

ANNUAL IINTEGRATED REPORT



### WE TAKE CARE OF THE PEOPLE'S WELL BEING

Colbún produces a fundamental asset for the economic development of the country, which improves the quality of life of its inhabitants: electric power. Day after day, the power produced by Colbún gets to thousands of households in Chile and Peru, and to large companies in these countries.



After four years of publishing our annual Sustainability Report, this year we wanted to give a step forward and publish our first Annual Integrated Report. This is consistent with our conviction that Colbún's business embraces the economic, social and environmental performance aspects in an integrated manner. This report was prepared in agreement with the principles of the International Integrated Reporting Council (IIRC), the compulsory requirements of the Superintendence of Securities and Insurance (SVS) and the Global Reporting Initiative. In addition, this report has been checked by an independent auditing company.

December of 2015.

"Colbún's indicators" show the specific performance of our Company. DJSI indicators index questionnaire. Further detail of these the heading "GRI Table".

# **COLBÚN IN NUMBERS 2015**

### **CONSOLIDATED NUMBERS**

US\$ MILLION IN NET PROFITS

USS EBITDA MARGIN

WORKERS IN PERÚ

### CHILE

Largest generator in the SIC, system that covers 92% of Chile's population.



Market share in the SIC (in MW).



Of installed capacity / 49% hydro and 51%



Kilometers of transmission lines



Of generation / 52% hydro / 48% thermal.



1.872

Contractors working for Colbún.



REGULATED (Chilectra, CGE, SAESA, among FREE (Codelco, Anglo American).

### **PERU**

**6**%

Market share in the SEIN (in MW).



Of installed capacity (100% thermoelectric).



REGULATED (Distriluz, Luz del Sur, Edelnor). FREE (Electrodunas, Celepsa). OTHER GENERATORS (Termochilca).

### **FENIX POWER PERU**

combined cycle power plant

### OWNERSHIP

**MATTE GROUP** 

Letter from the Chairman

# **BETTER ENERGY**

G4-1. G4-2



#### Dear Shareholders,

We are very pleased to present you with the first Annual Integrated Report, the 2015 management report that consolidates in a single document our traditional Annual Report and the Sustainability Report that we started to publish four years ago.

The decision to integrate both documents is consistent with the global view we have sought to give to the Company's management, where we recognize that Colbún's value for its shareholders increases when we achieve levels of excellence in the economic, social and environmental management of our business.

This 2015 Annual Integrated Report presents management information in the areas of interest for our stakeholders. Also, and for the first time ever, the data included herein have been submitted to verification by an independent auditing company, in line with the best international practices in the subject.

#### Internationalization and 2015 milestones

In connection with the Company's management in 2015, let me start with a milestone, which, although happened at year end was probably one of the highlights of the period. Within the framework of the internationalization process mentioned herein a year ago, in December Colbún entered a foreign market for the first time after acquiring with the Peruvian investment fund SIGMA and the sovereign fund Abu Dhabi Investment Authority, 100% of Fenix Power Peru. The 570 MW power plant operated by Fenix is the most efficient thermoelectric power plant based on natural gas in Peru, and its acquisition means a relevant step forward in our objective of looking for new opportunities, diversifying our sources of income and the regulatory risks. As the operating and controlling partner (51%) of the purchasing consortium, one of our challenges in 2016 will be to progress toward an integration model with such power plant that will enable us to provide added value to our stakeholders. In



addition, our intention is to continue looking for new opportunities in the region.

A second relevant milestone I would like to underline is Colbún's option to re-gasify liquefied natural gas for a volume equivalent to the operation of a combined cycle power plant such as Nehuenco complex for a 20-year term (after participating in a bid called by GNL Chile). If this option comes true – which will depend upon the evolution of GNL Quintero expansion plan in terms of deadlines and investment costs - Colbún will have direct access to the international LNG market thereby expanding its generation base available to participate in long-term electric power bids to supply regulated and free clients.

Finally, also from a business perspective, during 2015, a new long-term power supply contract with Codelco was enforced, which will allow the main mining company of the country to meet its requirements with energy supplied by the Central Interconnected System in a safe and competitive manner and Colbún to contract part of its capacity over the long-term.

In 2015 we also moved forward in the permanent and ever-growing challenge of integrating our power plant operations with their communities. An outstanding case is Angostura 316 MW hydroelectric power plant. In addition to contributing 1,221 GWh of renewable energy to the system, the diverse tourist attractions built on the shores of the reservoir hosted almost 130 thousand visitors last year. Angostura was recognized in 2015 by the Corporation of Capital Assets

as the best industrial investment of 2014, while Chile's Tourist Federation, FEDETUR, awarded a distinction within the category Sustainable Destination to Angostura del Biobío, the tourist project financed by the Tourist Worktable of Angostura where Colbún participates with the community.

In October this power plant also gave its first public address, the reportability policy led by Colbún which started in Coronel in 2013 – where Santa María Complex completed this year its third public address – and which in 2015 extended to the districts of Colbún (Colbún power plant), Yerbas Buenas (San Ignacio Power Plant), Santa Bárbara and Quilaco (Angostura Power Plant).

Our challenge is to promote the dialogue and the integration of our power plants with their environment. Colbún showed its commitment with the local development after adhering by mid-last year the Global Compact Network, an entity created under the aegis of United Nations that seeks to promote sustainable growth and corporate social responsibility.

It is worth recalling the words mentioned in January this year when the SOFOFA, the University Adolfo Ibáñez (UAI) and Capital magazine distinguished Colbún with the 2015 Corporate Sustainability Award: sustainability is a continuous improvement process, full of obstacles and difficulties, where we stand out for how we face the problems and not for pretending they do not exist.

#### **Financial Results**

From the viewpoint of results, 2015 was a good year. Colbún's EBITDA amounted to US\$ 583.3 in 2015, the highest in its history. This is due mainly of the growth plan embraced by the company over the last ten years, and which allowed us to add more than 900 MW of installed capacity, being the company that added more capacity to the SIC over that period. These results translated into a sustained improvement of our financial indicators, which explains that in last May Standard & Poor's improved the "investment grade" international risk rating perspective of the Company from negative to stable.

2015 performance also shows the high availability of our power plants and the better contractual conditions achieved with the natural gas suppliers for our combined cycle power plants, which added to the drop in the price of other fuels allowed us to lower the costs and to, consequently, improve the results. It is also important to underline the portfolio of long-term supply contracts subscribed by our company with various free and regulated customers, which allows projecting a long-term profitability in line with the investment and risk levels undertaken.

We achieved a reduction of 37% of the accident rate of our workers and contractors, from 0.48% to 0.3%. However, it is worth noting we had a considerable accident at our Chacabuquito power plant involving two of our workers and which calls us to double the efforts to prevent such accidents from happening. Fortunately, both

workers are recovering in a satisfactory manner.

I would like to thank all company's workers, who with their effort and dedication have significantly contributed to consolidate these results. I would also like to recognize every individual who has enabled us to work collaboratively to promote the energy supply that serves as the basis for the development of Chile: our shareholders, customers, providers, contractors and the communities where Colbún operates.

#### **Chile's Context**

At a country level, the general economic context has not been very promising. The GDP grew very modestly for the second year in a row, only by 2.1% in 2015, while the net power demand in the SIC grew by 1.1% through the year. Chile, as well as other emerging markets has been affected by the economic slowdown of China and the drop of "commodity" prices. We can also see endogenous factors behind this slowdown, as the deepening of the crisis of confidence affecting all the institutions, and the reforms, which design and implementation, beyond the necessary debate on the pertinence and the substantiation of their objectives, have generated more uncertainty than certainty.

Colbún is aware that the companies are insert within this scenario of lack of confidence, which has worsen due to reproachable behaviors that have come to light over the last few months. In the face of these events we can comfortably take distance or pretend our corporate governances or internal control systems will

hold us harmless and protect us from their occurrence. But we think it's healthier to assume that every social system, especially those that are highly complex such as large companies, may be subject to potential bad practices in front of which we should ask what can be improved in our corporate governance, control systems and corporate culture. Not only to minimize the risk of their occurrence, but also to deepen the company's adaptation to a context that is in constant scrutiny by several agents with other standards of transparency and where perceptions become massive realities that are difficult to reverse, all of them inherent to our modern society. These are complex challenges as they relate to the construction and moreover the management of something more relevant than physical assets, credibility, in a context where mistrust prevails.

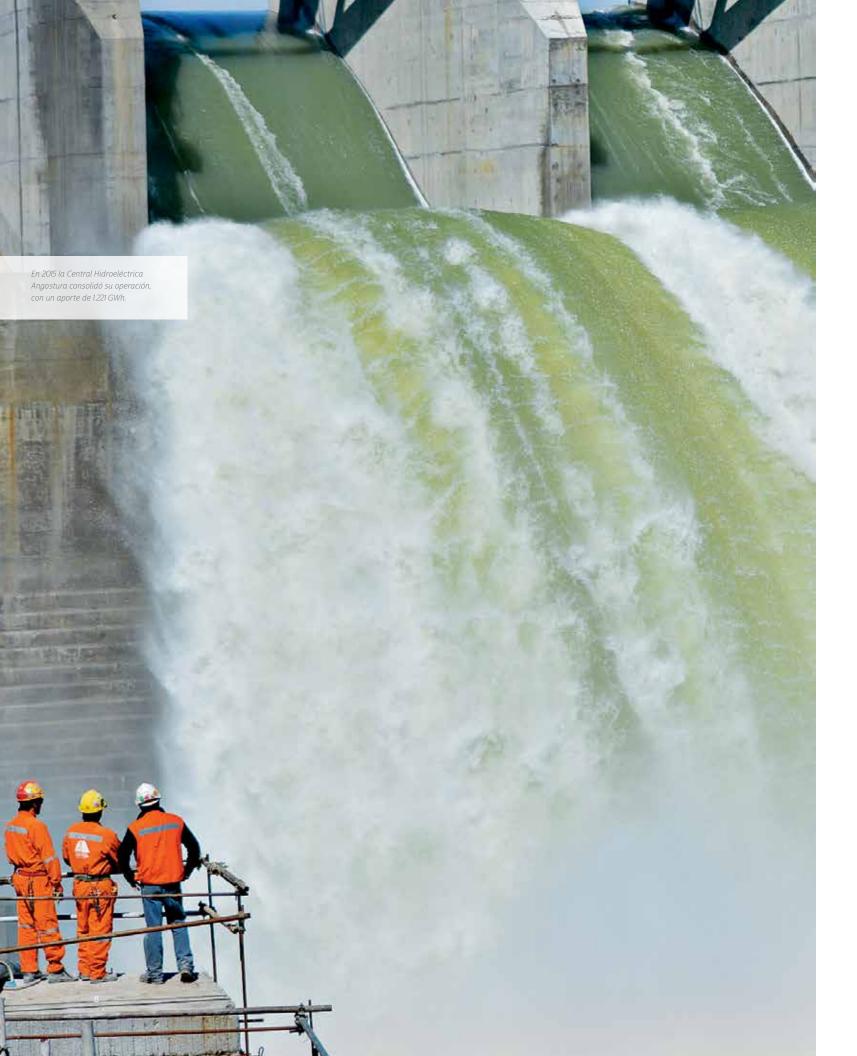
The above also because an answer solely based on control may ultimately affect the inherent nature of the business activity which is taking risks and growing.

Within this context, in 2015 we deepened the continuous program to strengthen our corporate governance, certifying the Crime Prevention Model, updating the policies and procedures of our Board of Directors and reviewing our Code of Ethics and Business Conduct. Also, to expand the visibility and the scope of our complaints channel, we incorporated to Colbún's website an Ethics Hotline that allows our stakeholders to raise allegations in a confidential and anonymous manner.

We have formalized, disclosed and delimited the roles and responsibilities of the various Company committees. I'm referring not only to the advisory committees of the Board such as the Directors' Committee, the Internal Auditing Committee and the Board Woktable, but also the advisory management committees such as the Risk and Sustainability Committee, the Regulatory and Projects Committee, among others

Similarly, and based upon the Superintendence of Securities and Insurance questionnaire included in General Standard 385, we implemented policies such as the Board's self-assessment and a training or refresher training course in matters such as corporate governance and risk management systems, among other initiatives. We have also responded with substantiated arguments when, in connection with other measures suggested by the above-mentioned questionnaire, there were alternatives more efficient or more consistent with the necessary separation between the roles of the Board of Directors and the Management.

Regardless of the importance of these and other corporate governance policies, they will remain dead letter if they are not captured by the ethics and the practices of our organizational culture and without the leadership – at all levels inside the Company – that guides us through the example.



#### Regulatory Agenda

At the electricity industry level, the Energy Agenda has been a relevant milestone in defining the sectoral objectives and the priorities assigned thereto by the Executive Power. The bid to regulated customers called in last October highlighted the strong impulse of NCRE energies, which last year accounted for 12% of the consumption at the SIC.

This is good news for Chile: these are renewable sources of flexible and modular construction. However, as we are dealing with variable and/or intermittent energy, their introduction will pose challenges to the system, such as the need to have flexible base power plants to provide for such variability. As Europeans have already seen, after long periods where the nonconventional renewable energies have pushed marginal costs to even negative levels, it is necessary to properly identify and distribute the costs associated with this higher NCRE penetration so that the market is given the correct signals that will enable a balanced development of our energy matrix.

Likewise, it is fundamental that the higher supply observed in the domestic power system that has pushed the prices down both on the spot market and in bid processes of distribution companies, will not lead us to fail in complying with the long-term energy challenge. With this I mean having enough, competitive, safe and sustainable electric energy to feed the recovery of the weak economic growth. Indeed, the reason behind this leeway

will not stay here forever. Although one of them, the commissioning of new generation capacity should have a positive effect if it prevails over time, the magnitude of the drop in fuel prices may not be permanent. And, for sure, we all expect that the slow growth of the economic activity and the power demand will be a temporary phenomenon. In this sector, the current decisions (or the absence thereof) have consequences that become visible over a period of five years. And in order to face the medium and longterm energy challenge, we need renewable sources such as hydroelectricity, biomass, solar and wind energy, but also an efficient thermal complement.

In legislative matters, in 2015 the Executive Power sponsored two draft laws that are relevant for the industry. One of them is the draft law on transmission that includes changes in the role of the system's operation coordinator, and introduces structural and deep modifications to the power sector. As this is an extremely complex matter that has long-term implications for the sector, we expect a well grounded technical discussion to take place, which will allow visualizing all the necessary aspects to progress toward a robust transmission system and an Operations Coordinator which, jointly with the other components of the sector institutionalism, will preserve the independence of the action and the technicality of the decisions.

The second draft law refers to the Water Code reform, which introduces significant changes to the way in which water is

currently regulated in Chile, and where we think it is important to consider that hydroelectric projects – which do not use consumptive rights – require, due to their development and construction, longer terms than those considered in the initiative currently being discussed.

At the level of public sectoral policies, two initiatives should be underlined. The first is the implementation in April of 2015 a cross-sectional Presidential Advisory Commission for the study of a new Environmental Impact Assessment System (SEIA). As we have said in the past, we welcome every reform contributing to a greater degree of legitimacy and predictability of the environmental institutionalism.

The second relevant initiative was Energía 2050, document that was sponsored by the Ministry of Energy which, in a participative and transversal manner formulated the main policy guidelines for the energy sector over the next 35 years. We think the decision to put back the hydroelectric power at the center of the energy development of the country is highly relevant, regardless of the project size. However, this document poses huge challenges when it comes to implementing the definitions stated as public policies that will ensure a balanced and sustainable power supply in the country. In circumstances where the discussion has centered on the electric, environmental and water institutionalism, and the State maintains or undertakes relevant roles, it is just about time to reactivate the lingering but always pushed-back debate



on the modernization of the State. We think such debate should push to have the National Energy Commission, the Environmental Impact Assessment System and the institutions responsible for the water resources, whose decisions are highly complex from a technical viewpoint and which require long-term policies, move forward to becoming independent state institutions with high technical competencies, thus replicating the positive experience in other fields.

### **Growth perspectives**

In connection with the future of the Company, we have an attractive portfolio of projects that contemplate different technologies in various development phases.

La Mina Hydroelectric Plant Project in the Maule Region – our third NCRE station, with 34 MW- recorded 46% construction progress at December of 2015, in line with the work schedule that forecasts its commissioning for early 2017.

Regarding the San Pedro Hydroelectric
Power Plant Project (I7O MW) in the Region
of Los Ríos, in June of 2015 we entered the
Environmental Impact Study with some
adjustments to the initiative. However, the
Environmental Evaluation Service of Los Ríos
suspended its environmental processing in
advance due to lack of essential information.
We are analyzing the observations made
by the public services and preparing the
necessary background information in order
to provide a timely and substantiated
answer to the data requested by the
authority.

It is worth recalling some of the environmental benefits of this initiative: it is an unregulated reservoir station, which in practice means that the power plant will be operated so as to preserve the flow conditions of the river downstream of the power station; the flooded area is quite limited, as it extends over the river basin without disturbing agricultural lands or human settlements; and the project was certified to issue carbon credits. As we are convinced of the benefits of this initiative, we have promoted instances of dialogue and have set up local work tables to identify a proper way to insert this project within its environment, as we have done with other Colbún initiatives.

Regarding the second unit of Santa María de Coronel Complex (350 MW), the Project has already obtained the environmental permitting and we are assessing the various financial, technical, environmental and social aspects to decide its construction; our best cover letter are the high technical and environmental standards of Santa Maria's Unit I operation.

Also in connection with hydroelectric projects we have continued to deepen technical, design and feasibility studies of different initiatives that will add close to 500 MW, mainly in the Maule Region, and which we think will significantly contribute to the 70% goal of renewable generation set forth by the document Energía 2050.

Similarly, in 2015 we created an Area of Non Conventional Renewable Energies to speed up the compliance with our objective of incorporating NCRE sources to our portfolio, especially solar and wind energies, deepening and making more professional our search for investment opportunities through the development of own projects, the purchase of third party's projects or the subscription of contracts to purchase electricity based on non-conventional renewable sources.

Finally, we will continue to look for investment opportunities in other countries of the region.

As we have said before, Chile and other countries in the region will need to continue building power generation stations that utilize different technologies over the medium and long-term in order to have a safe, competitive and sustainable supply. We have a long way to go in this area. At Colbún, we work hard every day to be a relevant player in achieving that goal.

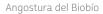
We invite you to read our first Annual Integrated report and to know in detail the performance of our Company in 2015.

#### Bernardo Larraín

Chairman of the Board, Colbún S.A.

### **TABLE OF CONTENTS**



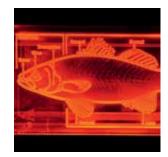




Suspension Bridge Canutillar Power Plant



Punta Palmeras wind farm



Visitors' Center, Parque Angostura

Letter from the Chairman



### + INFORMATION

For further information, scan the QR code with your smart Phone or Tablet.



#### CONTENTS

- **03** Colbún 2015 in numbers
- O4 Letter from the Chairman Bernardo Larraín
- 13 Table of contents

#### 15 THE POWER SECTOR

- 16 The Chilean market
- 20 The Peruvian market
- 21 The sector's operational model
- 22 The sector's commercialization model

### 25 COLBÚN: WHO WE ARE AND WHAT WE DO

- 26 Background Information
- 28 2015 Milestones
- 32 Our power plants
- 34 Ownership structure
- **36** Corporate Governance
- **46** Business model

# 53 ECONOMIC PERFORMANCE AND GOVERNANCE

- 56 Financial management
- 62 reliable, competitive and
- sustainable supply

  69 Ethics and Corporate
  Governance
- **72** Risk management
- **74** Growth perspectives

### 81 SOCIAL PERFORMANCE

- 85 Human capital development
- 90 Work practices
- 93 Human rights
- 100 Safety and health
- 104 Dialogue and communication Channels with our stakeholders and the society
- 106 Local development
- 108 Main social-environmental challenges

### 113 ENVIRONMENTAL PERFORMANCE

- 115 Water resources
- 120 Use of resources and efficiency
- 123 Climate Change
- **126** Carbon Footprint
- **128** Atmospheric emissions and air quality
- 130 Biodiversity

### 133 GENERAL BACKGROUND INFORMATION

- **134** Scope
- 135 How the Annual Integrated Report was built
- 139 Verification
- 141 Liability Statement
- 142 GRI G4 TABLES



### THE POWER SECTOR

This chapter describes the evolution of the regulatory framework and the power sector operations environment.

### THE CHILEAN MARKET

### CONTEXT

For the second year in a row, in 2015 the economy experienced a low activity level, growing only by 2.1%. External and internal factors account for this behavior. It is worth mentioning in the first place, the economic slowdown of China and the drop of copper prices, whereas at local level the internal demand experienced a weak performance due to low investment and consumption levels. The weaker economic activity reflected in the energy market, where the power demand grew at modest rates, with an expansion of the Central Interconnected System (SIC) of barely 1.3% in 2015.

