Comercial e Ing. y Gestión Industrial Ingher Ltda.	Proveedores	732
Abengoa Chile S.A.	Proveedores	593
Siemens S.A.	Proveedores	290
Vigaflow S.A.	Proveedores	259
Thoshiba América Do Sul Ltda.	Proveedores	163
ABB S.A.	Proveedores	158
Pine SpA	Proveedores	81
SAP Chile Ltda.	Proveedores	55
GE Energy Parts Inc	Proveedores	23
Engie Chile S.A.	Proveedores	19
Schneider Electric Chile Ltda.	Proveedores	19
Reliable Energy Ingeniería Ltda.	Proveedores	17
Rhona S.A.	Proveedores	14
Social Capital Group SAC	Proveedores	3
<b>Total</b>		<b>23.793</b>

## b.2 Garantías vigentes en Euros al 31 de diciembre de 2018

Depositado por	Relación con la sociedad	Total MUS\$
Andritz Chile Ltda.	Proveedores	1.879
Andritz Hydro S.R.L.	Proveedores	224
Siemens S.A	Proveedores	53
<b>Total</b>		<b>2.156</b>

## b.3 Garantías vigentes en Pesos al 31 de diciembre de 2018

Depositado por	Relación con la sociedad	Total MUS \$
Rhona S.A.	Proveedores	661
ODR Ingeniería y Montaje Ltda.	Proveedores	501
SG Ingeniería Eléctrica Ltda.	Proveedores	360
Konecranes Chile SpA	Proveedores	177
Climatermic Ltda.	Proveedores	116
Constructora Pesca Ltda.	Proveedores	92
Sistema Integral de Telecomunicaciones Ltda.	Proveedores	44
Sodexo Chile S.A.	Proveedores	43
Andritz Metaliza S.A.	Proveedores	41
Dimetales SpA	Proveedores	38
ISS Facility Service S.A.	Proveedores	33
Constructora R2 SpA	Proveedores	28
Asesoría Forestal Integral Ltda.	Proveedores	16
Serv. Industriales Esteban Carrasco	Proveedores	8
Ingeteco SpA	Proveedores	6
Transportes María Angélica Álvarez Empr.	Proveedores	5
Verónica Peña V. Forestal Paisaje Forestal EIRL	Proveedores	5
Garmendia Macus S.A.	Proveedores	5
Ximena Mariela Soto Orellana	Proveedores	4
Corrosión Integral y Tecnología Ltda.	Proveedores	4
Andrés Bustos Ojeda Soc. Ltda.	Proveedores	4
Eulen Seguridad S.A.	Proveedores	3
Máximo E. Sanhueza Manríquez	Proveedores	2
<b>Total</b>		<b>2.196</b>



## b.4 Garantías vigentes en Unidades de Fomento al 31 de diciembre de 2018

Depositado por	Relación con la sociedad	Total MUS\$
Zublin International GmbH Chile SpA	Proveedores	2.273
Serv. Industriales Ltda.	Proveedores	327
Soc. OGM Mecánica Integral S.A.	Proveedores	150
KDM Industrial S.A.	Proveedores	148
Echeverría Izquierdo Montajes Industriales S.A.	Proveedores	81
Andritz Chile Ltda.	Proveedores	77
Charrúa Transmisora de Energía S.A.	Proveedores	75
Soc. Austral de Electricidad S.A.	Proveedores	75
Soc. Comercial Camin Ltda.	Proveedores	63
Securitas S.A.	Proveedores	57
IMCD Ingeniería y Construcción SpA	Proveedores	57
Serv. Emca SpA	Proveedores	54
Soc. Comercial San Cristóbal Ltda.	Proveedores	48
Abengoa Chile S.A.	Proveedores	48
Ingeniería Agrosonda SpA	Proveedores	48
Soc. de Serv. Integrales de Ingeniería, Mantenimiento y Reparación Zu Ltda.	Proveedores	48
Constructora Propuerto Ltda.	Proveedores	46
MV Servicios para la Construcción Ltda.	Proveedores	45
Constructora Javag SpA	Proveedores	44
Sodexo Chile S.A.	Proveedores	43
Latinoamericana Serv. de Ing. y Construcción Ltda.	Proveedores	38
Durán y Durán Cía. de Seguridad Ltda.	Proveedores	35
Transporte José Carrasco Retamal E.I.R.L.	Proveedores	33
Bus es Ahumada Ltda.	Proveedores	32
Flota Verschae Viña del Mar S.A.	Proveedores	30
Marcelo Javier Urrea Caro	Proveedores	27
Emp. Serv. Ingeniería e Información Ambiental Esinfra Ltda.	Proveedores	26
Kupfer Hermanos S.A.	Proveedores	17
Serv. Industriales Euroambiente Ltda.	Proveedores	16
Measwind América Ltda.	Proveedores	14
Sistemas Eléctricos Ing. y Servicios S.A.	Proveedores	9
Mantenimiento de Jardines Arcoiris Ltda.	Proveedores	9
Soc. Comercial Conyser Ltda.	Proveedores	9
MYA Chile Soluciones contra Incendios e Industrial	Proveedores	8
DPL Grout Construcciones Ltda.	Proveedores	8
Félix Atilio Valenzuela Pérez	Proveedores	7
Tecnoeléctrica Valparaíso S.A.	Proveedores	6
Serv. Integrales de Mantenimientos Técnicos S.A.	Proveedores	6
Comercial e Industrial Accuratek S.A.	Proveedores	6
Algoritmos y Mediciones Ambientales SpA	Proveedores	6
Centro de Estudios Medición y Certificación de Calidad Cesmec S.A.	Proveedores	6
Inerco Tecnología Chile SpA	Proveedores	6
SGS Chile Ltda. Sociedad de Control	Proveedores	6
Servicios y Proyectos Ambientales S.A.	Proveedores	6
Woss SpA	Proveedores	6
Arcadis Chile SpA	Proveedores	3
Eulen Chile S.A.	Proveedores	3
Ana María Gómez Vega	Proveedores	2
<b>Total</b>		<b>4.187</b>

**Fenix Power Perú S.A.****a. Garantías vigentes en Dólares al 31 de diciembre de 2018**

Depositado por	Relación con la sociedad	Total MUS \$
Thoshiba América Do Sul Ltda.	Proveedores	179
Contract Workplaces Peru SAC	Proveedores	33
Cosapi S.A.	Proveedores	77
Quimex S.A.	Proveedores	9
Fursys S.A.	Proveedores	5
<b>Total</b>		<b>303</b>

**b. Garantías vigentes Soles al 31 de diciembre de 2018**

Depositado por	Relación con la sociedad	Total MUS \$
Empresa Regional de Serv. Público del oriente S.A.	Proveedores	1.806
Julio Crespo Perú S.A.	Proveedores	12
IT Servicios SRL	Proveedores	7
<b>Total</b>		<b>1.825</b>

**c. Detalle de litigios y otros**

La Administración de Colbún considera, con la información que posee en el momento de emisión de los presentes estados financieros consolidados, que las provisiones registradas en el estado de situación financiera consolidado adjunto cubren adecuadamente los riesgos por litigios y demás operaciones descritas en esta nota, por lo que no espera que de los mismos se desprendan pasivos adicionales a los registrados.

Dada las características de los riesgos que cubren estas provisiones, no es posible determinar un calendario exacto de fechas de pago si, en su caso, lo hubiere.

A continuación, de acuerdo a NIC 37, se presenta un detalle de los litigios al 31 de diciembre de 2018:

**Chile**

1.- Demandas por daño ambiental por operación de la CT Santa María ante el Tercer Tribunal Ambiental de Valdivia.

(i)-Demanda interpuesta con fecha 15 de octubre de 2015, Rol N° D-11-2015, ante el Tribunal Ambiental de Valdivia por 6 sindicatos de pescadores de Coronel y un grupo de pescadores de Lota, quienes alegan un supuesto daño ambiental provocado por la operación de la Central Santa María (emisiones no autorizadas de metales pesados al suelo y aguas de la bahía, presencia excesiva de óxidos de azufre y nitrógeno producidos por la combustión de la central, shock térmico por sistema de enfriamiento y antifouling).

La demanda fue contestada por Colbún con fecha 30 de septiembre de 2016.

Se llevó a cabo la audiencia de conciliación, prueba y alegaciones durante el mes de enero de 2017.

(ii)-Demanda interpuesta con fecha 15 de octubre de 2015, Rol N° D-12-2015, ante el Tribunal Ambiental de Valdivia por 6 sindicatos de pescadores de Coronel y un grupo de pescadores de Lota, quienes alegan un supuesto daño ambiental provocado por la operación de la Central Santa María (emisiones no autorizadas de metales pesados al suelo y aguas de la bahía, presencia excesiva de óxidos de azufre y nitrógeno

producidos por la combustión de la central, shock térmico por sistema de enfriamiento y antifouling). Al tratarse de la misma materia que la causa Rol N° D-11-2015 descrita en sección 2(i) anterior, los autos fueron acumulados en esta última.

Con fecha 31 de diciembre de 2018, el Tribunal Ambiental de Valdivia dictó sentencia rechazando ambas demandas. En contra de esta sentencia se pueden interponer recursos judiciales, por lo cual ésta aún no está ejecutoriada.

La Administración, en cumplimiento a lo indicado en la NIC 37, estima una contingencia como posible, por lo tanto, ha procedido a revelarla, pero no ha constituido provisión a la fecha, debido a que no es posible medir o estimar de forma fiable el pasivo que se derive de la misma, así también, no existen reembolsos reclamables en caso de una sentencia desfavorable.

2.- Formulación de Cargos de la Superintendencia de Medio Ambiente (SMA) en contra de la CT Santa María y a requerimiento del Tribunal Ambiental del Valdivia (TAV), por (i) la presunta existencia de equipos diferentes a los autorizados en la RCA y (ii) por el posible no ingreso en el SEIA del sobredimensionamiento de la chimenea del complejo térmico. Colbún presentó sus descargos ante la SMA debidamente fundamentados, con informes técnicos ambientales y legales y está a la espera de la continuación del proceso.

Sin perjuicio de lo anterior, tanto Colbún S.A. como la SMA presentaron Recursos de Casación ante la Corte Suprema en contra del fallo del TAV que ordenó dicha formulación de cargos y la limitación de la potencia de la central a 350 MW bruto. Ya se llevaron a cabo los alegatos y la causa se encuentra “en acuerdo”.

Cabe precisar que el proceso administrativo previo de investigación que realizó la SMA a la CT Santa María, esta autoridad consideró que no existían antecedentes para una formulación de cargos, sin embargo, el TAV revisando la resolución administrativa de la SMA ordenó formular estos dos cargos.

La Administración, en cumplimiento a lo indicado en la NIC 37, estima una contingencia como posible, por lo tanto, ha procedido a revelarla, pero no ha constituido provisión a la fecha, debido a que no es posible medir o estimar de forma fiable el pasivo que se derive de la misma, así también, no existen reembolsos reclamables en caso de una sentencia desfavorable.

3.- Procedimiento tributario contra Termoeléctrica Antilhue S.A. ante el Servicio de Impuestos Internos.

Mediante Liquidación N° 257, del 24.09.2015, notificada con fecha 24.09.2015, el Director Regional Metropolitano Santiago Oriente del SII impugnó partidas de la declaración de renta de Termoeléctrica Antilhue S.A. del año 2013, a la que se agregaron pérdidas de arrastre de los ejercicios 2009 al 2012, por otros conceptos. El monto total actualizado al 31 de diciembre de 2018 es MUS\$ 3.062 (M\$2.127.077), (Rol RIT GR-18-00002-2016).

Se interpuso un recurso de reposición en contra de la liquidación, el que fue rechazado.

Con fecha 14.01.2016 se interpuso un reclamo tributario ante el Cuarto Tribunal Tributario y Aduanero de Santiago. El SII presentó sus descargos y se encuentra pendiente el inicio del período de prueba.

La Administración estima, en cumplimiento a lo indicado en la NIC 37, que puede existir una contingencia que probablemente exija una salida de recursos. Por lo tanto, además de revelar la contingencia, la Compañía ha constituido una provisión en el rubro “Otras Provisiones”, que, a juicio de la administración, cubre adecuadamente los riesgos de esta contingencia. Así también, no existen reembolsos reclamables en caso de una sentencia desfavorable.

### 35. Compromisos

#### Compromisos contraídos con entidades financieras

Los contratos de crédito suscritos por Colbún S.A. con entidades financieras y los contratos de emisión de bonos, imponen a la Compañía diversas obligaciones adicionales a las de pago, incluyendo cumplimiento con indicadores financieros de variada índole durante la vigencia de dichos contratos, usuales para este tipo de operaciones de financiamiento.

La Compañía debe informar trimestralmente el cumplimiento de estas obligaciones. Al 31 de diciembre de 2018 la Compañía está en cumplimiento con todos los indicadores financieros exigidos en dichos contratos. El detalle de estas obligaciones se presenta a continuación:

Covenants	Condición	31.12.2018	Vigencia
<b>Bonos Mercado Local</b>			
Ebitda/Gastos Financieros Netos	> 3,0	10,77	jun-2029
Razón de Endeudamiento	< 1,2	0,76	jun-2029
Patrimonio Mínimo	> MUS\$ 1.348.000	MUS\$ 3.656.514	jun-2029

#### Metodologías de cálculo

Concepto	Cuentas	Valores al 31.12.2018	
Patrimonio	Patrimonio Total	MUS\$	3.856.938
Patrimonio Neto	Patrimonio Total - Participaciones No Controladoras	MUS\$	3.656.514
Patrimonio Mínimo	Patrimonio Total - Participaciones No Controladoras	MUS\$	3.656.514
Total pasivos	Total pasivos corrientes + Total pasivos no corrientes	MUS\$	2.921.411
Razón de Endeudamiento	Total pasivos / Patrimonio		0,76
Ebitda	Ingresos de actividades ordinarias - Materias primas y consumibles utilizados - Gastos por beneficio a los empleados - otros gastos por naturaleza	MUS\$	684.123
Gastos Financieros Netos	Costos financieros - Ingresos Financieros	MUS\$	63.504

producidos por la combustión de la central, shock térmico por sistema de enfriamiento y antifouling). Al tratarse de la misma materia que la causa Rol N° D-11-2015 descrita en sección 2(i) anterior, los autos fueron acumulados en esta última.

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La Administración estima, en cumplimiento a lo indicado en la NIC 37, que puede existir una contingencia que probablemente exija una salida de recursos. Por lo tanto, además de revelar la contingencia, la Compañía ha constituido una provisión en el rubro “Otras Provisiones”, que, a juicio de la administración, cubre adecuadamente los riesgos de esta contingencia. Así también, no existen reembolsos reclamables en caso de una sentencia desfavorable.

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Patrimonio Mínimo	> MUS\$ 1.348.000	MUS\$ 3.656.514	jun-2029

#### Metodologías de cálculo

Concepto	Cuentas	Valores al 31.12.2018	
Patrimonio	Patrimonio Total	MUS\$	3.856.938
Patrimonio Neto	Patrimonio Total - Participaciones No Controladoras	MUS\$	3.656.514
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Total pasivos	Total pasivos corrientes + Total pasivos no corrientes	MUS\$	2.921.411
Razón de Endeudamiento	Total pasivos / Patrimonio		0,76
Ebitda	Ingresos de actividades ordinarias - Materias primas y consumibles utilizados - Gastos por beneficio a los empleados - otros gastos por naturaleza	MUS\$	684.123
Gastos Financieros Netos	Costos financieros - Ingresos Financieros	MUS\$	63.504

### 36. Medio ambiente

Las sociedades del grupo en las cuales se han efectuado desembolsos asociados con medio ambiente son las siguientes: Colbún S.A., Empresa Eléctrica Industrial S.A., Río Tranquilo S.A., Termoeléctrica Nehuenco S.A. y Fenix Power S.A.

Los desembolsos efectuados por concepto de medio ambiente se encuentran principalmente asociados a instalaciones, por lo tanto, serán reconocidos en resultados vía depreciación de acuerdo con la vida útil de éstas, salvo el desarrollo de Estudios y Declaraciones de Impacto Ambiental, que corresponden a permisos ambientales efectuados previos a la fase de construcción.

A continuación, se indican los principales proyectos en curso y una breve descripción de los mismos:

Central Hidroeléctrica San Pedro: Central hidroeléctrica de embalse, se encuentra ubicada en la Región de Los Ríos.

El proyecto cuenta con un avance de la construcción del 15% aproximadamente y está a la espera de la tramitación de nuevo EIA de adecuaciones del proyecto para retomar las obras y actividades constructivas.

A lo anterior, se suman los desembolsos asociados a las 26 plantas de generación en operación, que incluyen a central Fenix (Chilca, Perú) y los activos de transmisión como subestaciones eléctricas y líneas de transmisión.

El siguiente es el detalle de los desembolsos efectuados y que se efectuarán relacionados con normas de medioambiente para el período terminado al 31 de diciembre de 2018 y 2017:

Gastos acumulados efectuados al 31.12.2018

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del Activo o ítem de Gasto	Importe del Desembolso MUS\$	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Colbún S.A.	S ta María 1	Gestión Ambiental de Centrales	Gasto	Cos to	809	dic-18
Colbún S.A.	Ne huenco	Gestión Ambiental de Centrales	Gasto	Cos to	629	dic-18
Colbún S.A.	Angos tura	Gestión Ambiental de Centrales	Gasto	Cos to	567	dic-18
Colbún S.A.	Zona Bio-Bio	Gestión Ambiental de Centrales	Gasto	Cos to	449	nov-18
Colbún S.A.	Antihue	Gestión Ambiental de Centrales	Gasto	Cos to	356	dic-18
Colbún S.A.	C andelaria	Gestión Ambiental de Centrales	Gasto	Cos to	316	dic-18
Colbún S.A.	Colbún	Gestión Ambiental de Centrales	Gasto	Cos to	283	dic-18
Colbún S.A.	Gestión Ambiental Corporativa	Gestión Ambiental de Matriz	Gasto	Cos to	265	dic-18
Colbún S.A.	Los Quillos	Gestión Ambiental de Centrales	Gasto	Cos to	261	dic-18
Colbún S.A.	Los Pinos	Gestión Ambiental de Centrales	Gasto	Cos to	229	dic-18
Colbún S.A.	Gestión Ambiental Corporativa	Gestión Ambiental de Matriz	Gasto	Cos to	193	oct-18
Colbún S.A.	Quilleco	Gestión Ambiental de Centrales	Gasto	Cos to	143	dic-18
Colbún S.A.	Zona Maule	Gestión Ambiental de Centrales	Gasto	Cos to	139	dic-18
Colbún S.A.	R ucúe	Gestión Ambiental de Centrales	Gasto	Cos to	104	dic-18
Colbún S.A.	Canutillar	Gestión Ambiental de Centrales	Gasto	Cos to	53	feb-18
Colbún S.A.	Angostura	Gestión Ambiental de Centrales	Gasto	Cos to	7	nov-18
Empresa Eléctrica Industrial S.A.	Carena	Gestión Ambiental de Centrales	Gasto	Cos to	33	dic-18
Río Traquillo S.A.	Hornitos	Gestión Ambiental de Centrales	Gasto	Cos to	93	dic-18
<b>Total</b>					<b>4.929</b>	



## Gastos Futuros al 31.12.2018

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción de la Activación del ítem de Gasto	Importe del Desembolso MUS\$	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Colbún S.A.	Angostura	Gestión Ambiental de Centrales	Gasto	Costo	148	dic-18
Colbún S.A.	Sa María 1	Gestión Ambiental de Centrales	Gasto	Costo	100	dic-18
Colbún S.A.	Nehuenco	Gestión Ambiental de Centrales	Gasto	Costo	51	dic-18
Colbún S.A.	Colbún	Gestión Ambiental de Centrales	Gasto	Costo	48	dic-18
Colbún S.A.	Gestión Ambiental Corporativa	Gestión Ambiental de Matriz	Gasto	Costo	18	dic-18
Colbún S.A.	Quilleco	Gestión Ambiental de Centrales	Gasto	Costo	14	dic-18
Colbún S.A.	Zona Maule	Gestión Ambiental de Centrales	Gasto	Costo	14	dic-18
Colbún S.A.	Zona Bio-Bio	Gestión Ambiental de Centrales	Gasto	Costo	10	dic-18
Colbún S.A.	Rucúe	Gestión Ambiental de Centrales	Gasto	Costo	7	dic-18
Colbún S.A.	Los Pinos	Gestión Ambiental de Centrales	Gasto	Costo	4	dic-18
Colbún S.A.	Los Quilos	Gestión Ambiental de Centrales	Gasto	Costo	3	dic-18
Colbún S.A.	Antihue	Gestión Ambiental de Centrales	Gasto	Costo	1	dic-18
Empresa Eléctrica Industrial S.A.	Carena	Gestión Ambiental de Centrales	Gasto	Costo	3	dic-18
<b>Total</b>					<b>421</b>	

Gastos acumulados efectuados al 31.12.2017

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del Activo o ítem de Gasto	Importe del Desembolso MUS\$	Fecha cierta o es timada en que los desembolsos fueron o serán efectuados
Colbún S.A.	S ta María 1	Ges tión Ambiental de Centrales	Gas to	Cos to	1.152	dic-17
Colbún S.A.	Angostura	Ges tión Ambiental de Centrales	Gas to	Cos to	883	dic-17
Colbún S.A.	CH Guaiquivilo-Melado	Ges tión Ambiental de Proyectos	Activo	Obras en Ejecución	765	dic-17
Colbún S.A.	Nehuenco 1	Ges tión Ambiental de Centrales	Gas to	Cos to	753	dic-17
Colbún S.A.	Candelaria	Ges tión Ambiental de Centrales	Gas to	Cos to	373	dic-17
Colbún S.A.	Zona Bio-Bio	Ges tión Ambiental de Centrales	Gas to	Cos to	312	dic-17
Colbún S.A.	Quilleco	Ges tión Ambiental de Centrales	Gas to	Cos to	310	dic-17
Colbún S.A.	Ges tión Ambiental Corporativa	Ges tión Ambiental de Matriz	Gas to	Gas to	282	dic-17
Colbún S.A.	Los Quillos	Ges tión Ambiental de Centrales	Gas to	Cos to	244	dic-17
Colbún S.A.	Los Pinos	Ges tión Ambiental de Centrales	Gas to	Cos to	241	dic-17
Colbún S.A.	Antihue	Ges tión Ambiental de Centrales	Gas to	Cos to	200	dic-17
Colbún S.A.	Colbún	Ges tión Ambiental de Centrales	Gas to	Cos to	139	dic-17
Colbún S.A.	Rucúe	Ges tión Ambiental de Centrales	Gas to	Cos to	120	dic-17
Colbún S.A.	CH La Mina	Ges tión Ambiental de Proyectos	Activo	Obras en Ejecución	106	dic-17
Colbún S.A.	Ges tión Ambiental de Proyectos	Ges tión Ambiental de Matriz	Gas to	Gas to	97	dic-17
Colbún S.A.	Canutillar	Ges tión Ambiental de Centrales	Gas to	Cos to	49	dic-17
Colbún S.A.	Nehuenco	Ges tión Ambiental de Centrales	Activo	Obras en Ejecución	21	dic-17
Empres a Eléctrica Industrial S.A.	Carena	Ges tión Ambiental de Centrales	Gas to	Cos to	94	dic-17
Río Tranquilo S.A.	Hornitos	Ges tión Ambiental de Centrales	Gas to	Cos to	186	dic-17
<b>Total</b>					<b>6.327</b>	

## Gastos Futuros al 31.12.2017

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del Activo o ítem de Gasto	Importe del Desembolso MUS \$	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Colbún S.A.	Antilhue	Gestión Ambiental de Centrales	Gasto	Costo	117	2018
Colbún S.A.	Zona Bio-Bio	Gestión Ambiental de Centrales	Gasto	Costo	96	2018
Colbún S.A.	Santa María 1	Gestión Ambiental de Centrales	Gasto	Costo	79	2018
Colbún S.A.	Colbún	Gestión Ambiental de Centrales	Gasto	Costo	53	2018
Colbún S.A.	Angostura	Gestión Ambiental de Centrales	Gasto	Costo	41	2018
Colbún S.A.	Nehuenco 1	Gestión Ambiental de Centrales	Gasto	Costo	37	2018
Colbún S.A.	Zona Bio-Bio	Gestión Ambiental de Centrales	Gasto	Costo	34	2018
Colbún S.A.	Gestión Ambiental Corporativa	Gestión Ambiental de Matriz	Gasto	Gasto	26	2018
Colbún S.A.	Candalaria	Gestión Ambiental de Centrales	Gasto	Costo	21	2018
Colbún S.A.	Gestión Ambiental Corporativa	Gestión Ambiental de Matriz	Gasto	Gasto	16	2018
Colbún S.A.	Los Pinos	Gestión Ambiental de Centrales	Gasto	Costo	16	2018
Colbún S.A.	Quilleco	Gestión Ambiental de Centrales	Gasto	Costo	16	2018
Colbún S.A.	Gestión Ambiental de Proyectos	Gestión Ambiental de Matriz	Gasto	Gasto	9	2018
Colbún S.A.	Gestión Ambiental de Proyectos	Gestión Ambiental de Matriz	Gasto	Gasto	8	2018
Colbún S.A.	Gestión Ambiental Corporativa	Gestión Ambiental de Matriz	Gasto	Gasto	7	2018
Colbún S.A.	Los Quillos	Gestión Ambiental de Centrales	Gasto	Costo	3	2018
Empresas Eléctrica Industrial S.A.	Carena	Gestión Ambiental de Centrales	Gasto	Costo	1	2018
Río Tranquilo S.A.	Hornitos	Gestión Ambiental de Centrales	Gasto	Costo	3	2018
<b>Total</b>					<b>583</b>	

## Desembolsos Perú

### Gastos acumulados efectuados al 31.12.2018

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del ítem de Gasto	Importe del Desembolso MUS\$	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Fenix Power Perú S.A.	Monitoreo y Gestión Ambiental	Monitoreo y Gestión Ambiental	Gasto	Costo	723	sep-18
<b>Total</b>					<b>723</b>	

### Gastos Futuros al 31.12.2018

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del ítem de Gasto	Total	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Fenix Power Perú S.A.	Monitoreo y Gestión Ambiental	Monitoreo y Gestión Ambiental	Gasto	Costo	1	dic-18
<b>Total</b>					<b>1</b>	

### Gastos acumulados efectuados al 31.12.2017

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del Activo o ítem de Gasto	Importe del Desembolso MUS\$	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Fenix Power Perú S.A.	Monitoreo y Gestión Ambiental	Monitoreo y Gestión Ambiental	Gasto	Costo	811	dic-17
<b>Total</b>					<b>811</b>	

### Gastos Futuros al 31.12.2017

Identificación de la Matriz o Subsidiaria	Nombre del Proyecto al que está asociado el desembolso	Concepto por el que se efectuó el desembolso	Activo / Gasto	Descripción del Activo o ítem de Gasto	Importe del Desembolso MUS\$	Fecha cierta o estimada en que los desembolsos fueron o serán efectuados
Fenix Power Perú S.A.	Monitoreo y Gestión Ambiental	Monitoreo y Gestión Ambiental	Gasto	Costo	409	2018
<b>Total</b>					<b>409</b>	

### 37. Hechos ocurridos después de la fecha del Estado de Situación

En sesión celebrada con fecha 29 de enero de 2019 el Directorio de la Compañía aprobó los estados financieros consolidados al 31 de diciembre 2018, preparados de acuerdo con Normas Internacionales de Información Financiera (NIIF), emitidas por el IASB.