The Executive Power sponsored a series of relevant legislative initiatives during the year. An example is the Tax Reform which, by means of an increased tax burden especially on corporations, seeks to finance the expenses associated to the social reforms promoted by the Executive Power. In connection with the Labor Reform, the terms on which this initiative will be approved shall have great consequences in

the development of the economy, especially on whether they will succeed or not in facing one of the main challenges of our country: improving the productivity of the human capital. In connection with the energy sector, the most relevant legal initiatives submitted in 2015 were the Transmission draft law, the Tariff Equity draft law and the changes to the Water Code. A significant milestone for the industry was the presentation of Energía 2050: A New Energy Policy for Chile by the Ministry of Energy.

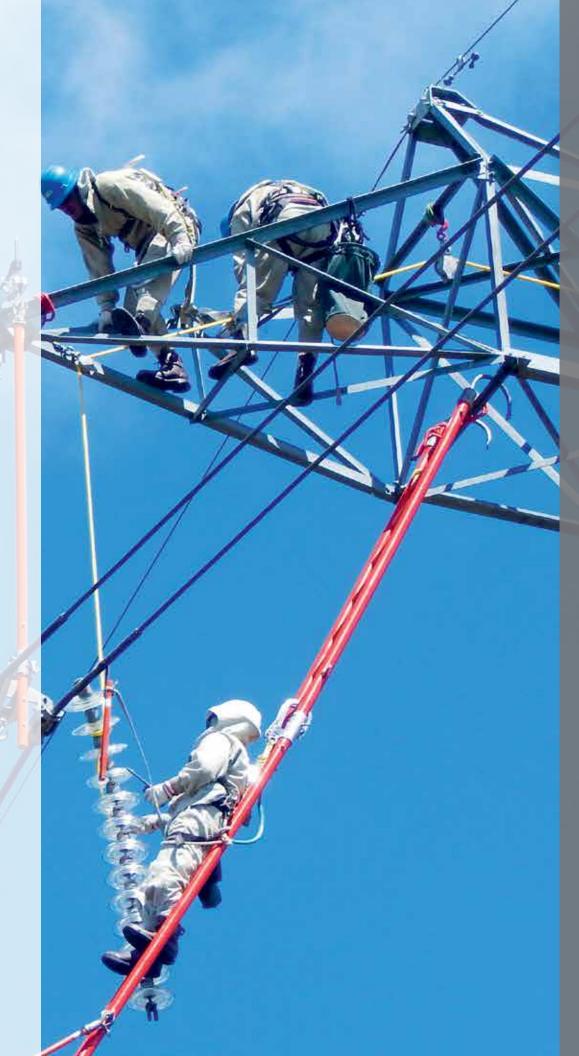
The drop in the price of fossil fuels during 2015 is the main reason that accounts for the decrease in the marginal costs of the Central Interconnected System this year followed by the entry of new generation supply.

### THE REGULATORY FRAMEWORK IN CHILE

Chile's electricity framework and Colbún's operations are mainly ruled by the General Law on Electric Power Services, the General Environmental Law and the Water Code.

There are five main entities that ensure the application and the compliance with the laws that rule the electric power sector in Chile:

- 1. Ministry of Energy.
- 2. National Energy Commission (CNE).
- 3. Superintendence of Electricity and Fuel (SEC).
- 4. Economic Load Dispatch Center (CDEC).
- 5. Expert Panel of the General Law on Electric Power Services.



# REGULATORY FRAMEWORK AND PUBLIC POLICIES

### WHY IS IT MATERIAL?

Regulatory stability is fundamental for a sector as power generation, where the projects of investment have long period of development, execution and return for investors. On the other hand, regulatory changes must be done having in consideration the complexities of an electrical system and supporting incentives adapted for all the actors. Finally, it must have limited room for discretion and unpredictable decisions. For these reasons, it is key to monitor risks associated with possible regulative changes and to take part of the discussion regarding the future of this sector.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Issues related to the Energy Agenda and regulations concern all the groups of interest of the Company, provided that the development of this industry is key for the development of the country.

### WHAT IS OUR OBJECTIVE?

Regularity stability has been a valuable characteristic of the Chilean electric sector. Having said that, regulations always can be improved. In this regards, we think that nowadays is important an institutional and regulatory evolution that allows to generate conditions to develop projects of different technologies in an environment that is more complex and dynamic.

### **HOW DO WE MANAGE IT?**

In 2013 Colbún created a Committee of Regulation that must define a working plan to generate proposes of contents regarding new public policies and/or to propose improvements in already existing policies. Additional, in 2014 Colbún created an area responsible for regulative topics, which is in charge of tracking the status of normative changes to elaborate proposes and coordinate with the rest of the areas of the Company Colbún's participation.

### **HOW DO WE MEASURE IT?**

Colbun-7. EC: Colbún's vision regarding Energy
Agenda and new regulations.

### WHO IS RESPONSIBLE?

Colbún's Committee of Regulation



### DRAFT LAWS AND REGULATORY CHANGES IN CHILE

Colbún-7.E

Transmission and Coordinator's Law: The draft law introduces structural and deep modifications to the power sector; therefore, its discussion and implementation poses a big challenge to achieve the objective of having a robust system and setting up a new operations Coordinator. Among the main changes in transmission, the draft law modifies the definition of the transmission systems, the planning, tariff setting and remuneration criteria, further deepening

a regime of open access to the networks, among other changes. The standard will also enhance the role of the system's operator, replacing the current Economic Load Dispatch Center (CDEC) with a Coordinator, with new structure and functions. It also grants new powers to the National Energy Commission and modifies certain duties of the Expert

CHILE'S COMPETENT
POWER SECTOR ENTITIES

SUPERINTENDENCY
OF ELECTRICITY
AND FUEL
SEC

CNE

COMMISSION
CNE

COMMISSION
CNE

CDEC

EXPERT
PANEL

Compliance
with the laws

Regulatory
function
Expansion
plans

CHILE'S COMPETENT
POWER SECTOR ENTITIES

ECONOMIC LOAD
DISPATCH CENTER
CDEC

Compliance
with the laws

Conflict
resolution
coordination
Economic
dispatch

Colbún has actively participated both directly and indirectly in the discussion of this initiative through the Association of Generation Companies, where it has stated its view on the project and provided some observations that would allow improving certain matters. The company has stated that the regulatory changes that will be introduced in the near future must be made taking into consideration the complexities of the power sector, maintaining proper incentives for investment, assuring the technical and independent nature of the institutions involved, perfecting the necessary balance between the regulatory, supervisory, sanctioning aspects and the resolution of controversies among the Ministry of Energy, the CNE, the SEC, the new Coordinator and the Expert Panel, so that the regulation provides clear and transparent rules that consolidate stakeholders' confidence.

Energy Policy in Chile: During 2015 many sectors discussed the document Energía 2050, which was later forwarded to the President of the Republic; this document sets forth the long-term energy policy including the vision for the future development of the energy sector, and which now presents

the challenge of implementing action plans to achieving the established goals. Among the most important guidelines set by this document is the goal to have 70% of the generation from renewable energies as at 2050, including run-of-the-river and reservoir hydroelectric power plants (either conventional or non-conventional sources). The promotion of sustainable hydroelectricity that will entail greater participation of renewable energies in the electricity matrix of the country requires us to work in action plans and regulatory instruments that will promote this type of technology, which, in the measure of its development will allow reaching the installed capacity forecasts proposed by the policy and contributing the regulation capacity required by the system to provide a safe and reliable supply.

#### Associativity Mechanisms and Tariff Equity:

Within the framework of promoting the community acceptance of the projects, issue that has been broadly discussed over the past few years the Executive Power worked in a single Associativity draft law in the beginning but finally decided to address this subject in different draft laws. Along these lines, by the end of 2015 the Ministry launched a Guide on Participation Standards for the Development of Energy Projects, which seeks to engage the communities in the development of projects through early participation processes and different mechanisms of dialogue and

information. In addition a Tariff Equity draft law is being discussed in Congress to close the gap between the electric rates of urban and rural zones, establishing an additional discount for the sites where the power plants are located.

There is consensus on the need to create a strategy that allows positively transforming the quality of life of the sites where the generation projects are located. We expect for the initiatives to progress in that sense by creating a sound institutionalism for dialogue between the corporations and the community, and by generating shared benefits that provide guidelines that will leverage the future investments our country requires.

However, it is important that these initiatives help minimize the eventual price distortions of such a relevant supply as the electric power, by promoting collaborative relationships between the corporations and the community without the interference of third parties' interests or charges that are not properly substantiated.

#### Water Code

The Water Code reform introduced by the Government brings structural changes to the way waters are currently regulated in Chile, namely, it establishes a temporary nature to the grant of water rights, the extinction of rights due to several causes and the establishment of an environmental water flow over the rights already granted, among other matters. It is important to prevent these changes from negatively affecting of hydroelectric power investment in Chile and the materialization of the Energy Policy promoted by the government, where hydroelectric power is essential for the long-term development of the country. Hydroelectric projects require long development periods, have a long service life and use non consumptive water rights, i.e. the water later returns to its natural source for other industrial, agricultural, tourism activities and for human consumption.



### THE PERUVIAN MARKET

#### CONTEXT

Peru experienced a growth of 2.9% in 2015, slightly higher than in 2014 (2.4%). In general, little dynamism of the private investment has been observed, which, according to the issuing institution is due to internal (lower expectations from consumers and investors) and external factors (drop in the price of products exported by Peru). However, Peru's National Interconnected System (SEIN) recorded a 6.6% growth in demand with a strong reduction of marginal

costs (-40% in 2015 versus 2014), due to the entry of more efficient power generation plants.

### REGULATORY FRAMEWORK IN PERU

The Peruvian power sector shows a sound regulatory framework in force since 1992.
This has encouraged a significant increase in power generation with a compound growth of 4.8% in installed capacity from 2000 to 2014.
There are five main regulatory agencies:

Ministry of Energy and Mines (MINEM)

- Supervisory Agency for Investment in Energy and Mining (OSINERGMIN)
- 3. Entity for Environmental Evaluation and Inspection (OEFA)
- 4. Economic Operation Center of the National Interconnected System (COES)
- National Institute for the Defense of Competition and Intellectual Property (INDECOPI)

### THE SECTOR'S OPERATIONAL MODEL (CHILE AND PERU)

The operation of the sector is based on a marginal cost schedule (cost incurred by the system in supplying an additional unit of demand), which includes in turn the safety and efficiency criteria in assigning the resources.

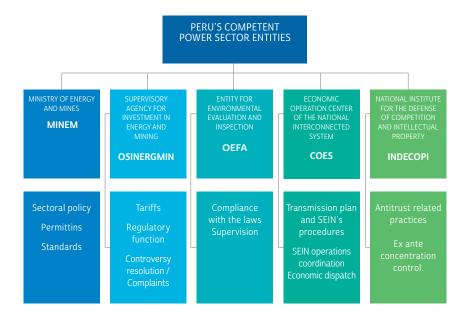
To meet the "efficiency" goal, generation companies coordinate their operations through the CDEC (Economic Load Dispatch Center, Centro de Despacho Económico de Car¬ga) in the case of Chile and through the COES (Economic Operation Center of the National Interconnected System) in the case of Peru. The Coordinator strives to minimize the operating costs of the system and to prevent its failure, in addition to ensuring the quality and the safety of the service provided by generation and transmission companies. The main purpose of the dispatch system is to ensure that customers are served by the most efficient units available at every moment.

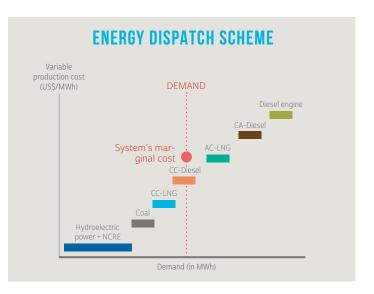
The coordination entity dispatches plants in the order of their respective variable costs of production, starting with the lowest-cost declared plants. The declared variable production cost of the most expensive unit under operation represents the marginal cost of the system and will determine the price of energy in the spot market in each hour and

is measured in US\$/MWh. In Chile, the costs declared by each company that owns a power plant may be subject to weekly audits. In Peru, in turn, each company may freely declare its costs and they are not subject to auditing. In addition, the declaration is done once a year. Power plants whose variable costs are lower than the spot price earn a margin over the production delivered to the system. In turn, the last unit dispatched by the CDEC will only recover its variable production costs because its variable costs are equal to the spot price. Power generation companies meet their contractual sale commitments with dispatched

electricity, whether produced by them or purchased from other generation companies on the spot market.

In order to meet the power supply "safety and continuity" objective, the tariff model also contemplates a "capacity charge" corresponding to an additional remuneration for generation companies that maintain their power plants available and that seeks to promote backup capacity in the system. Its remuneration is measured in US\$/KW-per month.





### THE SECTOR'S COMMERCIALIZATION MODEL

Generation companies both in Chile and Peru may:
(i) commit to sell energy to customers through
contracts (in general, medium /long term); (ii) or
sell their energy production to other generation
companies with a deficit in the spot market; (iii)

or select a mix of both. The generation companies may sign contracts with three types of customers: regulated clients (distribution companies), free clients (industrial, mining companies, etc.) or another generation company.

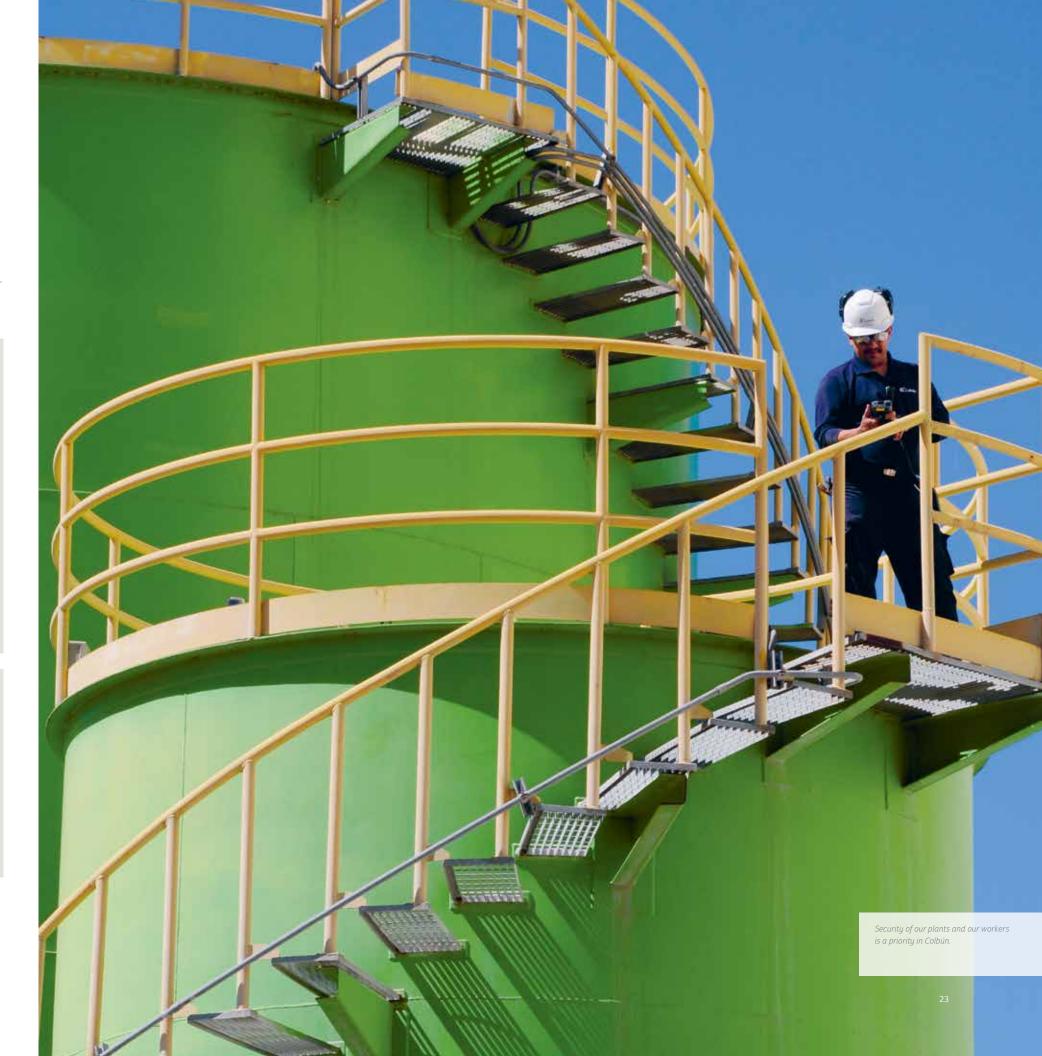
### TYPES OF CLIENTS AND CONTRACTS

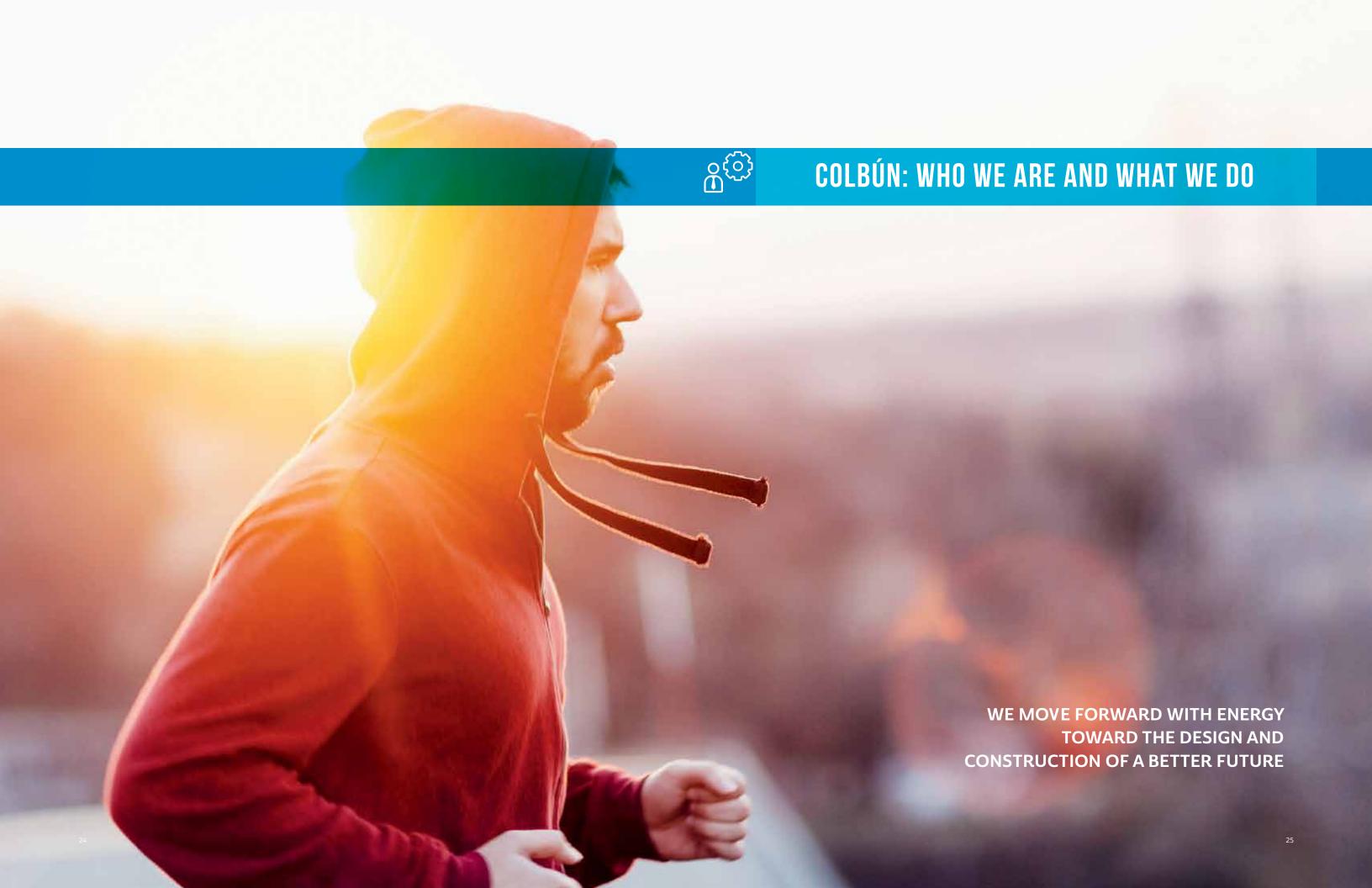
	REGULATED (Distributors)	FREE	OTHER GENERATORS
CHILE	>2.000 kW	<2,000 kW or >500 kW and <2,000 kW that have declared themselves free clients or >2,000 kW and <5,000 kW that have declared themselves free clients four years after the publication of the law	х
PERÚ	>2.500 kW	<2,500 kW or <200 kW and <2,500 kW that have declared themselves free clients	Х
TIPO DE CONTRATO	Otorgados vía licitaciones públicas reguladas	Bilaterally negotiated	Bilaterally negotiated

### **SIC MARKET SHARE BY COMPANY**

MARKET SHARE BY COMPANY AT DECEMBER 2015 (% OF INSTALLED CAPACITY)	
Endesa	29.08%
Colbún	20.37%
Aes Gener	10.45%
Otros	40.10%
Fuente: CNE	

Colbún is the second largest generator in the SIC with a market share of 20.37% in terms of installed capacity. The electric power market is very competitive featuring more than 150 companies.