Con fecha 3 de enero de 2019, se comunicó a la Comisión para el Mercado Financiero (CMF) en cumplimiento de lo dispuesto en el numeral 1 del artículo 4 del decreto ley N° 3.538, según su texto vigente contenido en la ley 21.000, un proceso de reorganización societaria que Colbún S.A. está llevando a cabo en relación con algunas de sus filiales.

En efecto, con fecha 22 de diciembre de 2018, Colbún S.A. pasó a ser titular del cien por ciento de las acciones de su filial Empresa Eléctrica Industrial S.A. (“EEI”) y, habiendo transcurrido un período ininterrumpido que excede de 10 días, se ha disuelto EEI, fusionándose en Colbún S.A., por aplicación del artículo 103 N°2 de la Ley de Sociedades Anónimas.

La disolución de EEI y su fusión en Colbún S.A., tiene el efecto a su vez que Colbún S.A. ha pasado a ser el único socio de su filial Sociedad Hidroeléctrica Melocotón Limitada, la que en consecuencia también se ha disuelto. Adicionalmente, la disolución de EEI implica que Colbún S.A. ha pasado a ser la única accionista de la filial Río Tranquilo S.A., la cual se disolverá una vez transcurrido un período ininterrumpido de más de 10 días en esta situación.

Adicionalmente con fecha 4 de enero de 2019 se produjo la disolución de las filiales Inversiones SUD SpA e Inversiones Andinas SpA, respecto de las cuales Colbún S.A. pasó a ser titular del cien por ciento de las acciones de las mismas, produciéndose la disolución de dichas sociedades de acuerdo a lo ordenado en sus estatutos.

No se han producido otros hechos posteriores entre el 31 de diciembre 2018 y la fecha de emisión de los presentes estados financieros consolidados.

### 38. Moneda extranjera

El detalle de Activos y Pasivos en moneda extranjera con efecto en resultado por diferencia de cambio es el siguiente:

Activos	Moneda Extranjera	Moneda Funcional	31.12.2018 MUS \$	31.12.2017 MUS \$
<b>Activos corrientes totales</b>				
Efectivo y equivalentes al efectivo	Pesos	Dólar	127.136	149.068
Efectivo y equivalentes al efectivo	Euro	Dólar	633	1.121
Efectivo y equivalentes al efectivo	Soles	Dólar	7.564	13.957
Otros activos no financieros, corriente	Pesos	Dólar	897	2.206
Deudores comerciales y otras cuentas por cobrar corrientes	Pesos	Dólar	143.400	127.587
Deudores comerciales y otras cuentas por cobrar corrientes	Soles	Dólar	29.589	43.809
Cuentas por cobrar a entidades relacionadas, corriente	Pesos	Dólar	428	240
Activos por impuestos corrientes	Pesos	Dólar	103	129
Activos por impuestos corrientes	Soles	Dólar	6.442	6.065
<b>Total activos corrientes</b>			<b>316.192</b>	<b>344.182</b>
<b>Activos no corrientes</b>				
Otros activos financieros no corrientes	Pesos	Dólar	-	245
Otros activos no financieros no corrientes	Pesos	Dólar	4.714	8.734
<b>Total de activos no corrientes</b>			<b>4.714</b>	<b>8.979</b>
<b>Total de activos</b>			<b>320.906</b>	<b>353.161</b>
Pasivos	Moneda Extranjera	Moneda Funcional	31.12.2018 MUS \$	31.12.2017 MUS \$
<b>Pasivos corrientes totales</b>				
Otros pasivos financieros corrientes	UF	Dólar	13.326	11.418
Cuentas por pagar comerciales y otras cuentas por pagar	Pesos	Dólar	145.953	147.805
Cuentas por pagar comerciales y otras cuentas por pagar	Soles	Dólar	6.443	4.408
Cuentas por pagar a entidades relacionadas, corriente	Pesos	Dólar	261	2.213
Otras provisiones corrientes	Pesos	Dólar	4.678	3.928
Provisiones corrientes por beneficios a los empleados	Pesos	Dólar	19.282	16.075
Provisiones corrientes por beneficios a los empleados	Soles	Dólar	1.180	1.250
Otros pasivos no financieros corrientes	Pesos	Dólar	23.354	21.430
Otros pasivos no financieros corrientes	Soles	Dólar	614	906
<b>Total pasivos corrientes totales</b>			<b>215.091</b>	<b>209.433</b>
<b>Pasivos no corrientes</b>				
Otros pasivos financieros no corrientes	UF	Dólar	62.260	79.005
Provisiones no corrientes por beneficios a los empleados	Pesos	Dólar	30.786	38.429
Otros pasivos no financieros no corrientes	Pesos	Dólar	739	9.924
<b>Total de pasivos no corrientes</b>			<b>93.785</b>	<b>127.358</b>
<b>Total pasivos</b>			<b>308.876</b>	<b>336.791</b>

El detalle de activos y pasivos en moneda extranjera no incluye las Inversiones contabilizadas utilizando el método de participación, por cuanto las diferencias originadas por diferencia cambio se reconocen en el patrimonio como ajustes de conversión (ver nota 26 letra e).

## Perfil de vencimiento de Otros pasivos financieros en moneda extranjera

Al 31.12.2018	Moneda Extranjera	Moneda funcional	Hasta 91 días MUS \$	Desde 91 días hasta 1 año MUS \$	Desde 1 año hasta 3 años MUS \$	Más 3 años hasta 5 años MUS \$	Más de 5 años MUS \$	Total MUS \$
Otros pasivos financieros	UF	Dólar	-	13.326	26.842	10.641	29.258	80.067
<b>Totales</b>			-	<b>13.326</b>	<b>26.842</b>	<b>10.641</b>	<b>29.258</b>	<b>80.067</b>

Al 31.12.2017	Moneda Extranjera	Moneda funcional	Hasta 91 días MUS \$	Desde 91 días hasta 1 año MUS \$	Desde 1 año hasta 3 años MUS \$	Más 3 años hasta 5 años MUS \$	Más de 5 años MUS \$	Total MUS \$
Otros pasivos financieros	UF	Dólar	-	11.418	28.570	20.764	37.897	98.649
<b>Totales</b>			-	<b>11.418</b>	<b>28.570</b>	<b>20.764</b>	<b>37.897</b>	<b>98.649</b>

## 39. Dotación del personal (No auditado)

La dotación del personal de la Compañía al 31 de diciembre de 2018 y 2017 es la siguiente:

	N° de Trabajadores					
	31.12.2018			31.12.2017		
	Chile	Perú	Total	Chile	Perú	Total
Gerentes y Ejecutivos principales	71	6	77	71	6	77
Profesionales y Técnicos	636	53	689	646	61	707
Otros	264	29	293	275	25	300
<b>Total</b>	<b>971</b>	<b>88</b>	<b>1.059</b>	<b>992</b>	<b>92</b>	<b>1.084</b>
<b>Promedio del año</b>	<b>984</b>	<b>90</b>	<b>1.074</b>	<b>994</b>	<b>94</b>	<b>1.088</b>

## 40. Anexo N° 1 Información adicional requerida por taxonomía XBRL

Este anexo forma parte integral de los estados financieros consolidados de la Compañía.

## Remuneraciones pagadas a auditores externos

Las remuneraciones pagadas a los auditores externos al 31 de diciembre de 2018 y 2017, fue la siguiente:

Concepto	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Servicios de auditoría	311	396
Servicios tributarios	17	37
Otros servicios	237	1.111
<b>Remuneración del auditor</b>	<b>565</b>	<b>1.544</b>

# Análisis Razonado de los Estados Financieros Consolidados

Al 31 de diciembre de 2018



## 1. SINÓPSIS DEL PERÍODO

■ El **EBITDA** consolidado del cuarto trimestre del año 2018 (4T18) alcanzó **US\$210,2 millones**, un 3% mayor que el EBITDA de US\$204,8 millones del cuarto trimestre del año 2017 (4T17). El mayor EBITDA se explica principalmente por mayores ventas a clientes libres, compensadas en parte por: (1) menores ventas a clientes regulados, y (2) mayores otros gastos, por naturaleza. Esto último, debido a que durante el año 2017 se realizó en Fenix un reverso de provisiones por incobrabilidad de deudores por venta que había sido contabilizada en 2016.

**En términos acumulados**, el **EBITDA** a diciembre 2018 (Dic18) alcanzó **US\$684,1 millones**, disminuyendo un 1% con respecto al EBITDA de US\$692,1 millones a diciembre 2017 (Dic17).

■ El **resultado no operacional** el 4T18 presentó una **pérdida de US\$50,2 millones**, un 52% menor que la pérdida de US\$105,0 millones en 4T17. La menor pérdida se explica principalmente por un menor registro contable de provisiones por deterioro de activos individuales y de patentes por no uso de derechos de agua, parcialmente compensado por el efecto negativo de la variación del tipo de cambio CLP/US\$ sobre partidas temporales del balance en moneda local durante dicho trimestre, comparado con el efecto positivo que tuvo la variación de dicha paridad el 4T17.

**En términos acumulados**, el resultado no operacional a Dic18 presentó una **pérdida de US\$118,3 millones**, un 19% menor que la pérdida de US\$146,0 millones presentada a Dic17. La menor pérdida se explica principalmente por: (1) los menores deterioros explicados anteriormente, (2) un aumento registrado en la línea “Resultado de sociedades Contabilizadas por el método de Participación” como resultado de una revalorización de los terrenos de propiedad de HydroAysén, producto de su contabilización a valor de liquidación y (3) mayores ingresos financieros provenientes de mejores tasas de inversión de los excedentes de caja. Estos efectos fueron parcialmente compensados por el efecto negativo de la variación del tipo de cambio CLP/US\$ sobre partidas temporales del balance en moneda local durante el año.

■ El **gasto por impuestos** del 4T18 ascendió a **US\$32,6 millones**, en comparación con la ganancia por impuesto de US\$23,7 millones del 4T17. La ganancia por impuestos del 4T17 se explica principalmente por el efecto en resultado generado por el reconocimiento del activo por impuesto diferido, producto de la pérdida tributaria generada a partir del cese de actividades y cancelación del “Proyecto Hidroeléctrico HydroAysén” por US\$39,8 millones, en noviembre de 2017.

**En términos acumulados**, el gasto por impuesto a Dic18 ascendió a **US\$98,4 millones**, que se compara con el gasto por impuesto de US\$34,1 millones presentados en Dic17. El mayor cargo por impuestos se explica principalmente por: (1) el reconocimiento del activo por impuesto diferido producto de la cancelación del “Proyecto Hidroeléctrico HydroAysén” explicado anteriormente y (2) una utilidad por impuesto (diferido) registrada el 2017 en Fenix, como resultado de la apreciación del sol peruano. Dada la depreciación del sol durante el año 2018, se registró una pérdida por este concepto en dicho período.

■ La Compañía presentó en el 4T18 una **ganancia que alcanzó los US\$67,4 millones**, un 15% menor a la ganancia de US\$79,5 millones del 4T17. La menor ganancia se explica principalmente por el mayor gasto por impuestos explicado anteriormente y por un mayor gasto por depreciación y amortización debido a la activación de mantenimientos mayores y proyectos. Estos efectos fueron compensados en parte por la menor pérdida no operacional y el mayor EBITDA del trimestre.

**En términos acumulados**, el resultado presenta una ganancia a Dic18 por **US\$230,4 millones**, un 20% menor a la ganancia de US\$288,6 millones de igual período del año anterior, explicado principalmente por las mismas razones que en términos trimestrales.

■ Al cierre del 4T18 Colbún cuenta con una **liquidez de US\$788,1 millones** y una **deuda neta de US\$815,2 millones**.

## Hechos destacados del año 2018:

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■ ■ ■ Durante el año 2018, la agenda estratégica de la Compañía experimentó avances relevantes, posicionando a Colbún de gran manera para asegurar **su competitividad en el mediano y largo plazo**, con foco en 4 ejes principales: (1) incorporación masiva de proyectos costo-eficientes de energía renovable de fuente variable; (2) aumento de participación de mercado en el segmento de clientes libres, (3) implementación de un plan de eficiencias que permita reducir la estructura de costos fijos de la Compañía; y (4) puesta en marcha de un programa de digitalización y automatización en nuestras instalaciones.

■ ■ ■ Respecto de la incorporación de energías renovables de fuente variable, al cierre del 2018 Colbún ha podido completar un portafolio de locaciones para 7 **proyectos eólicos y solares**, que están en etapas tempranas de desarrollo. Estos en total suman aproximadamente **1.800 MW**, distribuidos en distintos puntos del país (Atacama, Coquimbo, BioBio, Los Ríos y Los Lagos). Con ello se ha dado un paso importante en el cumplimiento del **objetivo de incorporar 4.000 MW de nueva capacidad de generación de energía renovable en 10 años**, duplicando el tamaño de la Compañía. Estos activos constituyen un muy buen complemento al parque de generación existente en Colbún, y que nos permitirá entregar a nuestros clientes un suministro de energía renovable, competitivo, continuo y de largo plazo.

Bajo esta misma línea de crecimiento en energía renovable de fuente variable, en junio de 2018 entró en operación comercial la **Planta Solar fotovoltaica Ovejería**. La central de tipo PMGD se ubica en la Región Metropolitana y cuenta con una capacidad instalada de 9 MW.

■ ■ ■ Respecto a la estrategia comercial, durante el 2018 **la Compañía contrató aproximadamente 1.400 GWh/año de su generación con nuevos clientes libres**. Con ello, Colbún suma más de 3.000 GWh/año contratados a partir del año 2016 con este segmento de clientes, equilibrando la proporción de ventas realizadas a clientes libres y a clientes regulados en términos de volumen.

■ ■ ■ En cuanto al **plan de eficiencias en la estructura de costos fijos**, se puede destacar que, durante el año 2018, la Compañía desarrolló un plan detallado de eficiencias en este tipo de gastos. **A la fecha, esta iniciativa presenta un importante grado de avance**, lo que se traducirá en un ahorro por un monto mínimo de US\$20 millones al año a partir del 2019.

■ ■ ■ Respecto al **programa de digitalización y automatización** de las actividades de Colbún, este consiste en una revisión de los procesos operacionales, administrativos y de mantenimiento de la compañía, con el objeto de simplificar los mismos y aumentar la eficiencia y competitividad de Colbún. Dentro de estas iniciativas se encuentran, por ejemplo, la adopción de técnicas predictivas de mantenimiento, el monitoreo de procesos operacionales en línea, telecontrol de centrales, entre otros.

■ ■ ■ El 1 de octubre de 2018, Colbún S.A. realizó una reorganización de activos, **consolidando todos los activos de transmisión (nacionales, zonales y dedicados) en Colbún Transmisión S.A.** Lo anterior, con el objetivo de dar **un mayor foco en gestión, reportabilidad y visibilidad al negocio de transmisión**. Cabe destacar que Colbún Transmisión reporta de manera independiente a la Comisión para el Mercado Financiero (CMF) sus Estados Financieros y principales cifras de manera anual. El EBITDA proforma (considerando la totalidad de activos de transmisión) de esta sociedad es de -US\$65 millones, considerando los doce meses del año 2018.

■ ■ ■ Como reconocimiento a la Compañía en materia de sostenibilidad, en septiembre de 2018, **Colbún fue seleccionado para listar por tercera vez en el Dow Jones Sustainability Index Chile (DJSI Chile) y segunda vez en el DJSI MILA**, en sus versiones 2018. En el caso de DJSI Chile, el índice agrupa las compañías con mejor calificación de Chile, mientras que el DJSI MILA reúne a las empresas con mejor calificación de los mercados de la Alianza del Pacífico.

## 2. GENERACIÓN Y VENTAS FÍSICAS

### Generación y Ventas Físicas Chile

La Tabla 1 presenta un cuadro comparativo de ventas físicas de energía, potencia y generación para los trimestres 4T17, 4T18 y acumulado a Dic17 y Dic18.

Tabla 1: Ventas Físicas y Generación Chile

Cifras Acumuladas		Ventas	Cifras Trimestrales		Var %	Var %
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
12.428	12.851	Total Ventas Físicas (GWh)	3.018	2.986	3%	(1%)
6.303	5.426	Clientes Regulados	1.490	1.256	(14%)	(16%)
4.732	6.113	Clientes Libres	1.184	1.573	29%	33%
1.393	1.313	Ventas en el Mercado Spot	345	156	(6%)	(55%)
1.608	1.643	Potencia (MW)	1.630	1.663	2%	2%

Cifras Acumuladas		Generación	Cifras Trimestrales		Var %	Var %
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
12.716	13.005	Total Generación (GWh)	3.080	3.009	2%	(2%)
5.897	6.312	Hidráulica	2.156	2.121	7%	(2%)
6.702	6.558	Térmica	888	845	(2%)	(5%)
3.890	3.859	Gas	495	336	(1%)	(32%)
206	78	Diésel	8	13	(62%)	72%
2.606	2.620	Carbón	385	496	1%	29%
116	136	ERFV	36	44	17%	22%
116	122	Eólica*	36	37	5%	3%
0	14	Solar	0	7	-	-
52	94	Compras en el Mercado Spot (GWh)	0	29	81%	-
1.341	1.218	Ventas - Compras en el Mercado Spot (GWh)	345	127	(9%)	(63%)

(\*): Corresponde a la energía comprada a central Punta Palmeras de propiedad de Acciona.

ERFV: Energías renovables de fuentes variables

Las ventas físicas durante el 4T18 alcanzaron 2.986 GWh, en línea en comparación con el 4T17. Por su parte, la generación del trimestre disminuyó en un 2% respecto al 4T17, principalmente por una menor generación a gas (-159 GWh t/t) e hidráulica (-35 GWh t/t), compensado en parte por una mayor generación con carbón (+111 GWh t/t), ERFV (+8 GWh t/t) y diésel (+6 GWh t/t).

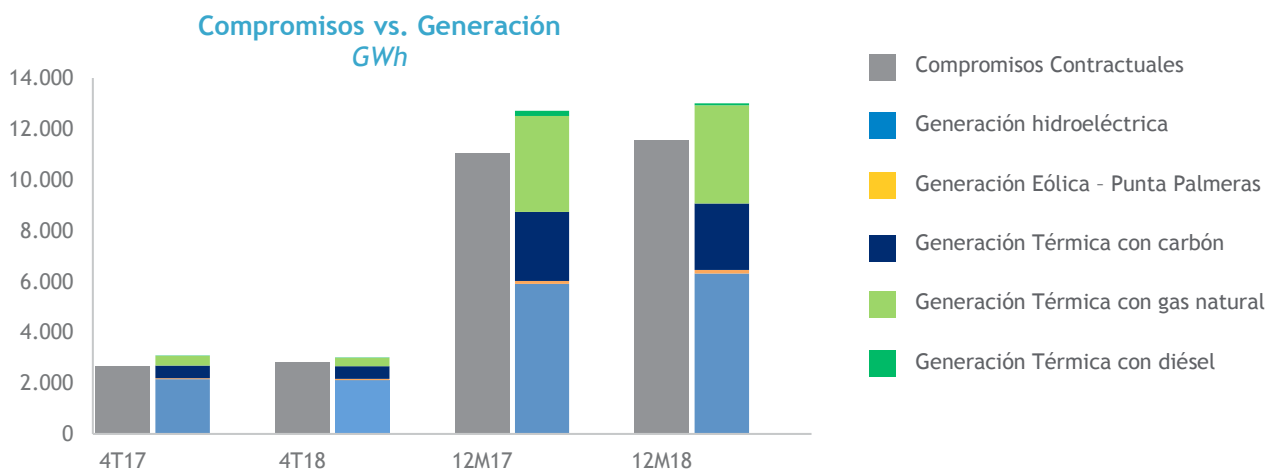
El balance en el mercado spot durante el trimestre registró ventas netas por 127 GWh, menores comparado con las ventas netas de 345 GWh registradas en el 4T17. Durante el trimestre, el **100% de los compromisos de suministro de Colbún fueron abastecidos con generación base costo eficiente** (hidroeléctrica, ERFV, carbón y gas natural).

En términos acumulados, las ventas físicas y la generación total de Colbún alcanzaron a Dic18 12.851 GWh y 13.005 GWh, aumentando un 3% y un 2% respectivamente, en comparación a Dic17. Las mayores ventas físicas se explican principalmente por mayores ventas a clientes libres, compensadas en parte por menores ventas a clientes regulados y menores ventas en el mercado spot. Por su parte, la generación acumulada aumentó principalmente por una mayor generación hidráulica (+415 GWh Ac/Ac), con ERFV (+19 GWh Ac/Ac) y con carbón (+14 GWh Ac/Ac), parcialmente compensada por una menor generación con diésel (-128 GWh Ac/Ac) y con gas (-31 GWh Ac/Ac).

**Mix de Generación en Chile:** El año hidrológico (Abr18-Mar19) ha presentado precipitaciones inferiores a un año medio en las principales cuencas del SEN, presentando déficit en las cuencas de Aconcagua (-34%), Maule (-17%), Biobío (-9%) y Chapo (-6%). Por otra parte, la cuenca de Laja ha presentado un superávit en precipitaciones (+12%) respecto al año medio.

A pesar de lo anterior, la energía acumulada en los embalses a Dic18 excede a la registrada a Dic17, debido a un mejor escenario de deshielo en comparación a igual periodo del año anterior.

Durante el 4T18, la generación total del SEN aumentó en un 1% respecto al 4T17, proveniente de un aumento en: (1) generación térmica a gas (+608 GWh t/t) y (2) generación ERFV (534 GWh t/t). La mayor generación fue parcialmente compensada por una menor: (1) generación con carbón (-735 GWh t/t), (2) generación con diésel (-134 GWh t/t), y (3) generación hidráulica (-113 GWh t/t). Por su parte, el costo marginal promedio medido en Alto Jahuel aumentó un 32% respecto al 4T17, promediando US\$52,7/MWh en el 4T18.



### 3. ANÁLISIS DEL ESTADO DE RESULTADOS

La Tabla 2 muestra un resumen del Estado de Resultados Consolidado (Chile y Perú) de los trimestres 4T17, 4T18 y acumulado a Dic17 y Dic18.

Tabla 2: Estado de Resultados (US\$ millones)

Cifras Acumuladas			Cifras Trimestrales		Var %	Var %
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
1.548,4	1.571,3	<b>INGRESOS DE ACTIVIDADES ORDINARIAS</b>	<b>388,8</b>	<b>394,9</b>	1%	2%
796,9	706,6	Venta a Clientes Regulados	197,3	166,6	(11%)	(16%)
425,3	627,8	Venta a Clientes Libres	120,8	180,0	48%	49%
112,5	111,0	Ventas de Energía y Potencia	18,7	16,8	(1%)	(10%)
189,5	98,4	Peajes	47,2	24,3	(48%)	(49%)
24,1	27,6	Otros Ingresos	4,9	7,3	14%	50%
(755,7)	(773,6)	<b>MATERIAS PRIMAS Y CONSUMIBLES UTILIZADOS</b>	<b>(161,5)</b>	<b>(154,7)</b>	2%	(4%)
(194,1)	(170,1)	Peajes	(50,9)	(41,4)	(12%)	(19%)
(46,0)	(45,5)	Compras de Energía y Potencia	(15,2)	(10,3)	(1%)	(33%)
(308,4)	(355,5)	Consumo de Gas	(46,9)	(51,5)	15%	10%
(31,1)	(16,4)	Consumo de Petróleo	(2,6)	(3,6)	(47%)	38%
(73,8)	(86,8)	Consumo de Carbón	(14,2)	(19,2)	18%	36%
(102,3)	(99,3)	Otros	(31,6)	(28,8)	(3%)	(9%)
792,7	797,7	<b>MARGEN BRUTO</b>	<b>227,3</b>	<b>240,2</b>	1%	6%
(76,8)	(79,8)	Gastos por Beneficios a Empleados	(22,9)	(19,5)	4%	(15%)
(23,8)	(33,9)	Otros Gastos, por Naturaleza	0,4	(10,5)	42%	-
(223,5)	(237,0)	Gastos por Depreciación y Amortización	(44,0)	(60,0)	6%	36%
468,6	447,2	<b>RESULTADO DE OPERACIÓN (*)</b>	<b>160,8</b>	<b>150,2</b>	(5%)	(7%)
692,1	684,1	<b>EBITDA</b>	<b>204,8</b>	<b>210,2</b>	(1%)	3%
12,7	20,4	Ingresos Financieros	4,2	6,0	60%	42%
(85,0)	(83,9)	Gastos Financieros	(22,7)	(20,8)	(1%)	(8%)
8,2	(12,6)	Diferencias de Cambio	4,1	(3,1)	-	-
2,9	11,4	Resultado de Sociedades Contabilizadas por el Método de Participación	(0,2)	1,8	292%	(868%)
(84,8)	(53,6)	Otras Ganancias (Pérdidas)	(90,4)	(34,2)	(37%)	(62%)
(146,0)	(118,3)	<b>RESULTADO FUERA DE OPERACIÓN</b>	<b>(105,0)</b>	<b>(50,2)</b>	(19%)	(52%)
322,7	328,8	<b>GANANCIA (PÉRDIDA) ANTES DE IMPUESTOS</b>	<b>55,8</b>	<b>99,9</b>	2%	79%
(34,1)	(98,4)	Gasto por Impuesto a las Ganancias	23,7	(32,6)	189%	(237%)
288,6	230,4	<b>GANANCIA (PÉRDIDA)</b>	<b>79,5</b>	<b>67,4</b>	(20%)	(15%)
271,0	240,3	<b>GANANCIA (PÉRDIDA) CONTROLADORA</b>	<b>76,6</b>	<b>71,9</b>	(11%)	(6%)
17,6	(9,9)	<b>GANANCIA (PÉRDIDA) ATRIBUIBLE A PARTICIPACIONES NO CONTROLADORAS</b>	<b>2,9</b>	<b>(4,5)</b>	-	-

(\*): El subtotal de “RESULTADO DE OPERACIÓN” aquí presentado excluye la línea “Otras ganancias (pérdidas)” presentada en los Estados Financieros. Esto se explica por un cambio de taxonomía dictado por la CMF, con lo cual el concepto de “Otras ganancias (pérdidas)”, que en el caso de Colbún son solamente partidas no operacionales, quedó incorporado como una partida operacional en los Estados Financieros.

Tabla 3: Tipos de Cambio de Cierre

Tipos de Cambio	dic-17	sep-18	dic-18
Chile (CLP / US\$)	614,75	660,42	694,77
Chile UF (CLP/UF)	26.798,14	27.357,45	27.565,79
Perú (PEN / US\$)	3,25	3,30	3,38

### 3.1. Análisis Resultado Operacional Chile

La Tabla 4 muestra un resumen del Resultado Operacional y EBITDA de los trimestres 4T17, 4T18 y acumulado a Dic17 y Dic18. Posteriormente serán analizadas las principales cuentas y/o variaciones.