## **HISTORY HIGHLIGHTS**

### 1985

Commissioning of Colbún and Machicura reservoir hydroelectric power plants.

### 1986

Stemming from the agreement to split Empresa Nacional de Electricidad S.A., Endesa, Empresa Eléctrica Colbún Machicura S.A., currently known as Colbún S.A. is created.

### 1996

Commissioning of San Ignacio hydroelectric power plant.

#### 1997

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

Creation of the affiliate Empresa Eléctrica Industrial S.A.

### 1998

Commissioning of Rucúe hydroelectric power plant.

### 1999

Commercial commissioning of Nehuenco I combined-cycle thermoelectric power plant.

Through its affiliate Empresa Eléctrica Industrial S.A., Colbún S.A. acquires the Carena runof-the river hydroelectric power plant.

### 2001

CORFO sells most of its shares in the local stock market and the Company's name is changed to Colbún S.A., later expanding its line of business.

### 2002

Commercial operation of Nehuenco III open-cycle thermoelectric power plant begins.

### 2004

Commissioning of Nehuenco II combined-cycle thermoelectric power plant.

### 2005

Commercial operation 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 Cenelca 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 percent of the share ownership of Sociedad Hidroeléctrica Melocotón Ltda.



COLBÚN POWER PLANT



NEHUENCO POWER PLANT



FENIX PERU POWER PLANT

### 2006

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

A new company is set up to develop the HidroAysén project, where Colbún S.A. contributes 49% of HidroAysén's capital and Endesa contributes the other 51%.

### 2007

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

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

Registration of Chacabuquito run-of-the-river hydroelectric power plant (5th Region)before the United Nations' Clean Development Mechanism, which will allow an annual reduction of approximately 80 thousand tons of  $CO_2e$ ., 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 bids 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.

### 2008

Commissioning of Hornitos hydroelectric power plant.

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

### 2009

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

Commissioning of Los Pinos open-cycle thermoelectric power plant.

### 2010

Commissioning of San Clemente mini-hydro power plant.

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

### 2011

Registration of San Clemente run-of-the-river hydroelectric power plant before the UN's Clean Development Mechanism (CDM), which will allow an annual reduction of approximately 17 thousand tons of CO2e, equivalent to removing from circulation more than 4 thousand cars.

### 2012

Commissioning of Santa Maria's Unit 1 (8th Region), the first coal-fired thermoelectric power plant pertaining to Colbún S.A.

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

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

### 2014

Commissioning of the Angostura reservoir hydroelectric power plant.

### 2015

Incorporation of the affiliates Colbún Perú S.A. and Inversiones Las Canteras S.A. in Peru.

Purchase 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.

ANNUAL INTEGRATED REPORT COLBÚN 2015 COLBÚN: WHO WE ARE AND WHAT WE DO

## **2015 MILESTONES**









### **JANUARY**

#### Enforcement of new contracts with Codelco

On January 1, 2015 two new long-term (15 and 30-year term) contracts were enforced with Codelco for a joint contracted capacity of up to 510 MW and an annual related energy of approximately 4,000 GWh. The service contracted with this free customer considers the supply for Salvador, Andina, Ventanas and El Teniente mining divisions.

#### Inauguration of Punta Palmeras wind farm

Acciona's Punta Palmeras wind farm was built after Colbún agreed to purchase 100% of the energy generated by such farm for 12 years, at a stable price. The initiative contemplates an installed capacity of 45 MW for an estimated annual production of 124 GWh that could supply 60 thousand households injecting energy to the Central Interconnected System (SIC) at the Las Palmas 220 kV station

### **FEBRUARY**

### Blanco station resumes

Blanco power station (53 MW) located at the Aconcagua basin, resumed commercial operations after one year of repair works. The repair works included the replacement of the Pelton wheel and the turbine shaft, among

### MARCH

#### End of the first summer season in Angostura Park

Closing ceremony of the first summer season in Angostura Park, tourist initiative developed around the Angostura hydroelectric power plant. In 2015, the various attractions of this park including beach resorts, camping facilities, visitors' center and a lookout hosted close to 130 thousand visitors.

### MAY

### S&P raises Colbún's international risk rating perspective

The international agency Standard & Poor's improved Colbún's perspective from 'negative' to 'stable' and reaffirmed its 'BBB'international risk rating based on the improvement of its credit indicators. The change responds to the improvement of financial indicators after the commissioning of Angostura hydroelectric power plant and the balanced commercial position defined by Colbún.

work tables with the



### JUNE

### San Pedro Project **Environmental Impact** Assessment

In June of 2015 Colbún submitted the Environmental Impact Assessment (EIA) with the adjustments to the San Pedro hydroelectric project, which was initially admitted to processing by the Environmental Evaluation Service (SEA) of Los Ríos. However, in August, the authority decided to terminate the process due to lack of Relevant Information (IRE). It should be noted that such project was environmentally approved in 2008. Colbún is working to submit a new adjustment study to properly respond to the observations made by the competent authorities. At the same time, the Company continues holding meetings and implementing communities and the authorities to enable projects to be better inserted in their environment. adecuadamente el proyecto a su entorno.



### JULY

#### Seminar Voices with Energy In Concepción, and within the

framework of the launching of its fourth Sustainability Report, Colbún conducted the Seminar "Voices with Energy". The seminar was led by the publicist and creator of the "NO" campaign (1988), Eugenio García, and by an expert panel whose discussion was centered in sustainability challenges.



### The Parity Committees of Candelaria, Carena and Nehuenco were distinguished by the Safety Mutual

The Candelaria Station Parity Committee was awarded the "Silver Category Prize" for the good results obtained in the certification sponsored by the Safety Mutual of the Chilean Chamber of Construction. Similarly, the Carena power station ranked first in the category Electricity, Gas and Water of the Competitive Company Program of the Safety Mutual, while the Nehuenco Complex was awarded a "remarkable grade" under the same program.

### Getting Profits out of the **Combined Cycle Power Plants**

Colbún and ENAP subscribed gas supply contracts over the period 2016-2018, which adds to the volume contracted with Metrogas in force until 2019. In addition, Colbún may access the international LNG market, after obtaining re-gasification capacity reserve within the Open Season process driven by GNL Chile.



### **OCTOBER**

### Public accounts of Angostura, Colbún, San Ignacio and Santa María power plants

In October, Colbún started its annual public account and reportability program to inform the communities where its power plants operate the main social, operational and environmental performance indicators of the facilities. Hence, meetings were held in the districts of Santa Bárbara and Quilaco (Angostura station), Los Ángeles (Angostura station), Colbún (Colbún station), Yerbas Buenas (San Ignacio station), Concepción (Santa María Complex) and Coronel (Santa María Complex).











### **OCTOBER**

### Angostura del Biobío was awarded the distinction of Sustainable Destination by Fedetur

The Federación de Empresas de Turismo de Chile (FEDETUR) in its fifth version of the 2015 Awards to Chilean Tourism, awarded Honorable Mention in the category Sustainable Tourism Destination to Angostura del Biobío; the project is located in the Biobío Region and was developed around the Angostura hydroelectric power plant. The goal of this award is to recognize the companies that promote sustainability, social responsibility, innovation and service quality in the Chilean tourist industry.

### **NOVEMBER**

### Environmental NGO distinguishes Colbún for its climate change management

The Carbon Disclosure Project ranked Colbún among the top eight Latin American companies in terms of its CO2 reportability, climate change risk and opportunity management analysis. Colbún annually quantifies its direct and indirect emissions of Greenhouse Gas Emissions (GHG).

#### Colbún joins Global Compact Network Chile

As part of its commitment with sustainability and transparency, Colbún formalized its entry to the Global Compact Network Chile. The main purpose of this entity is to promote sustainable development and to ensure citizens' commitment to human rights, labor standards, the environment and anticorruption. To date, this network has more than 12,000 members enrolled around the world.

### **DECEMBER**

# Colbún ranks first in the reputational ranking from the energy and distribution sector

The sixth Corporate Reputation Measurement (Merco) that recognizes the most respected companies of the country awarded Colbún the maximum distinction in the category Energy and Distribution.

### Consortium led by Colbún purchased power generation company Fenix Power Peru (570

Within the framework of its process of internationalization and growth into new Latin American markets, Colbún purchased the company Fenix Power Perú S.A. through a consortium where it holds a 51% ownership stake. Fenix Power Perú owns a 570 MW combined cycle thermoelectric power plant based on natural gas in the district of Chilca, approximately 64 kms south of Lima.

"This transaction represents a very relevant milestone for Colbún, and allows improving the Company's diversification in terms of sources of revenue, state-of-the art technology and markets", stated Thomas Keller, Colbún's general manager, upon announcing the purchase to the market.







CENTRAL CHACABUOUITO





CENTRAL SAN CLEMENTE

# **OUR POWER PLANTS**

Colbún operates 23 power plants in the Central Interconnected System (SIC), which covers the area from Taltal in the north of Chile to the Great Island of Chiloé in the south, supplying more than 90% of the population, and the Peruvian power plant recently acquired.

In addition, the Company owns 28 substations, close to 916 km of transmission lines and various concessions and patents, namely geothermal, electrical, transmission and water rights that allow building projects for a total estimated capacity of 500 MW. All power facilities and water rights pertain to Colbún and its affiliates, and they are commercialized under the trade name Colbún.



COLBÚN POWER PLANT



NEHLIENCO II POWER PLANT



CENTRAL ANGOSTURA



SANTA MARÍA POWER PLANT



CANUTILLAR POWER PLANT







CENTRAL CHIBURGO



CENTRAL RUCÚE

### OUR ASSETS MAP OF COLBUN POWER PLANTS \*



<sup>\*</sup> Capacity reported to the CDEC-SIC in 2015

### **OWNERSHIP STRUCTURE**

G4-7, G4-1.

Total Subscribed and Paid Shares	100,00
Other shareholders	11.71
BANCHILE. CORREDORES DE BOLSA S.A.	0.97
BOLSA DE COMERCIO STGO BOLSA DE VALORES	1.67
BANCO SANTANDER - JP MORGAN	1.86
BANCO ITAU POR CUENTA DE INVERSIONISTAS	3.32
AFP CAPITAL S.A.	3.71
AFP CUPRUM S.A.	4.09
BANCO DE CHILE POR CUENTA DE TERCEROS CA	4.46
AFP PROVIDA S.A.	4.61
AFP HABITAT S.A.	4.85
ANTARCHILE S.A.	9.58
FORESTAL COMINCO S.A.	14.00
MINERA VALPARAISO S.A.	35.17

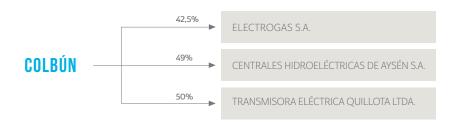
At December 31, 2015, the Matte group directly and through other affiliates indirectly holds the control of the Company (49.96% single series shares). The Matte group holds investments in the electric power, financial, forestry, real estate, telecommunications and port services sectors.

Similarly, Antarchile S.A. (taxpayer number 96.556.310-5) holds 9.58% ownership of Colbún allowing it to appoint a Board member. In addition, the AFPs altogether hold a stake of 18.33% in Colbún.

NOTE: At December 3I, the capital stock of the company consisted of 17.536167720 single series, fully subscribed and paid non-par value shares. The number of shareholders at the closing date amounts to 3,245.

### **PROPERTY STRUCTURE AFFILIATES** 100% EMPRESA ELÉCTRICA INDUSTRIAL S.A. SOCIEDAD HIDROELÉCTRICA MELOCOTÓN LTDA. RÍO TRANQUILO S.A. 100% TERMOELÉCTRICA NEHUENCO S.A. 100% TERMOELÉCTRICA ANTILHUE S.A. COLBÚN 100% COLBÚN TRANSMISIÓN S.A. 100% COLBÚN DESARROLLO S.P.A. 100% INVERSIONES SUD S.P.A. INVERSIONES ANDINAS S.P.A. 51% INVERSIONES LAS CANTERAS S.A. 100% FENIX POWER PERÚ S.A. COLBÚN PERÚ S.A.

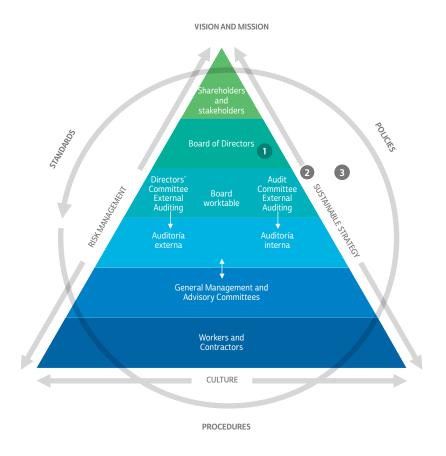
### **RELATED COMPANIES**





# **CORPORATE GOVERNANCE**

The corporate governance refers to the whole set of principles, standards and mechanisms ruling the operation of the company, in order to create sustainable value for its shareholders and stakeholders.



# 1 CORPORATE GOVERNANCE STRUCTURE

Colbún's workers, managers, directors and the Board's advisory committees are responsible for enforcing the corporate governance. At the top of the pyramid there are the shareholders and the other stakeholders, who are impacted by the governance strategy of the Company.

# 2 CORPORATE GOVERNANCE STRATEGY

Main interrelated elements that promote an adequate governance of the Company and its affiliates.

# 3 CORPORATE GOVERNANCE FRAMEWORK

Internal (policies and procedures) and external standards (regulations) ruling the manner in which Colbún's corporate governance is implemented.



### **BOARD OF DIRECTORS**

G4-37, G4-38, G4-39, G4-40, G4-43, G4-44, G4-49, G4-51, G4-52, G4-LAI2, G4-53 y G4-34

Colbún's Board of Directors regulates our Corporate
Governance. Our Board of Directors is composed of nine
members who do not hold executive positions, can be reelected indefinitely, and may or may not be shareholders.
The Board holds monthly meetings to address all relevant
matters relating to the Company's performance and
operation. In addition, it validates corporate objectives
once a year, including several dimensions: financial results,
social and environmental management, occupational
safety, work environment and growth. Extraordinary
Board meetings are held to address a specific or
contingent subject; once a year the Board holds the
Regular Shareholders' Meeting, where all shareholders can
participate with voice and vote.

The Board policies and procedures contemplate an annual individual or group visit to the Company's facilities by the board members; last year, they visited Aconcagua Complex power plants where they shared with the workers.

Similarly, in 2015 the Chairman of the Board met with the union leaders to address subjects of interest for both parties

At the Board meetings, the General Manager reports the most relevant situations relating to the relationship with our main stakeholders.

### **BOARD OF DIRECTORS**



BERNARDO LARRAÍN MATTE
CHAIRMAN
Commercial Engineer PUC



VICE-CHAIRMAN

Commercial Engineer U. de Chile



VIVIANNE BLANLOT SOZA
INDEPENDENT DIRECTOR
Economist PUC



JUAN EDUARDO CORREA GARCÍA

DIRECTOR

Civil Industrial Engineer PUC



**LUZ GRANIER BULNES**INDEPENDENT DIRECTOR
Commercial Engineer U. de Chile



JUAN HURTADO VICUÑA

DIRECTOR

Civil Engineer U. de Chile



**ARTURO MACKENNA ÍÑIGUEZ DIRECTOR**Civil Industrial Engineer U. de Chile



**ELIODORO MATTE LARRAÍN DIRECTOR**Civil Industrial Engineer U. de Chile



EDUARDO NAVARRO BELTRÁN
DIRECTOR
Commercial Engineer PUC

### **BOARD COMPENSATIONS**

Integrantes	Cargo	Remuneración Anual 2014 (M\$)	Remuneración Anual 2015 (M\$)	Remuneración Comité de Directores 2014 (M\$)	Remuneración Comité de Directores 2015 (M\$)
Bernardo Larraín	Chairman	57.624	60.147	-	-
Luis Felipe Gazitúa	Vice-chairman	29.620	30.039	9.580	10.056
Bernardo Matte	Director	11.826	-	-	-
Eliodoro Matte	Director	28.812	30.172	-	-
Arturo Mackenna	Director	28.803	30.067	-	-
Eduardo Navarro	Director	28.812	30.067	-	-
Juan Hurtado	Director	28.824	30.061	-	-
Sergio Undurraga	Director	28.835	7.340	9.580	2.490
Vivianne Blanlot	Independent director	28.834	30.075	9.580	10.018
Luz Granier	Independent director	-	22.700	-	7.565
Juan Eduardo Correa	Director	16.984	29.977	-	-
Total		289.010	300.645	28.740	30.129

#### NOTES:

- At the Regular Shareholders'
  Meeting held on April 22, 2015, the
  Board of Directors' compensation
  for the business year was
  approved. The Board members
  have not received any payment by
  way of entertainment expenses,
  per diem expenses, royalties or
  attendance payments. Additionally,
  the Board did not make any
  expense in advisory services during
  2015
- In the Shareholders' Meeting of 2015, the Board elected Ms. Luz Granier in replacement of Mr. Sergio Undurraga (ID number: 4.280.259-k; Commercial Engineer from the Pontificia Universidad Católica de Chile) who had been in the position since 2009. The Board ratified Mr. Juan Eduardo Correa, who replaced Mr. Bernardo Matte (ID number: 6.598.728-7; Commercial Engineer from the Universidad de Chile) after his resignation on May 27, 2014. The other Board members were reelected.



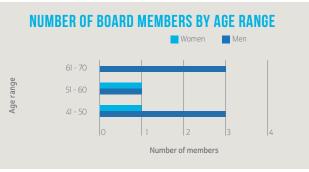
Our directory has a self-assessment procedure performance, which was approved at the end of 2015. This process is led by the Chairman of the Board and will be implemented by first time in the first half of 2016, enabling to detect opportunities to improve management of the highest governance body

### **DIVERSITY INDICATORS**

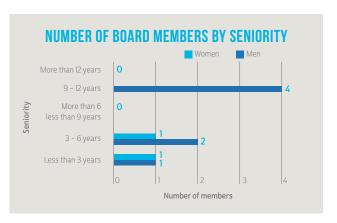
Matters of inclusion, diversity and non-discrimination are part of our "Code of Conduct and Business Ethics". Colbún has not implemented a procedure or policy establishing diversity criteria for the designation and election of Board members, as it deems the shareholders are entitled to consider the above-mentioned

criteria when proposing the candidates for the Board.

Luz Granier joined as the second female Board member early in 2015. Hence, Colbún has one of the largest female representations in its Board of Directors among closed stock companies in Chile.



NOTE: The age ranges used are in agreement with Standard 386 issued by the SVS.  $\label{eq:SVS}$ 



### **ADVISORY COMMITTEES**

During 2015, the Directors' Committee met several times to discuss matters proposed by the management to the Board and also, the transactions with related companies. In connection with the latter, the Committee made sure that these match the fairness conditions prevailing in the market for this type of operations or that these are within the regular transactions of Colbún line of business to then submit them to the Board's consideration.

The three advisory committees, namely the Audit Committee, the Directors' Committee and the Board Worktable inform the Board of the Company's sustainability management.



#### **Directors' Committee**

Reviews and issues an opinion on the financial statementrs and the main transactions a Director or Main Executive is interested in. In the meeting of April 28, 2015, the Board appointed the independent directors Vivianne Blanlot, and Luz Granier and the director Luis Felipe Gazitúa as members of the Directors' Committee.

### **Board Worktable**

Management shares and nforms the Board of several sues of relevance to the Company.
The Chairman and the Vice-chairman of the Board are

#### **Auditing Committee**

management of the complaint channel and the status of compliance with the Law 20,393 Criminal Responsibility of Corporations.