Tabla 4: EBITDA Chile (US\$ millones)

Cifras Acumuladas			Cifras Trimestrales		Var %	
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
1.355,6	1.369,9	<b>INGRESOS DE ACTIVIDADES ORDINARIAS (*)</b>	<b>342,1</b>	<b>347,3</b>	<b>1%</b>	<b>2%</b>
674,2	599,3	Venta a Clientes Regulados	165,6	142,6	(11%)	(14%)
414,2	598,2	Venta a Clientes Libres	120,8	173,1	44%	43%
99,3	93,4	Ventas de Energía y Potencia	16,4	10,5	(6%)	(36%)
148,3	56,4	Peajes	35,6	15,1	(62%)	(58%)
19,5	22,6	Otros Ingresos	3,8	6,1	16%	61%
<b>(614,3)</b>	<b>(617,4)</b>	<b>MATERIAS PRIMAS Y CONSUMIBLES UTILIZADOS</b>	<b>(124,1)</b>	<b>(116,1)</b>	<b>1%</b>	<b>(6%)</b>
(157,0)	(129,1)	Peajes	(40,7)	(31,6)	(18%)	(22%)
(43,0)	(39,0)	Compras de Energía y Potencia	(15,2)	(10,3)	(9%)	(33%)
(216,6)	(263,1)	Consumo de Gas	(22,6)	(26,2)	21%	16%
(31,1)	(15,1)	Consumo de Petróleo	(2,6)	(3,6)	(52%)	38%
(73,8)	(86,8)	Consumo de Carbón	(14,2)	(19,2)	18%	36%
(92,7)	(84,4)	Otros	(28,8)	(25,3)	(9%)	(12%)
<b>741,3</b>	<b>752,5</b>	<b>MARGEN BRUTO</b>	<b>218,0</b>	<b>231,2</b>	<b>2%</b>	<b>6%</b>
(70,9)	(73,6)	Gastos por Beneficios a Empleados	(21,2)	(18,0)	4%	(15%)
(31,8)	(30,5)	Otros Gastos, por Naturaleza	(9,7)	(9,1)	(4%)	(6%)
(191,3)	(203,7)	Gastos por Depreciación y Amortización	(35,7)	(51,4)	7%	44%
<b>447,3</b>	<b>444,7</b>	<b>RESULTADO DE OPERACIÓN (**)</b>	<b>151,4</b>	<b>152,6</b>	<b>(1%)</b>	<b>1%</b>
<b>638,5</b>	<b>648,4</b>	<b>EBITDA</b>	<b>187,0</b>	<b>204,1</b>	<b>2%</b>	<b>9%</b>

(\*): Por aplicación de nueva normativa IFRS (NIIF 15 Ingresos de Actividades Ordinarias Procedentes de Contratos con Clientes), se realizó una reclasificación en los ingresos de US\$50,8 millones desde Peajes a Ventas a Clientes Libres durante el 2018. Dicha normativa comenzó a regir a partir de enero de 2018, por lo que su efecto se muestra a partir de este periodo.

(\*\*): El subtotal de "RESULTADO DE OPERACIÓN" aquí presentado excluye la línea "Otras ganancias (pérdidas)" presentada en los Estados Financieros. Esto se explica por un cambio de taxonomía dictado por la CME, con lo cual el concepto de "Otras ganancias (pérdidas)", que en el caso de Colbún son solamente partidas no operacionales, quedó incorporado como una partida operacional en los Estados Financieros.

Los **Ingresos de actividades ordinarias del 4T18 ascendieron a US\$347,3 millones**, aumentando un 2% respecto al 4T17, principalmente debido a mayores ventas a clientes libres, parcialmente compensadas por: (1) menores ventas a clientes regulados y (2) menores ingresos por concepto de peajes, principalmente debido al cambio de metodología en el cobro de estos peajes, los cuales, a contar de enero de 2018, son pagados directamente al dueño de las instalaciones de transmisión.

**En términos acumulados**, los ingresos de actividades ordinarias a Dic18 ascendieron a **US\$1.369,9 millones**, aumentando un 1% respecto al año anterior. Los mayores ingresos del período se explican principalmente por las mismas razones que las variaciones en términos trimestrales.

Los **costos de materias primas y consumibles utilizados totalizaron US\$116,1 millones**, un 6% menores que los costos por US\$124,1 millones registrados en el 4T17. Los menores costos se explican principalmente por una disminución (1) en los costos por concepto de peajes, (2) en las compras de energía y potencia en el mercado spot, y (3) en los costos registrados en la línea "Otros" asociados principalmente a gastos de mantenimientos y seguros, producto del plan de reducción de gastos fijos explicado en la sección "Hechos destacados del 2018". Esta disminución fue parcialmente compensada por un mayor precio de consumo de carbón y de gas.

**En términos acumulados**, los costos de materias primas y consumibles a Dic18 ascendieron a **US\$617,4 millones**, aumentando un 1% respecto a Dic17, principalmente debido al mayor precio de consumo de gas y de carbón, el cual fue compensado principalmente por menores: (1) costos de peajes, (2) consumo de diésel debido a la reducción en la generación con dicho combustible, y (3) costos registrados en la línea "Otros" asociado principalmente a gastos de mantenimientos y seguros, producto del plan de reducción de gastos fijos anteriormente explicado.

■ El **EBITDA del 4T18** aumentó un 9% respecto a igual trimestre del año anterior, alcanzando **US\$204,1 millones**. El mayor EBITDA se explica principalmente por los menores costos de materias primas y consumibles utilizados y por los mayores ingresos de actividades ordinarias, anteriormente explicados.

**En términos acumulados**, el **EBITDA** aumentó desde US\$638,5 millones a Dic17 a **US\$648,4 millones a Dic18**. El mayor EBITDA se explica principalmente por los menores costos de materias primas y consumibles utilizados y por los mayores ingresos de actividades ordinarias, anteriormente explicados.

### 3.2. Análisis de Ítems No Operacionales Consolidados (Chile y Perú)

La Tabla 5 muestra un resumen del Resultado Fuera de Operación Consolidado (Chile y Perú) del 4T17, 4T18 y acumulado a Dic17 y Dic18. Posteriormente serán analizadas las principales cuentas y/o variaciones.

**Tabla 5: Resultado Fuera de Operación Consolidado (US\$ millones)**

Cifras Acumuladas			Cifras Trimestrales		Var %	Var %
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
12,7	20,4	Ingresos Financieros	4,2	6,0	60%	42%
(85,0)	(83,9)	Gastos Financieros	(22,7)	(20,8)	(1%)	(8%)
8,2	(12,6)	Diferencias de Cambio	4,1	(3,1)	-	-
2,9	11,4	Resultado de Sociedades Contabilizadas por el Método de Participación	(0,2)	1,8	292%	-
(84,8)	(53,6)	Otras Ganancias (Pérdidas)	(90,4)	(34,2)	-	(62%)
<b>(146,0)</b>	<b>(118,3)</b>	<b>RESULTADO FUERA DE OPERACIÓN</b>	<b>(105,0)</b>	<b>(50,2)</b>	<b>(19%)</b>	<b>(52%)</b>
<b>322,7</b>	<b>328,8</b>	<b>GANANCIA (PÉRDIDA) ANTES DE IMPUESTOS</b>	<b>55,8</b>	<b>99,9</b>	<b>2%</b>	<b>79%</b>
(34,1)	(98,4)	Gasto por Impuesto a las Ganancias	23,7	(32,6)	189%	(237%)
<b>288,6</b>	<b>230,4</b>	<b>GANANCIA (PÉRDIDA)</b>	<b>79,5</b>	<b>67,4</b>	<b>(20%)</b>	<b>(15%)</b>
<b>271,0</b>	<b>240,3</b>	<b>GANANCIA (PÉRDIDA) CONTROLADORA</b>	<b>76,6</b>	<b>71,9</b>	<b>(11%)</b>	<b>(6%)</b>
<b>17,6</b>	<b>(9,9)</b>	<b>GANANCIA (PÉRDIDA) ATRIBUIBLE A PARTICIPACIONES NO CONTROLADORAS</b>	<b>2,9</b>	<b>(4,5)</b>	<b>-</b>	<b>-</b>

■ El **resultado no operacional** el 4T18 presentó una **pérdida de US\$50,2 millones**, un 52% menor que la pérdida de US\$105,0 millones en 4T17. La menor pérdida se explica principalmente por un menor registro contable de provisiones por deterioro de activos individuales y de patentes por no uso de derechos de agua, parcialmente compensado por el efecto negativo de la variación del tipo de cambio CLP/US\$ sobre partidas temporales del balance en moneda local durante dicho trimestre, comparado con el efecto positivo que tuvo la variación de dicha paridad el 4T17.

**En términos acumulados**, el resultado no operacional a Dic18 presentó una **pérdida de US\$118,3 millones**, un 19% menor que la pérdida de US\$146,0 millones presentada a Dic17. La menor pérdida se explica principalmente por: (1) los menores deterioros explicados anteriormente, (2) un aumento registrado en la línea “Resultado de sociedades Contabilizadas por el método de Participación” como resultado de una revalorización de los terrenos de propiedad de HydroAysén, producto de su contabilización a valor de liquidación y (3) mayores ingresos financieros provenientes de mejores tasas de inversión de los excedentes de caja. Estos efectos fueron parcialmente compensados por el efecto negativo de la variación del tipo de cambio CLP/US\$ sobre partidas temporales del balance en moneda local durante el año.

■ El **gasto por impuestos** del 4T18 ascendió a **US\$32,6 millones**, cifra que se compara con la ganancia por impuesto de US\$23,7 millones del 4T17. La ganancia por impuesto se explica principalmente por el efecto en resultado generado por el reconocimiento del activo por impuesto diferido, producto de la pérdida tributaria generada a partir del cese de actividades y cancelación del “Proyecto Hidroeléctrico HydroAysén” por US\$39,8 millones, en noviembre de 2017.

**En términos acumulados**, el gasto por impuesto a Dic18 ascendió a **US\$98,4 millones**, que se compara con el gasto por impuesto de US\$34,1 millones presentados en Dic17. El mayor cargo por impuestos se explica principalmente por: (1) el reconocimiento del activo por impuesto diferido producto de la cancelación del “Proyecto Hidroeléctrico HidroAysén” explicado anteriormente y (2) una utilidad por impuesto (diferido) registrada el 2017 en Fenix, como resultado de la apreciación del sol peruano. Dada la depreciación del sol durante el año 2018, se registró una pérdida por este concepto en dicho período.

■ ■ ■ La Compañía presentó en el 4T18 una **ganancia que alcanzó los US\$67,4 millones**, un 15% menor a la ganancia de US\$79,5 millones del 4T17. La menor ganancia se explica principalmente por el mayor gasto por impuestos explicado anteriormente y por un mayor gasto por depreciación y amortización debido a la activación de mantenimientos mayores y proyectos. Estos efectos fueron compensados en parte por la menor pérdida no operacional y el mayor EBITDA del trimestre.

**En términos acumulados**, el resultado presenta una ganancia a Dic18 por **US\$230,4 millones**, un 20% menor a la ganancia de US\$288,6 millones de igual período del año anterior, explicado principalmente por las mismas razones que en términos trimestrales.



## 4. ANÁLISIS DEL BALANCE GENERAL CONSOLIDADO

La Tabla 6 presenta un análisis de cuentas relevantes del Balance al 31 de diciembre de 2017 y al 31 de diciembre de 2018. Posteriormente serán analizadas las principales variaciones.

**Tabla 6:** Principales Partidas del Balance Consolidado, Chile y Perú (US\$ millones)

	dic-17	dic-18	Var	Var %
Activos corrientes	1.147,2	1.151,3	4,1	0%
Activos no corrientes	5.775,4	5.627,1	(148,3)	(3%)
<b>TOTAL ACTIVOS</b>	<b>6.922,5</b>	<b>6.778,3</b>	<b>(144,2)</b>	<b>(2%)</b>
Pasivos corrientes	354,8	345,4	(9,4)	(3%)
Pasivos no corrientes	2.617,0	2.576,0	(41,0)	(2%)
Patrimonio neto	3.950,7	3.856,9	(93,8)	(2%)
<b>TOTAL PATRIMONIO NETO Y PASIVOS</b>	<b>6.922,5</b>	<b>6.778,3</b>	<b>(144,2)</b>	<b>(2%)</b>

**Activos Corrientes:** Alcanzaron US\$1.151,3 millones, en línea con respecto al cierre de Dic17.

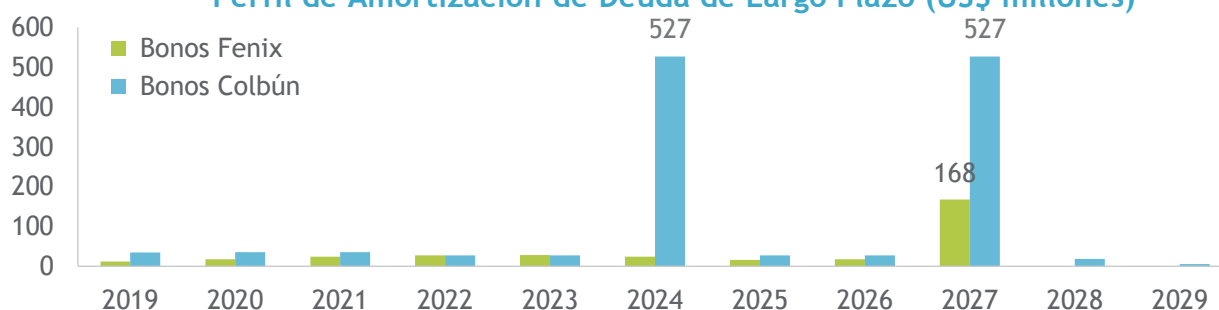
**Activos No Corrientes:** Registraron US\$5.627,1 millones al cierre de Dic18, disminuyendo levemente respecto al saldo registrado a Dic17, explicado principalmente por la depreciación de activo fijo, compensado en parte por el capex del período.

**Pasivos Corrientes:** Totalizaron US\$345,4 millones al cierre de Dic18, disminuyendo un 3% con respecto al cierre de Dic17, principalmente debido a las provisiones registradas en el saldo a Dic17, por pagos de impuestos realizados en abril de 2018.

**Pasivos No Corrientes:** Totalizaron US\$2.576,0 millones al cierre de Dic18, disminuyendo un 2% respecto al saldo registrado a Dic17, principalmente debido a las amortizaciones de deuda financiera durante el año.

**Patrimonio:** La Compañía alcanzó un Patrimonio Neto de US\$3.856,9 millones, disminuyendo un 2% respecto al cierre de Dic17. Esta disminución se debe principalmente al reparto del dividendo definitivo por US\$212,8 millones en mayo de 2018 y del dividendo provisorio por US\$84,2 millones en diciembre de 2018, parcialmente compensados por la utilidad generada durante el año.

### Perfil de Amortización de Deuda de Largo Plazo (US\$ millones)



**Tabla 7: Principales Partidas De Endeudamiento (US\$ millones)**

	dic-17	dic-18	Var	Var %
Deuda Financiera Bruta*	1.659,5	1.603,3	(56,2)	(3%)
Inversiones Financieras**	810,2	788,1	(22,1)	(3%)
Deuda Neta	849,2	815,2	(34,1)	(4%)
EBITDA LTM	692,1	684,1	(8,0)	(1%)
Deuda Neta/EBITDA LTM	1,2	1,2	(0,0)	(3%)

(\*) El monto incluye un bono internacional por US\$335 millones y un leasing financiero por US\$15,0 millones asociados a Fenix, sin recurso a Colbún.

(\*\*) La cuenta "Inversiones Financieras" aquí presentada, incluye el monto asociado a depósitos a plazo que por tener plazo de inversión superior a 90 días se encuentran registrados como "Otros Activos Financieros Corrientes" en los Estados Financieros.

**Tabla 8: Perfil Deuda Financiera de Largo Plazo**

Vida Media	6,7 años
Tasa promedio	4,5% (100% tasa fija)
Moneda*	95% USD / 5% UF

(\*) Incluye los derivados asociados

## 5. INDICADORES FINANCIEROS CONSOLIDADOS

A continuación, se presenta un cuadro comparativo de índices financieros a nivel consolidado. Los indicadores financieros de Balance son calculados a la fecha que se indica y los del Estado de Resultados consideran el resultado acumulado de los últimos doce meses a la fecha indicada.

**Tabla 9: Índices Financieros**

Indicador	dic-17	dic-18	Var %
Liquidez Corriente: Activo Corriente en operación / Pasivos Corriente en operación	3,23	3,33	3,1%
Razón Ácida: (Activo Corriente - Inventarios - Pagos Anticipados) / Pasivos Corriente en operación	3,06	3,21	4,9%
Razón de Endeudamiento: (Pasivos Corrientes en Operación + Pasivos no Corrientes) / Total Patrimonio Neto	0,75	0,76	0,7%
Deuda Corto Plazo (%): Pasivos Corrientes en operación / (Pas. Corrientes en operación + Pas. no Corrientes)	11,94%	11,82%	(1,0%)
Deuda Largo Plazo (%): Pasivos no Corrientes en operación / (Pas. Corrientes en operación + Pas. no Corrientes)	88,06%	88,18%	0,1%
Cobertura Gastos Financieros: (Ganancia (Pérd.) antes de Impuestos + Gastos financieros) / Gastos Financieros	4,80	4,92	2,5%
Rentabilidad Patrimonial (%): Ganancia (Pérd.) de actividades continuadas después de impuesto / Patrimonio Neto Promedio	7,46%	5,90%	(20,8%)
Rentabilidad del Activo (%): Ganancia (Pérd.) controladora / Total Activo Promedio	3,94%	3,51%	(11,0%)
Rendimientos Activos Operacionales (%): Resultado de Operación / Propiedades, Plantas y Equipos Neto (Promedio)	8,39%	8,19%	(2,4%)

Los indicadores de flujo corresponden a valores de los últimos 12 meses.

- Patrimonio promedio: Patrimonio trimestre actual más el patrimonio un año atrás dividido por dos.
- Total activo promedio: Total activo trimestre actual más el total de activo un año atrás dividido por dos.
- Activos operacionales promedio: Total de Propiedad, Plantas y Equipos trimestre actual más el total de Propiedad, planta y equipo un año atrás dividido por dos.

- La **Liquidez Corriente** y la **Razón Ácida** fueron de 3,33x y 3,21x a Dic18, aumentando con respecto a Dic17, debido a una disminución de los pasivos corrientes como resultado principalmente de las provisiones registradas en el saldo a Dic17 por pagos de impuestos realizados en abril de 2018.
- La **Razón de Endeudamiento** alcanzó 0,76x a Dic18, en línea con el valor de 0,75x a Dic17.
- El porcentaje de **Deuda de Corto Plazo** a Dic18 fue de 11,82%, en línea con el valor de 11,94% a Dic17.
- El porcentaje de **Deuda de Largo Plazo** a Dic18 fue de 88,18%, en línea con el valor de 88,06% a Dic17.
- La **Cobertura de Gastos Financieros** a Dic18 fue de 4,92x, aumentando respecto al valor de 4,80x obtenido a Dic17, principalmente explicado por la mayor utilidad antes de impuestos registrada durante el período y por menores gastos financieros respecto al cierre de Dic17, producto del menor saldo de deuda financiera vigente.
- La **Rentabilidad Patrimonial** a Dic18 fue de 5,90%, disminuyendo respecto del valor de 7,46% registrado a Dic17. La variación se explica principalmente por la menor utilidad registrada durante el período, principalmente debido al mayor gasto por impuestos.
- La **Rentabilidad del Activo** y el **Rendimiento de Activos Operacionales** a Dic18 alcanzaron 3,51% y 8,19% respectivamente. La rentabilidad del activo disminuyó respecto a Dic17 debido a la menor utilidad del período explicada anteriormente. Por su parte, el rendimiento de activos operacionales disminuyó respecto a Dic17 debido al menor resultado operacional registrado a Dic18.

## 6. ANÁLISIS DEL FLUJO DE EFECTIVO CONSOLIDADO

El comportamiento del Flujo de Efectivo de la sociedad se presenta en la siguiente tabla:

**Tabla 10:** Resumen del Flujo Efectivo de Chile y Perú (US\$ millones)

Cifras Acumuladas			Cifras Trimestrales		Var %	
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
667,0	810,2	Efectivo Equivalente Inicial*	775,8	784,6	21%	1%
600,9	516,4	Flujo Efectivo de la Operación	194,1	144,4	(14%)	(26%)
(338,4)	(396,5)	Flujo Efectivo de Financiamiento	(142,7)	(117,3)	17%	(18%)
(129,1)	(118,6)	Flujo Efectivo de Inversión**	(23,8)	(18,0)	(8%)	(24%)
133,5	1,3	Flujo Neto del Periodo	27,6	9,1	-	(67%)
9,8	(23,4)	Efecto de las variaciones en las tasas de cambio sobre efectivo y efectivo equivalente	6,8	(5,6)	-	-
810,2	788,1	Efectivo Equivalente Final	810,2	788,1	(3%)	(3%)

(\*) El “Efectivo Equivalente” aquí presentado, incluye el monto asociado a depósitos a plazo que por tener plazo de inversión superior a 90 días se encuentran registrados como “Otros Activos Financieros Corrientes” en los Estados Financieros.

(\*\*) El “Flujo Efectivo de Inversión” difiere del de los Estados Financieros, ya que no incorpora el monto asociado a depósitos a plazo con vencimiento superior a 90 días.

Durante el 4T18, la Compañía presentó un **Flujo de Efectivo neto positivo de US\$9,1 millones**, disminuyendo un 67% con respecto al Flujo de Efectivo neto positivo de US\$27,6 millones del 4T17.

**Actividades de la operación:** Durante el 4T18 se generó un flujo neto positivo de US\$144,4 millones, disminuyendo un 26% respecto al 4T17. El menor flujo operacional, se explica por un aumento en el saldo de cuentas por cobrar a clientes durante el trimestre, producto de indexaciones aplicadas en los contratos de ventas de energía.

**En términos acumulados**, se registró un flujo neto positivo de US\$516,4 millones a Dic18, menor respecto al flujo neto positivo de US\$600,9 millones a Dic17, explicado principalmente por: (1) el pago del impuesto que grava las emisiones de las centrales térmicas, que entró en vigencia en enero de 2017 y cuyo primer pago fue realizado en abril de 2018, (2) mayores pagos de IVA y Pagos Provisionales Mensuales durante el 2018.

**Actividades de financiamiento:** Generaron un flujo neto negativo de US\$117,3 millones durante el 4T18, que se compara con el flujo neto negativo de US\$142,7 millones al 4T17. El menor flujo neto negativo del trimestre se asocia principalmente al registro de los gastos asociados a las emisiones de bonos y refinanciamiento de deuda en el mercado internacional, desembolsados durante el 4T17. Este efecto fue parcialmente compensado por el mayor pago de dividendo provisorio durante el 4T18, que ascendió a US\$84,2 millones comparado con US\$58,2 millones del año anterior. Este aumento se explica por un cambio en la política de dividendos de la Compañía, que aumentó el reparto desde un 30% a un 50% de la utilidad líquida distribuable. **En términos acumulados**, se registró un flujo neto negativo de US\$396,5 millones a Dic18, un 17% mayor que el flujo neto negativo de US\$338,4 millones a Dic17, explicado principalmente por el mayor reparto de dividendos realizado en mayo y en diciembre de 2018, respecto a los dividendos repartidos el año anterior.

**Actividades de inversión:** Generaron un flujo neto negativo de US\$18,0 millones durante el 4T18, disminuyendo un 24% respecto a los desembolsos por US\$23,8 millones al 4T17, principalmente debido a los desembolsos realizados el 4T17 para la construcción de la central Ovejería.

**En términos acumulados**, las actividades de inversión generaron un flujo neto negativo de US\$118,6 millones a Dic18, menor respecto a los desembolsos por US\$129,1 millones a Dic17, principalmente debido a los desembolsos realizados el año 2017 para la construcción de las centrales La Mina y Ovejería, las cuales entraron en operación en mayo de 2017 y en junio de 2018 respectivamente.

## 7. ANÁLISIS DEL ENTORNO Y RIESGOS

Colbún S.A. es una empresa generadora cuyo parque de producción alcanza una potencia instalada de 3.893 MW conformada por 2.250 MW en unidades térmicas, 1.634 MW en unidades hidráulicas y 9 MW del parque solar fotovoltaico Ovejería. La Compañía opera en el Sistema Eléctrico Nacional (SEN) en Chile, donde representa el 17% del mercado (23% en el SIC, previo a la interconexión con el SING efectiva a partir de octubre de 2017). También opera en el Sistema Eléctrico Interconectado Nacional (SEIN) en Perú, donde posee aproximadamente un 8% de participación de mercado. Ambas participaciones medidas en términos de energía producida.

A través de su política comercial, la Compañía busca ser un proveedor de energía competitiva, segura y sostenible con un volumen a comprometer a través de contratos que le permitan maximizar la rentabilidad a largo plazo de su base de activos, acotando la volatilidad de sus resultados. Estos presentan una variabilidad estructural, por cuanto dependen de condiciones exógenas como la hidrología y el precio de los combustibles (petróleo, gas natural y carbón). Para mitigar el efecto de dichas condiciones exógenas, la Compañía procura contratar en el largo plazo sus fuentes de generación (propias o adquiridas a terceros) con costos eficientes y eventualmente, en caso de existir déficit/superávit se puede recurrir a comprar/vender energía en el mercado spot a costo marginal.

### 7.1 Perspectiva De Mediano Plazo Chile

El año hidrológico iniciado en el mes de abril, presenta al 31 de diciembre una probabilidad de excedencia del SEN de un 81,4%. Dado lo anterior, la matriz energética ha continuado su operación con mayores fuentes termoeléctricas. Cabe recordar, en cuanto al suministro de gas, la Compañía posee acuerdos de suministro con Metrogas hasta el 2019 y con Enap Refinerías S.A. (“ERSA”) con un contrato que incluye capacidad reservada de regasificación por 13 años cuya entrada en vigencia fue el 1° de enero de 2018. Estos contratos permiten contar con gas natural para operar dos unidades de ciclo combinado durante gran parte del primer semestre, período del año en el cual generalmente se registra una menor disponibilidad de recurso hídrico. Además, existe la posibilidad de acceder a gas natural adicional vía compras spot permitiendo contar con respaldo eficiente en condiciones hidrológicas desfavorables en la segunda mitad del año.

Desde finales de 2016 Colbún se ha adjudicado el suministro de mediano plazo con clientes libres por más de 3.000 GWh/año aproximadamente y se encuentra en negociaciones para concretar nuevos acuerdos.

Los resultados de la Compañía para los próximos meses estarán determinados principalmente por un nivel balanceado entre generación propia costo-eficiente y nivel de contratación. Dicha generación eficiente dependerá de la operación confiable que puedan tener nuestras centrales y de las condiciones hidrológicas.

### 7.2 Perspectiva De Mediano Plazo en Perú

En el cuarto trimestre de 2018, el SEIN registró una condición hidrológica con probabilidad de excedencia de 50,6%, siendo 82,0% el valor registrado en igual trimestre de 2017. La tasa de crecimiento acumulada de la demanda eléctrica al cierre del cuarto trimestre fue de 3,7%, superando el bajo crecimiento que se experimentó en 2017. El comportamiento futuro de los costos marginales está supeditado principalmente al crecimiento de la demanda, a la hidrología y a los cambios regulatorios que tienen relación con la declaración de precios.

### 7.3 Plan De Crecimiento y Acciones De Largo Plazo

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La Compañía busca oportunidades de crecimiento en Chile y en países de la región, para mantener una posición relevante en la industria de generación eléctrica y para diversificar sus fuentes de ingresos en términos geográficos, condiciones hidrológicas, tecnologías de generación, acceso a combustibles y marcos regulatorios.

Colbún procura aumentar su capacidad instalada manteniendo una relevante participación hidráulica, con un complemento tanto térmico eficiente como proveniente de otras fuentes renovables que permita contar con una matriz de generación segura, competitiva y sustentable.

En Chile, Colbún tiene varios potenciales proyectos actualmente en distintas etapas de madurez, incluyendo proyectos hidroeléctricos, térmicos, fuentes variables y sus respectivas líneas de transmisión.