The independent directors Vivianne Blanlot and Luz Granier, and Luis Felipe Gazitúa are members of the Auditing Commmitee. The Internal Audiring Manager performs as the Secretary of



### **EXECUTIVES**



Thomas Keller 5.495.282-1 CHIEF EXECUTIVE OFFICER Commercial Engineer, Universidad Adolfo Ibáñez



Juan Eduardo Vásquez 7.868.160-8 BUSINESS AND ENERGY MANAGER Civil Electrical Engineer, Universidad de Chile



Eduardo Lauer 6,994,492-2 ENGINEERING AND PROJECT MANAGER Civil Mechanical Engineer, Fach Hochschule de Munchen (Alemania)



Carlos Luna 25.046.079-1 GENERATION MANAGER Civil Engineer, Escuela Colombiana de Ingeniería



Sebastián Moraga 12.026.836-8 FINANCE AND ADMINISTRATION MANAGER Commercial Engineer, Universidad Adolfo Ibáñez



Juan Pablo Schaeffer 10.373.614-5 SUSTAINABLE DEVELOPMENT MANAGER Lawyer, Pontificia Universidad Católica de Chile



Sebastián Fernández 10.673.365-1 DEVELOPMENT MANAGER Commercial Engineer, Universidad de Los Andes



Rodrigo Pérez 10.313.675-K LEGAL AFFAIRS MANAGER Lawyer, Pontificia Universidad Católica de Chile



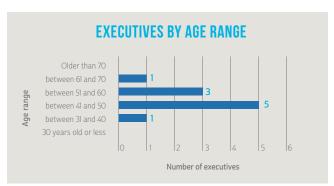
Paula Martínez 14.449.738-4 ORGANIZATION AND PEOPLE'S MANAGER Psychologist, Universidad Diego Portales



Heraldo Álvarez 12.369.371-K INTERNAL AUDITING MANAGER Accountant Auditor, Universidad de Talca

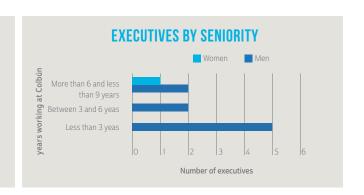
### **DIVERSITY INDICATORS**





NOTE: The age ranges used are in agreement with Standard 386 issued by the SVS

















### MANAGEMENT SUPPORT COMMITTEES



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.



of the main Company risks, including sustainability risks; it meets once a month



# INFORMATION SECURITY COMMITTEE

security process, making sure of the availability of the necessary resources for a ongoing monitoring; it meets once a month.



Controls and supervises the developmen and execution of Company's projects; it meets once a month.



### REGULATORY COMMITTEE (\*)

Tracks the status of the legislative and administrative processing of the draft laws, regulations and decrees that affect the development of the Company's activities; it meets once a month.



Monitorea y revisa los Tracks and reviews the tax issues of the Company; it meets at least once every quarter.

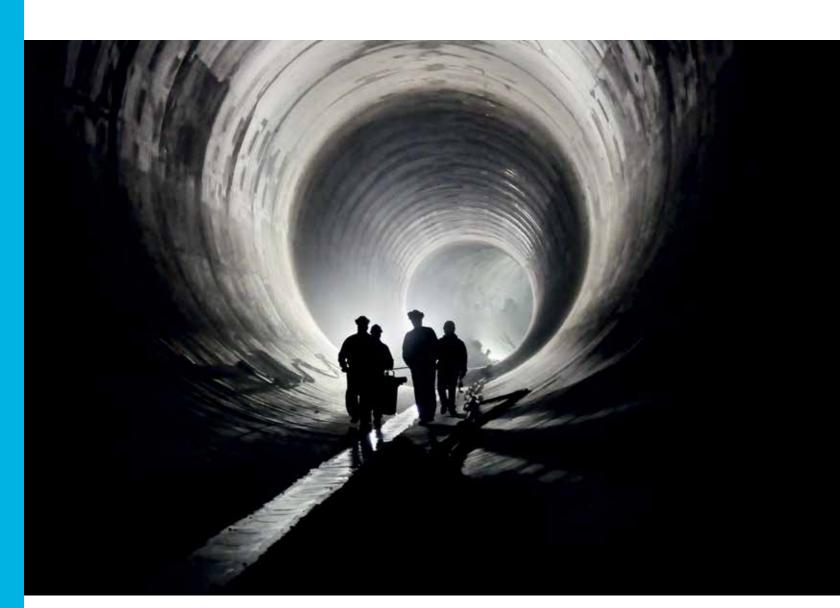
#### (\*) These committees include the participation of a member of the Board of Directors (Chairman or Vice President) and may also attend other Directors of the Company.

# **OUR BUSINESS MODEL**

G4-12, G4-14, G4-24, G4-25, G4-35, G4-36, G4-37, G4-43, G4-50

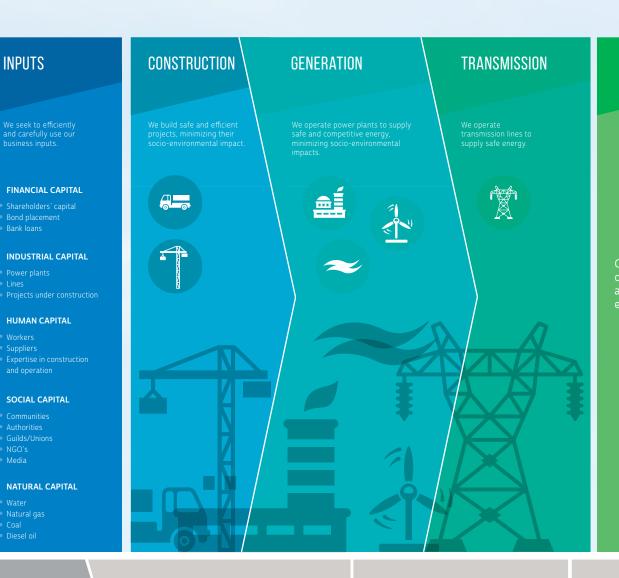
In the development of our work, we count on several inputs, primarily financial, industrial, social, natural and human capital resources to which we give value added through our business model in order to meet strategic organizational objectives. Consequently, we generate and commercialize reliable, competitive and sustainable energy to our clients; operate power plants pursuant to high environmental standards; add value to our investors; contribute to

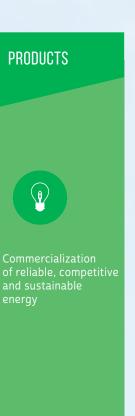
local development in the communities where we operate and raise the quality of life of our workers and contractors. In order to protect the sustainability of the business, we identify, evaluate and manage the risks that may impact our Company and stakeholders.

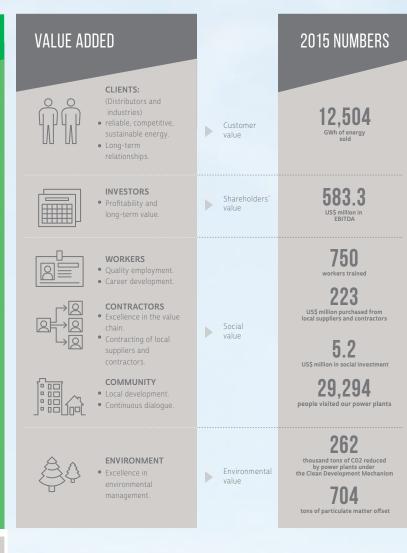


# COLBÚN'S **BUSINESS** MODEL

Colbún is a power generation company that owns power generation plants and sells its electricity to distributors (regulated customers) and industries (non-regulated customers) through contracts and/or by selling that energy to other generation companies on the spot market. It also participates in the power transmission business.







MATERIAL SUBJECTS

AuthoritiesGuilds/Unions

NGO'sMedia

INPUTS



#### Economics and governance:

Availability and Reliability of the Power Plants - Business Ethics and Corporate Governance -Growth - Profitability - Energy Agenda and Legal Standards



#### Social:

Health and Safety- Career Relations/Local Development – Socio-Environmental Conflicts – Community Dialogue



#### Environmental:

Biodiversity







**POTENTIAL** 

**IMPACTS** 



Effluents and waste

• Water consumption (thermoelectric stations)

• Disturbance of the river flow regimes

 Disturbance of the landscape • Disturbance of land and aquatic ecosystems

Demographic increase

# OUR ACTIONS AND WHAT WE SEEK AS A COMPANY ARE MIRRORED IN OUR VISION, MISSION AND VALUES



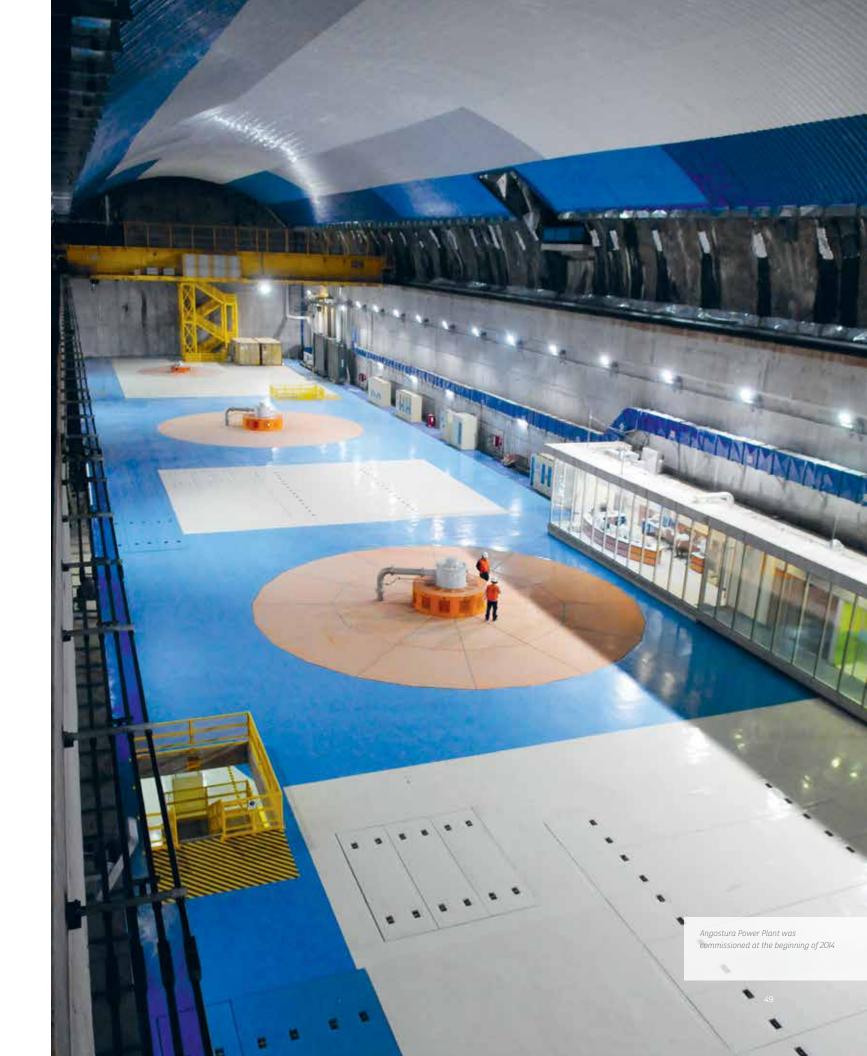
### SUSTAINABILITY IS THE BUSINESS



During 2015, Colbún updated its
Sustainability Policy emphasizing the
generation of value for each stakeholder and
the respect for Human Rights.

The result of this work is shown in the "sustainability turbine", which stresses that **sustainability is the business** and it is therefore integrated to all Company's areas and activities.

At the center of the turbine are growth and profitability; without them it is not possible to add value for our stakeholders, while each blade of the turbine represents a particular stakeholder. In turn, the turbine is driven by our excellent people, socio-environmental and operational management.



ANNUAL INTEGRATED REPORT COLBÚN 2015 COLBÚN: QUIÉNES SOMOS Y QUÉ HACEMOS

The Sustainable Development Division promotes the application of sustainability criteria across the Company and is responsible for supporting the dissemination and the management of sustainability inside the organization. The responsibility for managing the criteria falls upon each Company area, regardless of the methodological support provided by the sustainability area. Compliance with the Sustainability Policy and the risks involved are a matter of discussion and analysis in the monthly meetings of the Risk and Sustainability Committee. The most relevant aspects identified through the process

are presented by the General Manager at the monthly regular Board meetings, including the progresses in social, environmental and safety performance of the Company, as well as the main socio-environmental contingencies, eventual fines, sanctions or complaints and the issues relating to the progress of the projects and/or operations. In connection with the internal control and the adherence to the Code of Conduct and Business Ethics, they are regularly informed by the Auditing Manager to the Auditing Committee and to the Board on a quarterly basis.

Starting in 2016 Colbún will set up a Sustainability Worktable, where all company areas will be represented and which purpose is to identify and manage the gaps.

We promote the permanent exchange and communication with our stakeholders, convinced this is the best way to understand each other and to build the necessary confidence and respect to manage our business jointly. The following dialogue and communication channels are open and available through the year.

### INNOVATION

Our innovation strategy is aimed at searching initiatives and projects that add value improve our competitiveness and allow the installation of new capabilities and practices in our organizational culture.



The initiatives will be selected out of a portfolio containing the best ideas collected from the Innovation Days at the power plants, the workshops in Santiago and other instances that have enabled us to detect value opportunities



#### **INNOVATION ACTIVITIES IN 2015** 3. Innovation days at the 1. Workshops in Santiago: 2. Safety challenges: power plants: · Total number of partici-· Total number of Total number of pants: 12 participants: 240 participants: 55 · Total number of ideas Total number of sessions: Total number of ideas received on the platform: 14 (distributed in 4 months collected: 630 238 of work) Total number of Total number of ideas Number of projects subprototyped ideas: 12 implemented from mitted to the Innovation the 2015 challenge: 32 3 ideas under Panel: 6 (Nehuenco: 7 ideas; analysis for eventual Number of projects se-Candelaria: 5 ideas; implementation lected by the Managers' Colbún: 20 ideas) Committee: 3 (the 3 will Total number of ideas be worked out during implemented from the 2016) 2014 challenge (Santa María challenge): 23

### **COMMUNICATION CHANNELS**

We are part of an industry that is fundamental for the development of the country and the quality of life of its inhabitants. So, we seek to be in synchrony and to understand our stakeholders by means of relationships that promote communication, confidence and respect. As part of our continuous improvement process, in 2015 we incorporated to our Corporate Reputation Index the perception of our suppliers, contractors, investors and customers.

The following dialogue and communication channels are open and available through the year.



- Area that takes care of Investor Relations.
- Breakfasts, work meetings and conferences.
- Perception surveys.



### WORKERS

- Meetings of the supervisory level employees with the General Manager.
- Meetings with unions, and subscription of collective agreements.
- Work climate and internal services surveys.



- **ENVIRONMENT** • Early and voluntary citizen
- Lectures at seminars and participative talks.

involvement.

• Environmental RSE Committee and Center of Leaders for Climate Change.



- Dialogue worktables.
- Periodic meetings with authorities and neighbors.
- Participation in union and regional associations.
- Periodic meetings with the media
- Visits to power plants.
- Public accounts.
- · Perception surveys.
- Reception of letters and telephone calls.
- Mass media newspaper ("+ Energía", TV show, radio, webpage, Facebook).



### CONTRACTORS AND **SUPPLIERS**

- Participation in business forums.
- Suppliers and bidders' website.
- Feedback meetings.
- Perception survey.



- · Commercial team with specialized service to clients and vendors.
- Perception survey.







We have an Ethics Hotline where any individual member of an internal or external stakeholder group can ask questions or raise ethics-related allegations by email, telephone, conventional mail or in person.



### **ECONOMIC PERFORMANCE AND GOVERNANCE**

In this chapter, we go over the management of material aspects relating to the Company's "financial and industrial capital".

> Manage resources in order to generate economic results in line with the expectations of our shareholders allows us to go no with operations in time and secure the business sustainability

MATERIAL **ISSUES** 

**RELATED** RISKS

### **PROFITABILITY**

Exchange rate variation

Lower access to liquid funds

### **AVAILABILITY AND** RELIABILITY OF **POWER PLANTS**

### **BUSINESS ETHICS** AND CORPORATE GOVERNANCE

### GROWTH

### Company's assets (for example: nature

Process and/or system failure

Lower own and customers' credit Long drought Opposition by the communities

Reputational damage

Unethical or unlawful business conduct

Opposition to the development of projects

Supply/demand and power sale price variation risk

MANAGEMENT AND REGULATORY FRAMEWORK

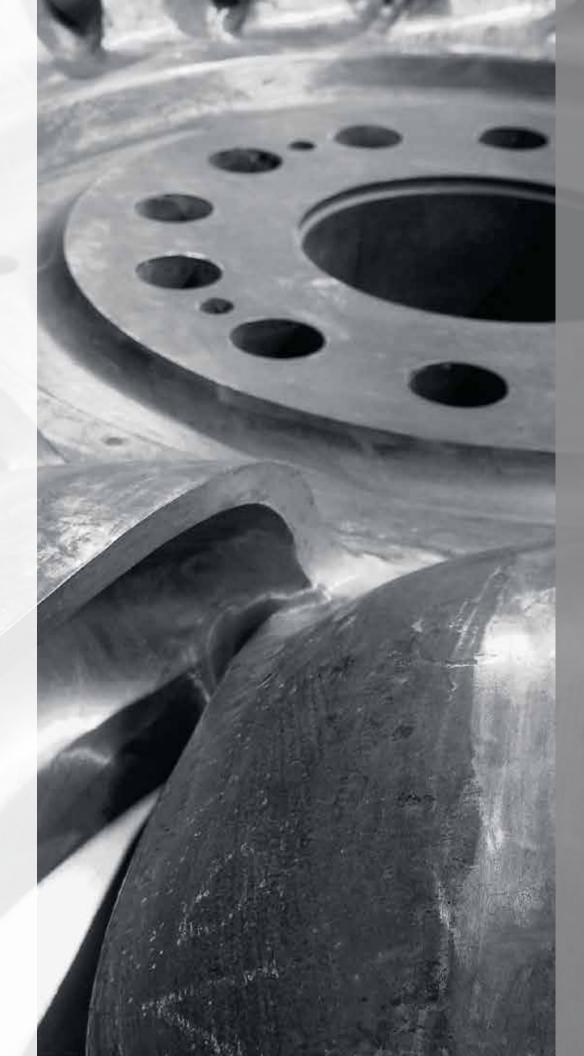
General Standard 385/386

Information Management Policy

contracting of goods and services supplied by politically exposed

procedures of the

Policy on the Delegation of Authority



### **PROFITABILITY**

### WHY IS IT MATERIAL?

### WHAT STAKEHOLDERS ARE **IMPACTED BY THIS MATERIAL** ASPECT?

profitability is an issue that affects all our stakeholders. As mentioned in our

### WHAT IS OUR OBJECTIVE?

by means of an outstanding operation.

### **HOW DO WE MANAGE?**

To maximize the long-term value of the

### **HOW DO WE MEASURE?**

distributed (G4-EC1), EBITDA (Colbún-1.EC)

### WHO IS ACCOUNTABLE?

CERRADA

CERRADA

### FINANCIAL MANAGEMENT

### **PROFITABILITY**

G4- EC1, Colbún-1.E0

2015 was a good year from the viewpoint of our economic results. For the second year in a row, the company obtained a record in terms of EBITDA. This result is due mainly to the good mix of energy generation and low fuel costs, and the long-term energy sale contracts which levels and terms allow forecasting a long-term profitability in line with the investments and risks undertaken by the Company.

As compared to 2014, the average cost of own thermoelectric power generation dropped significantly, thereby reflecting the decrease in the price of fossil fuels in international markets and the better contractual conditions of natural gas supply for our combined cycle power stations.

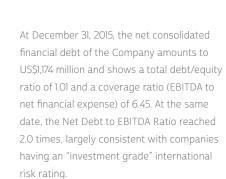
Ordinary income for 2015 amounted to US\$ 1,314 million, lower by 13% as compared to 2014, due mainly to lower revenues from contracted clients as a result of lower sale prices over the drop in the price of fossil fuels. Raw material and fuel costs in 2015, totaled US\$ 641.1 million, down by 27% from the previous management period.

As a result of the above, the operating income measured by EBITDA reached US\$ 583.3 million, up by 8% from 2014, and consolidated net profits reached US\$ 202.1 million, an increase of 146% as compared to the previous year.

Within the framework of the internationalization process and the expansion to new Latin American markets, on December 18, 2015, through a consortium where Colbún holds a 51% stake, acquired Fenix Power Perú S.A. Such company has a 570 MW combined cycle thermoelectric power plant based on natural gas in the district of Chilca, approximately 64 kms south of Lima.

Fenix is valued in US\$786 million, which deducted from the Company's debt meant cash contribution by US\$421 million. Of this amount, Colbún disbursed 51%, i.e. US\$214 million. This 51% stake implies that Colbún consolidates Fenix's operation from the date indicated above in the 2015 Financial Statements.

The net consolidated financial debt of the Company increased by US\$13 between December 2014 and December 2015. This increase is due mainly to the disbursement to purchase Fenix Power Perú, as well as the debt consolidation by US\$378 million, offset by the net positive cash flow (US\$699 million) from operating activities in 2015.



CERRADA

At 2015 closing, at a national level Colbún was rated A+ by Fitch Ratings and AA- by Humphreys, both with stable perspectives. At an international level, the company was rated BBB by Fitch Ratings and BBB- by Standard & Poor's (S&P), both with stable perspectives.