#### Proyectos en desarrollo

**■ ■ Proyecto Eólico Horizonte (607 MW):** El proyecto Horizonte es un parque eólico ubicado a 70 km al noreste de Taltal y 170 km al suroeste de Antofagasta. Cuenta con una potencia total de aproximadamente 607 MW y una generación anual promedio de aproximadamente 2.000 GWh.

Este proyecto se inicia a partir de la adjudicación de una licitación convocada por el Ministerio de Bienes Nacionales para el desarrollo, construcción y operación de un Parque Eólico mediante una concesión de uso oneroso por 30 años, en un sector de propiedad fiscal de cerca de 8 mil hectáreas.

Para su desarrollo se estiman cuatro años para las etapas de estudios y permisos más tres años para la construcción.

Durante el 2018 se avanzó en la etapa de factibilidad, logrando el inicio del proceso de medición del recurso mediante la instalación de torres anemométricas y equipos Lidar. A su vez se avanzó en la ingeniería y diagnóstico ambiental.

**■ ■ Proyecto Solar Fotovoltaico Sol de Tarapacá (200 MW):** El Proyecto considera la instalación de un parque de generación por energía solar que cuenta con una capacidad instalada cercana a 200 MW.

Este parque solar se encuentra ubicado a aproximadamente 5 km al sur-poniente de la localidad de La Tirana, y a unos 16 km al sur de Pozo Almonte en la Región de Tarapacá, y utiliza un área total de aproximadamente 423 ha.

La energía generada será inyectada al Sistema Interconectado a través de una línea de transmisión eléctrica, que se inicia en la S/E asociada al parque, y posee una extensión aproximada de 8 km de sur a norte, conectándose a la subestación nueva Pozo Almonte ubicada 2,5 km al noreste del cruce de la carretera a La Tirana con la carretera Panamericana.

Este proyecto se origina a partir de su adquisición a la empresa estadounidense First Solar, el cual se encontraba con un avance que incluye algunos estudios de ingeniería, estudios ambientales y un contrato exclusivo con opción de compra del terreno.

Durante el 4T18 se trabajó en la actualización de los estudios ambientales para poder dar inicio a la tramitación ambiental.

■ ■ ■ **Otros Proyectos de Energía Renovable de Fuente Variable (~1.000 MW):** Al cierre del 2018, Colbún ha podido completar un portafolio de locaciones para otros 5 proyectos eólicos y solares (en adición a los proyectos Horizonte y Sol de Tarapacá antes indicados), que están en etapas tempranas de desarrollo. Estos en total suman aproximadamente 1.000 MW, distribuidos en distintos puntos del país (Atacama, Coquimbo, BioBio, Los Ríos y Los Lagos).

■ ■ ■ **Proyecto Hidroeléctrico San Pedro (170 MW):** El proyecto San Pedro se ubica a unos 25 kilómetros al nororiente de la comuna de Los Lagos, Región de Los Ríos, y considera utilizar las aguas del río homónimo mediante una central de embalse ubicada entre el desagüe del Lago Riñihue y el Puente Malihue. Considerando las adecuaciones contempladas actualmente en el proyecto, éste tendrá una capacidad instalada aproximada de 170 MW para una generación anual de 953 GWh en condiciones hidrológicas normales. La operación de la central será tal que la cota del embalse permanecerá prácticamente constante, lo que significa que el caudal aguas abajo de la central no se verá alterado por su operación.

El proyecto línea de transmisión San Pedro-Ciruelos va a permitir evacuar la energía de la Central San Pedro al SEN mediante una línea de 220 kV y 47 kilómetros de longitud, que se conectará en la subestación Ciruelos, ubicada a unos 40 km al nororiente de Valdivia.

A raíz de que la autoridad terminó anticipadamente el proceso de tramitación ambiental por falta de información esencial el 2015, se ha continuado trabajando para completar los antecedentes necesarios para lograr que este proyecto se pueda ejecutar. Durante el 2018 se concluyó la preparación de estos antecedentes para finalmente reingresar al SEIA en diciembre de 2018.

■ ■ ■ **Proyecto Guaiquivilo Melado (316 MW):** El proyecto central hidroeléctrica Guaiquivilo Melado es un complejo hidroeléctrico con capacidad de regulación ubicado en las cuencas de los ríos Guaiquivilo y Melado, en la comuna de Colbún, Provincia de Linares. Cuenta una potencia total de 316 MW y una generación anual promedio de aproximadamente 1.629 GWh. Para inyectar la energía al SEN se considera una LAT de 220 kV con una extensión total aproximada de 90 km desde la Central Guaiquivilo hasta su punto de conexión en la LAT Los Córdones.

Respecto a este proyecto, Colbún ha decidido diferir su desarrollo mientras no estén dadas las condiciones de mercado para ejecutar la iniciativa, las que son permanentemente monitoreadas.

■ ■ ■ **Proyecto Los Cuartos (93 MW):** El proyecto hidroeléctrico Los Cuartos se ubica en el río Biobío, próximo a la localidad de San Carlos de Purén, a unos 5 km río arriba de la intersección con la Carretera Panamericana Sur. Esta central hidroeléctrica cuenta con derechos de agua que permiten alcanzar una potencia de 93 MW, con una generación media anual de aproximadamente 511 GWh. El proyecto también considera una línea de transmisión eléctrica de 10 km de longitud para conectar en la subestación Mulchén.

Respecto a este proyecto, Colbún ha decidido diferir su desarrollo mientras no estén dadas las condiciones de mercado para ejecutar la iniciativa, las que son permanentemente monitoreadas.



## 7.4 Gestión de Riesgo

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### A. Política de Gestión de Riesgos

La estrategia de Gestión de Riesgo está orientada a resguardar los principios de estabilidad y sustentabilidad de la Compañía, identificando y gestionando las fuentes de incertidumbre que la afectan o puedan afectar.

Gestionar integralmente los riesgos supone identificar, medir, analizar, mitigar y controlar los distintos riesgos incurridos por las distintas gerencias de la Compañía, así como estimar el impacto en la posición consolidada de la misma, su seguimiento y control en el tiempo. En este proceso intervienen tanto la alta dirección de Colbún como las áreas tomadoras de riesgo.

Los límites de riesgo tolerables, las métricas para la medición del riesgo y la periodicidad de los análisis de riesgo son políticas normadas por el Directorio de la Compañía.

La función de gestión de riesgo es responsabilidad de la Gerencia General, así como de cada división y gerencia de la Compañía, y cuenta con el apoyo de la Gerencia de Control de Gestión y Riesgos y la supervisión, seguimiento y coordinación del Comité de Riesgos y Sostenibilidad.

### B. Factores de Riesgo

Las actividades de la Compañía están expuestas a diversos riesgos que se han clasificado en riesgos del negocio eléctrico y riesgos financieros.

#### B.1. Riesgos del Negocio Eléctrico

##### B.1.1. Riesgo Hidrológico

En condiciones hidrológicas secas, Colbún debe operar sus plantas térmicas de ciclo combinado con compras de gas natural o con diésel, o por defecto operar sus plantas térmicas de respaldo o bien recurrir al mercado spot. Esta situación podría encarecer los costos de Colbún, aumentando la variabilidad de sus resultados en función de las condiciones hidrológicas.

La exposición de la Compañía al riesgo hidrológico se encuentra razonablemente mitigada mediante una política comercial que tiene por objetivo mantener un equilibrio entre la generación competitiva (hidráulica en un año medio a seco, y generación térmica a carbón y a gas natural costo eficiente, y otras energías renovables costo eficientes y debidamente complementadas por otras fuentes de generación dada su intermitencia y volatilidad) y los compromisos comerciales. En condiciones de extremas y repetidas sequías, una eventual falta de agua para refrigeración afectaría la capacidad generadora de los ciclos combinados. Con el objetivo de minimizar el uso del agua y asegurar la disponibilidad operacional durante periodos de escasez hídrica, Colbún ha construido una Planta de Osmosis Inversa que permite reducir hasta en un 50% el agua utilizada en el proceso de enfriamiento de los ciclos combinados del Complejo Nehuencho. La planta terminó su construcción en mayo de 2017 y entró en operación durante el tercer trimestre del 2017.

En Perú, Colbún cuenta con una central de ciclo combinado y una política comercial orientada a comprometer a través de contratos de mediano y largo plazo, dicha energía de base. La exposición a hidrologías secas es acotada ya que sólo impactaría en caso de eventuales fallas operacionales que obliguen a recurrir al mercado spot. Adicionalmente el mercado eléctrico peruano presenta una oferta térmica eficiente y disponibilidad de gas natural local suficiente para respaldarla.

### B.1.2. Riesgo de precios de los combustibles

En Chile, en situaciones de bajos afluentes a las plantas hidráulicas, Colbún debe hacer uso principalmente de sus plantas térmicas o efectuar compras de energía en el mercado spot a costo marginal. Lo anterior genera un riesgo por las variaciones que puedan presentar los precios internacionales de los combustibles. Parte de este riesgo se mitiga con contratos cuyos precios de venta también se indexan con las variaciones de los precios de los combustibles. Adicionalmente, se llevan adelante programas de cobertura con diversos instrumentos derivados, tales como opciones *call* y opciones *put*, entre otras, para cubrir la porción remanente de esta exposición en caso de existir. En caso contrario, ante una hidrología abundante, la Compañía podría encontrarse en una posición excedentaria en el mercado spot cuyo precio estaría en parte determinado por el precio de los combustibles.

En Perú, el costo del gas natural tiene una menor dependencia de los precios internacionales, dada una importante oferta doméstica de este hidrocarburo, lo que permite acotar la exposición a este riesgo.

Al igual que en Chile, la proporción que queda expuesta a variaciones de precios internacionales es mitigada mediante fórmulas de indexación en contratos de venta de energía.

Por lo anteriormente expuesto, la exposición al riesgo de variaciones de precios de los combustibles se encuentra en parte mitigado.

### B.1.3. Riesgos de suministro de combustibles

Respecto del suministro de combustibles líquidos, en Chile la Compañía mantiene acuerdos con proveedores y capacidad de almacenamiento propio que le permiten contar con una adecuada confiabilidad en la disponibilidad de este tipo de combustible.

Respecto al suministro de gas natural en Chile, Colbún mantiene contratos de mediano plazo con ERSA y Metrogas y para el largo plazo destaca el nuevo contrato con ERSA por opciones de suministro de gas natural licuado y capacidad reservada de regasificación, vigente desde el año 2018 al 2030 que permitirá a Colbún disponer de gas natural para el Complejo Nehuenco. Adicionalmente, se han firmado contratos de suministro de gas con productores argentinos, lo que permite tener la opción de acceder a los excedentes de gas que se produzcan en el país vecino.

Por su parte, en Perú, Fenix cuenta con contratos de largo plazo con el consorcio ECL88 (Pluspetrol, Pluspetrol Camisea, Hunt, SK, Sonatrach, Tecpetrol y Repsol) y acuerdos de transporte de gas con TGP.

En cuanto a las compras de carbón para la central térmica Santa María Unidad I, se realizan licitaciones (la última en noviembre de 2018), invitando a importantes suministradores internacionales, adjudicando el suministro a empresas competitivas y con respaldo. Lo anterior siguiendo una política de compra temprana y una política de gestión de inventario de modo de mitigar sustancialmente el riesgo de no contar con este combustible.

### B.1.4. Riesgos de fallas en equipos y mantención

La disponibilidad y confiabilidad de las unidades de generación y de las instalaciones de transmisión de Colbún son fundamentales para el negocio. Es por esto que Colbún tiene como política realizar mantenimientos programados, preventivos y predictivos a sus equipos, acorde a las recomendaciones de sus proveedores, y mantiene una política de cobertura de este tipo de riesgos a través de seguros para sus bienes físicos, incluyendo cobertura por daño físico y perjuicio por paralización.

### B.1.5. Riesgos de construcción de proyectos

El desarrollo de nuevos proyectos puede verse afectado por factores tales como: retrasos en la obtención de permisos, modificaciones al marco regulatorio, judicialización, aumento en el precio de los equipos o de la mano de obra, oposición de grupos de interés locales e internacionales, condiciones geográficas imprevistas, desastres naturales, accidentes u otros imprevistos.

La exposición de la Compañía a este tipo de riesgos se gestiona a través de una política comercial que considera los efectos de los eventuales atrasos de los proyectos. Además, se incorporan niveles de holgura en las estimaciones de plazo y costo de construcción. Adicionalmente, la exposición de la Compañía a este riesgo se encuentra parcialmente cubierta con la contratación de pólizas del tipo “Todo Riesgo de Construcción” que cubren tanto daño físico como pérdida de beneficio por efecto de atraso en la puesta en servicio producto de un siniestro, ambos con deducibles estándares para este tipo de seguros.

Las compañías del sector enfrentan un mercado eléctrico muy desafiante, con mucha activación de parte de diversos grupos de interés, principalmente de comunidades vecinas y ONGs, las cuales legítimamente están demandando más participación y protagonismo. Como parte de esta complejidad, los plazos de tramitación ambiental se han hecho más inciertos, los que en ocasiones son además seguidos por extensos procesos de judicialización. Lo anterior ha resultado en una menor construcción de proyectos de tamaños relevantes.

Colbún tiene como política integrar con excelencia las dimensiones sociales y ambientales al desarrollo de sus proyectos. Por su parte, la Compañía ha desarrollado un modelo de vinculación social que le permita trabajar junto a las comunidades vecinas y la sociedad en general, iniciando un proceso transparente de participación ciudadana y de generación de confianza en las etapas tempranas de los proyectos y durante todo el ciclo de vida de los mismos.

### B.1.6. Riesgos regulatorios

La estabilidad regulatoria es fundamental para el sector de generación, donde los proyectos de inversión tienen largos plazos de desarrollo, ejecución y retorno de la inversión. Colbún estima que los cambios regulatorios deben hacerse considerando las complejidades del sistema eléctrico y manteniendo los incentivos adecuados para la inversión. Es importante disponer de una regulación que entregue reglas claras y transparentes que consoliden la confianza de los agentes del sector.

En Chile, el actual gobierno está llevando a cabo diversos cambios regulatorios que o bien, se han heredado del gobierno anterior, o se han iniciado durante el presente mandato. Estos cambios, dependiendo de la forma en que se implementen, podrían representar oportunidades o riesgos para la Compañía.

Respecto a los proyectos de Ley que están en discusión en el Congreso, destacan (i) la reforma al Código de Aguas, (ii) el proyecto de ley para modernizar el Sistema de Evaluación de Impacto Ambiental, (iii) el proyecto de ley que crea el Ministerio de Pueblos Indígenas, (iv) el proyecto de ley que crea el Consejo Nacional y los Consejos de Pueblos Indígenas, y (v) la Ley de Biodiversidad y Áreas Protegidas.

Adicionalmente, el Ministerio de Energía ha anunciado discusión y creación de una “Ley de Flexibilidad” y otra de “Mejoramientos a la Ley de Transmisión”, que buscarán perfeccionar aspectos de la Ley de Transmisión promulgada el 2016. Los contenidos específicos de estas leyes aún no han sido definidos.

Por otro lado, La Comisión Nacional de Energía y el Ministerio de Energía han continuado desarrollando Mesas de Trabajo para seguir con sus labores normativas, destacando la Mesa de Reglamento de los Sistemas de Transmisión y Planificación de la Transmisión, y varias Mesas para la elaboración de Normas Técnicas. Adicionalmente, el Ministerio dio por concluida la Mesa de Descarbonización de la matriz eléctrica y el Plan Anual de Expansión de Transmisión del año 2017 y ha realizado avances en proceso de elaboración del Plan de Expansión Anual de Transmisión para el Año 2018.

En Perú, existen dos proyectos de ley en el Senado que buscan recuperar la eficiencia en su mercado eléctrico a través de modificaciones en la declaración de precios de gas. Además, se está discutiendo una ley que busca el reconocimiento de Potencia Firme a Energías Renovables. Paralelamente, el Ministerio de Energía de Perú dio a conocer su agenda de cambios normativos, los que incluyen (i) Modificaciones del Reglamento de licitaciones de Suministro, para promover la competitividad, (ii) Elaboración de un reglamento de Generación Distribuida, (iii) Proyecto de Ley para la promoción de vehículos eléctricos.

De la calidad de estas nuevas regulaciones y de las señales que por ello entregue la autoridad, dependerá - en buena medida - el necesario y equilibrado desarrollo del mercado eléctrico en los próximos años, tanto en Chile como en Perú.

#### **B.1.7. Riesgo de variación de demanda/oferta y de precio de venta de la energía eléctrica**

La proyección de demanda de consumo eléctrico futuro es una información muy relevante para la determinación del precio de mercado.

En Chile, un bajo crecimiento de la demanda, una baja en el precio de los combustibles y un aumento en el ingreso de proyectos de energías renovables variables solar y eólica determinaron durante los últimos años una baja en el precio de corto plazo de la energía (costo marginal).

Respecto de los valores de largo plazo, las licitaciones de suministro de clientes regulados concluidas en agosto de 2016 y octubre de 2017 se tradujeron en una baja importante en los precios presentados y adjudicados, reflejando la mayor dinámica competitiva que existe en este mercado y el impacto que está teniendo la irrupción de nuevas tecnologías -solar y eólica fundamentalmente- con una significativa reducción de costos producto de su masificación. Aunque se puede esperar que los factores que gatillan esta dinámica competitiva y tendencia en los precios se mantengan a futuro, es difícil determinar su alcance preciso en los valores de largo plazo de la energía.

Adicionalmente, y dada la diferencia de precios de la energía entre clientes libres y regulados, pudiese ocurrir que ciertos clientes regulados podrían acogerse a régimen de cliente libre. Lo anterior se puede producir dada la opción, contenida en la legislación eléctrica que permite que los clientes con potencia conectada entre 500 kW y 5.000 kW pueden ser categorizados como clientes regulados o libres. Colbún tiene uno de los parques de generación más eficientes del sistema chileno, por lo que tiene la capacidad de ofrecer condiciones competitivas.

En Perú, también se presenta un escenario de desbalance temporal entre oferta y demanda, generado principalmente por el aumento de oferta eficiente (centrales hidroeléctricas y a gas natural).

El crecimiento que se ha observado en el mercado chileno (y potencialmente en el peruano) de fuentes de generación renovables de fuentes variables como la generación solar y eólica, puede generar costos de integración y por lo tanto afectar las condiciones de operación del resto del sistema eléctrico, sobre todo en ausencia de un mercado de servicios complementarios que remunere adecuadamente los servicios necesarios para gestionar la variabilidad de las fuentes de generación indicadas.

#### **B.2 Riesgos Financieros**

Son aquellos riesgos ligados a la imposibilidad de realizar transacciones o al incumplimiento de obligaciones procedentes de las actividades por falta de fondos, como también a las variaciones de tasas de interés, tipos de cambios, quiebra de contrapartes u otras variables financieras de mercado que puedan afectar patrimonialmente a Colbún.

### B.2.1 Riesgo de tipo de cambio

El riesgo de tipo de cambio viene dado principalmente por fluctuaciones de monedas que provienen de dos fuentes. La primera fuente de exposición proviene de flujos correspondientes a ingresos, costos y desembolsos de inversión que están denominados en monedas distintas a la moneda funcional (dólar de los Estados Unidos).

La segunda fuente de riesgo corresponde al descalce contable que existe entre los activos y pasivos del Estado de Situación Financiera denominados en monedas distintas a la moneda funcional.

La exposición a flujos en monedas distintas al dólar se encuentra acotada por tener prácticamente la totalidad de las ventas de la Compañía denominada directamente o con indexación al dólar. Del mismo modo, los principales costos corresponden a compras de petróleo diésel, gas natural y carbón, los que incorporan fórmulas de fijación de precios basados en precios internacionales denominados en dólares. Respecto de los desembolsos en proyectos de inversión, la Compañía incorpora indexadores en sus contratos con proveedores y en ocasiones recurre al uso de derivados para fijar los egresos en monedas distintas al dólar.

La exposición al descalce de cuentas de Balance se encuentra mitigada mediante la aplicación de una Política de descalce máximo entre activos y pasivos para aquellas partidas estructurales denominadas en monedas distintas al dólar. Para efectos de lo anterior, Colbún mantiene una proporción relevante de sus excedentes de caja en dólares y adicionalmente recurre al uso de derivados, siendo los más utilizados swaps de moneda y forwards.

### B.2.2 Riesgo de tasa de interés

Se refiere a las variaciones de las tasas de interés que afectan el valor de los flujos futuros referenciados a tasa de interés variable, y a las variaciones en el valor razonable de los activos y pasivos referenciados a tasa de interés fija que son contabilizados a valor razonable. Para mitigar este riesgo se utilizan swaps de tasa de interés fija.

La deuda financiera de la Compañía, incorporando el efecto de los derivados de tasa de interés contratados, presenta el siguiente perfil:

Tabla 11: Perfil de Deuda Financiera

Tasa de interés	dic-17	sep-18	dic-18
Fija	100%	100%	100%
Variable	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Al 31 de diciembre de 2018, la deuda financiera de la Compañía se encuentra denominada en un 100% a tasa fija.

### B.2.3 Riesgo de crédito

La Compañía se ve expuesta a este riesgo derivado de la posibilidad de que una contraparte falle en el cumplimiento de sus obligaciones contractuales y produzca una pérdida económica o financiera. Históricamente todas las contrapartes con las que Colbún ha mantenido compromisos de entrega de energía han hecho frente a los pagos correspondientes de manera correcta.

Con respecto a las colocaciones en Tesorería y derivados que se realizan, Colbún efectúa las transacciones con entidades de elevados ratings crediticios. Adicionalmente, la Compañía ha establecido límites de participación por contraparte, los que son aprobados por el Directorio y revisados periódicamente.

Al 31 de diciembre de 2018, las inversiones de excedentes de caja se encuentran invertidas en fondos mutuos (de filiales bancarias) y en depósitos a plazo en bancos locales e internacionales.

Los primeros corresponden a fondos mutuos de corto plazo, con duración menor a 90 días, conocidos como “*money market*”.

La información sobre rating crediticio de los clientes se encuentra revelada en la nota 11.b de los Estados Financieros.

#### B.2.4 Riesgo de liquidez

Este riesgo viene dado por las distintas necesidades de fondos para hacer frente a los compromisos de inversiones y gastos del negocio, vencimientos de deuda, entre otros. Los fondos necesarios para hacer frente a estas salidas de flujo de efectivo se obtienen de los propios recursos generados por la actividad ordinaria de Colbún y por la contratación de líneas de crédito que aseguren fondos suficientes para soportar las necesidades previstas por un período.

Al 31 de diciembre de 2018, Colbún cuenta con excedentes de caja por aproximadamente US\$788 millones, invertidos en Depósitos a Plazo con duración promedio de 108 días (se incluyen depósitos con duración inferior y superior a 90 días, estos últimos son registrados como “Otros Activos Financieros Corrientes” en los Estados Financieros Consolidados) y en fondos mutuos de corto plazo con duración menor a 90 días. Asimismo, la Compañía tiene disponibles como fuentes de liquidez adicional al día de hoy: (i) dos líneas de bonos inscritas en el mercado local por un monto conjunto de UF 7 millones y (ii) líneas bancarias no comprometidas por aproximadamente US\$150 millones.

En los próximos doce meses, la Compañía deberá desembolsar aproximadamente US\$118 millones por concepto de intereses y amortizaciones de deuda financiera. Éste remanente de intereses y amortizaciones menores se espera cubrir con la generación propia de flujos de caja.

Al 31 de diciembre de 2018, Colbún cuenta con clasificaciones de riesgo nacional AA- por Fitch Ratings y AA por Standard & Poor’s (S&P), ambas con perspectivas estables. A nivel internacional la clasificación de la Compañía es Baa2 por Moody’s, BBB por S&P y BBB por Fitch Ratings, todas con perspectivas estables.

Por su parte, Fenix cuenta con clasificaciones de riesgo internacional Baa3 por Moody’s, BBB- por Standard & Poor’s (S&P) y BBB- por Fitch Ratings, todas con perspectivas estables.

Por lo anteriormente expuesto, se considera que el riesgo de liquidez de la Compañía actualmente es acotado.

Información sobre vencimientos contractuales de los principales pasivos financieros se encuentra revelada en la nota 21.c.2 de los Estados Financieros.

#### B.2.5 Medición del riesgo

La Compañía realiza periódicamente análisis y mediciones de su exposición a las distintas variables de riesgo, de acuerdo a lo presentado en párrafos anteriores. La gestión de riesgo es realizada por un Comité de Riesgos con el apoyo de la Gerencia de Riesgo Corporativo y en coordinación con las demás divisiones de la Compañía.

Con respecto a los riesgos del negocio, específicamente con aquellos relacionados a las variaciones en los precios de los commodities, Colbún ha implementado medidas mitigatorias consistentes en indexadores en contratos de venta de energía y coberturas con instrumentos derivados para cubrir una posible exposición remanente. Es por esta razón que no se presentan análisis de sensibilidad.

Para la mitigación de los riesgos de fallas en equipos o en la construcción de proyectos, la Compañía cuenta con seguros con cobertura para daño de sus bienes físicos, perjuicios por paralización y pérdida de beneficio por atraso en la puesta en servicio de un proyecto. Se considera que este riesgo está razonablemente acotado.

Con respecto a los riesgos financieros, para efectos de medir su exposición, Colbún elabora análisis de sensibilidad y valor en riesgo con el objetivo de monitorear las posibles pérdidas asumidas por la Compañía en caso que la exposición exista.

El riesgo de tipo de cambio se considera acotado por cuanto los principales flujos de la Compañía (ingresos, costos y desembolsos de proyectos) se encuentran denominada directamente o con indexación al dólar.

La exposición al descalce de cuentas contables se encuentra mitigada mediante la aplicación de una política de descalce máximo entre activos y pasivos para aquellas partidas estructurales de Balance denominadas en monedas distintas al dólar. En base a lo anterior, al 31 de diciembre de 2018 la exposición de la Compañía frente al impacto de diferencias de cambio sobre partidas estructurales se traduce en un potencial efecto de aproximadamente US\$4,3 millones, en términos trimestrales, en base a un análisis de sensibilidad al 95% de confianza.

No existe riesgo de variación de tasas de interés, ya que el 100% de la deuda financiera se encuentra contratada a tasa fija.

El riesgo de crédito se encuentra acotado por cuanto Colbún opera únicamente con contrapartes bancarias locales e internacionales de alto nivel crediticio y ha establecido políticas de exposición máxima por contraparte que limitan la concentración específica con estas instituciones. En el caso de los bancos, las instituciones locales tienen clasificación de riesgo local igual o superior a BBB y las entidades extranjeras tienen clasificación de riesgo internacional grado de inversión.

Al cierre del período, la institución financiera que concentra la mayor participación de excedentes de caja alcanza un 23%. Respecto de los derivados existentes, las contrapartes internacionales de la Compañía tienen riesgo equivalente a BBB+ o superior y las contrapartes nacionales tienen clasificación local BBB+ o superior. Cabe destacar que en derivados ninguna contraparte concentra más del 21% en términos de nocional.

El riesgo de liquidez se considera bajo en virtud de la relevante posición de caja de la Compañía, la cuantía de obligaciones financieras en los próximos doce meses y el acceso a fuentes de financiamiento adicionales.

## 8. ANEXO FENIX POWER

### 8.1 Generación y Ventas Físicas Perú

La Tabla a continuación presenta un cuadro comparativo de ventas físicas de energía, potencia y generación para los trimestres 4T17, 4T18 y acumulado a Dic17 y Dic18.

Cifras Acumuladas		Ventas	Cifras Trimestrales		Var %	Var %
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
4.112	4.045	Total Ventas Físicas (GWh)	1.110	1.160	(2%)	4%
3.012	3.001	Clientes bajo Contrato	820	717	(0%)	(13%)
1.099	1.044	Ventas en el Mercado Spot	290	443	(5%)	53%
557	552	Potencia (MW)	554	554	(1%)	(0%)

Cifras Acumuladas		Generación	Cifras Trimestrales		Var %	Var %
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
4.113	3.914	Total Generación (GWh)	1.135	1.186	(5%)	4%
4.113	3.914	Gas	1.135	1.186	(5%)	4%
93	210	Compras en el Mercado Spot (GWh)	-	-	126%	-
1.007	834	Ventas - Compras en el Mercado Spot (GWh)	290	443	(17%)	53%

### 8.2. Análisis Resultado Operacional Perú

La Tabla a continuación muestra un resumen del Resultado Operacional y EBITDA de Fenix para los trimestres 4T17, 4T18 y acumulado a Dic17 y Dic18. Posteriormente serán analizadas las principales cuentas y/o variaciones.

Tabla: EBITDA Perú (US\$ millones)

Cifras Acumuladas			Cifras Trimestrales		Var %	
dic-17	dic-18		4T17	4T18	Ac/Ac	T/T
192,8	201,5	INGRESOS DE ACTIVIDADES ORDINARIAS	46,7	47,6	4%	2%
122,7	107,3	Ventas a clientes Regulados	31,7	24,0	(13%)	(24%)
11,1	29,6	Venta a Clientes Libres	0,0	7,0	166%	-
13,2	17,6	Ventas Otras Generadoras	2,3	6,3	34%	172%
41,2	42,0	Peajes	11,6	9,2	2%	(21%)
4,6	5,0	Otros Ingresos	1,1	1,1	9%	8%
(141,4)	(156,2)	MATERIAS PRIMAS Y CONSUMIBLES UTILIZADOS	(37,4)	(38,6)	10%	3%
(37,1)	(41,0)	Peajes	(10,2)	(9,8)	11%	(4%)
(3,0)	(6,5)	Compras de Energía y Potencia	(0,0)	(0,0)	115%	(80%)
(91,7)	(92,4)	Consumo de Gas	(24,4)	(25,3)	1%	4%
0,0	(1,4)	Consumo de Diésel	0,0	0,0	-	-
(9,6)	(14,9)	Otros	(2,8)	(3,5)	56%	26%
51,4	45,3	MARGEN BRUTO	9,3	9,0	(12%)	(3%)
(5,8)	(6,1)	Gastos por Beneficios a Empleados	(1,7)	(1,5)	5%	(12%)
8,0	(3,4)	Otros Gastos, por Naturaleza	10,2	(1,4)	(143%)	(114%)
(32,2)	(33,3)	Gastos por Depreciación y Amortización	(8,3)	(8,6)	3%	3%
21,4	2,5	RESULTADO DE OPERACIÓN	9,4	(2,4)	(88%)	-
53,6	35,7	EBITDA	17,8	6,1	(33%)	(65%)



Los **Ingresos de actividades ordinarias del 4T18 ascendieron a US\$47,6 millones**, aumentando un 2% respecto al 4T17, principalmente debido a mayores ventas a clientes libres y a otras generadoras, parcialmente compensadas por menores ventas a clientes regulados y menores ingresos por concepto de peajes.

**En términos acumulados**, los ingresos de actividades ordinarias a Dic18 ascendieron a **US\$201,5 millones**, aumentando un 4% respecto a igual período del año anterior. Los mayores ingresos del período se explican principalmente por las mismas razones que las variaciones en términos trimestrales.

Los **costos de materias primas y consumibles utilizados aumentaron un 3% respecto a igual trimestre** del año anterior. El aumento se explica principalmente por un mayor consumo de gas, producto de la mayor generación del trimestre.

**En términos acumulados**, los **costos de materias primas y consumibles utilizados totalizaron US\$156,2 millones** a Dic18, aumentando un 10% en comparación a Dic17, explicado principalmente por mayores compras de energía y potencia en el mercado spot, producto de indisponibilidades menores de la central durante el año y por las compras de energía a otras generadoras para suministrar los contratos de ventas de energía durante el periodo de mantenimiento de la planta, lo que coincidió con una falla en el ducto de TGP, elevando el costo de compra de energía durante ese periodo.

El **EBITDA de Fenix totalizó US\$6,1 millones al 4T18**, menor que el EBITDA de US\$17,8 millones registrado en el 4T17.

**En términos acumulados**, el **EBITDA de Fenix a Dic17 alcanzó US\$35,7 millones** vs. el EBITDA de US\$53,6 millones a Dic17. La disminución se explica principalmente por el menor margen bruto antes explicado, y porque durante 2017 se reconoció de manera extraordinaria, en la línea "Otros Gastos, por Naturaleza", un reverso de provisiones por incobrabilidad de deudores por venta, originalmente contabilizada en 2016.

# Estados Financieros Resumidos Subsidiarias

Colbún Transmisión S.A.

Termoeléctrica Antihue S.A.

Empresa Eléctrica Industrial S.A.

Sociedad Hidroeléctrica Melocotón Ltda.

Termoeléctrica Nehuenco S.A.

Río Tranquilo S.A.

Inversiones Andinas SpA.

Inversiones SUD SpA.

Colbún Desarrollo SpA.

Santa Sofía Spa.

Colbún Perú S.A.

Inmersiones Las Canteras S.A.

Fenis Power Perú S.A.

Aysén Energía S.A.

Aysén Transmisión S.A.

Colbún Transmisión S.A.  
Estados de Situación Financiera, Clasificados  
al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	50	632
Otros activos no financieros, corrientes	25	257
Deudores comerciales y otras cuentas por cobrar, corrientes	13.940	2.860
Cuentas por cobrar a entidades relacionadas, corrientes	7	7
Inventarios corrientes	531	-
Activos por impuestos corrientes	1.022	673
<b>Activos corrientes totales</b>	<b>15.575</b>	<b>4.429</b>
<b>Activos no corrientes</b>		
Activos intangibles distintos de la plusvalía	40.111	14.368
Propiedades, planta y equipos	328.062	107.260
<b>Total activos no corrientes</b>	<b>368.173</b>	<b>121.628</b>
<b>TOTAL DE ACTIVOS</b>	<b>383.748</b>	<b>126.057</b>

<b>PATRIMONIO Y PASIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre 2017 MUS \$</b>
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	3.294	3.136
Cuentas por pagar a entidades relacionadas, corrientes	51.672	11.542
Pasivos por impuestos corrientes	-	346
Otros pasivos no financieros	1.027	987
<b>Pasivos corrientes totales</b>	<b>55.993</b>	<b>16.011</b>
<b>Pasivos no corrientes</b>		
Pasivos por impuestos diferidos	62.546	23.033
<b>Total pasivos no corrientes</b>	<b>62.546</b>	<b>23.033</b>
<b>Total pasivos</b>	<b>118.539</b>	<b>39.044</b>
<b>Patrimonio</b>		
Capital emitido	99.235	28.891
Ganancias (pérdidas) acumuladas	858	726
Otras Reservas	165.116	57.396
<b>Patrimonio Total</b>	<b>265.209</b>	<b>87.013</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>383.748</b>	<b>126.057</b>

Colbún Transmisión S.A.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	40.060	29.546
Materias primas y consumibles utilizados	(9.789)	(1.728)
Gastos por depreciación y amortización	(8.411)	(6.279)
Otros gastos, por naturaleza	(527)	(442)
Otras ganancias (pérdidas)	9	61
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>21.342</b>	<b>21.158</b>
Costos financieros	(2)	(1)
Diferencias de cambio	(91)	106
<b>Ganancia (pérdida) antes de impuesto</b>	<b>21.249</b>	<b>21.263</b>
Gasto por impuesto a las ganancias	(5.740)	(5.708)
<b>Ganancia (pérdida) procedentes de operaciones continuadas</b>	<b>15.509</b>	<b>15.555</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>15.509</b>	<b>15.555</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia (pérdida)</b>	<b>15.509</b>	<b>15.555</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
<b>Otros componentes de otro resultado integral, antes de impuestos</b>	-	-
<b>Impuesto a las ganancias relacionado con componentes de otro resultado integral</b>	-	-
<b>Otro resultado integral total</b>	-	-
<b>RESULTADO INTEGRAL TOTAL</b>	<b>15.509</b>	<b>15.555</b>

**Colbún Transmisión S.A.**  
**Estados de Flujos de Efectivo – Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADOS DE FLUJOS DIRECTO</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	42.114	35.160
Otros cobros por actividades de la operación	129	-
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(1.528)	(1.656)
Otros pagos por actividades de operación	(695)	(3.943)
<b>Flujos de efectivo netos procedentes de (utilizados en) la operación</b>	<b>40.020</b>	<b>29.561</b>
Impuestos a las ganancias reembolsados (pagados)	(7.907)	(7.715)
Otras entradas (salidas) de efectivo	(2)	(1)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>32.111</b>	<b>21.845</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos	(33.541)	(10.334)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(33.541)</b>	<b>(10.334)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Importes procedentes de préstamos</b>	<b>19.159</b>	<b>-</b>
Préstamos de entidades relacionadas	19.159	-
Dividendos pagados	(18.500)	(11.000)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>659</b>	<b>(11.000)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>(771)</b>	<b>511</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	189	9
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>(582)</b>	<b>520</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	632	112
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>50</b>	<b>632</b>

Colbún Transmisión S.A.  
Estados de Cambios en el Patrimonio  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

Estados de Cambios en el Patrimonio	Capital emitido	Otras reservas	Ganancias (pérdidas) acumuladas	Patrimonio Total
	MUS \$	MUS \$	MUS \$	MUS \$
Saldo inicial al 01.01.2018	28.891	57.396	726	87.013
<b>Cambios en Patrimonio</b>				
<b>Resultado integral</b>				
Ganancia (pérdida)			15.509	15.509
Otro resultado integral			-	-
Emisión de patrimonio	70.344	-	-	70.344
Dividendos	-	-	(18.500)	(18.500)
Incrementos por otras aportaciones de los propietarios		-	-	-
Incremento (disminución) por transferencias y otros cambios	-	107.720	3.123	110.843
Total de cambios en patrimonio	<b>70.344</b>	<b>107.720</b>	<b>132</b>	<b>178.196</b>
<b>Saldo final al 31.12.2018</b>	<b>99.235</b>	<b>165.116</b>	<b>858</b>	<b>265.209</b>

	Capital emitido	Otras reservas	Ganancias (pérdidas) acumuladas	Patrimonio Total
	MUS \$	MUS \$	MUS \$	MUS \$
Saldo inicial al 01.01.2017	20.503	52.542	(7.821)	65.224
<b>Cambios en Patrimonio</b>				
<b>Resultado integral</b>				
Ganancia (pérdida)			15.555	15.555
Otro resultado integral			-	-
Emisión de patrimonio	8.388	-	-	8.388
Dividendos	-	-	(11.000)	(11.000)
Incremento (disminución) por transferencias y otros cambios	-	4.854	3.992	8.846
Total de cambios en patrimonio	<b>8.388</b>	<b>4.854</b>	<b>8.547</b>	<b>21.789</b>
<b>Saldo final al 31.12.2017</b>	<b>28.891</b>	<b>57.396</b>	<b>726</b>	<b>87.013</b>

Colbún Transmisión S.A.  
Transacciones con Empresas Relacionadas

Cuentas por Cobrar Empresas Relacionadas

RUT	Sociedad	País de origen	Naturaleza de la relación	Tipo de moneda	Corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$
76.293.900-2	Río Tranquilo S.A.	Chile	Accionista	Pesos	7	7
<b>Total</b>					<b>7</b>	<b>7</b>

Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	País de origen	Naturaleza de la relación	Tipo de moneda	Corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$
96.854.000-9	Empresa Eléctrica Industrial S.A.	Chile	Accionista	Pesos	787	-
96.505.760-9	Colbún S.A.	Chile	Controlador	Pesos	50.885	11.542
<b>Total</b>					<b>51.672</b>	<b>11.542</b>

Transacciones más significativas y sus efectos en resultado

RUT	Sociedad	País de origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero - Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) MUS \$	Monto MUS \$	Efecto en resultados (cargo) MUS \$
96.505.760-9	Colbún S.A.	Chile	Controlador	UF	Servicios recibidos	2.354	(1.978)	333	(280)
				UF	Arriendos	2.520	(2.118)	266	(224)
				Pesos	Venta peajes	14.431	12.127	10.474	8.802
				Pesos	Compra peajes	5.631	(4.732)	114	(101)
				Dólares	Dividendos <sup>(2)</sup>	18.500	-	11.000	-
				Dólares	Préstamos	19.159	-	-	-
				Dólares	Aporte de activos <sup>(1)</sup>	66.144	-	-	-
96.854.000-9	Empresa Eléctrica Industrial	Chile	Grupo empresarial común	Dólares	Aporte de activos <sup>(1)</sup>	4.147	-	-	-
76.293.900-2	Río Tranquilo S.A.	Chile	Grupo empresarial común	Dólares	Aporte de activos <sup>(1)</sup>	53	-	-	-



**Termoeléctrica Antihue S.A.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ACTIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre 2017 MUS \$</b>
<b>Activos corrientes</b>		
Activos por impuestos	366	253
<b>Activos corrientes totales</b>	<b>366</b>	<b>253</b>
<b>Activos no corrientes</b>		
Propiedades, planta y equipos	27.955	32.976
<b>Total activos no corrientes</b>	<b>27.955</b>	<b>32.976</b>
<b>TOTAL ACTIVOS</b>	<b>28.321</b>	<b>33.229</b>

<b>PATRIMONIO NETO Y PASIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre 2017 MUS \$</b>
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	2	2
Otras provisiones, corrientes	3.213	3.063
Otros pasivos no financieros	151	152
<b>Pasivos corrientes totales</b>	<b>3.366</b>	<b>3.217</b>
<b>Pasivos no corrientes</b>		
Cuentas por pagar a entidades relacionadas	5.747	9.029
Otras provisiones, no corrientes	995	959
Pasivos por impuestos diferidos	5.250	6.316
<b>Total pasivos no corrientes</b>	<b>11.992</b>	<b>16.304</b>
<b>Total pasivos</b>	<b>15.358</b>	<b>19.521</b>
Capital emitido	3.332	3.332
Ganancias (pérdidas) acumuladas	9.584	10.329
Otras reservas	47	47
<b>Patrimonio Total</b>	<b>12.963</b>	<b>13.708</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>28.321</b>	<b>33.229</b>

Termoeléctrica Antihue S.A.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	4.800	4.400
Materias primas y consumibles utilizados	(111)	(114)
Gastos por depreciación y amortización	(5.021)	(9.031)
Otros gastos, por naturaleza	(20)	(21)
Otras ganancias (pérdidas)	(692)	-
<b>Ganancia por actividades de operación</b>	<b>(1.044)</b>	<b>(4.766)</b>
Diferencias de cambio	402	(19)
<b>Ganancia (pérdida) antes de impuesto</b>	<b>(642)</b>	<b>(4.785)</b>
Gasto por impuesto a las ganancias	(103)	(520)
<b>Ganancia (pérdida) de actividades continuadas</b>	<b>(745)</b>	<b>(5.305)</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>(745)</b>	<b>(5.305)</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia (pérdida)</b>	<b>(745)</b>	<b>(5.305)</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Otros componentes de otro resultado integral, antes de impuestos	-	-
<b>Resultado integral total</b>	<b>(745)</b>	<b>(5.305)</b>

Termoeléctrica Antilhue S.A.  
Estados de Flujos de Efectivo - Método Directo  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADO DE FLUJOS DIRECTO	Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	5.712	5.236
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(20)	(28)
Otros pagos por actividades de operación	(1.380)	(831)
Impuestos a las ganancias reembolsados (pagados)	(901)	(871)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>3.411</b>	<b>3.506</b>
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>		
	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Pagos de préstamos a entidades relacionadas	(3.411)	(1.506)
Dividendos pagados	-	(2.000)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(3.411)</b>	<b>(3.506)</b>
Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio	-	-
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	-	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>-</b>	<b>-</b>
Efectivo y equivalentes al efectivo al principio del período	-	-
<b>Efectivo y equivalentes al efectivo al final del período</b>	<b>-</b>	<b>-</b>

**Termoeléctrica Antihue S.A.**  
**Estados de Cambios en el Patrimonio**  
 por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
 (En miles de dólares)

Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas	Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Total otras reservas MUS \$		
Saldo inicial al 01.01.2018	3.332	47	10.329	13.708
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)			(745)	(745)
Otro resultado integral		-		-
Dividendos			-	-
Incremento (disminución) por transferencias y otros cambios	-	-	-	-
Total de cambios en patrimonio	-	-	(745)	(745)
<b>Saldo final al 31.12.2018</b>	<b>3.332</b>	<b>47</b>	<b>9.584</b>	<b>12.963</b>
Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas	Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Total otras reservas MUS \$		
Saldo inicial al 01.01.2017	3.332	47	17.635	21.014
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)			(5.305)	(5.305)
Otro resultado integral		-		-
Dividendos			(2.001)	(2.001)
Incremento (disminución) por transferencias y otros cambios	-	-	-	-
Total de cambios en patrimonio	-	-	(7.306)	(7.306)
<b>Saldo final al 31.12.2017</b>	<b>3.332</b>	<b>47</b>	<b>10.329</b>	<b>13.708</b>

## Termoeléctrica Antihue S.A.

### Transacciones con Empresas Relacionadas

#### Cuentas por Cobrar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Corriente		No Corriente	
					Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$	Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	-	-	-
<b>Total</b>					-	-	-	-

#### Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Corriente		No Corriente	
					Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$	Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	-	5.747	9.029
<b>Total</b>					-	-	5.747	9.029

#### Transacciones más significativas y sus efectos en resultado

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	UF	Serv. de Administración (Back Office)	(121)	(102)	(118)	(99)
				UF	Arriendo de Terreno	(9)	(9)	(8)	(8)
				Dólar	Pago Préstamos empresas relacionadas	(3.411)	-	(1.506)	-
				Dólar	Arrendamiento de Central Antihue	5.712	4.800	5.236	4.400

**Empresa Eléctrica Industrial S.A.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	24	7
Otros activos no financieros	6	63
Deudores comerciales y otras cuentas por cobrar	43	285
Cuentas por cobrar a entidades relacionadas	788	-
Inventarios	1.040	853
Activos por impuestos	1.095	394
<b>Activos corrientes totales</b>	<b>2.996</b>	<b>1.602</b>
<b>Activos no corrientes</b>		
Cuentas por cobrar a entidades relacionadas	229	246
Inversiones contabilizadas utilizando el método de la participación	11.083	9
Activos intangibles distintos de la plusvalía	-	2
Propiedades, planta y equipos	15.295	17.744
<b>Total activos no corrientes</b>	<b>26.607</b>	<b>18.001</b>
<b>TOTAL DE ACTIVOS</b>	<b>29.603</b>	<b>19.603</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	556	815
Cuentas por pagar a entidades relacionadas	2	-
Otras provisiones	1.018	200
Provisiones por beneficios a los empleados, corrientes	405	238
Otros pasivos no financieros	174	98
<b>Pasivos corrientes totales</b>	<b>2.155</b>	<b>1.351</b>
<b>Pasivos no corrientes</b>		
Cuentas por pagar a entidades relacionadas	15.151	11.601
Pasivos por impuestos diferidos	766	405
Provisiones por beneficios a los empleados, no corrientes	543	699
<b>Total pasivos no corrientes</b>	<b>16.460</b>	<b>12.705</b>
<b>Total pasivos</b>	<b>18.615</b>	<b>14.056</b>
Capital emitido	3.680	3.680
Ganancias (pérdidas) acumuladas	57	2.757
Otras reservas	7.251	(890)
Patrimonio atribuible a los propietarios de la controladora	10.988	5.547
<b>Patrimonio Total</b>	<b>10.988</b>	<b>5.547</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>29.603</b>	<b>19.603</b>

**Empresa Eléctrica Industrial S.A.**  
**Estados de Resultados Integrales,**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	5.112	5.615
Materias primas y consumibles utilizados	(1.651)	(1.884)
Gastos por beneficio a los empleados	(1.567)	(1.484)
Gastos por depreciación y amortización	(761)	(751)
Otros gastos, por naturaleza	(57)	(221)
Otras ganancias (pérdidas)	51	307
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>1.127</b>	<b>1.582</b>
Participación en las ganancias (pérdidas) de asociadas y negocios conjuntos que se contabilicen utilizando el método de participación	117	3
Diferencias de cambio	281	(74)
<b>Ganancia (pérdida) antes de impuesto</b>	<b>1.525</b>	<b>1.511</b>
Gasto por impuesto a las ganancias	(807)	924
<b>Ganancia (pérdida) de actividades continuadas</b>	<b>718</b>	<b>2.435</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>718</b>	<b>2.435</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia (pérdida)</b>	<b>718</b>	<b>2.435</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Ganancias (pérdidas) actuariales por planes de beneficios definidos	(16)	(58)
Otros componentes de otro resultado integral, antes de impuestos	(16)	(58)
<b>Impuesto a las ganancias relativos a componentes de Otro Resultado Integral</b>		
Impuesto a las ganancias relacionado con planes de beneficios definidos	4	16
<b>Resultado integral</b>	<b>(12)</b>	<b>(42)</b>
<b>RESULTADO INTEGRAL TOTAL</b>	<b>706</b>	<b>2.393</b>

**Empresa Eléctrica Industrial S.A.**  
**Estados de Flujos de Efectivo – Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADO DE FLUJOS DIRECTO</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	6.083	6.682
Otros cobros por actividades de operación	32	180
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(2.105)	(2.371)
Pagos a y por cuenta de los empleados	(1.411)	(1.417)
Otros pagos por actividades de operación	(860)	(154)
Dividendos recibidos	784	-
Impuestos a las ganancias reembolsados (pagados)	(494)	(1.658)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>2.029</b>	<b>1.262</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos	(1.839)	(4.453)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(1.839)</b>	<b>(4.453)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Préstamos de entidades relacionadas	3.283	3.157
Dividendos pagados	(3.484)	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(201)</b>	<b>3.157</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>(11)</b>	<b>(34)</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	28	4
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>17</b>	<b>(30)</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	7	37
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>24</b>	<b>7</b>



**Empresa Eléctrica Industrial S.A.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

Estado de Cambios en el Patrimonio	Capital MUS \$	Cambios en Otras reservas			Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Otras reservas varias MUS \$	Reserva de ganancias o pérdidas actuariales MUS \$	Total otras reservas MUS \$		
Saldo inicial al 01.01.2018	3.680	(890)	-	(890)	2.757	5.547
<b>Cambios en Patrimonio</b>						
Resultado integral						
Ganancia (pérdida)					718	718
Otro resultado integral		-	(12)	(12)		(12)
Dividendos					(3.484)	(3.484)
Incremento (disminución) por transferencias y otros cambios	-	-	12	12	66	78
Incrementos (disminuciones) por cambios las participaciones en la propiedad de subsidiarias que no dan lugar a pérdida de control	-	8.141	-	8.141	-	8.141
Total de cambios en patrimonio	-	8.141	-	8.141	(2.700)	5.441
<b>Saldo final al 31.12.2018</b>	<b>3.680</b>	<b>7.251</b>	<b>-</b>	<b>7.251</b>	<b>57</b>	<b>10.988</b>

Estado de Cambios en el Patrimonio	Capital MUS \$	Cambios en Otras reservas			Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Otras reservas varias MUS \$	Reserva de ganancias o pérdidas actuariales MUS \$	Total otras reservas MUS \$		
Saldo inicial al 01.01.2017	3.680	(890)	-	(890)	364	3.154
<b>Cambios en Patrimonio</b>						
Resultado integral						
Ganancia (pérdida)					2.435	2.435
Otro resultado integral		-	(42)	(42)		(42)
Dividendos					-	-
Incremento (disminución) por transferencias y otros cambios	-	-	42	42	(42)	-
Total de cambios en patrimonio	-	-	-	-	2.393	2.393
<b>Saldo final al 31.12.2017</b>	<b>3.680</b>	<b>(890)</b>	<b>-</b>	<b>(890)</b>	<b>2.757</b>	<b>5.547</b>

**Empresa Eléctrica Industrial S.A.**  
**Transacciones con Empresas Relacionadas**

**Cuentas por Cobrar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente		No corriente	
					31.12.2018	31.12.2017	31.12.2018	31.12.2017
					MUS \$	MUS \$	MUS \$	MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	788	-	-	-
96.853.150-6	Papeles Cordillera S.A.	Chile	Grupo empresarial común	Pesos	-	-	229	246
<b>Total</b>					<b>788</b>	<b>-</b>	<b>229</b>	<b>246</b>

**Cuentas por Pagar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente		No corriente	
					31.12.2018	31.12.2017	31.12.2018	31.12.2017
					MUS \$	MUS \$	MUS \$	MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	-	15.151	11.601
99.520.000-7	Compañía de Petróleos de Chile Copec S.A.	Chile	Director Común	Pesos	2	-	-	-
<b>Total</b>					<b>2</b>	<b>-</b>	<b>15.151</b>	<b>11.601</b>

**Transacciones más significativas y sus efectos en resultado**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto	Efecto en resultados (cargo) abono	Monto	Efecto en resultados (cargo) abono
						MUS \$	MUS \$	MUS \$	MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	UF	Serv. de Administración (Back Office)	(121)	(102)	(118)	(99)
				UF	Arriendo de Terreno	(9)	(9)	(8)	(8)
				Dólar	Pago Préstamos empresas relacionadas	(3.411)	-	(1.506)	-
				Dólar	Arrendamiento de Central Antihue	5.712	4.800	5.236	4.400

Sociedad Hidroeléctrica Melocotón Ltda.  
Estados de Situación Financiera, Clasificados  
al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	4	3
Deudores comerciales y otras cuentas por cobrar, corrientes	-	743
<b>Activos corrientes totales</b>	<b>4</b>	<b>746</b>
<b>Activos no corrientes</b>		
Otros activos no financieros	-	541
Cuentas por cobrar a entidades relacionadas, no corrientes	-	5.568
Activos intangibles distintos de la plusvalía	2.482	2.482
<b>Total activos no corrientes</b>	<b>2.482</b>	<b>8.591</b>
<b>TOTAL DE ACTIVOS</b>	<b>2.486</b>	<b>9.337</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	1	1
Pasivos por impuestos, corrientes	47	47
Otros pasivos no financieros, corrientes	79	-
<b>Pasivos corrientes totales</b>	<b>127</b>	<b>48</b>
<b>Pasivos no corrientes</b>		
Cuentas por pagar a entidades relacionadas	921	-
Pasivos por impuestos diferidos	144	144
<b>Total pasivos no corrientes</b>	<b>1.065</b>	<b>144</b>
<b>Total pasivos</b>	<b>1.192</b>	<b>192</b>
Capital emitido	1.114	1.114
Ganancias (pérdidas) acumuladas	(1.425)	6.426
Otras reservas	1.605	1.605
<b>Patrimonio Total</b>	<b>1.294</b>	<b>9.145</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>2.486</b>	<b>9.337</b>