NORMAL

CERRADA

NORMAL

CERRADA

CERRADA





#### DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED (ECI. MILLION US\$)

**ABIERTA** 

CERRADA

	2014	2015
Operating income	1,762.9	1,561.9
Financial income	15.2	13.4
Other revenues (1)	9.2	31.2
Total direct economic value generated (VEG)	1,787.3	1,606.4
Operating expenses	1,117.0	828.7
Employees' compensations and benefits	60.3	62.1
Payment to capital providers /Financing activities	106.6	146.7
Payments to the state (4)	12.2	13.9
Fixed asset investment	119.2	291.7
Community investments	4.3	5.2
Total economic value distributed (VED)	1,419.6	1,348.2
Net effect of financing activities	223.2	(22.9)
RETAINED ECONOMIC VALUE (VER)	590.9	235.3

#### NOTES

1) Income from tax returns (PPUA: provisional payment for profits absorbed).

2) Expenses in dividends (shareholders) and interests (banks).

3) Net value of revenues and loan payments (only capital, no interests).
4) Accrued taxes by MMUS\$ 87.4 and 99.6 for 2014 and 2015, respectively.

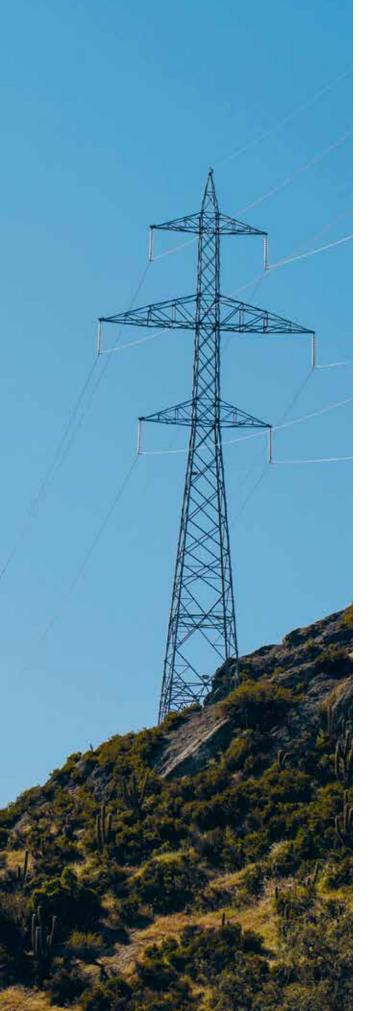
The values included herein correspond to the Company's cash flows during 2014 and 2015, therefore, they do not match the amounts indicated in the Comprehensive Income Statements.

#### CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (MILLION US\$)

CONSOLIDATED STATEMENTS OF FINANCIAL POS	ISOLIDATED STATEMENTS OF FINANCIAL POSITION (MILLION US\$)	
	2014	2015
Current assets	1,261.8	1,365.8
Non-current assets	5,112.2	5,787.4
Total Assets	6,374.0	7,153.2
Current liabilities	258.3	707.8
Non-current liabilities	2,777.7	2,778.2
Net equity	3,338.0	3,667.1
Total Liabilities and Net Equity	6,374.0	7,153.2

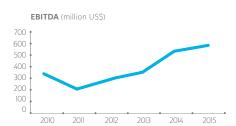
#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME BY SEGMENT (JANUARY-DECEMBER, MILLION US\$)

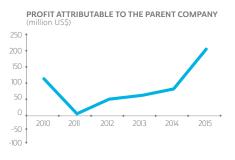
	2014	2015
	MUS\$	MUS\$
Net income from ordinary activities	1,502.6	1,313.9
Raw materials and consumables used	(883.7)	(645.9)
Personnel expenses	(59.7)	(56.1)
Depreciation and amortization expenses	(182.4)	(194.9)
Other expenses by segment	(22.6)	(28.5)
Other profits (losses)	(1.4)	0.5
Profits from operating activities	352.8	388.8
Financial income	5.6	5.5
Financial costs	(76.0)	(90.5)
Shared profits (losses) from related companies and joint ventures accounted for	(99.3)	6.6
using the equity method		
Exchange rate differences	(22.4)	(11.2)
Income from readjustment units	9.1	2.4
Earnings before tax	169.7	301.7
Income tax expense	(87.4)	(99.6)
Cash flow from operating activities	82.3	202.1
Profit attributable to		
Profit attributable to the parent company	204.7	82.3
Profit attributable to non-controlling interest	(2.6)	[X-1
		44. X

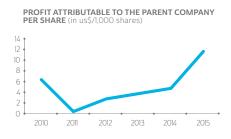


# **EVOLUTION OF THE MAIN COLBÚN'S INDICATORS**

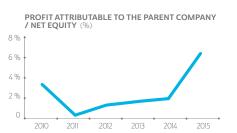




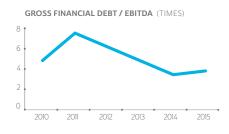


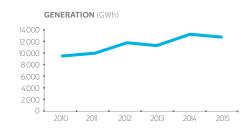


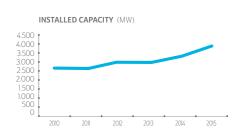


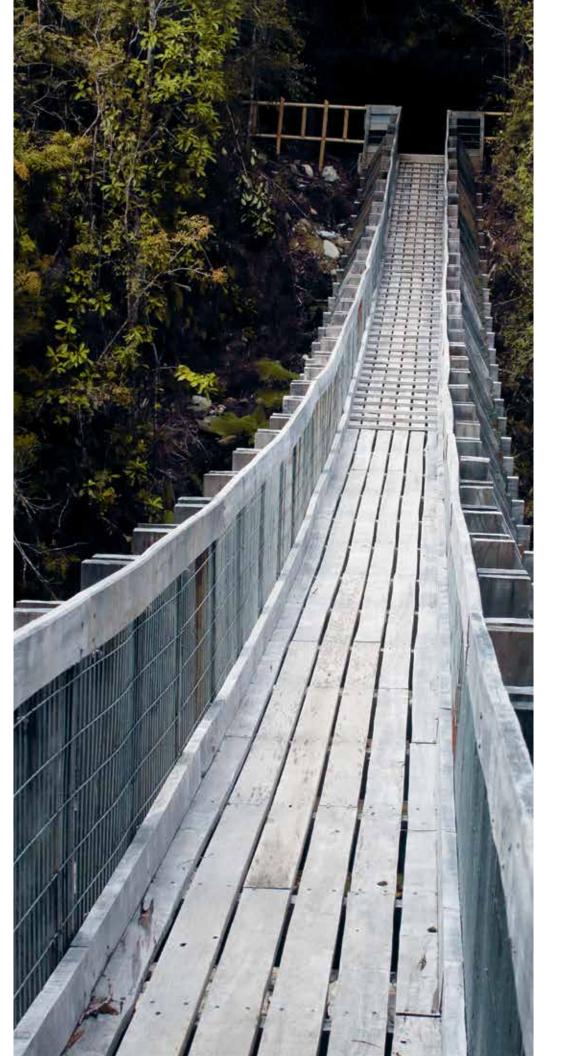


# GROSS FINANCIAL DEBT / NET EQUITY (%) 80 % 60 % 40 % 20 % 20 10 20 11 20 12 20 13 20 14 20 15









### **INVESTOR RELATIONS**

It is of the utmost importance for us in Colbún that all our investors and shareholders, no matter their size, are duly informed of the Company's operations and latest developments.

Therefore, by means of our investor relations area, we have strengthened the communication with industry investors and analysts through visits to our power plants, participation in breakfasts, periodic meetings at our offices and local and international investors' conference calls, where we provide timely response to their requests.

In addition, on occasion of the quarterly publication of the financial results, this area prepares analysis reports and holds international conference calls to update the presentation of results to our investors. This material is available for any interested individual at our Company website, where it is periodically updated.





### FINANCIAL POLICIES APPROVED BY OUR SHAREHOLDERS





#### Dividend Policy

Of the net profits for the period.

onsider, among others, ne Company's power sales ontract portfolio, the ontribution of each project o the Company's generation nix and the medium to ong term profitability, otal investments in the nanagement period shall ot exceed 100% of the net

**Investment Policy** 

#### Financing Policy

Financing shall seek to provide the necessary funds for the adequate operation of the existing assets, as well as of the new investments. The indebtedness level shall no jeopardize the "investment grade" credit rating of the debt instruments issued.



### RELIABLE COMPETITIVE AND SUSTAINABLE SUPPLY

G4-EU2, G4-EU3, G4-SO

During 2015, Colbún updated its Commercial Policy in order to embrace the changing market conditions and the status of our generation and projects portfolio. Based on different hydrological scenarios, market analyses and forecasts of energy committed under contracts, we determined the commercial guidelines for our business.

Colbún supplies energy to 18 large customers, among which we find 15 regulated customers (distribution companies) and 3 free or industrial customers (mining companies, transport services and water treatment plants).

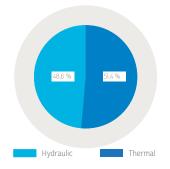
To provide safe energy, we have 3,282 MW installed in the Central Interconnected System (SIC). Our generation mix keeps a balanced combination of renewable technologies (mainly hydroelectric, supplemented with purchases of energy or NCRE attributes, namely wind and biomass generation) and thermoelectric (with very demanding emission standards), which allows a safe, competitive and sustainable supply. We seek to ensure levels of excellence in managing the technical, economic, social and environmental dimensions of the business to meet our sustainability commitment and goals.

#### NUMBER OF DISTRIBUTORS AND INDUSTRIAL CLIENTS

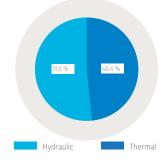
Total	22	22	18
Industriales	6	6	3
Distribuidoras	16	16	15
Tipo de clientes	2013	2014	2015

NOTE: At December 31, 2015, three clients account for at least 10% of the revenues: National Copper Corporation of Chile 23%, CGE Distribución 22% and Chilectra S.A. 16%.

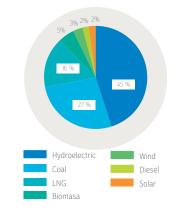
### COLBÚN'S INSTALLED CAPACITY IN THE SIC CHILE 2015: 3,282 MW



### COLBÚN'S GENERATION IN THE SIC CHILE 2015: 12,535 GWH



### TOTAL GENERATION IN THE SIC (CHILE) BY TYPE OF FUEL



Colbún maintains a personal relationship with each customer, which enables us to reinforce the links and provide quick response to their needs and concerns. In 2015 we signed contract addenda with Chilectra and SAESA Group, which approached the parties' positions in connection with the application of supply contracts, confirming the negotiation capacity and the good will of both parties.



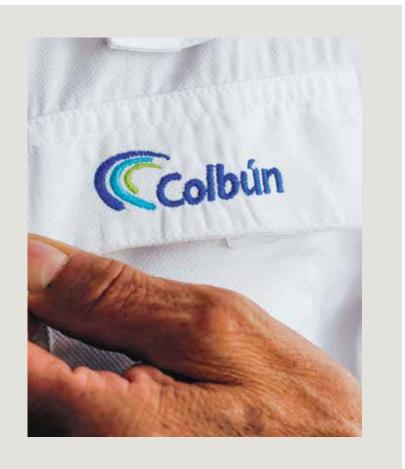


### **FREE COMPETITION**

Colbún promotes a Free Competition Policy approved by the Board. This policy states that all employees must fully abide by the free competition standards. It also defines the practices understood to be against free competition, such as collusion or any type of agreement between Colbún and its competitors involving prices, sale conditions, market segmentation and production limitation, among others.

Since 2011, the Company trains its main executives in order to provide them with information about the latest developments in free competition matters.

Colbún has not been sued for unfair competition, antitrust conduct, or practices against free competition.



Physical sales to regulated customers reached 11,053 GWh in 2015, down by 7% from December of 2014, due mainly to the termination of CONAFE'S contract in April of 2015, and Codelco's marginal cost contract in December of 2014, added to a lower demand from regulated and free customers. Net YTD spot market sales at December 2015 totaled 1,328 GWh, more than double the previous year's number. However, it is worth noting that part of these sales are credited to Codelco, per the contractual terms with this client, in connection with the portion of the Santa Maria's thermoelectric power supply.

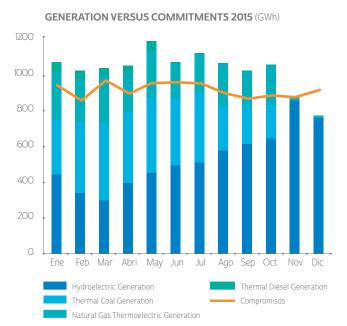
Total YTD generation in 2015 dropped by 1% as compared to the year before, due mainly to lower diesel (-55%), hydroelectric (-3%) and coal generation (-8%). This decrease was partially offset by greater generation with natural gas (+14%).

5 ENERGY SA	ENERGY SALES PER TYPE OF CUSTON		ALES PER TYPE OF CUSTOMER IN CHILE (GWh)				
Quarter	Regulated Clients		Spot Market (CDEC)	Total			
	Distributors	Industrial					
Jan-Mar	1,733	1,048	332	3,114			
Apr-Jun	1,699	1,125	486	3,309			
Jul-Sep	1,636	1,106	456	3,197			
Oct-Dec	1,557	1,150	178	2,885			
Total	6,625	4,428	1/52	12,504			
iotai	11,0	53	1,452	12,504			

	2014	2015
 Total	1,710	1,699

Quarter H	lydraulic					Purchases	TOTAL
	,	Thermal Gas	Thermal Diesel	Thermal Coal	Total	CDEC	Energy
January - March	1,098	1,147	141	792	3,177	0	3,177
April - June	1,358	1,202	102	699	3,361	0	3,361
July - September	1,724	868	0	651	3,243	0	3,243
October -December	2,285	204	1	263	2,753	116	2,869

Efficient base generation (hydroelectric and coal) provided for 80% of yearly commitments, up from 2014 (78%). The other commitments were covered with natural gas supply, which considering the commercial conditions negotiated by Colbún now also represents a cost-efficient source of generation. The following chart shows an adequate commercial balance between Colbún's cost efficient generation capacity and its supply commitments. Except for December, where low marginal costs were recorded in the system, in 2015 all commitments were supplied with own efficient generation.





# AVAILABILITY AND RELIABILITY OF OUR POWER PLANTS

G4-FU6, G4-FU

### **MAINTENANCE MANAGEMENT**

During 2015 we progressed in the management of major maintenance, by enhancing the planning, introducing best execution practices and reducing the scheduled interruption time.

	2014	2015
Planned	13,125	20,197
Unplanned	14,079	11,911
Total	27,204	32,108

We also made significant progress in the prioritized implementation of the recommendations made by expert operational risk management advisors and by our insurers.

# AVAILABILITY AND RELIABILITY OF OUR POWER PLANTS

### WHY IS IT MATERIAL?

We seek to be the raw model in the generation of reliable and safe energy according to the commercial commitments undertaken and the operation required by the power system so as to ensure its sustainability over time. To this end, , we must control the risks associated with our operational continuity, such as potential failures in the processes and /or systems, the capacity to get the fuel we need to operate, the long droughts and the potential threats against our generation assets.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

The availability and the reliability of our power plants is an issue that impacts all our stakeholders as it affects the Company's financial results and the cost of the power supply in the SIC.

### WHAT IS OUR OBJECTIVE?

Our goal is to meet the reliability and availability commitments undertaken and seek to achieve world-class standards in connection with these indicators.

### **HOW DO WE MANAGE?**

Together with having an efficient thermal complement that ensures a safe supply to our clients under difficult hydrological scenarios, we will strive to achieve an excellent management in terms of maintenance, critical spares and safety in our facilities.

### **HOW DO WE MEASURE?**

Average plant availability factor by energy source and regulatory regime (G4-EU30) / Managemento ensure the short and long-term availability of power supply (G4-EU6).

### WHO IS ACCOUNTABLE?

Generation Division, Energy Business and Management Division.

ANNUAL INTEGRATED REPORT COLBÚN 2015 ECONOMIC PERFORMANCE AND GOVERNANCE

### MAINTENANCE OF THERMOELECTRIC **POWER PLANTS**

**NEHUENCO:** implementation of a plan to increase the efficiency and the reliability of the water supply for the Complex, with the commissioning of two reverse osmosis pilot plants, project that added to the computerized management of existing wells through the SCADA monitoring system.

CANDELARIA: between March and May the units underwent the annual maintenance, and modifications were made to the combustion system and turbine section to meet the environmental regulation and increase the efficiency of the units by approximately 3%.

ANTILHUE AND LOS PINOS: signature of a Service Agreement (CSA) with General Electric for maintenance and servicing of turbine failures, including spare parts and technical assistance.

SANTA MARÍA: Major maintenance in November; the works included the review of the water-steam circuit for increased efficiency and the replacement of pipelines in the super-heater 4 and re-heater 1 of the boiler, maintenance of the forced draft ventilators and general review of the capacitor to increase the reliability.

### HYDROELECTRIC **POWER PLANTS**

Major maintenance scheduled works were brought forward and significant modernization works were undertaken, namely:

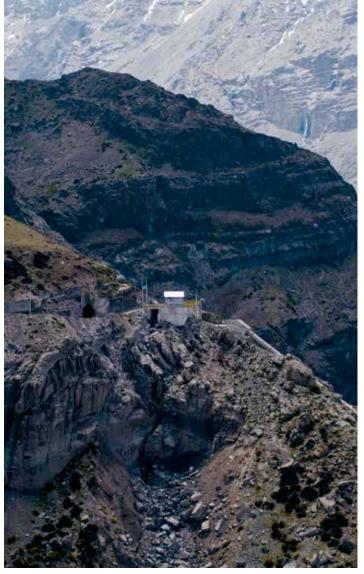
**ACONCAGUA COMPLEX:** improvements were made with the installation of new predictive maintenance systems at the Complex and major maintenance was done to Los Quilos power plant. Despite the numerous safety measures promoted by the Company, by year-end in Chacabuquito hydroelectric station an accident was recorded during the development of maintenance works. In consequence, repair and modernization works were undertaken to improve the standard of those systems in the four units of the Complex.

**CARENA STATION:** structural reinforcement of the power plant tunnels for greater reliability in the carriage of water.

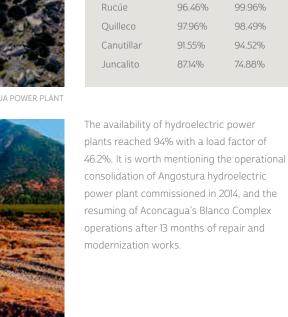
**COLBÚN COMPLEX:** major maintenance was done after 30 years of operation of Colbún's Complex Unit 2 and major maintenance of Machicura's Unit 1. San Ignacio, Chiburgo and San Clemente Stations also underwent maintenance.

**BIOBÍO COMPLEX:** work was developed to clean the intake system fence of Angostura power plant with a method that enabled us to conduct the work without causing unscheduled interruption of the generation units and with greater safety, as there was no need to use the divers' team.

**CANUTILLAR POWER PLANT:** the power plant underwent major maintenance.



ACONCAGUA POWER PLANT



Management indicators showed good results, with a Load Factor of 43.6% slightly lower than in 2014 (44.2%). This load factor is normal for hydroelectric power plants and for dispatch conditions at thermoelectric power plants.

Power plant availability reached an average of 91.5%, a significant improvement as compared to the 88.8% of 2014. Unavailability due to power plant failure amounted to 3.52% down from 2014, when it reached 4.45%.

#### AVAILABILITY PER HYDROELECTRIC POWER PLANT (%)

	( , , ,	
Station	2014	2015
Carena	94.93%	94.32%
Los Quilos	95.69%	90.56%
Chacabuquito	93.89%	73.49%
Juncal	95.16%	95.16%
Blanco	3.03%	83.78%
Hornitos	90.58%	95.76%
Colbún	97.28%	94.70%
Machicura	97.07%	96.33%
San Ignacio	97.81%	97.69%
Chiburgo	98.80%	98.20%
San Clemente	98.76%	98.50%
Angostura	71.36%	90.38%
Rucúe	96.46%	99.96%
Quilleco	97.96%	98.49%
Canutillar	91.55%	94.52%
Juncalito	87.14%	74.88%

Of the gas-fired power plants, the main is Nehuenco Complex, which combined cycles recorded an availability of 92.7% and a load factor of 51.6%. Simple cycle power plants recorded an availability of 90.8% and a load factor of 4%. Santa María Complex was available 79.4% of the time due to major maintenance done in November and a failure recorded during the commissioning after the maintenance works. The load factor of this power plant was 78.4%.

AVAILABILITY PER THERMOELECTRIC

2014

91.62%

88.26%

97.26%

97.58%

98.50%

96.98%

84.34%

89.55%

83.77%

2015

93.10%

92.38%

98.09%

91.46%

93.16%

97.37%

76.39%

91.27%

79.4%

POWER PLANT (%)

Station

Nehuenco I

Nehuenco II

Nehuenco III

Candelaria I

Candelaria II

Antilhue I

Antilhue II

Los Pinos

Santa María



CANDELARIA POWER PLANT

### THE RELEVANCE OF TRANSMISSION

G4-EU4, G4-EU1

Electric transmission infrastructure is fundamental to ensure the reliability of power supply and its competitiveness and access to the various generation sources.

During 2015, a dedicated transmission management area was set up in order to:

- · Define and conduct scheduled and unscheduled maintenance activities to improve efficiency and reliability indicators.
- · Participate in the technical definition of new transmission facilities developed in order to meet the regulatory reliability and safety standards.
- $\cdot$  Gather, complete and manage transmission technical data to respond to the authorities' requirements.
- $\cdot$  Over the long-term, the goal is to improve transmission losses (measured as a percentage) and the reliability trend of the power lines.

Colbún owns 916 km of transmission lines and a total of 28 substations. The transmission team pertains to the Energy Business and Management Division, and is made up of 39 people.

ransmission Assets	2014	2015
Tansinission Assets	Km	Km
Colbún S.A.	652.2	652.2
Affiliates (Colbún Trasmisión S.A.)	263.8	263.8
lotal loss	916.0	916.0

	2014	2015
	2014	2015
ransmission losses	2 30%	16%

NOTE: Transmission losses are directly tied to the coordinated operation of the Central Interconnected System (SIC), which is defined by the Economic Load Dispatch Center (CDEC-SIC, entity foreseen in the General Law on Electric Power Services charged with determining and coordinating the operation of the group of installations of the central power system, including power generation stations; trunk transmission lines, etc.)



COLBÚN COUNTS > WITH

A TOTAL OF ESTABLISHED SUBS

# ## © ° ° ° SUBSTATIONS

# ETHICS AND CORPORATE GOVERNANCE

G4-41, G4-56, G4-57, G4-58, G4-SO3, G4-SO4, G4-SO5

### **CORPORATE GOVERNANCE FRAMEWORK**

Our corporate governance is ruled by a series of standards and policies disseminated inside the Company



- CODE OF CONDUCT AND BUSINESS ETHICS
- 2 DELEGATION OF AUTHORITY (DOA) Establishes criteria and general principles in order to ensure that corporate transactions are reviewed and authorized by the proper Company levels.
- 3 PC

#### POLICIE

Guidelines that rule internal processes, in line with the Company's strategy, Company's principles and values.

4

#### PROCEDURES

Description of the sequence of tasks required to undertake an activity or process.

Colbun makes available to all its workers the Corporate Policies and Procedures Website, which allows access to the following information:

- $\cdot \ \mathsf{Corporate} \ \mathsf{Documents}$
- · Map of Company processes
- · Map of Policies and Procedures per process

# ETHICS AND CORPORATE GOVERNANCE

### WHY IS IT MATERIAL?

Robust corporate governance, based on ethics an transparency is essential to maintain the confidence ou investors and stakeholders

e evaluate and manage the risks associated with tential defaults of Corporate Governance issues or her standards, and we have an Ethics Management stem open to all our stakeholders.

### WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Ethics and corporate governance is an issue that affect all our stakeholders

### WHAT IS OUR OBJECTIVE?

Managing our business in agreement with the high ethics and transparency standards we have imposed ourselves.

### **HOW DO WE MANAGE?**

We have a governance system based upon the pillars of our Code of Business Ethics, the policies and procedure of the Company, a crime prevention model and a complaint hotline.

### WHICH GLOBAL COMPACT PRINCIPLE IS THIS ASPECT RELATED TO?

Principle number 10: The companies must act agains any form of corruption, including extortion and bribery

### **HOW DO WE MEASURE?**

Processes whereby the highest governance body prevents and manages potential conflicts of interest (G4-41) / Values, principles, organizational standards and rules, such as codes of conduct or codes of business ethics (G4-56) / Internal and external advisory mechanisms that promote an ethics and lawful business conduct, and that help find out issues relating to the organizational integrity (G4-57) / Internal and external mechanisms to inform unethical or unlawful business conducts and issues relating to the organizational integrity (G4-58) / Number and percentage of centers where assessment has been made of the risks relating to corruption and significant risks detected (G4- SO3) / Anti-corruption communication and training policies and procedures (G4-SO4)/ Confirmed cases of corruption and measures adonted (G4-SO5)

#### WHO IS ACCOUNTABLE?

Company's employees from the workers to the Board embers

### **ETHICS CULTURE**

G4-42, G4-5

Colbún's Code of Conduct and Business Ethics in place since 2013 contains the principles, values and practices that must guide the daily actions and the decisions of all our workers, contractors and suppliers. In 2015 the Board reviewed the Code of Conduct and Business Ethics and jointly with Internal Auditing updated the document to match it to the current events and challenges.

The Ethics Committee channels all the allegations received; it is made up of Internal Auditing, Legal Affairs and Organization and People Management.

All Colbún workers must read the Code of Conduct and Business Ethics upon joining the Company and review it on a periodic basis thereafter. This document is published on our webpage so that all of our stakeholders may have access thereto and ask questions or raise allegations. To this end, we have a communication channel available on our webpage, that operates either by phone, email or personally, to receive direct and anonymous allegations relating to the (non) compliance with ethics standards, conflicts of interest and any other issue relating to a potential non compliance of the standards. This communication channel may be used by any party interested. In addition, the complaint mechanisms are informed to the employees by means of the intranet and on our Bulletin Board. Four ethics related allegations were received in 2015 that were fully addressed and solved in agreement with the existing procedure. The Ethics Committee is the body charged with the investigation and operational analysis of the allegations and must assure an independent, confidential and non retaliatory resolution for the reporting employee. The results of the investigation are later submitted to the Board's Auditing Committee, which is the final responsible for this communication channel.

To Colbún it is fundamental to act in a consistent and transparent manner, preventing the conflicts of interest or managing them adequately when they come up. Therefore, in our Code of Conduct and Business Ethics we defined a conflict of interest arises in any situation where a worker resorts to his contacts and/or his position in the Company to its own (or close relatives') benefit, businesses or finances. Also, the Code provides that each worker is responsible for preventing these issues or managing them adequately, by notifying any situation of potential conflict of interest to his direct supervisor and the Internal Auditing Manager.

In the event that a Board member finds himself in a situation of potential conflict of interest, he must report this fact to the Board. Similarly, the disclosing Board member shall abstain from participating in the discussions relating to the reported issue, in the manner set forth by the law.



# The Code of Conduct and Business Ethics

The Code of Conduct and Business Ethics contains the principles, values and practices that must guide the daily actions and the decisions of all our workers, contractors and suppliers.

### **CRIME PREVENTION MODEL**

Our company has implemented a Crime
Prevention Model, within the framework of Law
20,393 on Criminal Liability of Legal Entities
that seeks to prevent the risk of bribery,
money laundering and terrorism financing. The
model contemplates an internal and external
regulatory framework, and a Crime Prevention
Manager (Internal Auditing Manager)
designated by the Board of Directors.

Such model was certified in 2015 by the ICR risk rating agency.

Similarly, during 2015, the workers from our power plants and Santiago corporate offices received onsite training on anti-corruption procedures, including the Law on Criminal Responsibility and bribery. In 2015 we received no allegations in connection with corruption cases.







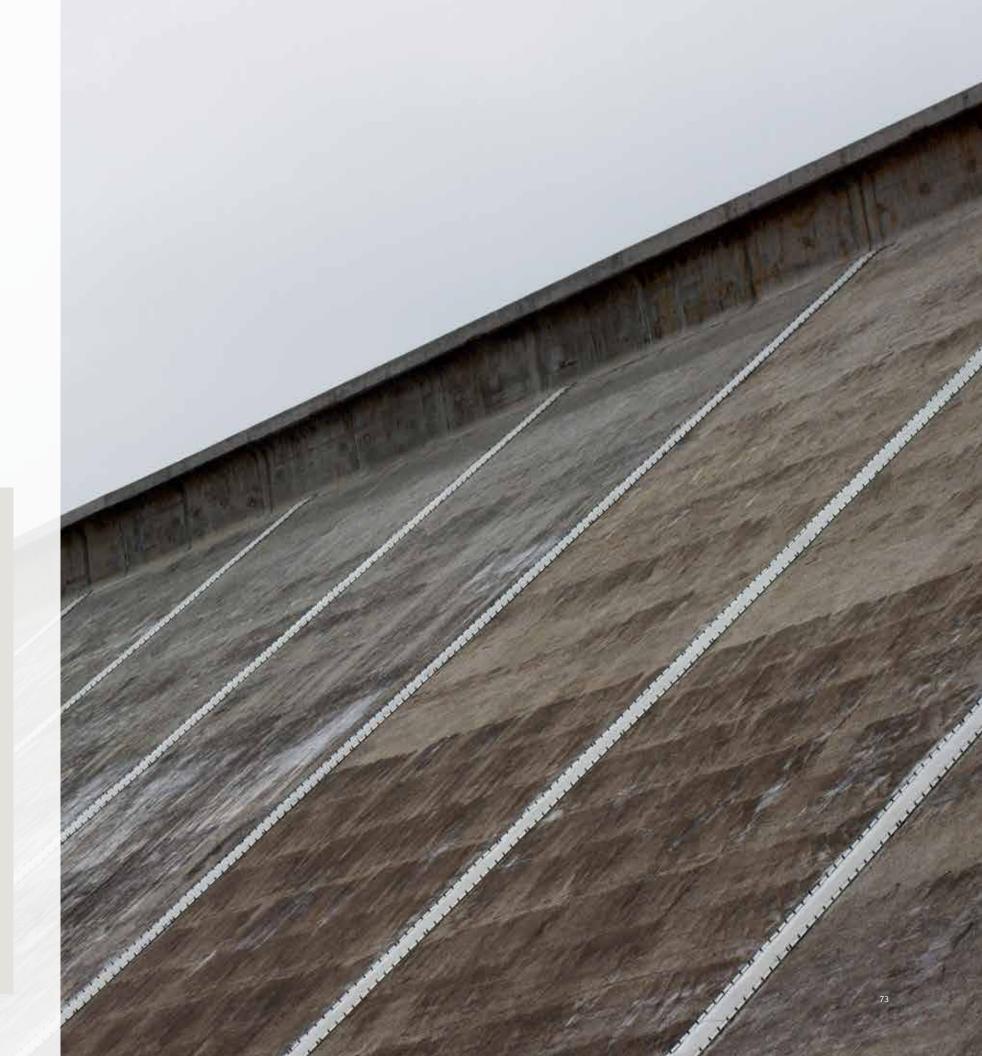
### **RISK MANAGEMENT**



- Ensure the sustainability of the business, defining mitigation actions in front of impacts brought about by the adverse consequences of the variables that affect
- Integrate the risk perspectives in the corporate management of each business area.
- Generate an organizational structure and a management methodology that enables us to manage the Company's risks.
- Minimizar de forma costo-eficiente los riesgos para responder al entorno cambiante en el que se desarrolla el negocio.
- Track the compliance with the mitigation plans agreed upon and the resulting residual risks.

The Company has set up a Risk Management Unit and a Risk and Sustainability Committee that follow up on the strategic risks faced by Colbun. Risk management is deemed to be a comprehensive part of the company business and is one of the matters the General Manager reports to the Board for discussion and analysis. The Risk and Sustainability Committee holds monthly meetings and is made up of the General Manager, the Main Executives and is attended by a representative of the Board. Other Board members can also attend these meetings. The General Manager provides a monthly report on these issues to the Board.

#### Hydrological Fuel prices Fuel supply/availability Power Business Equipment and maintenance Risks failures Project construction Regulatory defaults Economic Risks Demand/supply/price variations Exchange rate Interest rate Financial Risks Credit Liquidity Ethics and Reputational damage Governance Related Risk Unethical conducts Retention of professionals Strikes Labor Risks Risks relating Occupational accidents to Social Regulatory defaults Performance Interruption of projects and/or Community operations Community incidents Climate change Environmental Environmental Regulatory defaults Environmental incidents

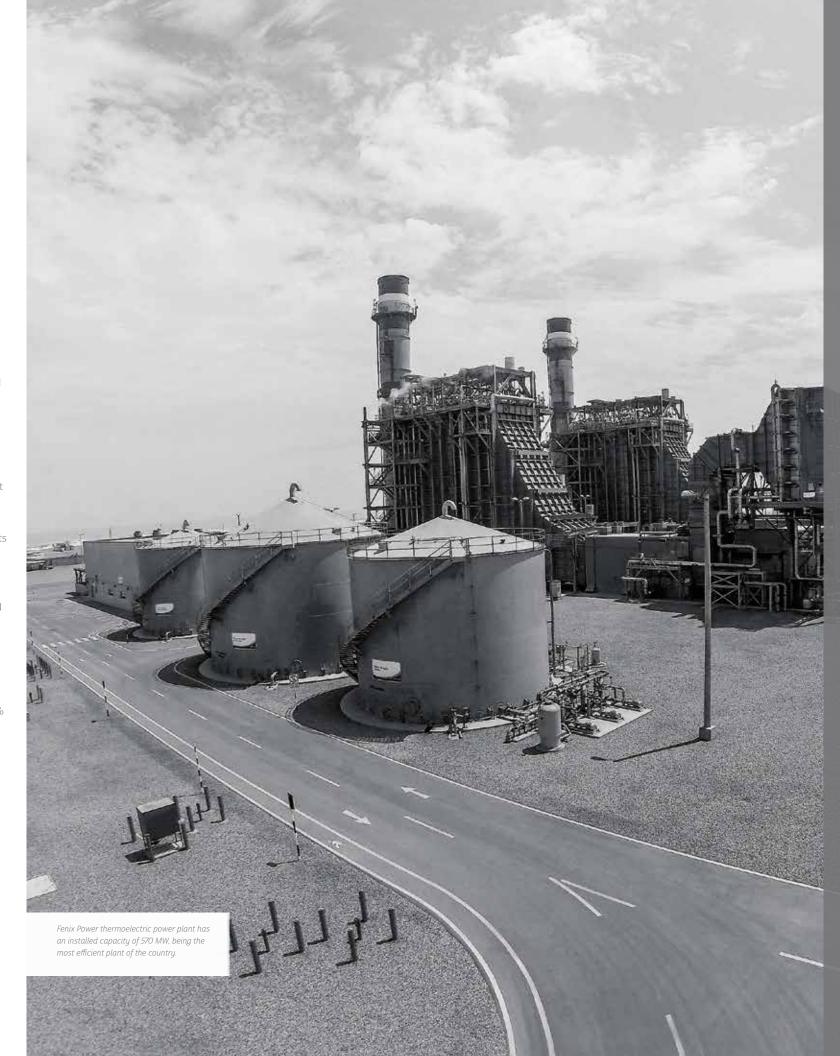


### **GROWTH PERSPECTIVES**

#### INTERNATIONALIZATION

In 2015 Colbún deepened the search of opportunities in Latin America; to such end, it set up a Development Management Unit especially dedicated to gear the Company's efforts toward such goal. In the first stage, the search of opportunities has been focused on Peru and Colombia, due to their attractive economic situation and consolidated power regulatory framework. Participating in such markets could improve diversification in terms of hydrological conditions, generation technologies, access to fuels and sound regulatory frameworks. The search centered on existing assets in operation that would not compromise our Investment Grade risk rating, comply with the Investment Policy approved by the Shareholders' Meeting, and where we could identify some room to apply top-level management criteria in financial, environmental, technical terms, taking care of our stakeholders.

As a result of this development plan, on December 18, 2015 the Company subscribed the purchase of Fenix Power Perú that owns a 570 combined cycle thermoelectric power station in the district of Chilca, south of Lima, and accounts for 9% of the Peruvian generation market in the National Interconnected System (SEIN). It is the most efficient thermoelectric power plant in the system that operates on long-term natural gas contracts and holds long-term contracts with the main distribution companies. In order to materialize the transaction, a consortium was set up partnered by Blue Bolt A 2015 Limited - a subsidiary controlled by Abu Dhabi Investment Authority (ADIA) - and the Infrastructure Investment Fund managed by Sigma Peru. Pursuant to the agreement, Colbún shall have 51% of Fenix Power Peru, acting as the parent company and the operator, while ADIA shall have 36% and Sigma, 13%.



#### **GROWTH PERSPECTIVES**

#### WHY IS IT MATERIAL?

We are a company with growth vocation that seeks to supply safe, competitive and sustainable electric power required by the countries to support and encourage their economic development. In order to respond to this challenge, we must track, evaluate and project all the conditions that define our growth notential and capacity.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Growth is an issue that affects all ou stakeholders.

#### WHAT IS OUR OBJECTIVE?

Our goal is to add new capacity that enables the company to meet the demand and to ensure a competitive, safe and reliable power supply. We seek to grow our installed capacity in the region, with an initial focus in Chile, Peru and Colombia.

#### **HOW DO WE MANAGE?**

Our development plan is aimed at increasing our installed capacity maintaining an efficient generation mix that contemplates a relevant hydroelectric component, an efficient thermoelectric complement and a greater penetration of other renewable sources.

#### HOW DO WE MEASURE?

Long-term planned capacity versus the projected demand for power broken down by energy source and regulatory regime. (G4-EUIO) / Description of the status of Company's projects, future perspectives and growth-related goals (Colbún-6.EC).

#### WHO IS ACCOUNTABLE?

Engineering and Projects Division, Business and Energy Management Division and Development Management.

### **PROJECTS**

Colbún-6.E0

At Colbún we are committed to maximizing the value of our company, by exploring and identifying growth opportunities through projects that will enable us to meet electricity requirements in a competitive, safe and sustainable manner.

To meet this objective, we have a diversified portfolio of projects at different development stages, which completion is subject to the technical/financial evaluation of each initiative, the power requirements of the country and the development of activities aimed at achieving an adequate insertion of the projects within their environment and in the communities where we operate.

### PROJECTS UNDER CONSTRUCTION

### LA MINA HYDROELECTRIC PROJECT (34 MW)

La Mina is a non-conventional renewable energy (NCRE) project located in the district of San Clemente, some 110 km east of Talca. This run-of-the river power station contemplates an installed capacity of 34 MW and an annual average generation of 191 GWh.

The power will be injected to the Central Interconnected System (SIC) over a 220 kV line at the Loma Alta substation by means of a 24 km, 66 KV single circuit high-voltage line. The power plant will use the Maule River waters downstream of the intersection with Puelche River, to return them to the Maule River 2 km downstream of the catchment point.

The project started its construction stage in January of 2015, and so far it has progressed 46%, which is in agreement with the schedule. The project is expected to start commercial operations early in 2017. The amount to be invested, including the transmission line is approximately US\$130 million, of which 44% has already been expensed.



### PROJECTS UNDER EXECUTION



#### SAN PEDRO HYDROELECTRIC Power Plant Project (160 MW - 170 MW)

San Pedro hydroelectric power plant project is situated some 25 km northeast of Los Lagos Municipality in Los Ríos Region and will use the water of the river of the same name through a power plant located in the span between the outflow of Rinihue Lake and Malihue Bridge. Considering the adjustments introduced to the project, this shall have an estimated design flow of 460m3/s (+10% of overtripping) and an approximate installed capacity of 160 - 170 MW for an annual generation of 950 GWh under normal hydrological conditions. The power plant will be operated so as to ensure that the dam level remains practically unaltered, which means that the flow conditions of the river downstream of the power plant will not be disturbed by its operation.

In June of 2015, the Company filed the Environmental Impact Study with the project modifications, which was initially admitted to processing by the Environmental Evaluation Service of Los Ríos. However, in August, the authority early terminated the process due to lack of relevant information, which was confirmed after the Company presented an appeal for reversal with new background information.

Notwithstanding the above, the Company is analyzing the observations made by the public services to compile and prepare the necessary background information that would allow providing a timely and technically sound answer to the information requested by the authority. In parallel, the Company is developing a schedule of explanatory and exploratory meetings with municipalities, public services, regional authorities and indigenous communities, among other stakeholders in order to resubmit the project at the right time.

#### SAN PEDRO-CIRUELOS Transmission line project

San Pedro-Ciruelos transmission line project will inject energy from San Pedro power plant to the Central Interconnected System over a 47 km, 220 kV single circuit line that will connect to Ciruelos substation, located some 40 kms northeast of Valdivia. The main activities conducted so far are related to the line easement negotiations.

#### SANTA MARIA COMPLEX'S UNIT II Project (350 MW)

The thermoelectric project is located in the municipality of Coronel, Biobío Region and contemplates an installed capacity of 350 MW. At present, Colbún has already obtained the environmental permitting to develop this second unit of the complex.