Sociedad Hidroeléctrica Melocotón Ltda.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	3.504	3.504
Otros gastos, por naturaleza	(46)	(5)
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>3.458</b>	<b>3.499</b>
Diferencias de cambio	171	136
<b>Ganancia (pérdida) antes de impuesto</b>	<b>3.629</b>	<b>3.635</b>
Gasto por impuesto a las ganancias	(980)	(921)
<b>Ganancia (pérdida) de actividades continuadas</b>	<b>2.649</b>	<b>2.714</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>2.649</b>	<b>2.714</b>
Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ganancia (pérdida)	2.649	2.714
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Otros componentes de otro resultado integral, antes de impuestos	-	-
<b>RESULTADO INTEGRAL TOTAL</b>	<b>2.649</b>	<b>2.714</b>

Sociedad Hidroeléctrica Melocotón Ltda.  
Estados de Flujos de Efectivo – Método Directo  
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ESTADO DE FLUJOS DIRECTO	Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	3.504	3.504
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(47)	(76)
Impuestos a las ganancias reembolsados (pagados)	(359)	(86)
Otras entradas (salidas) de efectivo	786	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>3.884</b>	<b>3.342</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Pagos de préstamos a entidades relacionadas	-	(3.342)
Préstamos de entidades relacionadas	6.490	-
Dividendos pagados	(10.500)	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de</b>	<b>(4.010)</b>	<b>(3.342)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>(126)</b>	<b>-</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	127	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>1</b>	<b>-</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	3	3
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>4</b>	<b>3</b>

**Sociedad Hidroeléctrica Melocotón Ltda.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas	Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Otras reservas varias MUS \$		
Saldo inicial al 01.01.2018	1.114	1.605	6.426	9.145
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)			2.649	2.649
Otro resultado integral		-		-
Reparto Utilidad			(10.500)	(10.500)
Total de cambios en patrimonio	-	-	(7.851)	(7.851)
<b>Saldo final al 31.12.2018</b>	<b>1.114</b>	<b>1.605</b>	<b>(1.425)</b>	<b>1.294</b>

Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas	Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Otras reservas varias MUS \$		
Saldo inicial al 01.01.2017	1.114	1.605	3.712	6.431
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)			2.714	2.714
Otro resultado integral		-		-
Total de cambios en patrimonio	-	-	2.714	2.714
<b>Saldo final al 31.12.2017</b>	<b>1.114</b>	<b>1.605</b>	<b>6.426</b>	<b>9.145</b>

## Sociedad Hidroeléctrica Melocotón Ltda. Transacciones con Empresas Relacionadas

### Cuentas por Cobrar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	No corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	5.568
<b>Total</b>					-	<b>5.568</b>

### Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	No corriente		No Corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	-	921	-
<b>Total</b>					-	-	<b>921</b>	-

### Transacciones más significativas y sus efectos en resultado

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Dólar	Arrendamiento Derechos de Agua	3.504	3.504	3.504	3.504
					Prestamos empresas relacionadas	6.490	-	-	-
					Reparto utilidades	10.490	-	-	-
96.854.000-9	Empresa Eléctrica Industrial S.A.	Chile	Accionista	Dólar	Reparto utilidades	10	-	-	-

**Termoeléctrica Nehuenco S.A.**  
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ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	20	7
Deudores comerciales y otras cuentas por cobrar	70	123
Inventarios	132	132
Activos por impuestos corrientes	7	5
<b>Activos corrientes totales</b>	<b>229</b>	<b>267</b>
<b>Activos no corrientes</b>		
Activos por impuestos diferidos	3.189	3.992
<b>Total activos no corrientes</b>	<b>3.189</b>	<b>3.992</b>
<b>TOTAL DE ACTIVOS</b>	<b>3.418</b>	<b>4.259</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	317	326
Provisiones por beneficios a los empleados, corrientes	1.313	1.058
Otros pasivos no financieros	196	236
<b>Pasivos corrientes totales</b>	<b>1.826</b>	<b>1.620</b>
<b>Pasivos no corrientes</b>		
Cuentas por pagar a entidades relacionadas	12.719	15.709
Provisiones por beneficios a los empleados, no corrientes	3.102	3.319
<b>Total pasivos no corrientes</b>	<b>15.821</b>	<b>19.028</b>
<b>Total pasivos</b>	<b>17.647</b>	<b>20.648</b>
Capital emitido	212	212
Ganancias (pérdidas) acumuladas	(14.309)	(16.469)
Otras reservas	(132)	(132)
<b>Patrimonio Total</b>	<b>(14.229)</b>	<b>(16.389)</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>3.418</b>	<b>4.259</b>



Termoeléctrica Nehuenco S.A.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	8.529	8.311
Materias primas y consumibles utilizados	(474)	(1.060)
Gastos por beneficio a los empleados	(5.459)	(5.612)
Otros gastos, por naturaleza	(4)	(5)
Otras ganancias (pérdidas)	(11)	(5)
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>2.581</b>	<b>1.629</b>
Diferencias de cambio	531	(397)
<b>Ganancia (pérdida) antes de impuesto</b>	<b>3.112</b>	<b>1.232</b>
Gasto por impuesto a las ganancias	(843)	(319)
<b>Ganancia (pérdida) de actividades continuadas</b>	<b>2.269</b>	<b>913</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>2.269</b>	<b>913</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia (pérdida)</b>	<b>2.269</b>	<b>913</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Ganancias (pérdidas) actuariales por planes de beneficios definidos	(149)	128
Otros componentes de otro resultado integral, antes de impuestos	(149)	128
<b>Impuesto a las ganancias relativos a componentes de Otro Resultado Integral</b>		
Impuesto a las ganancias relacionado con planes de beneficios definidos	40	(35)
<b>Resultado integral total</b>	<b>(109)</b>	<b>93</b>
<b>RESULTADO INTEGRAL TOTAL</b>	<b>2.160</b>	<b>1.006</b>

Termoeléctrica Nehuenco S.A.  
Estados de Flujos de Efectivo – Método Directo  
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<b>ESTADO DE FLUJOS DIRECTO</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	10.149	9.890
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(226)	(1.366)
Pagos a y por cuenta de los empleados	(4.685)	(5.290)
Otros pagos por actividades de operación	(1.878)	(1.725)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>3.360</b>	<b>1.509</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Pagos de préstamos a entidades relacionadas	(3.347)	(1.502)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(3.347)</b>	<b>(1.502)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>13</b>	<b>7</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	-	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>13</b>	<b>7</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	7	-
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>20</b>	<b>7</b>

**Termoeléctrica Nehuenco S.A.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas			Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Otras reservas varias MUS \$	Reserva de ganancias o pérdidas actuariales MUS \$	Total otras reservas MUS \$		
Saldo inicial al 01.01.2018	212	(132)	-	(132)	(16.469)	(16.389)
<b>Cambios en Patrimonio</b>						
Resultado integral						
Ganancia (pérdida)					2.269	2.269
Otro resultado integral		-	(109)	(109)		(109)
Dividendos					-	-
Incremento (disminución) por transferencias y otros cambios	-	-	109	109	(109)	-
Total de cambios en patrimonio	-	-	-	-	2.160	2.160
<b>Saldo final al 31.12.2018</b>	<b>212</b>	<b>(132)</b>	<b>-</b>	<b>(132)</b>	<b>(14.309)</b>	<b>(14.229)</b>
Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas			Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Otras reservas varias MUS \$	Reserva de ganancias o pérdidas actuariales MUS \$	Total otras reservas MUS \$		
Saldo inicial al 01.01.2017	212	(132)	-	(132)	(17.475)	(17.395)
<b>Cambios en Patrimonio</b>						
Resultado integral						
Ganancia (pérdida)					913	913
Otro resultado integral		-	93	93	-	93
Incremento (disminución) por transferencias y otros cambios	-	-	(93)	(93)	93	-
Total de cambios en patrimonio	-	-	-	-	1.006	1.006
<b>Saldo final al 31.12.2017</b>	<b>212</b>	<b>(132)</b>	<b>-</b>	<b>(132)</b>	<b>(16.469)</b>	<b>(16.389)</b>

Termoeléctrica Nehuenco S.A.  
Transacciones con Empresas Relacionadas

Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente		No corriente	
					31.12.2018	31.12.2017	31.12.2018	31.12.2017
					MUS \$	MUS \$	MUS \$	MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	-	12.719	15.709
<b>Total</b>					-	-	<b>12.719</b>	<b>15.709</b>

Transacciones más significativas y sus efectos en resultado

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	UF	Servicios de Administración (Back Office)	296	(249)	297	(250)
					Servicio de Administración Mantenimiento y Operación Central Nehuenco	10.149	8.529	9.889	8.311

Río Tranquilo S.A.  
Estados de Situación Financiera, Clasificados  
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ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	2	2
Otros activos no financieros	4	277
Deudores comerciales y otras cuentas por cobrar	-	21
Inventarios	1.572	1.360
Activos por impuestos corrientes	912	558
<b>Activos corrientes totales</b>	<b>2.490</b>	<b>2.218</b>
<b>Activos no corrientes</b>		
Inversiones contabilizadas utilizando el método de la participación	142	-
Activos intangibles distintos de la plusvalía	30	82
Propiedades, plantas y equipos	45.878	46.819
<b>Total activos no corrientes</b>	<b>46.050</b>	<b>46.901</b>
<b>TOTAL DE ACTIVOS</b>	<b>48.540</b>	<b>49.119</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	203	359
Cuentas por pagar a entidades relacionadas	7	7
Otros pasivos no financieros	1.130	697
<b>Pasivos corrientes totales</b>	<b>1.340</b>	<b>1.063</b>
<b>Pasivos no corrientes</b>		
Cuentas por pagar a entidades relacionadas, no corrientes	11.078	8.915
Otras provisiones, no corrientes	262	253
Pasivos por impuestos diferidos	10.389	10.642
<b>Total pasivos no corrientes</b>	<b>21.729</b>	<b>19.810</b>
<b>Total pasivos</b>	<b>23.069</b>	<b>20.873</b>
Capital emitido	64	64
Ganancias (pérdidas) acumuladas	25.948	28.166
Otras reservas	(541)	16
<b>Patrimonio Total</b>	<b>25.471</b>	<b>28.246</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>48.540</b>	<b>49.119</b>

Río Tranquilo S.A.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
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ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	12.950	16.760
Materias primas y consumibles utilizados	(1.368)	(1.857)
Gastos por depreciación y amortización	(1.042)	(1.110)
Otros gastos, por naturaleza	(103)	(20)
Otras ganancias (pérdidas)	141	155
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>10.578</b>	<b>13.928</b>
Diferencias de cambio	93	(26)
Participación en las ganancias (pérdidas) de asociadas y negocios conjuntos que se contabilicen utilizando el método de participación	2	-
<b>Ganancia (pérdida) antes de impuesto</b>	<b>10.673</b>	<b>13.902</b>
Gasto por impuesto a las ganancias	(2.881)	(4.092)
<b>Ganancia (pérdida) de actividades continuadas</b>	<b>7.792</b>	<b>9.810</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>7.792</b>	<b>9.810</b>
Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia (pérdida)</b>	<b>7.792</b>	<b>9.810</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Otros componentes de otro resultado integral, antes de impuestos	-	-
<b>Resultado integral total</b>	<b>7.792</b>	<b>9.810</b>
<b>RESULTADO INTEGRAL TOTAL</b>	<b>7.792</b>	<b>9.810</b>

Río Tranquilo S.A.  
Estados de Flujos de Efectivo - Método Directo  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

<b>ESTADO DE FLUJOS DIRECTO</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	15.411	19.945
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(1.117)	(1.196)
Otros pagos por actividades de operación	(1.808)	(2.933)
Impuestos a las ganancias reembolsados (pagados)	(3.384)	(4.239)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>9.102</b>	<b>11.577</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos	(1.273)	(751)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(1.273)</b>	<b>(751)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Préstamos de entidades relacionadas	2.181	1.174
Dividendos pagados	(10.010)	(12.000)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(7.829)</b>	<b>(10.826)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>-</b>	<b>-</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	-	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>-</b>	<b>-</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	2	2
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>2</b>	<b>2</b>

Río Tranquilo S.A.  
Estados de Cambios en el Patrimonio  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas			Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Reservas por diferencias de cambio por conversión MUS \$	Otras Reservas MUS \$	Total otras reservas MUS \$		
Saldo inicial al 01.01.2018	64	16		16	28.166	28.246
<b>Cambios en Patrimonio</b>						
Resultado integral						
Ganancia (pérdida)					7.792	7.792
Otro resultado integral		-	-	-		-
Dividendos					(10.010)	(10.010)
Incrementos (disminuciones) por cambios las participaciones en la propiedad de subsidiarias que no dan lugar a pérdida de control	-	-	(557)	(557)	-	(557)
Total de cambios en patrimonio	-	-	(557)	(557)	(2.218)	(2.775)
<b>Saldo final al 31.12.2018</b>	<b>64</b>	<b>16</b>	<b>(557)</b>	<b>(541)</b>	<b>25.948</b>	<b>25.471</b>

Estado de Cambios en el Patrimonio	Capital emitido MUS \$	Cambios en otras reservas			Ganancias (pérdidas) acumuladas MUS \$	Patrimonio total MUS \$
		Reservas por diferencias de cambio por conversión MUS \$	Otras Reservas MUS \$	Total otras reservas MUS \$		
Saldo inicial al 01.01.2017	64	16	-	16	30.356	30.436
<b>Cambios en Patrimonio</b>						
Resultado integral						
Ganancia (pérdida)					9.810	9.810
Otro resultado integral		-	-	-		-
Dividendos					(12.000)	(12.000)
Incremento (disminución) por transferencias y otros cambios	-	-	-	-	-	-
Total de cambios en patrimonio	-	-	-	-	(2.190)	(2.190)
<b>Saldo final al 31.12.2017</b>	<b>64</b>	<b>16</b>	<b>-</b>	<b>16</b>	<b>28.166</b>	<b>28.246</b>



## Río Tranquilo S.A. Transacciones con Empresas Relacionadas

### Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente		No Corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$	31.12.2018 MUS \$	31.12.2017 MUS \$
76.218.856-2	Colbún Transmisión S.A.	Chile	Matriz Común	Pesos	7	7	-	-
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	-	-	11.078	8.915
<b>Total</b>					<b>7</b>	<b>7</b>	<b>11.078</b>	<b>8.915</b>

### Transacciones más significativas y sus efectos en resultado

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	UF	Servicios de Administración (Back Office)	(296)	(249)	(299)	(251)
				UF	Servicios de Supervisión y Operación Central Hornitos	(119)	(100)	(118)	(99)
				Pesos	Venta de Energía, Potencia y Peajes	15.411	12.950	19.945	16.761
				Dólar	Dividendo declarado <sup>(1)</sup>	10.010	-	12.000	-
				Dólar	Préstamo	2.181	-	1.174	-

**Inversiones Andinas SpA.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

<b>ACTIVOS</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Activos corrientes</b>		
Cuentas por cobrar a entidades relacionadas	10	10
<b>Activos corrientes totales</b>	<b>10</b>	<b>10</b>
<b>TOTAL ACTIVOS</b>	<b>10</b>	<b>10</b>
<b>PATRIMONIO NETO Y PASIVOS</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Patrimonio</b>		
Capital emitido	10	10
<b>Patrimonio Total</b>	<b>10</b>	<b>10</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>10</b>	<b>10</b>

**Inversiones Andinas SpA.**  
**Estados de Flujos de Efectivo - Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADO DE FLUJOS DIRECTO</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Otros pagos para adquirir participaciones en negocios conjuntos	-	-
Préstamos a entidades relacionadas	-	-
Compras de propiedades, plantas y equipos	-	-
Anticipos de efectivo y préstamos concedidos a terceros	-	-
Otras entradas (salidas) de efectivo	-	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Importes procedentes de la emisión de acciones	-	-
Pagos de entidades relacionadas	-	-
Dividendos pagados	-	-
Otras entradas (salidas) de efectivo	-	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	-	-
Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio	-	-
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	-	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	-	-
Efectivo y equivalentes al efectivo al principio del período	-	-
<b>Efectivo y equivalentes al efectivo al final del período</b>	-	-

**Inversiones Andinas SpA.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

Estados de Cambios en el Patrimonio	Capital emitido	Ganancias (pérdidas) acumuladas	Patrimonio total
	MUS \$	MUS \$	MUS \$
Saldo inicial al 01.01.2018	10	-	10
<b>Cambios en Patrimonio</b>			
Resultado integral			
Ganancia (pérdida)		-	-
Otro resultado integral			-
Total de cambios en patrimonio	-	-	-
<b>Saldo final al 31.12.2018</b>	<b>10</b>	<b>-</b>	<b>10</b>

Estados de Cambios en el Patrimonio	Capital emitido	Ganancias (pérdidas) acumuladas	Patrimonio total
	MUS \$	MUS \$	MUS \$
Saldo inicial al 01.01.2017	10	-	10
<b>Cambios en Patrimonio</b>			
Resultado integral			
Ganancia (pérdida)		-	-
Otro resultado integral			-
Total de cambios en patrimonio	-	-	-
<b>Saldo final al 31.12.2017</b>	<b>10</b>	<b>-</b>	<b>10</b>

## Inversiones Andinas SpA.

### Transacciones con Empresas Relacionadas

#### Cuentas por Cobrar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente	
					Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Dólar	10	10
<b>Total</b>					<b>10</b>	<b>10</b>

#### Transacciones más significativas y sus efectos en resultado

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	Dólar	Venta emisión acciones de patrimonio	-	-	-	-

**Inversiones SUD SpA**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	54	41
Otros activos financieros, corrientes	-	5.360
Deudores comerciales y otras cuentas por cobrar, corrientes	-	348
Activos por impuestos	66	-
<b>Activos corrientes totales</b>	<b>120</b>	<b>5.749</b>
<b>Activos no corrientes</b>		
Propiedades, planta y equipos	-	2.173
<b>Total activos no corrientes</b>	<b>-</b>	<b>2.173</b>
<b>TOTAL ACTIVOS</b>	<b>120</b>	<b>7.922</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	-	1.174
Pasivos por impuestos, corrientes	-	13
<b>Pasivos corrientes totales</b>	<b>-</b>	<b>1.187</b>
<b>Pasivos no corrientes</b>		
Cuentas por pagar a entidades relacionadas	51	6.686
<b>Total pasivos no corrientes</b>	<b>51</b>	<b>6.686</b>
<b>Total pasivos</b>	<b>51</b>	<b>7.873</b>
<b>Patrimonio</b>		
Capital emitido	10	10
Ganancias (pérdidas) acumuladas	59	39
<b>Patrimonio Total</b>	<b>69</b>	<b>49</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>120</b>	<b>7.922</b>

**Inversiones SUD SpA**  
**Estados de Resultados Integrales,**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Otras ganancias (pérdidas)	129	-
<b>Ganancia por actividades de operación</b>	<b>129</b>	<b>-</b>
Costos financieros	(95)	(1)
Diferencias de cambio	(7)	53
<b>Ganancia (pérdida) antes de impuesto</b>	<b>27</b>	<b>52</b>
Gasto por impuesto a las ganancias	(7)	(13)
Ganancia (pérdida) de actividades continuadas	20	39
<b>GANANCIA (PÉRDIDA)</b>	<b>20</b>	<b>39</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ganancia (pérdida)	20	39
<b>Resultado integral total</b>	<b>20</b>	<b>39</b>
<b>Resultado integral atribuible a</b>		
Resultado integral atribuible a los propietarios de la controladora	20	39
<b>RESULTADO INTEGRAL TOTAL</b>	<b>20</b>	<b>39</b>

**Inversiones SUD SpA**  
**Estados de Flujos de Efectivo – Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADO DE FLUJOS DIRECTO</b>	<b>Diciembre 31, 2018 MUS \$</b>	<b>Diciembre 31, 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
Pagos a proveedores por el suministro de bienes y servicios	38	-
Otras entradas (salidas) de efectivo	-	(4)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>38</b>	<b>(4)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos	(1.931)	(6.651)
Otras entradas (salidas) de efectivo	8.665	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>6.734</b>	<b>(6.651)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
Préstamos de entidades relacionadas	-	6.696
Pagos de entidades relacionadas	(6.759)	-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(6.759)</b>	<b>6.696</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>13</b>	<b>41</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	-	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>13</b>	<b>41</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	41	-
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>54</b>	<b>41</b>



**Inversiones SUD SpA**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

Estados de Cambios en el Patrimonio	Capital emitido	Ganancias (pérdidas) acumuladas	Patrimonio total
	MUS \$	MUS \$	MUS \$
Saldo inicial al 01.01.2018	10	39	49
<b>Cambios en Patrimonio</b>			
Resultado integral			
Ganancia (pérdida)		20	20
Otro resultado integral			-
Total de cambios en patrimonio	-	20	20
<b>Saldo final al 31.12.2018</b>	<b>10</b>	<b>59</b>	<b>69</b>

Estados de Cambios en el Patrimonio	Capital emitido	Ganancias (pérdidas) acumuladas	Patrimonio total
	MUS \$	MUS \$	MUS \$
Saldo inicial al 01.01.2017	10	-	10
<b>Cambios en Patrimonio</b>			
Resultado integral			
Ganancia (pérdida)		39	39
Otro resultado integral			-
Total de cambios en patrimonio	-	39	49
<b>Saldo final al 31.12.2017</b>	<b>10</b>	<b>39</b>	<b>49</b>

**Inversiones SUD SpA**  
**Transacciones con Empresas Relacionadas**

**Cuentas por Cobrar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Corriente	
					Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Dólar	-	-
<b>Total</b>					-	-

**Cuentas por Pagar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente	
					Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Dólar	51	6.686
<b>Total</b>					<b>51</b>	<b>6.686</b>

Colbún Desarrollo SpA.  
Estados de Situación Financiera, Clasificados  
al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ACTIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	10	10
Deudores comerciales y otras cuentas por cobrar, corrientes	1	1
<b>Activos corrientes totales</b>	<b>11</b>	<b>11</b>
<b>Activos no corrientes</b>		
Cuentas por cobrar a entidades relacionadas, no corrientes	149	149
<b>Total activos no corrientes</b>	<b>149</b>	<b>149</b>
<b>TOTAL DE ACTIVOS</b>	<b>160</b>	<b>160</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
Capital emitido	160	160
<b>Patrimonio Total</b>	<b>160</b>	<b>160</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>160</b>	<b>160</b>

Colbún Desarrollo SpA.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Costos financieros	-	-
Diferencias de cambio	-	-
<b>Ganancia (pérdida) antes de impuesto</b>	-	-
Gasto por impuesto a las ganancias	-	-
<b>Ganancia (pérdida) de actividades continuadas</b>	-	-
<b>GANANCIA (PÉRDIDA)</b>	-	-

Colbún Desarrollo SpA.  
Estados de Flujos de Efectivo - Método Directo  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADO DE FLUJOS DIRECTO	Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Préstamos a entidades relacionadas		(150)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	-	(150)
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	-	-
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	-	(150)
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	-	(150)
Efectivo y equivalentes al efectivo al principio del ejercicio	10	160
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	10	10

**Colbún Desarrollo SpA.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>Estados de Cambio en el Patrimonio</b>	<b>Capital emitido</b>	<b>Ganancias (pérdidas) acumuladas</b>	<b>Patrimonio total</b>
	<b>MUS \$</b>	<b>MUS \$</b>	<b>MUS \$</b>
Saldo inicial al 01.01.2018	160	-	160
Resultado integral			
Ganancia (pérdida)		-	-
Otro resultado integral			-
Dividendos		-	-
Total de cambios en patrimonio	-	-	-
<b>Saldo final al 31.12.2018</b>	<b>160</b>	<b>-</b>	<b>160</b>

<b>Estados de Cambio en el Patrimonio</b>	<b>Capital emitido</b>	<b>Ganancias (pérdidas) acumuladas</b>	<b>Patrimonio total</b>
	<b>MUS \$</b>	<b>MUS \$</b>	<b>MUS \$</b>
Saldo inicial al 01.01.2017	160	-	160
Resultado integral			
Ganancia (pérdida)		-	-
Otro resultado integral			-
Total de cambios en patrimonio	-	-	-
<b>Saldo final al 31.12.2017</b>	<b>160</b>	<b>-</b>	<b>160</b>

## Colbún Desarrollo SpA. Transacciones con Empresas Relacionadas

### Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	No corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	149	149
<b>Total</b>					<b>149</b>	<b>149</b>

### Transacciones con Empresas Relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	Dólar	Préstamo	-	-	149	-

## Santa Sofía SpA. Estados de Situación Financiera, Clasificados al 31 de diciembre de 2018 (En miles de dólares)

ACTIVOS	31 de Diciembre 2018 MUS \$
<b>Activos no corrientes</b>	
Activos por impuestos diferidos	153
<b>Total activos corrientes</b>	<b>153</b>
<b>TOTAL DE ACTIVOS</b>	<b>153</b>

PATRIMONIO NETO Y PASIVOS	31 de Diciembre 2018 MUS \$
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### Pasivos no corrientes

Cuentas por pagar a entidades relacionadas	180
<b>Total pasivos no corrientes</b>	<b>180</b>
<b>Total pasivos</b>	<b>180</b>

### Patrimonio

Capital emitido	588
Ganancias (pérdidas) acumuladas	(615)
<b>Patrimonio Total</b>	<b>(27)</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>153</b>

Santa Sofía SpA.  
Estados de Situación Financiera, Clasificados  
al 31 de diciembre de 2018  
(En miles de dólares)

<b>ACTIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>
<b>Activos no corrientes</b>	
Activos por impuestos diferidos	153
<b>Total activos corrientes</b>	<b>153</b>
<b>TOTAL DE ACTIVOS</b>	<b>153</b>
<b>PATRIMONIO NETO Y PASIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>
<b>Pasivos no corrientes</b>	
Cuentas por pagar a entidades relacionadas	180
<b>Total pasivos no corrientes</b>	<b>180</b>
<b>Total pasivos</b>	<b>180</b>
<b>Patrimonio</b>	
Capital emitido	588
Ganancias (pérdidas) acumuladas	(615)
<b>Patrimonio Total</b>	<b>(27)</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>153</b>

**Santa Sofía SpA.**  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018  
(En miles de dólares)

ESTADO DE RESULTADOS INTEGRALES POR NATURALEZA	Junio - Diciembre
	2018 MUS \$
Otras ganancias (pérdidas)	(685)
<b>Ganancia por actividades de operación</b>	<b>(685)</b>
<b>Ganancia (pérdida) antes de impuesto</b>	<b>(685)</b>
Gasto por impuesto a las ganancias	153
Ganancia (pérdida) de actividades continuadas	<b>(532)</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>(532)</b>

Estados de otros resultados integrales	Junio - Diciembre
	2018 MUS \$
<b>Ganancia (pérdida)</b>	<b>(532)</b>

**Santa Sofía SpA.**  
Estados de Flujos de Efectivo - Método Directo  
por los ejercicios terminados al 31 de diciembre de 2018  
(En miles de dólares)

ESTADO DE FLUJOS DIRECTO	Diciembre 31, 2018 MUS \$
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>	
<b>Clases de pago</b>	
Pagos a proveedores por el suministro de bienes y servicios	(180)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>(180)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>	
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>-</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>	
Préstamos de entidades relacionadas	180
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>180</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>-</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al</b>	
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>-</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	-
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>-</b>



**Santa Sofía SpA.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018**  
 (En miles de dólares)

<b>Estados de Cambios en el Patrimonio</b>	<b>Capital emitido MUS \$</b>	<b>Ganancias (pérdidas) acumuladas MUS \$</b>	<b>Patrimonio total MUS \$</b>
Saldo inicial al 06.06.2018	-	-	-
<b>Cambios en Patrimonio</b>			
Resultado integral			
Emisión de patrimonio	588	-	588
Ganancia (pérdida)		(532)	(532)
Otro resultado integral			-
Dividendos		-	-
Incremento (disminución) por transferencias y otros cambios	-	(83)	(83)
<b>Total de cambios en patrimonio</b>	<b>588</b>	<b>(615)</b>	<b>(27)</b>
<b>Saldo final al 31.12.2018</b>	<b>588</b>	<b>(615)</b>	<b>(27)</b>