During 2014-2015 we improved its design, by incorporating new technology to meet the demanding emission standard in force since January 1, 2012. Also, analysis is being made of the social, economic and commercial dimensions of the project to timely define the start of the construction stage.



# NCRE PROJECTS (NON CONVENTIONAL RENEWABLE ENERGIES)

Chile's power legislation requires that a portion of the contracted energy should come from non-conventional renewable energy sources, establishing a goal of 20% supply with this type of technology by 2025.

Although Colbún already owns two power plants recognized as NCRE – San Clemente and Chiburgo hydroelectric power plants- in addition to the purchase of NCRE energy and attributes from Punta Palmeras wind farm and the NCRE attributes from Comasa biomass station, in the second half of 2015 Colbún set up the Renewable Energy Area, charged with developing and studying the participation in NCRE initiatives.

#### LNG

Within the framework of the Open Season process where GNL Chile bid part of its re-gasification capacity associated with the expansion of the re-gasification terminal located in Quintero, Colbún was awarded reserve capacity in the bid, which was confirmed in December 2015, for an approximate volume equivalent to the operation of a combined cycle. The Company's participation in the abovementioned process grants to Colbún the option to have assured re-gasification capacity, which is part of its long-term strategy to use its power generation installed capacity based on natural gas and contribute with a competitive, safe and sustainable power supply.

#### HIDROAYSÉN

Colbún holds a 49% stake in HidroAysén S.A.

Notwithstanding the natural uncertainty on the timing and the contents of the court's decisions in relation to the legal instances HidroAysen has resorted to after the rejection by the Ministers' Committee, and the guidelines, conditions or eventual reformulations of the processes led by the government in long-term energy policy and territorial basin planning matters regarding the development of the hydroelectric potential of Aysén, Colbún S.A. has reiterated its conviction that the applicable water rights, the additional requests for water rights, the environmental qualification resolution, the concessions, the field studies, the engineering, authorizations and the project's real estate are assets acquired and developed by the company over the last eight years pursuant to the current institutionalism and to international technical and environmental standards.

#### **OTHER PROJECTS**

The Company has continued to conduct technical, economic and environmental pre-feasibility studies as well as feasibility studies for hydroelectric projects that would use Colbún's water rights for approximately 500 MW in the Maule Region.





### **SOCIAL PERFORMANCE**

The chapter "2015 Social Performance" gives an account of activities associated to the material aspects relating to Colbún's "human capital" and "social capital" in Chile.

### THE EFFORT AND THE PROFESSIONALISM OF OUR WORKERS AND CONTRACTORS HELP US ACHIEVE OUR OBJECTIVES

MATERIAL ISSUES	CAREER Development	WORK CLIMATE	WORK RELATIONS	HEALTH AND SAFETY
RELATED RISKS	Loss of key talent due climate, training oppo competitiveness and organizational rigidity	ortunities, /or	Union conflicts	Accident or death of a Company's own worker or subcontractor
	Knowledge transfer s professionals	senior	Shutdown	Accidents caused by the operations or incidents inside the Company facilities
MANAGEMENT IND LEGULATORY RAMEWORK	Training plans Talent and successic Work plan with unio associations Benefit program Activities that includ families	ns and workers	Meeting woth union leaders     Training workshops	Healthy life program Zero fatality protocol Zero fatality standards Operational excellence Competitive program with the Safety Mutual
	People's managemen	t policy		Health and Occupational Safety Policy





#### ESTABLISHING A VIRTUOUS RELATIONSHIP WITH THE COMMUNITIES WHERE WE OPERATE IS CRUCIAL FOR THE CONTINUITY OF COLBÚN'S OPERATIONS.

**MATERIAL ISSUES** 

COMMUNITY DIALOGUE

LOCAL DEVELOPMENT

SOCIO-ENVIRONMENTAL CONFLICTS

RELATED RISKS

Shutdown of the facilities due to social conflicts Investigation by the Environmental Superintendence

MANAGEMENT AND **REGULATORY FRAMEWORK** 





### **HUMAN CAPITAL DEVELOPMENT**

G4-10, G4-LA9, G4-LA11, G4-LA13, EU-14, Colbún-8.TR

COLBUN WORKERS (HEADCOUNT)

# Women Men Total Women Men Total

Total	167	794	961	172	790	962
XIV Region	4	22	26	3	19	22
X Region	2	18	20	2	17	19
VIII Region	17	170	187	16	182	198
VII Region	5	94	99	6	99	105
VI Region	1	23	24	1	23	24
V Region	18	186	204	19	169	188
RM- Metropolitan Region	120	281	401	125	281	406

#### CONTRACTORS WORKERS (HEADCOUNT)

Contractors and Subcontractors	2014	2015
Generation	1,105	1,259
Projects	466	613
Total	1,571	1,872

Our commitment with our workers is to deliver quality employment and a labor environment encouraging ongoing improvement.

#### **HUMAN CAPITAL DEVELOPMENT**

#### WHY IS IT MATERIAL?

management as we conceive it. The risk of losing the by offering development opportunities and constant challenges.

#### WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

as our workers' performance affects the performance of the company and the communities where we operate, because

#### WHAT IS OUR OBJECTIVE?

#### **HOW DO WE MANAGE?**

#### WHICH GLOBAL COMPACT PRINCIPLE IS THIS **ASPECT RELATED TO?**

#### **HOW DO WE MEASURE?**

Average hours of annual training per employee by sex and job category (G4-LA9) / Skill management and ongoing

#### WHO IS ACCOUNTABLE?





RELATIONSHIP BETWEEN THE BASE SALARIES OF WOMEN COMPARED TO MEN, BROKEN DOWN BY PROFESSIONAL CATEGORY (G4 - LA13). GROSS MONTHLY SALARY MEASURED IN CHILEAN PESOS

Positions Evaluated	Salary Gap Average Gross Salary	Average Seniority Men	Average Seniority Women	Average Age Men	Average Age Women	Number of Male Workers	Number of Female Workers
Assistant Managers	-3%	12	19	49	46	17	3
Professionals and Supervisors	-2%	6	4	39	37	99	69
Technicians	1%	7	3	40	34	144	8
Administrative personnel	-5%	11	8	44	36	9	16
Other Positions	-5%	3	8	42	49	3	14
Overall Average Gap	-3%	8	8	43	40	272	110

NOTE

The gap in broad categories such as "executives", "professionals and technicians" and "other workers" could not be analyzed with a reasonable degree of confidence, so the GRI methodology that has a measurable and comparable adjusted result was used.

In order to ensure the competitiveness of our salaries, each year we acquire market studies associated to remuneration so as to compare our incomes and compensate each worker based on their skills and experience with a sense of internal and external fairness.

The above table shows the relationship between the wages of men and women, for each job category, resulting in an average wage gap of 3%, well below the national average. For comparison purposes, only those positions and/or roles that were filled by more than two women with equivalent responsibilities were considered.

### MANAGEMENT LEVEL COMPENSATION

US\$	2013	2014	2015	
Management level compensation	4,618,472	4,638,483	3.541.736	
Fixed	3,719,256	2,765,411	2.682.023	
Variable	899,215	1,873,071	859.713	
Indemnification to Management Executives	0	213,415	157.731	
Fixed	0	213,415	157.731	

#### NOTE:

- · Bonus paid in 2013 corresponding to 2012 period
- Bonus paid in 2014 corresponding to 2013 period, except executives who left the company in 2014, who were paid that year
- · Bonus paid in 2014 corresponding to 2015 period
- · The indemnifications are fixed and are agreed upon in advance in employment contracts
- The difference is due to higher US\$ exchange rate in 2015. In 2014 the calculation was made on the basis of \$ 570.37 and in 2015 on the basis of \$ 710.16.



Fixed and variable compensation policies and structures for Management level executives are reviewed and validated by the Directors' Committee for subsequent ratification by the Board of Directors. Similarly, the amounts to be paid for performance bonuses are also submitted to the consideration of the Board of Directors.

The Company has agreed to a variable Permanence Bonus with some of its Senior Executives, in order to reward the bond of the worker with the company.

### TRAINING AND DEVELOPMENT



The Company is committed to training and internal promotion as mechanisms to promote excellence in people management.

Along these lines, in 2015 we continued to collect information on competencies with Fundación Chile; operation area gaps were measured at all power plants and definition was made of the development curricula.

This year, we provided in average 50 training hours per worker and of the 136 openings generated, 49% were filled in through promotions and internal contests (Colbún-8.TR). The company offers scholarships and language, soft skills and technical training courses

Every 6 months, the Company grants approximately 50 undergraduate scholarships to applicants who meet the pre-established requirements.

#### TOTAL NUMBER OF TRAINED WORKERS

(G4-LA9)

2015	Women			Men		
Category	Number of Workers	Number of Formation Hours	Average Formation Hours	Number of Workers	Number of Formation Hours	Average Formation Hours
Managerial level	4	160	40.0	29	1,089	37.6
Professionals	95	7,345	77.3	464	37,003	79.7
Administrative personnel	23	2,285	99.3	9	686	76.2
Qualified Workers	3	575	191.7	123	9,784	79.5
Total number of Workers Trained	125	10,365	82.9	625	48,562	77.7

Note: The total Colbún headcount is 172 women and 790 men

### PERFORMANCE ASSESSMENT

We maintain a performance assessment system for staff with permanent contracts, which measures compliance with corporate, divisional and individual objectives and qualitative behavioral factors of executives and professionals in a systematic and standardized manner.

In 2015, 944 workers (equivalent to 98% of the total headcount) underwent performance assessment, maintaining the proportion of the previous year. In addition, this assessment process included Company's sustainability objectives linked to socio-environmental management, safety management, financial results and power plant availability indicators.



98% OF HEADCOUNT WAS ASSESSED



### **LABOR PRACTICES**

### **LABOR RELATIONS**

GA-11 Colbrin-9TR GA-LAA GA-HRA

At Colbún, we continuously seek to improve labor relations with our employees. Mutual respect and permanent dialogue between management and union representatives is a very important aspect that promotes such relationships.

In view of the above, in 2015 a Union
Management program specially designed
for Colbún workers was offered by the
University of Chile. The program delivered
to participants an academic and practical
training to strengthen their leadership
and communication skills and to develop a
strategic vision regarding their management.
Also, in early June the Company conducted

the first Training Conference for Union Leaders, where Company's executives shared with workers' representatives and the leaders met personally with the General Manager and the Chairman of the Board. Lastly, during the year the Company hosted a Labor Relations Workshop organized by the University of Chile with the Participation of Company supervisors and executives.

In Colbún there are 11 groups that bargained collectively, grouping 415 workers (43% of the total headcount). Of these 11 groups, 5 are unions and group 280 workers (28% of the total headcount).



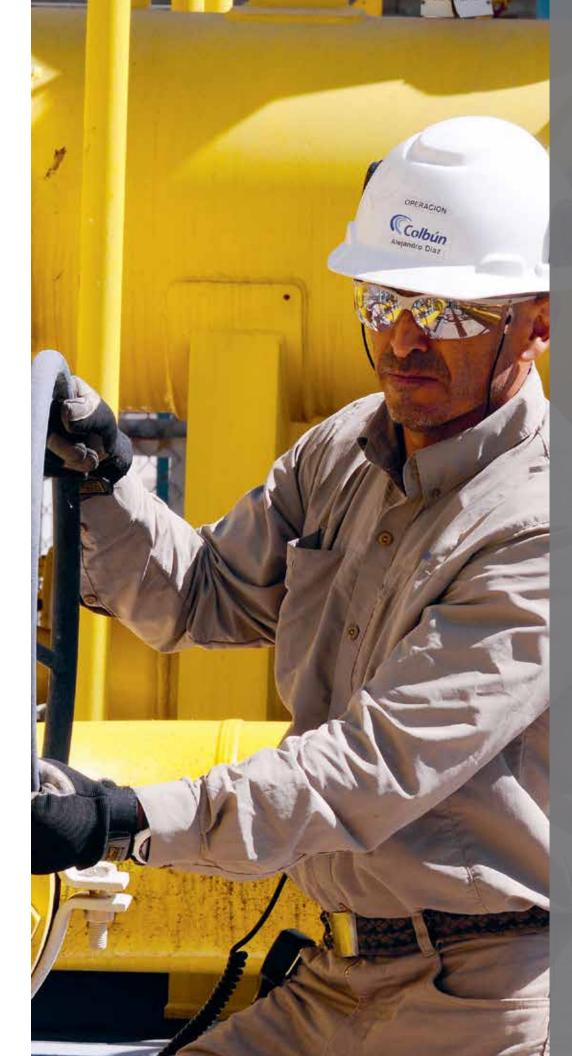




# **COMMUNICATION CHANNELS**WITH WORKERS

The Company has made available several internal communication media. The intranet website is updated on a daily basis to keep workers informed on all news and corporate activities; a newsletter is sent to all plants and corporate offices on a monthly basis; the magazine "+Energía en Familia", with two issues per year, in addition to the internal mails, whereby organizational changes, relevant news, births and deaths

are reported, etc. Other sources of interaction with workers are measurements of organizational development, as Work Environment and Internal Services Evaluation, where relevant information on the perception of workers regarding the Company is obtained.



#### **WORK PRACTICES**

#### WHY IS IT MATERIAL?

The Company-workers dialoguing instances are of the utmost relevance for the sustainability of our business, due to their direct impact on the work environment and, ultimately, on the productivity of the Company.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Labor relations impact mainly our workers. But it also has an impact on our investors, who benefit from the better performance resulting from good labor relations.

#### WHAT IS OUR OBJECTIVE?

We seek to maintain good relations with our employees through various levels: relationship with supervisors, relationship with unions, among others, strengthening the sense of belonging, commitment and pride.

#### **HOW DO WE MANAGE?**

We promote honest, open and systematic workers' dialogue with their supervisors. The Organization and People Management maintains ongoing contact and dialogue with union leaders. Additionally, we organize day-meetings between senior Company executives and workers' representatives, where leaders hold meetings with the General Manager and the Chairman of the Board.

# WHICH GLOBAL COMPACT PRINCIPLE IS THIS ASPECT RELATED TO?

Principle # 3: Companies should uphold the freedom of association and recognition of the rights to collective bargaining.

#### **HOW DO WE MEASURE?**

Percentage of employees covered by collective agreements (G4-II) / Channels of dialogue and engagement with workers (Colbun-9.TR) / Minimum notice periods for operational changes and possible inclusion thereof in collective agreements (G4-LA4)

#### WHO IS ACCOUNTABLE?

All Management areas are accountable, in particular the Organization and People Management, through their support to the different areas.

#### **WORK ENVIRONMENT**

#### WHY IS THIS MATERIAL?

The work environment impacts the productivity and performance of the company.

### WHAT STAKEHOLDERS ARE IMPACTED BY THIS ASPECT?

The quality of working life is an aspect that affects mainly our workers. It also impacts investors to the extent that the performance of the workforce affects the performance of the company.

#### WHAT IS OUR OBJECTIVE?

We seek to create the conditions for each person working in Colbún to develop their full potential. Along these lines, we want to incorporate the families of our workers, assuming a comprehensive view of the people who are part of the Company.

#### **HOW DO WE MANAGE?**

We manage it by promoting a culture based on our values: integrity, excellence, innovation, passion and collaboration. These values are supported by various benefits, activities and initiatives that aim to incorporate the families of our workers, and we develop work and workshops with the supervisory level of the Company.

#### **HOW DO WE MEASURE?**

Results GPTW (Colbun-IO.TR) / Reconciling work and personal life, Reconciliation of benefits and policies (Colbun-II.TR) / Social benefits for full-time employees not offered to temporary or part-time employees, broken down by significant activity location (G4-LA2).

#### WHO IS ACCOUNTABLE?

Each management and supervisory level must ensure a good work environment across the Company.

### **WORK ENVIRONMENT**

Colbún-10.TR, G4-LA2, Colbún-11.TR

Our good performance in 2015 in this area was mirrored in the measurement of our work environment with the survey Great Place to Work. With 90% representation and 839 out of 933 workers answering the survey, the positive satisfaction level was 82%.

These figures are well aligned with our "High Performance" innovation project, introduced in 2014 by a group of workers from different areas of the Company and developed in 2015.

This is a reflection of the work we did to strengthen our best practices, developing plans next to those plants that presented opportunities for improvements in climate surveys, conducting workshops, delivering personalized support and reviewing the structure and organization of such plants.



### **HEALTH AND SAFETY**

G4-LA5, G4-LA6, G4-LA7, EU16, EU21, EU25, Colbún-12.TR

### **SAFETY MANAGEMENT**

Our Safety, Occupational Health,
Environmental and Quality policy is actively
promoted by 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. Also, the standard provides
that no production goal or operational
emergency is worth a human life.

In 2015, we pursued the work associated with "Zero Fatality Protocols" that resulted from the identification of the 12 most relevant hazards that could potentially cause severe accidents. The work was centered on monitoring the controls associated with these protocols. Despite the efforts made, in October of 2015 two workers of Chacabuquito power station were injured during maintenance works on Unit 1. The accident was due to the explosion of a medium voltage breaker and consequently one of the workers ended up with burns on his face and the other, on one of his arms. Fortunately, both of them are quickly recovering.

#### **HEALTH AND SAFETY**

#### WHY IS IT MATERIAL?

Power generation involves working at plants that involve risks to the safety and health of people. It is, therefore, of utmost importance to have these factors assessed and controlled to protect the health and safety of those who work and live near the facility.

### WHAT STAKEHOLDERS ARE IS IMPACTED BY THIS ASPECT?

Health and safety is an aspect that primarily impacts our employees, contractors and providers, as well as our communities.

#### WHAT IS OUR OBJECTIVE?

In broad terms, we carry out our best efforts in order for our workers and their families to enjoy good health. In more specific terms, one of the strategic objectives of Colbún is to seek and manage "zero accident". Also, we want our communities to feel safe in relation to the operation of our plants and, to this end we are advancing in the dissemination of our mechanisms to respond to emergencies, encouraging our neighbors to become part of those plans.

#### **HOW DO WE MANAGE?**

We maintain a "Safety, Occupational Health, Environmental and Quality Policy" certified since 2010 under ISO 14001 and OSHAS 18001 standards. We have also implemented "Special Regulations for Contractors and Subcontractors (REECS)", and an "Integrated Management System (SIGECS)", which allow our partner companies to seek certification under national or international standards. We work on the detection of the training needs in health and safety, and deliver relevant training.

#### **HOW DO WE MEASURE?**

We measure it according to the percentage of workers represented in formal joint safety and health committees, for executives and employees, established to help monitor and recommend safety and occupational health programs (G4-LA5) / Type and rate of injuries, occupational diseases, days lost, absenteeism and fatalities related to work by region and sex (G4-LA6) / Percentage of workers within the normal/healthy health range (Colbun-12.TR) / Contingency planning measures, disaster or emergency management plan, training programs, and recovery and restoration plans (ELIZI)

#### WHO IS ACCOUNTABLE?

Every Colbún worker must ensure self-care. However, the Occupational Health and Safety Management is responsible for generating the processes and managing this area within the Company.







#### COLBÚN AND CONTRACTORS ACCIDENT RATE INDICATORS Contractor Total Colbún Companies 16.1 8.1 4.1 Accident rate (2) 0.2 0.4 0.3 Frequency Indicator (3) 0.9 2.2 1.7 Severity Indicator (4) 67.6 24.1 42.3 Average number of 958.9 1,871.6 2,830.6 workers 2,278,386 5,435,550 Man hours 3,157,164 Accidents with time lost 2 7 154 76 230 Severe and/or fatal ac-0 0 0 Accidents without lost time 7 17 24 Vehicle accidents 14 18 4

(1) Days lost per 100, divided by the average headcount for the period.

(2) Number of accidents per 100, divided by the average headcount for the period.

(3) Number of accidents per 1,000,000, divided by the total number of man hours for the period.

(4) Days lost per 1,000,000, divided by the number of man hours for the period.

### **HEALTHY LIFE**

Occupational Health at Colbún is aimed at keeping its workers free of any disease that could be brought about by the substances they handle, the equipment, machines and tools they use or the environmental conditions where they develop their activities.



### EPIDEMIOLOGICAL MONITORING

We track our workers' job exposure by identifying risk agents and exposure times that allow us quantifying their magnitude to propose control measures. We also check their health condition against specific risk agents, by measuring biological indicators and testing to detect damaged organs.



### OCCUPATIONAL HEALTH PROTOCOLS

Noise is the main health threat we have identified at Colbún's power plants. Therefore, we applied a program called Prexor, consisting of a systematic sequence of actions, such as a hygiene plan, qualitative evaluations and previous studies at all stations between 2014 and 2015.



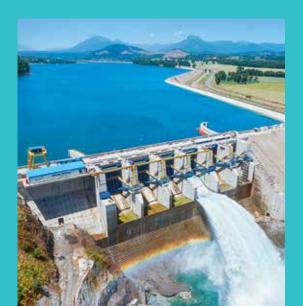
### PUBLIC HEALTH MONITORING

From the viewpoint of Public Health, in 2015 evaluation was made of the coronary health risks of the whole organization, through a battery of tests, nutritional evaluation and personalized counseling. As a result of this work, which began in 2013, 90% of the workers are within a range regarded as healthy.



#### **PROFESSIONAL**

In order to ensure that workers are physically fit for the work they must carry out, we have implemented occupational health tests, thus improving the health of 59.4% of our workers presenting some degree of alteration in their first examination.



# ATTACK AGAINST THE ANGOSTURA PLANT

At dawn on November 15, 2015, a group of masked men broke into the premises of the Angostura Hydro Plant, forcing their way past the staff and making an arson attack on the administrative offices and some vehicles owned by the company. Immediately, Colbún staff notified this situation to police and firefighters. Fortunately, no injuries were reported

Colbún deplores and categorically rejects this action, which adds to othe similar nature attacks on third parties in the area in recent times. For this reason, Colbún filed a complaint with the Prosecutor's Office of Los Angeles and expressed its conviction that the authorities will make all necessary efforts to find those responsible for the attack.

### **SAFETY INNOVATION PLATFORM**

Faced with the challenge of adding value, raising significant opportunities for our business and enhancing participation, in 2015 our workers and contractors were invited to submit their ideas through a web platform, with the aim of making our plants the safest in Chile. Work began at the Santa Maria Plant and then spread to four more facilities. To date we have implemented more than 60 ideas from over 300 participants. Through this collaborative and participatory instance, we have generated value for the Company in a matter as important as the safety culture at Colbún. By 2016, we expect to have extended this challenge to all Company complexes and plants.



Moreover, health protocols focus on minimizing workers' risks and monitoring their individual health status. Currently, protocols have been implemented to identify: Upper Extremity Musculoskeletal Disorders (TMERT-EESS), Manual Handling of Loads (MMC) and Psychosocial Disorders (TPS).

Regarding psychosocial disorders, Colbún developed a plan based on a protocol issued by the Ministry of Health, enforceable beginning in September 2015. Furthermore, the collection of information helped identify changes the dimension "Double Presence" \* were identified in some of the work centers (five plants and three divisions in Santiago). In order to work out this matter, actions have been implemented such deferred entry and exit times, improved transportation of workers between their homes and work, and planning of focus group in Santiago. By means of these activities, we expect to reverse the results of the survey that identified the psychosocial risk factors, to be reevaluated in May 2016, at the locations where the deviation was found.

Health and Sports Benefits		
Benefit	Beneficiary	Quantity
	Workers	610
Health Insurance	Legal dependents	979
TOTAL		1.589
Anti-flu shots at national level	Workers	381
Reimbursement of anti-flu shot expenses	Legal dependents	12
Eye doctor visits	Workers	154
Eye-glasses purchased	Workers	105
Dental Refund	Workers	338
Running Benefit	Workers	11
Emergency care agreements with	Workers and family	33

<sup>\* &</sup>quot;Double Presence" is a health hazard resulting from the increased work burden as well as by the difficulty to respond to work and family demands requirements simultaneously. Some of the benefits offered by Welfare can be extended to the families of the workers.

The absence of occupational patients (EP) has been a focus at Colbún, by establishing the "O EP" protocol, fulfilled in 2015. It should be noted that since such types of illnesses develop over time, they need to be identified and managed in a timely manner. Also, the complexity of establishing the occupational origin of a professional illness needs to be taken into account due to the absence of clinical symptoms that enable the linking of the symptoms to a specific job and its many causes.

clinics





# PUBLIC SAFETY MANAGEMENT IN OUR COMMUNITIES

Colbún-5.SO

All Colbún plants maintain a contingency plan for fires, earthquakes and natural disasters. Drills are held annually, in which entities such as firefighters, municipal or governmental emergency offices, police, and/or the Safety Mutual are involved.

The issue of public safety has been raised as a priority in several consultations with the communities where we operate. For this reason, the Angostura and Colbún plants (where we have our largest reservoirs) have implemented fences, signage, and various communication channels (meetings with authorities and neighbors, flyers, radio and media interviews) to communicate potential risk situations.

In addition, when visitors come to the plant, at entry point they are made aware of safety areas in the event of an emergency, and are required to be always accompanied by a guide who knows the protocols to be followed.

Despite the measures taken, in November 2015 we had to mourn the death of a mother and her son who accidentally fell in the Colbún Complex Return Channel. This situation was widely discussed with authorities and residents in the districts of Colbún and Yerbas Buenas. Based on those discussions, an action plan was defined that includes the implementation of additional physical protection in a sector of the Channel and the implementation of an information and education plan for neighbors to be implemented in 2016.

Additionally, in January 2015, the unfortunate death of a child occurred on the Quilaco beach, located on the shores of the Angostura Reservoir. It should be noted that the beach had lifeguards, designated swimming zone and warning signage.



### **COMMUNITY RELATIONS**

The table below shows the objectives and focus of our community and authorities relation strategy for the 20 districts where we operate:

#### FINAL OBJECTIVE

e, and Be Recognized, as a company that generates shared value in a sustainable way with its neighboring communities

<b>GENERATING</b>	
TRIIST	

### GENERATING OPPORTUNITIES

#### GENERATING FUTURE

Build and maintain associative and collaborative relations wit the community Maximize the positive impact of Colbún's business in the community, promoting the development of local economy

Collaboratively drive the development of the community by means of innovative and sustainable business projects

#### ENERGY FOR PARTICIPATION

#### ENERGY FOR LOCAL EMPLOYMENT

#### **ENERGY FOR EDUCATION**

Mapping of relevant players

Collect data on community priorities

Meetings with authorities and neighbors

Work and dialogue tables Visits to power plants and the House of Energy and the Visitors' Center

Participation in community

Alliance with union associations

Joint work with the local media

Más Energía newspaper

Collection of employability and employment (Colbún v/s local offer)

Training of local mannower

Definition of the minimum percentage of local manpower

Education in energy and the environment

Technical training in trades and leadership skills

Educational infrastructure and equipment

#### **ENERGY FOR ENTREPRENEURS**

Productive chain (for example: honey, maqui, fishing, etc)

Training in entrepreneuria skills

Entrepreneurial facilitation (infrastructure)

unds for entrepreneurs

#### ENERGY FOR LEADERSHIP

### ENERGY FOR LOCAL SUPPLIERS

#### ENERGY FOR A BETTER QUALITY OF LIFE

Training to neighbor associations' leaders

Support in the management

Data collection on goods and services (Colbún v/s local offer)

Training of local suppliers per Colbún's standards

Contracting of local

Prompt payment policies Financial support (guarantee funds) Sports programs

ports infrastructure a

Public spaces and recreational areas

Promotion of tourism



# GENERATING TRUST DIALOGUE WITH THE COMMUNITY AND SOCIETY

G4-SO1, G4-SO2, EU19

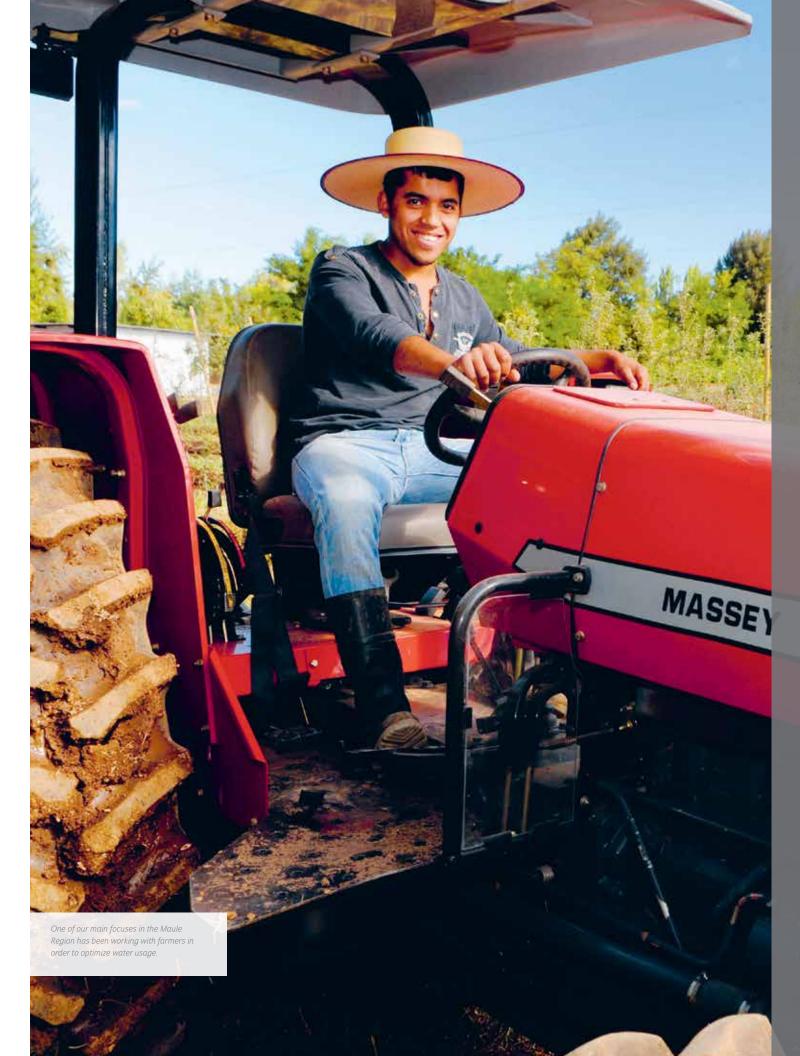
At Colbún, we understand that the communities surrounding our 23 plants can be or feel affected by our operation. Thus, based on dialogue and ongoing communication, we strive in order for the development of our business to have a positive impact and improve the quality of life of the communities where we operate and society in general. To that end, community initiatives have been implemented at all Colbún plants and projects. To identify the potential impacts of a new plant on neighboring communities and then determine how to reduce the negative impacts and enhance positive impacts, our Public Affairs Management is integrated into the process of project building from day

one, working hand in hand with Engineering and Projects Division Management and with Environmental Management. This approach is then maintained during the operation of the plant, working with the Generation Division Management.

The important role played by the Public Affairs Management should not lessen the importance of having each supervisor of projects under construction or operational power plants and every worker at our power plants and projects establish relationships of mutual trust and shared values with our neighboring communities.

#### **POTENTIAL NEGATIVE IMPACTS** (G4-SO2)

Project Construction	Hydroelectric Generation	Thermoelectric Generation
Noise	Alteration of land and water ecosystems	Hazardous and non- hazardous effluents and residues
Landscape alteration	Changes in river water flow rates	Air emissions and waste water
Relocation of communities (in some cases)		Noise
Dust		Water usage
Increased demographics		
Alteration of land and water ecosystems		
Archeological findings		



### DIALOGUE WITH THE COMMUNITY AND SOCIETY

#### WHY IS IT MATERIAL?

Trust relationships based on dialogue are essential to develop and maintain power generation projects. In this sense, we must be proactive against potential risks arising from the opposition against project development or Company operations.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Community dialogue is an aspect that impacts primarily our communities and society in general.

#### WHAT IS OUR OBJECTIVE?

We seek to better understand the vision that our communities have of themselves, of their hopes and concerns and of our company, and thus design projects consistent with our pillar "Community Relations Policy."

#### **HOW DO WE MANAGE?**

The processes of dialogue and consultation with communities are conducted regularly through the activation of various communication channels in the communities where we operate. Based on this dialogue, partnership initiatives that will benefit the hosting communities are implemented.

#### **HOW DO WE MEASURE?**

Percentage of centers where development, impact assessments and local community participation programs have been implemented (G4-SOI) / Stakeholders' involvement in the decision-making process related to project planning and infrastructure development (EUI9).

#### WHO IS ACCOUNTABLE?

The Sustainable Development Division, plant and project supervisors and people who work in them are accountable.

ANNUAL INTEGRATED REPORT COLBÚN 2015 SOCIAL PERFORMANCE

### **COMMUNICATION CHANNELS**

Within the framework of our Community Relations Strategy, our commitment to Generating Trust was channeled through several mechanisms of interaction and dialogue with our communities. Telephone contact, letters or emails with the supervisory level or the Public Affairs area are the most direct channel used by the Community to contact the Company. In 2015, we also implemented Colbún's website, an Ethics hotline (confidential and anonymous) to receive related allegations.



We have several tools to determine the views of the communities where we operate, some of which also serve as sources for dialogue:

#### PUBLICATION OF RESULTS AND CONSULTATION PROCESSES: In

order to inform communities in Coronel, Angostura and Maule about our operational, environmental and social results, we give an annual public account or report to guest community social leaders and members.



We conduct an annual survey on mass perception among neighbors and stakeholders that helps us identify the main concerns and issues of the communities where we operate. In 2015 we expanded the Corporate Reputation Index, adding to the survey our suppliers and contractors, investors, customers and vendors.



**(SGC):** In order to track the commitments undertaken with the community, we recorded in the Community Management System (SGC, per its acronym in Spanish) all actions associated with community affairs.

**NEWSLETTER + ENERGY:** In the districts of Colbún, Santa Bárbara, Quilaco and Coronel we distribute the community magazine "+ Energy", issued three or four times a year, and informing about topics of interest to the community as well as Colbún activities in the area. In 2015 we added the TV program + Energía TV in Coronel.

TOURING OF OUR FACILITIES: At Colbún, special emphasis has been given to the opening of our plants to the community in order to raise awareness of our operations and allowing for questions and clarifications. More than four years ago we created the Energy House at the Colbún Plant; this educational center is part of a guided tour to major facilities in that complex. This center was remodeled in 2015 with a new interactive exhibition, receiving more than 4,550 people, especially schoolchildren.

In the case of Santa María Plant, in 2015, the visitors program was enhanced to allow 1,800 people to visit the thermoelectric complex. In Angostura, the Energy Tour enabled 22,729 people to visit the Visitors Center and the facilities. It should be noted that in 2015 we hosted 129,469 visitors at the various attractions of the Angostura Park, while Angostura Biobío was awarded the distinction of Sustainable Destination by FEDETUR.

### **EARLY CITIZEN INVOLVEMENT**

During the new generation plant Project study process we at Colbún conduct early consultations with the community, in addition to the formal, legally required processes.

This allows us to report on the general features of the projects and collect the views of the community to this regard. The early points reported to stakeholders are mainly meetings with authorities (SEREMI, Mayor, municipal councils, among others), neighbors and civil society organizations.

adjustments, Colbún began an information

unions, neighborhood associations,

universities, NGOs and other regional

and workshops held to this date, and

interviews on radio and written press. In

total, in 2015 there were more than 156

a website (www.centralsanpedro.cl)

organizations. This materialized through

meetings, visits to the project area, lectures

meetings with stakeholders in the area, and

342 visits to the project. We also implemented

containing all the information on this initiative.

Topics raising maximum interest during the

design, construction times, need for a plant

of this kind in the region, location of the site,

job safety, job options for the community,

and impacts on fishing and rafting. In the

case of San Pedro, an ongoing worktable

has been implemented with the nearby

community consultation included project

and consultation process with municipalities,

indigenous communities and the Los Lagos district in order to identify potential areas where the project could contribute to a better quality of life and local development. Thus, agreements have been reached with most of the organizations of indigenous peoples in the area of the project's direct influence.



In the specific case of the San Pedro Project (Los Ríos Region), nine months before filing the EIA containing project

> **WORKTABLES:** we have worktables in various communities, providing instances for dialogue and joint work with our neighbors.

**CSR AGREEMENTS:** we have signed mutual cooperation agreements with municipalities in the areas where we

**ESCUELA DE LÍDERES:** this initiative seeks to strengthen the capacities of social leaders so they can better display their leadership and functions













OTHER INITIATIVES PROMOTED BY **GENERATING TRUST** 

#### LOCAL DEVELOPMENT

#### WHY IS IT MATERIAL?

Local development is one of the main expectations communities have faced with the presence of Colbún in their localities. We seek to be proactive in providing job opportunities and in identifying ways to contribute to local development associatively.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Local development is an aspect that primarily impacts our communities, society, local contractors and providers.

#### WHAT IS OUR OBJECTIVE?

Our purpose is to collaboratively support the development of the community through innovative, sustainable and high social impact projects linked to productive development, education and promoting quality of life. In addition, we seek to promote the development of the local economy, boosting employment and supporting suppliers to join our value chain.

#### **HOW DO WE MANAGE?**

In collaborative worktables we define the relevance assigned by people and local authorities to matters of Education, Entrepreneurship and Quality of Life. On this basis, we jointly seek and find social investment projects that can be implemented by encouraging resource management through applications to government or other funds.

#### **HOW DO WE MEASURE?**

We measure it as the percentage of expenditure in areas with significant operations corresponding to local providers (G4-EC9) / Social investment by

#### WHO IS ACCOUNTABLE?

Sustainable Development Division









### SOCIAL INVESTMENT PER TYPE OF INITIATIVE (Colbún-3.SO)

Investment Line	Sub-category	US\$	Number of Beneficiaries
Generating	Leadership	422,901	105
Trust	Participation	35,187	336
Total Generating Trust		458,087	441
	Quality of Life	1,481,019	43,000
Generating Future	Education Future	909,247	4,115
ruture	Entrepreneurship	1,841,338	1,512
Total Generating Future		4,231,603	48,627
Others	Others	437,087	7,824
TOTAL GENERAL		5,126,777	56,892

Note: Training delivered to local suppliers in 2015 is not included.

### **GENERATING OPPORTUNITIES**

G4-FC9. Colbún-3.S

### LOCAL EMPLOYMENT AND SUPPLIERS

In 2015, **Generating Opportunities** focused on maximizing opportunities for the hiring of local labor and suppliers. These are some examples:

#### LA MINA PLANT PROJECT (MAULE

**REGION):** The percentage of local unskilled labor reached 51% at December 2015.

**SANTA MARÍA COMPLEX:** 68% of permanent contractors belong to the towns of Coronel and Lota.

#### SANTA MARIA COMPLEX UNIT I

**MAINTENANCE:** 47% of contractors who worked on this project (1,264 people in total) belonged to the towns of Coronel and Lota.

**ANGOSTURA PLANT:** 45 own workers, 9% workers from Santa Bárbara and Quilaco and 87% from Los Angeles.

At Colbún, we promote the purchase of goods and services from local suppliers, to the extent that they meet the technical and commercial conditions required.

### GEOGRAPHICAL DISTRIBUTION OF PURCHASES (G4-EC9)

		2014	2	2015	
Locations	Amount MUSD	N° prov.	Amount MUSD	N° prov.	
International	36,431	183	36,431	183	
V - Valparaíso	18,584	243	18,630	244	
RM - Metropolitan	157,255	1,479	157,208	1,476	
VI - Lib. Bdo O'Higgins	1,080	49	871	46	
VII - Maule	5,582	164	5,780	163	
VIII - Biobío	32.797	792	32,816	800	
XIV - De Los Ríos	1,662	83	1,916	102	
X - Los Lagos	1,501	86	1,244	69	
Other Regions	4,734	49	4,730	46	
Total	259,625	3,128	259,625	3,129	

NOTE: The location of the supplier is determined by the taxpayer ID where they pay their duties, taxes and patents. It includes purchases of plants and projects, excluding the purchases of energy, capacity, tolls and generation fuels. As a reference, among the latter, three suppliers concentrate individually at least 10% of purchases. These suppliers are: ENAP Refinerías S.A. 16%; Empresa Nacional de Gas Natural, 11%; and Transelec S.A. 11%.

### **GENERATING FUTURE** COMMUNITY DEVELOPMENT PROGRAMS

In order to Generate Future, at Colbún we focus our work with the communities along three lines of work:

#### **ENERGY FOR ENTREPRENEURSHIP:**

programs designed to strengthen the capacities of our neighbors in areas production development and employability.

**ENERGY FOR EDUCATION:** programs designed to provide support in educational matters to youth and institutions close to our facilities.

#### **ENERGY FOR QUALITY OF LIFE:**

programs focusing on improving the living conditions of those living in the areas of influence of our plants and projects.

Following are some of the initiatives and programs in which these working lines materialize



#### **CUIDO MI PLANETA** (CARING FOR MY PLANET)

This program seeks to promote and encourage initiatives and projects linked to environmental care through training, contest funds, and recycling campaigns, among others. In 2015, under this program, 72 recycling and waste management workshops were held in the districts of Colbún and Yerbas Buenas, in addition to a project formulation workshop. Additionally, through the second version of the Environmental Management Fund Contest, support was given to the projects submitted by three neighbors associations, five educational institutions and a development committee. In Codegua, on the other hand, in 2015, through a partnership with the NGO inGEA, 43 educators were given Environmental Training Courses for Teachers, with a total of 108 teachers trained since the beginning of the program in 2013.



#### PROGRAMA-COLBÚN **VERTICAL PROGRAM**

Sponsored by Fundación