**Santa Sofía SpA.**  
**Transacciones con Empresas Relacionadas**

**Cuentas por Cobrar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente
					31.12.2018 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Dólar	-
<b>Total</b>					<b>-</b>

**Cuentas por Pagar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente
					31.12.2018 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Dólar	180
<b>Total</b>					<b>180</b>

**Transacciones con Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Junio-Diciembre 2018	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	Dólar	Préstamo	180	-

**Colbún Perú S.A.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

<b>ACTIVOS</b>	<b>31 de Diciembre, 2018 MUS \$</b>	<b>31 de Diciembre, 2017 MUS \$</b>
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	54.747	56.488
Otros activos no financieros, corrientes	1.305	1.451
Deudores comerciales y otras cuentas por cobrar	31.454	42.219
Inventarios	8.931	7.720
Activos por impuestos	6.442	6.066
<b>Activos corrientes totales</b>	<b>102.879</b>	<b>113.944</b>
Otros activos no financieros, no corrientes	5.920	3.614
Activos intangibles distintos de la plusvalía	2.824	3.324
Propiedades, planta y equipos	673.159	697.833
Activos por impuestos diferidos	32.719	34.369
<b>Total activos no corrientes</b>	<b>714.622</b>	<b>739.140</b>
<b>ACTIVOS</b>	<b>817.501</b>	<b>853.084</b>
<b>PATRIMONIO NETO Y PASIVOS</b>	<b>31 de Diciembre, 2018 MUS \$</b>	<b>31 de Diciembre, 2017 MUS \$</b>
<b>Pasivos corrientes</b>		
Otros pasivos financieros, corrientes	16.500	9.587
Cuentas por pagar comerciales y otras cuentas por pagar, corrientes	24.959	21.539
Cuentas por pagar a entidades relacionadas	10.825	59
Pasivos por impuestos	26	-
Provisiones por beneficios a los empleados, corrientes	1.180	1.250
Otros pasivos no financieros, corrientes	931	774
<b>Pasivos corrientes totales</b>	<b>54.421</b>	<b>33.209</b>
<b>Pasivos no corrientes</b>		
Otros pasivos financieros, no corrientes	332.587	344.438
Cuentas por pagar comerciales y otras cuentas por pagar, no corrientes	433	9.614
Pasivos por impuestos diferidos	733	815
Otras provisiones no corrientes	270	-
<b>Total pasivos no corrientes</b>	<b>334.023</b>	<b>354.867</b>
<b>Total pasivos</b>	<b>388.444</b>	<b>388.076</b>
<b>Patrimonio</b>		
Capital emitido	219.635	219.635
Ganancias (pérdidas) acumuladas	8.999	19.198
<b>Patrimonio atribuible a los propietarios de la controladora</b>	<b>228.634</b>	<b>238.833</b>
Participaciones no controladoras	200.423	226.175
<b>Patrimonio Total</b>	<b>429.057</b>	<b>465.008</b>
<b>PATRIMONIO Y PASIVOS</b>	<b>817.501</b>	<b>853.084</b>

Colbún Perú S.A.  
Estados de Resultados Integrales,  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	201.479	192.837
Materias primas y consumibles utilizados	(156.209)	(141.394)
Gastos por beneficio a los empleados	(6.128)	(5.848)
Gastos por depreciación y amortización	(33.539)	(32.509)
Otros gastos, por naturaleza	(3.578)	7.460
Otras ganancias (pérdidas)	(1.541)	23.712
<b>Ganancia de actividades operacionales</b>	<b>484</b>	<b>44.258</b>
Ingresos financieros	1.185	637
Costos financieros	(18.332)	(14.774)
Diferencias de cambio	(1.864)	2.273
<b>Ganancia antes de impuesto</b>	<b>(18.527)</b>	<b>32.394</b>
Gasto por impuesto a las ganancias	(1.597)	3.539
<b>Ganancia de actividades continuadas</b>	<b>(20.124)</b>	<b>35.933</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>(20.124)</b>	<b>35.933</b>
<b>Ganancia atribuible a</b>		
Ganancia atribuible a los propietarios de la controladora	(10.199)	18.316
Ganancia atribuible a participaciones no controladoras	(9.925)	17.617
<b>GANANCIA (PÉRDIDA)</b>	<b>(20.124)</b>	<b>35.933</b>

ESTADOS DE OTROS RESULTADOS INTEGRALES	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia</b>	<b>(20.124)</b>	<b>35.933</b>
<b>Componentes de otro resultado integral que se reclasificarán al resultado del periodo, antes de impuestos</b>		
Ganancias (pérdidas) por coberturas de flujos de efectivo		(5.153)
<b>Otro resultado integral que se reclasificara al resultado del periodo, antes de impuestos</b>	<b>-</b>	<b>(5.153)</b>
<b>Otros componentes de otro resultado integral, antes de impuestos</b>	<b>-</b>	<b>(5.153)</b>
<b>Impuesto a las ganancias relativos a componentes de otro resultado integral que se reclasificará al resultado del periodo</b>		
Impuesto a las ganancias relacionado con coberturas de flujo de efectivo		1.520
<b>Impuesto a las ganancias relativo a componentes de otro resultado integral</b>	<b>-</b>	<b>1.520</b>
<b>Otro resultado integral total</b>	<b>-</b>	<b>(3.633)</b>
<b>Resultado integral total</b>	<b>(20.124)</b>	<b>32.300</b>
<b>Resultado integral atribuible a</b>		
Resultado integral atribuible a los propietarios de la controladora	(10.199)	16.463
Resultado integral atribuible a participaciones no controladoras	(9.925)	15.837
<b>RESULTADO INTEGRAL TOTAL</b>	<b>(20.124)</b>	<b>32.300</b>

**Colbún Perú S.A.**  
**Estados de Flujos de Efectivo – Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

ESTADOS DE FLUJOS DIRECTO	31 de Diciembre, 2018 MUS \$	31 de Diciembre, 2017 MUS \$
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	241.226	245.714
Cobros procedentes de primas y prestaciones, anualidades y otros beneficios de pólizas suscritas	1.047	350
Otros cobros por actividades de la operación	3.083	15.930
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(191.505)	(173.083)
Pagos a y por cuenta de los empleados	(6.262)	(6.794)
Pagos procedentes de primas y prestaciones, anualidades y otras obligaciones derivadas de las pólizas suscritas	(3.367)	(452)
Otros pagos por actividades de operación	(11.014)	(4.171)
<b>Flujos de efectivo netos procedentes de (utilizados en) la operación</b>	<b>33.208</b>	<b>77.494</b>
Intereses recibidos	1.169	604
Impuestos a las ganancias reembolsados (pagados)	(358)	(449)
Otras entradas (salidas) de efectivo	(650)	(966)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>33.369</b>	<b>76.683</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos	(5.444)	(9.741)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(5.444)</b>	<b>(9.741)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Importes procedentes de préstamos</b>	<b>-</b>	<b>340.000</b>
Importes procedentes de préstamos de largo plazo	-	340.000
Pagos de préstamos	(5.455)	(348.106)
Dividendos pagados	(4.655)	(2.953)
Intereses pagados	(16.878)	(12.567)
Otras entradas (salidas) de efectivo	-	(6.960)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(26.988)</b>	<b>(30.586)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>937</b>	<b>36.356</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	(2.678)	(2.477)
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>(1.741)</b>	<b>33.879</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	56.488	22.609
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>54.747</b>	<b>56.488</b>

**Colbún Perú S.A.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

Estados de Cambios en el Patrimonio Neto	Patrimonio Atribuible a los Propietarios de la Controladora					Participaciones no controladoras MUS \$	Patrimonio total MUS \$
	Capital emitido MUS \$	Cambios en otras reservas		Ganancias (pérdidas) acumuladas MUS \$	Patrimonio atribuible a los propietarios de la controladora MUS \$		
		Reserva de coberturas de flujo de efectivo MUS \$	Total Otras reservas MUS \$				
Saldo inicial al 01.01.2018	219.635	-	-	19.198	238.833	226.175	465.008
<b>Cambios en Patrimonio</b>							
<b>Resultado integral</b>							
Ganancia (pérdida)				(10.199)	(10.199)	(9.925)	(20.124)
Otro resultado integral			-		-		-
Dividendos				-	-	(15.827)	(15.827)
Incremento (disminución) por otros cambios	-	-	-	-	-		-
Total de cambios en patrimonio	-	-	-	(10.199)	(10.199)	(25.752)	(35.951)
<b>Saldo final al 31.12.2018</b>	<b>219.635</b>	<b>-</b>	<b>-</b>	<b>8.999</b>	<b>228.634</b>	<b>200.423</b>	<b>429.057</b>

Estado de Cambios en el Patrimonio Neto	Patrimonio Atribuible a los Propietarios de la Controladora					Participaciones no controladoras MUS \$	Patrimonio total MUS \$
	Capital emitido MUS \$	Cambios en otras reservas		Ganancias (pérdidas) acumuladas MUS \$	Patrimonio atribuible a los propietarios de la controladora MUS \$		
		Reserva de coberturas de flujo de efectivo MUS \$	Total Otras reservas MUS \$				
Saldo inicial al 01.01.2017	219.635	1.853	1.853	882	222.370	213.447	435.817
<b>Cambios en Patrimonio</b>							
<b>Resultado integral</b>							
Ganancia (pérdida)				18.316	18.316	17.617	35.933
Otro resultado integral <sup>(1)</sup>		(1.853)	(1.853)		(1.853)	(1.780)	(3.633)
Dividendos				-	-	(3.109)	(3.109)
Incremento (disminución) por otros cambios	-		-	-	-	-	-
Total de cambios en patrimonio	-	(1.853)	(1.853)	18.316	16.463	12.728	29.191
<b>Saldo final al 31.12.2017</b>	<b>219.635</b>	<b>-</b>	<b>-</b>	<b>19.198</b>	<b>238.833</b>	<b>226.175</b>	<b>465.008</b>

**Colbún Perú S.A.**  
**Transacciones con Empresas Relacionadas**

**Cuentas por Pagar Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente	
					31.12.2018 MUS \$	31.12.2017 MUS \$
96.505.760-9	Colbún S.A.	Chile	Matriz	Pesos	217	59
<b>Total</b>					<b>217</b>	<b>59</b>

**Transacciones con Empresas Relacionadas**

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero-Diciembre			
						2018		2017	
						Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
96.505.760-9	Colbún S.A	Chile	Matriz	Dólar	Cobro servicios TI	220	(220)	132	(132)

**Inversiones las Canteras S.A.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

<b>ACTIVOS</b>	<b>31 de Diciembre, 2018</b>	<b>31 de Diciembre, 2017</b>
	MUS \$	MUS \$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	46.072	53.070
Otros activos no financieros, corrientes	1.305	1.450
Deudores comerciales y otras cuentas por cobrar	31.454	42.219
Inventarios	8.931	7.720
Activos por impuestos	6.442	6.066
<b>Activos corrientes totales</b>	<b>94.204</b>	<b>110.525</b>
<b>Activos no corrientes</b>		
Otros activos financieros, no corrientes	-	-
Otros activos no financieros, no corrientes	5.920	3.615
Activos intangibles distintos de la plusvalía	2.824	3.324
Propiedades, planta y equipos	673.159	697.833
Activos por impuestos diferidos	32.719	34.369
<b>Total activos no corrientes</b>	<b>714.622</b>	<b>739.141</b>
<b>ACTIVOS</b>	<b>808.826</b>	<b>849.666</b>

<b>PATRIMONIO NETO Y PASIVOS</b>	<b>31 de Diciembre, 2018</b>	<b>31 de Diciembre, 2017</b>
	MUS \$	MUS \$
<b>Pasivos corrientes</b>		
Otros pasivos financieros, corrientes	16.500	9.587
Cuentas por pagar comerciales y otras cuentas por pagar, corrientes	24.957	21.538
Cuentas por pagar a entidades relacionadas	22.210	69
Provisiones por beneficios a los empleados, corrientes	1.180	1.250
Otros pasivos no financieros, corrientes	931	774
<b>Pasivos corrientes totales</b>	<b>65.778</b>	<b>33.218</b>
<b>Pasivos no corrientes</b>		
Otros pasivos financieros, no corrientes	332.587	344.438
Cuentas por pagar comerciales y otras cuentas por pagar, no corrientes	433	9.614
Pasivos por impuestos diferidos	733	817
Otras provisiones no corrientes	270	-
<b>Total pasivos no corrientes</b>	<b>334.023</b>	<b>354.869</b>
<b>Total pasivos</b>	<b>399.801</b>	<b>388.087</b>
<b>Patrimonio</b>		
Capital emitido	425.698	432.100
Ganancias (pérdidas) acumuladas	(20.256)	27.127
Otras reservas	3.583	2.352
<b>Patrimonio atribuible a los propietarios de la controladora</b>	<b>409.025</b>	<b>461.579</b>
<b>Patrimonio Total</b>	<b>409.025</b>	<b>461.579</b>
<b>PATRIMONIO Y PASIVOS</b>	<b>808.826</b>	<b>849.666</b>

**Inversiones las Canteras S.A.**  
**Estados de Resultados Integrales,**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	201.479	192.837
Materias primas y consumibles utilizados	(156.209)	(141.394)
Gastos por beneficio a los empleados	(6.128)	(5.848)
Gastos por depreciación y amortización	(33.539)	(32.508)
Otros gastos, por naturaleza	(3.560)	7.469
Otras ganancias (pérdidas)	(1.541)	66
<b>Ganancia de actividades operacionales</b>	<b>502</b>	<b>20.622</b>
Ingresos financieros	1.002	633
Costos financieros	(18.327)	(14.773)
Diferencias de cambio	(1.865)	2.273
<b>Ganancia antes de impuesto</b>	<b>(18.688)</b>	<b>8.755</b>
Gasto por impuesto a las ganancias	(1.568)	3.552
<b>Ganancia de actividades continuadas</b>	<b>(20.256)</b>	<b>12.307</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>(20.256)</b>	<b>12.307</b>
<b>Ganancia atribuible a</b>		
Ganancia atribuible a los propietarios de la controladora	(20.256)	12.307
Ganancia atribuible a participaciones no controladoras	-	-
<b>GANANCIA</b>	<b>(20.256)</b>	<b>12.307</b>



ESTADOS DE OTROS RESULTADOS INTEGRALES	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia</b>	<b>(20.256)</b>	<b>12.307</b>
<b>Componentes de otro resultado integral que no se reclasificarán al resultado del periodo, antes de impuestos</b>		
Ganancias (pérdidas) por coberturas de flujos de efectivo, antes de impuestos		(5.153)
<b>Otro resultado integral que no se reclasificará al resultado del periodo, antes de impuestos</b>	<b>-</b>	<b>(5.153)</b>
<b>Componentes de otro resultado integral que se reclasificarán al resultado del periodo, antes de impuestos</b>		
<b>Otros componentes de otro resultado integral, antes de impuestos</b>	<b>-</b>	<b>(5.153)</b>
<b>Impuesto a las ganancias relativos a componentes de otro resultado integral que no se reclasificará al resultado del periodo</b>		
Impuesto a las ganancias relacionado con planes de beneficios definidos	-	-
<b>Impuesto a las ganancias relativos a componentes de otro resultado integral que se reclasificará al resultado del periodo</b>		
Impuesto a las ganancias relacionado con coberturas de flujo de efectivo		1.520
<b>Impuesto a las ganancias relativo a componentes de otro resultado integral</b>	<b>-</b>	<b>1.520</b>
<b>Otro resultado integral total</b>	<b>-</b>	<b>(3.633)</b>
<b>Resultado integral total</b>	<b>(20.256)</b>	<b>8.674</b>
<b>Resultado integral atribuible a</b>		
Resultado integral atribuible a los propietarios de la controladora	(20.256)	8.674
Resultado integral atribuible a participaciones no controladoras	-	-
<b>RESULTADO INTEGRAL TOTAL</b>	<b>(20.256)</b>	<b>8.674</b>

**Inversiones las Canteras S.A.**  
**Estados de Flujos de Efectivo – Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADOS DE FLUJOS DIRECTO</b>	<b>31 de Diciembre, 2018 MUS \$</b>	<b>31 de Diciembre, 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	241.226	245.714
Cobros procedentes de primas y prestaciones, anualidades y otros beneficios de pólizas suscritas	1.047	350
Otros cobros por actividades de la operación	3.083	15.930
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(191.505)	(173.084)
Pagos a y por cuenta de los empleados	(6.262)	(6.794)
Pagos procedentes de primas y prestaciones, anualidades y otras	(3.367)	(452)
Otros pagos por actividades de operación	(11.014)	(3.830)
<b>Flujos de efectivo netos procedentes de (utilizados en) la operación</b>	<b>33.208</b>	<b>77.647</b>
Intereses recibidos	21	604
Impuestos a las ganancias reembolsados (pagados)	(356)	(449)
Otras entradas (salidas) de efectivo	(397)	(680)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>32.476</b>	<b>77.122</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Para obtener el control de subsidiarias u otros negocios	-	-
Compras de propiedades, plantas y equipos	(5.444)	(9.741)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(5.444)</b>	<b>(9.741)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Importes procedentes de préstamos</b>	<b>(5.455)</b>	<b>(8.108)</b>
Importes procedentes de préstamos de largo plazo		340.000
Pago de préstamos	(5.455)	(348.108)
Aporte de Capital	-	-
Dividendos pagados	(9.206)	(6.436)
Intereses pagados	(16.878)	(12.567)
Otras entradas (salidas) de efectivo		(6.961)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de</b>	<b>(31.539)</b>	<b>(34.072)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>(4.507)</b>	<b>33.309</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	(2.678)	(2.473)
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>(7.185)</b>	<b>30.836</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	53.257	22.421
<b>Efectivo y equivalentes al efectivo al final del periodo</b>	<b>46.072</b>	<b>53.257</b>

**Inversiones las Canteras S.A.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
(En miles de dólares)

Estados de Cambios en el Patrimonio Neto	Patrimonio Atribuible a los Propietarios de la				Patrimonio total MUS \$
	Capital emitido MUS \$	Cambios en otras reservas Reserva de coberturas de flujo de efectivo MUS \$	Total Otras reservas MUS \$	Ganancias (pérdidas) acumuladas MUS \$	
Saldo inicial al 01.01.2018	432.100	2.352	2.352	27.127	461.579
<b>Cambios en Patrimonio</b>					
<b>Resultado integral</b>					
Ganancia (pérdida)				(20.256)	(20.256)
Otro resultado integral			-		-
Dividendos				(9.206)	(9.206)
Incremento (disminución) por otros cambios	(6.402)	1.231	1.231	(17.921)	(23.092)
Total de cambios en patrimonio	<b>(6.402)</b>	<b>1.231</b>	<b>1.231</b>	<b>(47.383)</b>	<b>(52.554)</b>
<b>Saldo final al 31.12.2018</b>	<b>425.698</b>	<b>3.583</b>	<b>3.583</b>	<b>(20.256)</b>	<b>409.025</b>

Estado de Cambios en el Patrimonio Neto	Patrimonio Atribuible a los Propietarios de la				Patrimonio total MUS \$
	Capital emitido MUS \$	Cambios en otras reservas Reserva de coberturas de flujo de efectivo MUS \$	Total Otras reservas MUS \$	Ganancias (pérdidas) acumuladas MUS \$	
Saldo inicial al 01.01.2017	432.100	3.633	3.633	23.518	459.251
<b>Cambios en Patrimonio</b>					
<b>Resultado integral</b>					
Ganancia (pérdida)				12.307	12.307
Otro resultado integral		(3.633)	(3.633)		(3.633)
Dividendos				(6.346)	(6.346)
Incremento (disminución) por otros cambios		2.352	2.352	(2.352)	-
Total de cambios en patrimonio	-	<b>(1.281)</b>	<b>(1.281)</b>	<b>3.609</b>	<b>2.328</b>
<b>Saldo final al 31.12.2017</b>	<b>432.100</b>	<b>2.352</b>	<b>2.352</b>	<b>27.127</b>	<b>461.579</b>

**Fenix Power Perú S.A.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ACTIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre, 2017 MUS \$</b>
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	23.704	52.868
Otros activos no financieros, corrientes	1.305	1.450
Deudores comerciales y otras cuentas por cobrar	31.454	42.219
Inventarios	8.931	7.720
Activos por impuestos	6.442	6.066
<b>Activos corrientes totales</b>	<b>71.836</b>	<b>110.323</b>
<b>Activos no corrientes</b>		
Otros activos no financieros, no corrientes	5.920	3.615
Activos intangibles distintos de la plusvalía	338	561
Propiedades, planta y equipos	673.159	697.833
Activos por impuestos diferidos	32.719	34.369
<b>Activos no corrientes totales</b>	<b>712.136</b>	<b>736.378</b>
<b>ACTIVOS</b>	<b>783.972</b>	<b>846.701</b>

<b>PATRIMONIO NETO Y PASIVOS</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre, 2017 MUS \$</b>
<b>Pasivos corrientes</b>		
Otros pasivos financieros, corrientes	16.500	9.587
Cuentas por pagar comerciales y otras cuentas por pagar, corrientes	24.951	21.538
Cuentas por pagar a entidades relacionadas	217	59
Provisiones por beneficios a los empleados, corrientes	1.180	1.250
Otros pasivos no financieros, corrientes	613	774
<b>Pasivos corrientes totales</b>	<b>43.461</b>	<b>33.208</b>
<b>Pasivos no corrientes</b>		
Otros pasivos financieros, no corrientes	332.587	344.438
Cuentas por pagar comerciales y otras cuentas por pagar, no corrientes	433	9.614
Otras provisiones no corrientes	270	-
<b>Pasivos no corrientes totales</b>	<b>333.290</b>	<b>354.052</b>
<b>Pasivos totales</b>	<b>376.751</b>	<b>387.260</b>
<b>Patrimonio</b>		
Capital emitido	425.093	445.637
Ganancias (pérdidas) acumuladas	(19.921)	13.062
Otras reservas	2.049	742
<b>Patrimonio atribuible a los propietarios de la controladora</b>	<b>407.221</b>	<b>459.441</b>
<b>Patrimonio total</b>	<b>407.221</b>	<b>459.441</b>
<b>PATRIMONIO Y PASIVOS</b>	<b>783.972</b>	<b>846.701</b>

**Fenix Power Perú S.A.**  
**Estados de Resultados Integrales,**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	201.479	192.837
Materias primas y consumibles utilizados	(156.209)	(141.394)
Gastos por beneficio a los empleados	(6.128)	(5.848)
Gastos por depreciación y amortización	(33.262)	(32.232)
Otros gastos, por naturaleza	(3.403)	7.990
Otras ganancias (pérdidas)	(1.541)	66
<b>Ganancia de actividades operacionales</b>	<b>936</b>	<b>21.419</b>
Ingresos financieros	983	633
Costos financieros	(18.325)	(14.770)
Diferencias de cambio	(1.865)	2.273
<b>Ganancia (Pérdida) antes de impuesto</b>	<b>(18.271)</b>	<b>9.555</b>
Ingreso (gasto) por impuesto a las ganancias	(1.650)	3.507
<b>Ganancia (Pérdida) de actividades continuadas</b>	<b>(19.921)</b>	<b>13.062</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>(19.921)</b>	<b>13.062</b>

ESTADOS DE OTROS RESULTADOS INTEGRALES	Nota N°	Enero - Diciembre	
		2018 MUS \$	2017 MUS \$
<b>Ganancia (Pérdida)</b>		<b>(19.921)</b>	<b>13.062</b>

**Componentes de otro resultado integral que no se reclasificarán al resultado del periodo, antes de impuestos**

Ganancias (pérdidas) por coberturas de flujos de efectivo, antes de impuestos	-	-	(5.153)
<b>Otro resultado integral que no se reclasificará al resultado del periodo, antes de impuestos</b>	-	-	<b>(5.153)</b>
<b>Otros componentes de otro resultado integral, antes de impuestos</b>		-	<b>(5.153)</b>
Impuesto a las ganancias relacionado con coberturas de flujo de efectivo	16.c	-	1.520
<b>Impuesto a las ganancias relativo a componentes de otro resultado integral</b>		-	<b>1.520</b>
<b>Otro resultado integral total</b>	-	-	<b>(3.633)</b>
<b>RESULTADO INTEGRAL TOTAL</b>		<b>(19.921)</b>	<b>9.429</b>

Fenix Power Perú S.A.  
Estados de Flujos de Efectivo – Método Directo  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE FLUJOS DIRECTO	31 de Diciembre 2018 MUS \$	31 de Diciembre 2017 MUS \$
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios	241.226	245.714
Cobros procedentes de primas y prestaciones, anualidades y otros beneficios de pólizas suscritas	1.047	350
Otros cobros por actividades de la operación	3.083	15.930
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios	(191.505)	(173.084)
Pagos a y por cuenta de los empleados	(6.263)	(6.794)
Pagos procedentes de primas y prestaciones, anualidades y otras bligaciones derivadas de las pólizas suscritas	(3.367)	(452)
Otros pagos por actividades de operación	(11.014)	(4.017)
<b>Flujos de efectivo netos procedentes de (utilizados en) la operación</b>	<b>33.207</b>	<b>77.647</b>
Intereses recibidos	974	604
Impuestos a las ganancias reembolsados (pagados)	(356)	(449)
Otras entradas (salidas) de efectivo	(235)	(680)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>33.590</b>	<b>77.122</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Préstamos de entidades relacionadas	-	245
Compras de propiedades, plantas y equipos	(5.444)	(9.741)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(5.444)</b>	<b>(9.496)</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Importes procedentes de préstamos</b>	<b>-</b>	<b>340.000</b>
Importes procedentes de préstamos de largo plazo	-	340.000
Pagos de préstamos	(5.455)	(348.108)
Dividendos pagados	(11.756)	(6.681)
Intereses pagados	(16.878)	(12.567)
Otras entradas (salidas) de efectivo	(20.544)	(6.961)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	<b>(54.633)</b>	<b>(34.317)</b>
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	<b>(26.487)</b>	<b>33.309</b>
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	(2.677)	(2.473)
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>(29.164)</b>	<b>30.836</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	52.868	22.032
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>23.704</b>	<b>52.868</b>

Fenix Power Perú S.A.  
Estados de Cambios en el Patrimonio  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

Estados de Cambios en el Patrimonio	Nota	Patrimonio Atribuible a los Propietarios de la Controladora					Patrimonio total MUS \$
		Capital emitido MUS \$	Cambios en otras reservas			Ganancias (pérdidas) acumuladas MUS \$	
			Reserva de coberturas de flujo de efectivo MUS \$	Otras reservas varias MUS \$	Total Otras reservas MUS \$		
Saldo inicial al 01.01.2018		445.637	-	742	742	13.062	459.441
<b>Cambios en Patrimonio</b>							
<b>Resultado integral</b>							
Ganancia (pérdida)						(19.921)	(19.921)
Otro resultado integral			-	-	-		-
<b>Resultado integral</b>		-	-	-	-	<b>(19.921)</b>	<b>(19.921)</b>
Dividendos						(11.756)	(11.756)
Incremento (disminución) por otros cambios		(20.544)	-	1.307	1.307	(1.306)	(20.543)
Total de cambios en patrimonio		<b>(20.544)</b>	-	<b>1.307</b>	<b>1.307</b>	<b>(32.983)</b>	<b>(52.220)</b>
<b>Saldo final al 31.12.2018</b>	<b>21</b>	<b>425.093</b>	-	<b>2.049</b>	<b>2.049</b>	<b>(19.921)</b>	<b>407.221</b>

Estado de Cambios en el Patrimonio	Nota	Patrimonio Atribuible a los Propietarios de la Controladora					Patrimonio total MUS \$
		Capital emitido MUS \$	Cambios en otras reservas			Ganancias (pérdidas) acumuladas MUS \$	
			Reserva de coberturas de flujo de efectivo MUS \$	Otras reservas varias MUS \$	Total Otras reservas MUS \$		
Saldo inicial al 01.01.2017		620.268	3.633		3.633	(167.208)	456.693
<b>Cambios en Patrimonio</b>							
<b>Resultado integral</b>							
Ganancia (pérdida)						13.062	13.062
Otro resultado integral			(3.633)	-	(3.633)		(3.633)
<b>Resultado integral</b>		-	<b>(3.633)</b>	-	<b>(3.633)</b>	<b>13.062</b>	<b>9.429</b>
Dividendos						(6.681)	(6.681)
Incremento (disminución) por otros cambios		(174.631)	-			174.631	-
Asignación de reserva legal				742	742	(742)	-
Total de cambios en patrimonio		<b>(174.631)</b>	<b>(3.633)</b>	<b>742</b>	<b>(2.891)</b>	<b>180.270</b>	<b>2.748</b>
<b>Saldo final al 31.12.2017</b>	<b>21</b>	<b>445.637</b>	-	<b>742</b>	<b>742</b>	<b>13.062</b>	<b>459.441</b>



## Fenix Power Perú S.A.

### Transacciones con Empresas Relacionadas

#### Cuentas por Pagar Empresas Relacionadas

Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente	
				31.12.2018 MUS \$	31.12.2017 MUS \$
Colbun S.A.	Chile	Controlador	Dólares	217	59
<b>Total</b>				<b>217</b>	<b>59</b>

#### Transacciones con Empresas Relacionadas

Sociedad	País origen	Naturaleza de la relación	Tipo de moneda	Descripción de la Transacción	Enero - Diciembre			
					2018		2017	
					Monto MUS \$	Efecto en resultados (cargo) abono MUS \$	Monto MUS \$	Efecto en resultados (cargo) abono MUS \$
Colbún S.A.	Chile	Controlador	Dólares	Servicios TI	217	(217)	132	(132)
Inversiones de Las Canteras S.A.	Perú	Accionista	Dólares	Devolución	20.544	-	-	-
				Reembolso de	-	-	245	-
				Dividendos <sup>(2)</sup>	11.756	-	6.681	-

**Aysén Energía S.A.**  
**Estados de Situación Financiera, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ACTIVOS</b>	<b>31 de Diciembre 2018 M\$</b>	<b>31 de Diciembre 2017 M\$</b>
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	702	702
Otros activos no financieros, corrientes	-	300
<b>Activos corrientes totales</b>	<b>702</b>	<b>1.002</b>
<b>TOTAL DE ACTIVOS</b>	<b>702</b>	<b>1.002</b>
<b>PATRIMONIO Y PASIVOS</b>	<b>31 de Diciembre 2018 M\$</b>	<b>31 de Diciembre 2017 M\$</b>
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	1.378	670
Cuentas por pagar a entidades relacionadas, corrientes	16.349	15.621
<b>Pasivos corrientes totales</b>	<b>17.727</b>	<b>16.291</b>
<b>Pasivos no corrientes</b>		
Pasivos por impuestos diferidos	-	-
<b>Total pasivos no corrientes</b>	<b>-</b>	<b>-</b>
<b>Total pasivos</b>	<b>17.727</b>	<b>16.291</b>
<b>Patrimonio</b>		
Capital emitido	4.900	4.900
Ganancias (pérdidas) acumuladas	(21.925)	(20.189)
Otras Reservas	-	-
<b>Patrimonio Total</b>	<b>(17.025)</b>	<b>(15.289)</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>702</b>	<b>1.002</b>

**Aysén Energía S.A.**  
**Estados de Resultados Integrales,**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
Ingresos de actividades ordinarias	-	-
Materias primas y consumibles utilizados	-	-
Gastos por depreciación y amortización	-	-
Otros gastos, por naturaleza	(1.736)	(3.190)
Otras ganancias (pérdidas)	-	-
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>(1.736)</b>	<b>(3.190)</b>
Costos financieros	-	-
Diferencias de cambio	-	-
<b>Pérdida antes de impuesto</b>	<b>(1.736)</b>	<b>(3.190)</b>
Gasto por impuesto a las ganancias	-	-
<b>Pérdida procedentes de operaciones continuadas</b>	<b>(1.736)</b>	<b>(3.190)</b>
<b>PÉRDIDA DEL EJERCICIO</b>	<b>(1.736)</b>	<b>(3.190)</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 MUS \$	2017 MUS \$
<b>Ganancia (pérdida)</b>	<b>(1.736)</b>	<b>(3.190)</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Otros componentes de otro resultado integral, antes de impuestos	-	-
Impuesto a las ganancias relacionado con componentes de otro resultado integral	-	-
Otro resultado integral total	-	-
<b>RESULTADO INTEGRAL TOTAL</b>	<b>(1.736)</b>	<b>(3.190)</b>

**Aysén Energía S.A.**  
**Estados de Flujos de Efectivo - Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADOS DE FLUJOS DIRECTO</b>	<b>31 de Diciembre 2018 MUS \$</b>	<b>31 de Diciembre 2017 MUS \$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios		-
Otros cobros por actividades de la operación		-
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios		-
Otros pagos por actividades de operación		-
<b>Flujos de efectivo netos procedentes de (utilizados en ) la operación</b>	-	-
Impuestos a las ganancias reembolsados (pagados)		-
Otras entradas (salidas) de efectivo		-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos		-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Importes procedentes de préstamos</b>	-	-
Préstamos de entidades relacionadas		-
Dividendos pagados		-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	-	-
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	-	-
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente		-
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	-	-
Efectivo y equivalentes al efectivo al principio del ejercicio	702	702
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>702</b>	<b>702</b>

**Aysén Energía S.A.**  
**Estados de Cambios en el Patrimonio**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>Estados de Cambios en el Patrimonio</b>	<b>Capital emitido</b>	<b>Ganancias (pérdidas) acumuladas</b>	<b>Patrimonio atribuible a los propietarios de la controladora</b>	<b>Patrimonio Total</b>
	<b>MUS \$</b>	<b>MUS \$</b>	<b>MUS \$</b>	<b>MUS \$</b>
Saldo inicial al 01.01.2018	4.900	(20.189)	(15.289)	(15.289)
<b>Cambios en Patrimonio</b>				
<b>Resultado integral</b>				
Ganancia (pérdida)		(1.736)	(1.736)	(1.736)
Otro resultado integral		-	-	-
Incremento (disminución) por transferencias y otros cambios	-	-	-	-
Total de cambios en patrimonio	-	<b>(1.736)</b>	<b>(1.736)</b>	<b>(1.736)</b>
<b>Saldo final al 31.12.2018</b>	<b>4.900</b>	<b>(21.925)</b>	<b>(17.025)</b>	<b>(17.025)</b>

	<b>Capital emitido</b>	<b>Ganancias (pérdidas) acumuladas</b>	<b>Patrimonio atribuible a los propietarios de la controladora</b>	<b>Patrimonio Total</b>
	<b>MUS \$</b>	<b>MUS \$</b>	<b>MUS \$</b>	<b>MUS \$</b>
Saldo inicial al 01.01.2017	4.900	(16.999)	(12.099)	(12.099)
<b>Cambios en Patrimonio</b>				
<b>Resultado integral</b>				
Ganancia (pérdida)		(3.190)	(3.190)	(3.190)
Otro resultado integral		-	-	-
Incremento (disminución) por transferencias y otros cambios	-	-	-	-
Total de cambios en patrimonio	-	<b>(3.190)</b>	<b>(3.190)</b>	<b>(3.190)</b>
<b>Saldo final al 31.12.2017</b>	<b>4.900</b>	<b>(20.189)</b>	<b>(15.289)</b>	<b>(15.289)</b>

## Aysén Energía S.A.

### Transacciones con Empresas Relacionadas

#### Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	Descripción de la transacción	Plazo de la transacción	Naturaleza de la relación	Moneda	Corriente	
						31.12.2018 M\$	31.12.2017 M\$
76.652.400-1	Centrales Hidroeléctricas de Aysén S.A., en Liquidación	Servicios profesionales	Menos de 90 días	Accionista	CH\$	16.349	15.621
<b>Total</b>						<b>16.349</b>	<b>15.621</b>

## Aysén Transmisión S.A.

### Estados de Situación Financiera, Clasificados al 31 de diciembre de 2018 y 2017

(En miles de dólares)

ACTIVOS	31 de Diciembre 2018 M\$	31 de Diciembre 2017 M\$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	3.897	3.476
<b>Activos corrientes totales</b>	<b>3.897</b>	<b>3.476</b>
<b>TOTAL DE ACTIVOS</b>	<b>3.897</b>	<b>3.476</b>

PATRIMONIO Y PASIVOS	31 de Diciembre 2018 M\$	31 de Diciembre 2017 M\$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar	1.930	1.071
Cuentas por pagar a entidades relacionadas, corrientes	39.673	38.524
<b>Pasivos corrientes totales</b>	<b>41.603</b>	<b>39.595</b>
<b>Total pasivos</b>	<b>41.603</b>	<b>39.595</b>
<b>Patrimonio</b>		
Capital emitido	22.368	22.368
Ganancias (pérdidas) acumuladas	(60.074)	(58.487)
<b>Patrimonio Total</b>	<b>(37.706)</b>	<b>(36.119)</b>
<b>TOTAL PATRIMONIO Y PASIVOS</b>	<b>3.897</b>	<b>3.476</b>

**Aysén Transmisión S.A.**  
**Estados de Resultados Integrales,**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 M\$	2017 M\$
Otros gastos, por naturaleza	(2.007)	(4.785)
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>(2.007)</b>	<b>(4.785)</b>
Diferencias de cambio	421	(287)
<b>Pérdida antes de impuesto</b>	<b>(1.586)</b>	<b>(5.072)</b>
Gasto por impuesto a las ganancias	-	-
<b>Pérdida procedentes de operaciones continuadas</b>	<b>(1.586)</b>	<b>(5.072)</b>
<b>PÉRDIDA DEL EJERCICIO</b>	<b>(1.586)</b>	<b>(5.072)</b>

Estados de otros resultados integrales	Enero - Diciembre	
	2018 M\$	2017 M\$
<b>Ganancia (pérdida)</b>	<b>(1.586)</b>	<b>(5.072)</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Otros componentes de otro resultado integral, antes de impuestos	-	-
Impuesto a las ganancias relacionado con componentes de otro resultado integral	-	-
Otro resultado integral total	-	-
<b>RESULTADO INTEGRAL TOTAL</b>	<b>(1.586)</b>	<b>(5.072)</b>

**Aysén Transmisión S.A.**  
**Estados de Flujos de Efectivo – Método Directo**  
**por los ejercicios terminados al 31 de diciembre de 2018 y 2017**  
 (En miles de dólares)

<b>ESTADOS DE FLUJOS DIRECTO</b>	<b>31 de Diciembre 2018 M\$</b>	<b>31 de Diciembre 2017 M\$</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de operación</b>		
<b>Clases de cobros por actividades de la operación</b>		
Cobros procedentes de las ventas de bienes y prestación de servicios		-
Otros cobros por actividades de la operación		-
<b>Clases de pago</b>		
Pagos a proveedores por el suministro de bienes y servicios		-
Otros pagos por actividades de operación		-
<b>Flujos de efectivo netos procedentes de (utilizados en ) la operación</b>	-	-
Impuestos a las ganancias reembolsados (pagados)		-
Otras entradas (salidas) de efectivo		-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos		-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	-	-
<b>Flujos de efectivo procedentes de (utilizados en) actividades de financiación</b>		
<b>Importes procedentes de préstamos</b>	-	-
Préstamos de entidades relacionadas		-
Dividendos pagados		-
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de financiación</b>	-	-
<b>Incremento neto (disminución) en el efectivo y equivalentes al efectivo, antes del efecto de los cambios en la tasa de cambio</b>	-	-
<b>Efectos de la variación en la tasa de cambio sobre el efectivo y equivalentes al efectivo</b>		
Efectos de las variaciones en las tasas de cambio sobre el efectivo y efectivo equivalente	421	(288)
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>421</b>	<b>(288)</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	3.476	3.764
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>3.897</b>	<b>3.476</b>



Estados de Cambios en el Patrimonio	Capital emitido	Ganancias (pérdidas) acumuladas	Patrimonio atribuible a los propietarios de la controladora	Patrimonio Total
	M\$	M\$	M\$	M\$
Saldo inicial al 01.01.2018	22.368	(58.487)	(36.119)	(36.119)
<b>Cambios en Patrimonio</b>				
<b>Resultado integral</b>				
Ganancia (pérdida)		(1.586)	(1.586)	(1.586)
Otro resultado integral		-	-	-
Incremento (disminución) por transferencias y otros cambios	-	(1)	(1)	(1)
Total de cambios en patrimonio	-	(1.587)	(1.587)	(1.587)
<b>Saldo final al 31.12.2018</b>	<b>22.368</b>	<b>(60.074)</b>	<b>(37.706)</b>	<b>(37.706)</b>

	Capital emitido	Ganancias (pérdidas) acumuladas	Patrimonio atribuible a los propietarios de la controladora	Patrimonio Total
	M\$	M\$	M\$	M\$
Saldo inicial al 01.01.2017	22.368	(53.415)	(31.047)	(31.047)
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)		(5.072)	(5.072)	(5.072)
Otro resultado integral		-	-	-
Incremento (disminución) por transferencias y otros cambios	-	-	-	-
Total de cambios en patrimonio	-	(5.072)	(5.072)	(5.072)
<b>Saldo final al 31.12.2017</b>	<b>22.368</b>	<b>(58.487)</b>	<b>(36.119)</b>	<b>(36.119)</b>

## Aysén Transmisión S.A.

### Transacciones con Empresas Relacionadas

#### Cuentas por Pagar Empresas Relacionadas

RUT	Sociedad	Descripción de la transacción	Plazo de la transacción	Naturaleza de la relación	Moneda	Corriente	
						31.12.2018	31.12.2017
						M\$	M\$
76.652.400-1	Centrales Hidroeléctricas de Aysén S.A., en Liquidación	Servicios profesionales	Menos de 90 días	Accionista	CH\$	39.673	38.52
<b>Total</b>						<b>39.673</b>	<b>38.52</b>

# Estados Financieros Resumidos Coligadas

Transmisora Eléctrica Quillota Ltda.  
Electrogas S.A.

Transmisora Eléctrica Quillota Ltda.  
Estados de Situación Financiera Consolidados, Clasificados  
al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ACTIVOS	Diciembre 31, 2018 M\$	Diciembre 31, 2017 M\$
<b>Activos corrientes</b>		
Efectivo y equivalentes al efectivo	8.185.392	7.310.371
Otros activos no financieros, corrientes	1.030	1.012
Deudores comerciales por cobrar y otras cuentas por cobrar	8.655	8.408
Cuentas por cobrar a entidades relacionadas, corrientes	1.125.293	287.228
Activos por impuestos corrientes	4.467	157.832
<b>Activos corrientes totales</b>	<b>9.324.837</b>	<b>7.764.851</b>
<b>Activos no corrientes</b>		
Otros activos no financieros, no corrientes	27.843	28.928
Activos intangibles distintos de la plusvalía	258.889	263.994
Propiedades, planta y equipos	11.271.896	11.772.205
<b>Activos no corrientes totales</b>	<b>11.558.628</b>	<b>12.065.127</b>
<b>ACTIVOS TOTALES</b>	<b>20.883.465</b>	<b>19.829.978</b>
PATRIMONIO NETO Y PASIVOS	Diciembre 31, 2018 M\$	Diciembre 31, 2017 M\$
<b>Pasivos corrientes</b>		
Cuentas por pagar comerciales y otras cuentas por pagar, corrientes	153.511	410.632
Otros pasivos no financieros, corrientes	73.877	29.869
<b>Pasivos corrientes totales</b>	<b>227.388</b>	<b>440.501</b>
<b>Pasivos no corrientes</b>		
Pasivos por impuestos diferidos	1.708.660	1.751.963
<b>Pasivos no corrientes totales</b>	<b>1.708.660</b>	<b>1.751.963</b>
<b>Pasivos totales</b>	<b>1.936.048</b>	<b>2.192.464</b>
<b>Patrimonio</b>		
Capital emitido	4.404.446	4.404.446
Ganancias acumuladas	15.392.917	14.083.014
Otras reservas	(849.946)	(849.946)
<b>Patrimonio Total</b>	<b>18.947.417</b>	<b>17.637.514</b>
<b>PATRIMONIO Y PASIVOS TOTALES</b>	<b>20.883.465</b>	<b>19.829.978</b>

Transmisora Eléctrica Quillota Ltda.  
Estados de Resultados Integrales Consolidados, por Naturaleza  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 M\$	2017 M\$
Ingresos de actividades ordinarias	3.003.757	2.813.493
Gastos por depreciación y amortización	(784.364)	(782.321)
Otros gastos varios de operación	(758.598)	(691.142)
Otras ganancias (pérdidas)	70	(95)
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>1.460.865</b>	<b>1.339.935</b>
Ingresos financieros	187.530	162.930
Costos financieros	(9)	(113)
Resultados por unidades de reajuste	11.364	2.949
<b>Ganancia (pérdida) antes de impuesto</b>	<b>1.659.750</b>	<b>1.505.701</b>
Gasto por impuesto a las ganancias	(349.847)	(313.709)
<b>Ganancia (pérdida) de actividades continuadas</b>	<b>1.309.903</b>	<b>1.191.992</b>
<b>GANANCIA (PÉRDIDA)</b>	<b>1.309.903</b>	<b>1.191.992</b>
<b>Ganancia (pérdida) atribuible a</b>		
Ganancia (pérdida) atribuible a los propietarios de la controladora	1.309.903	1.191.992
<b>GANANCIA (PÉRDIDA)</b>	<b>1.309.903</b>	<b>1.191.992</b>
Estados de otros resultados integrales	Enero - Diciembre	
	2018 M\$	2017 M\$
<b>Ganancia (pérdida)</b>	<b>1.309.903</b>	<b>1.191.992</b>
<b>Componentes de otro resultado integral, antes de impuestos</b>		
Otros componentes de otro resultado integral, antes de impuestos	-	-
<b>RESULTADO INTEGRAL TOTAL</b>	<b>1.309.903</b>	<b>1.191.992</b>

Transmisora Eléctrica Quillota Ltda.  
Estados de Flujos de Efectivo Consolidados - Método Directo  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

<b>ESTADOS DE FLUJOS INDIRECTO</b>	<b>Diciembre 31, 2018 M\$</b>	<b>Diciembre 31, 2017 M\$</b>
<b>Conciliación con la ganancia (pérdida) de operaciones</b>		
<b>Ganancia</b>	<b>1.309.903</b>	<b>1.191.992</b>
<b>Ajustes para conciliar con la ganancia de las operaciones</b>		
Gasto por impuesto a las ganancias	349.847	313.709
Depreciación del ejercicio	784.364	782.321
(Incremento) decremento en deudores comerciales y otras cuentas por cobrar	(838.312)	181.233
Decremento en otros activos	1.085	1.086
Incremento en acreedores comerciales y otras cuentas por pagar	(257.121)	66.341
Incremento (decremento) en otros pasivos	44.008	(16.628)
<b>Total ajuste para conciliación de ganancia</b>	<b>83.871</b>	<b>1.328.062</b>
Impuestos a las ganancias pagados (reembolsados)	(239.803)	(362.764)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de operación</b>	<b>1.153.971</b>	<b>2.157.290</b>
<b>Flujos de efectivo procedentes de (utilizados en) actividades de inversión</b>		
Compras de propiedades, plantas y equipos	(278.950)	(783.947)
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de inversión</b>	<b>(278.950)</b>	<b>(783.947)</b>
<b>Flujos de efectivo netos procedentes de (utilizados en) actividades de</b>	<b>-</b>	<b>-</b>
<b>Incremento (disminución) neto de efectivo y equivalentes al efectivo</b>	<b>875.021</b>	<b>1.373.343</b>
Efectivo y equivalentes al efectivo al principio del ejercicio	7.310.371	5.937.028
<b>Efectivo y equivalentes al efectivo al final del ejercicio</b>	<b>8.185.392</b>	<b>7.310.371</b>

Transmisora Eléctrica Quillota Ltda.  
Estados de Cambios en el Patrimonio  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

Estados de Cambios en el Patrimonio	Capital emitido	Otras reservas varias	Ganancias (pérdidas) acumuladas	Patrimonio
	M\$	M\$	M\$	
Saldo inicial al 01.01.2018	4.404.446	(849.946)	14.083.014	17.637.514
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)			1.309.903	1.309.903
Otro resultado integral		-		-
Total de cambios en patrimonio	-	-	<b>1.309.903</b>	<b>1.309.903</b>
<b>Saldo final al 31.12.2018</b>	<b>4.404.446</b>	<b>(849.946)</b>	<b>15.392.917</b>	<b>18.947.417</b>

Estado de Cambios en el Patrimonio	Capital emitido	Otras reservas varias	Ganancias (pérdidas) acumuladas	Patrimonio
	M\$	M\$	M\$	
Saldo inicial al 01.01.2017	4.404.446	(849.946)	12.891.022	16.445.522
<b>Cambios en Patrimonio</b>				
Resultado integral				
Ganancia (pérdida)			1.191.992	1.191.992
Otro resultado integral		-		-
Total de cambios en patrimonio	-	-	<b>1.191.992</b>	<b>1.191.992</b>
<b>Saldo final al 31.12.2017</b>	<b>4.404.446</b>	<b>(849.946)</b>	<b>14.083.014</b>	<b>17.637.514</b>

## Transmisora Eléctrica Quillota Ltda. Transacciones con Empresas Relacionadas

### Cuentas por Cobrar Empresas relacionadas

RUT	Sociedad	País origen	Naturaleza de la relación	Tipo de Moneda	Corriente	
					31.12.2018 M\$	31.12.2017 M\$
96.505.760-9	Colbún S.A.	Chile	Socio	Pesos	285.153	130.390
78.932.860-9	Gasatacama Chile S.A.	Chile	Socio	Pesos	392.498	72.965
91.081.000-6	Enel Generación Chile S.A.	Chile	Relacionado por socio	Pesos	447.642	83.873
<b>Total</b>					<b>1.125.293</b>	<b>287.228</b>

RUT	Sociedad	Naturaleza de la relación	Descripción de la Transacción	Enero - Diciembre			
				2018		2017	
				Monto M\$	Efecto en resultados (cargo) abono M\$	Monto M\$	Efecto en resultados (cargo) abono M\$
96.505.760-9	Colbún S.A.	Socio	Peaje uso de instalaciones	1.679.722	1.411.531	1.572.604	1.321.516
78.932.860-9	Gasatacama Chile S.A.	Socio	Peaje uso de instalaciones	761.786	640.156	713.489	599.571
91.081.000-6	Enel Gx Chile S.A.	Relacionado por socio	Peaje uso de instalaciones	1.081.703	908.994	1.011.846	850.290

**Electrogas S.A.**  
**Estados de Situación Financiera Consolidados, Clasificados**  
**al 31 de diciembre de 2018 y 2017**  
**(En miles de dólares)**

<b>ACTIVOS</b>	<b>Diciembre 31, 2018 M\$ USD</b>	<b>Diciembre 31, 2017 M\$ USD</b>
<b>Activos Corrientes</b>		
Efectivo y Equivalentes al Efectivo	3.702	3.962
Otros Activos Financieros	6	15
Otros Activos no Financieros	341	337
Deudores Comerciales y Otras Cuentas por Cobrar	1.418	1.901
Cuentas por Cobrar a Entidades Relacionadas	1.546	1.462
Activos por Impuestos	61	67
<b>Activos corrientes totales</b>	<b>7.073</b>	<b>7.742</b>
<b>No Corriente</b>		
Activos Intangibles	8.447	9.177
Propiedades, Planta y Equipo	42.898	46.917
<b>Activos No Corrientes</b>	<b>51.345</b>	<b>56.095</b>
<b>ACTIVOS TOTALES</b>	<b>58.418</b>	<b>63.837</b>



<b>PATRIMONIO NETO Y PASIVOS</b>	<b>Diciembre 31, 2018 M\$ US D</b>	<b>Diciembre 31, 2017 M\$ US D</b>
<b>Pasivos corrientes</b>		
Otros Pasivos Financieros	2.059	4.369
Cuentas Comerciales y Otras Cuentas por Pagar	2.553	1.249
Pasivos por Impuestos	1.608	1.345
Provisiones por Beneficios a los Empleados	459	505
<b>Pasivos corrientes totales</b>	<b>6.679</b>	<b>7.468</b>
<b>Pasivos no corrientes</b>		
Otros Pasivos Financieros	561	2.700
Otras Provisiones	1.513	1.513
Pasivo por Impuestos Diferidos	10.599	11.642
<b>Pasivos no corrientes totales</b>	<b>12.674</b>	<b>15.855</b>
<b>Pasivos totales</b>	<b>19.353</b>	<b>23.323</b>
<b>Patrimonio</b>		
Capital Emitido	21.266	21.266
Otras Reservas	(235)	(315)
Ganancias Acumuladas	18.033	19.563
<b>Patrimonio Total</b>	<b>39.065</b>	<b>40.514</b>
<b>PATRIMONIO Y PASIVOS TOTALES</b>	<b>58.418</b>	<b>63.837</b>

## Electrogas S.A.

Estados de Resultados Integrales Consolidados, por Naturaleza  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE RESULTADOS INTEGRALES POR NATURALEZA	Enero - Diciembre	
	2018 M\$ US	2017 M\$ US
Ingresos de actividades ordinarias	35.146	36.152
Costo de ventas	(3.326)	(3.385)
Depreciación y amortizaciones	(5.354)	(5.679)
Otros ingresos	8	68
Gastos de administración	(917)	(901)
Otros gastos	(77)	(5)
Ganancia bruta	26	27
<b>Ganancia (pérdida) de actividades operacionales</b>	<b>25</b>	<b>26</b>
Ingresos financieros	0	0
Costos financieros	(0)	(0)
Diferencia de cambio	(0)	1
<b>Ganancia (pérdida) antes de impuesto</b>	<b>25</b>	<b>27</b>
Gasto por impuesto a las ganancias	(7)	(8)
<b>Ganancia del período</b>	<b>18</b>	<b>19</b>

## Electrogas S.A.

Estados de Cambios en el Patrimonio  
por los ejercicios terminados al 31 de diciembre de 2018 y 2017  
(En miles de dólares)

ESTADOS DE CAMBIOS EN EL PATRIMONIO	Diciembre 31, 2018 MUS \$	Diciembre 31, 2017 MUS \$
Capital emitido	21.266	21.266
Ganancias (pérdidas) acumuladas	5.607	19.563
Total otras reservas	(235)	-315
Utilidad del Ejercicio	18.049	-
Dividendos	(5.623)	-
<b>TOTAL PATRIMONIO, NETO</b>	<b>39.065</b>	<b>40.514</b>

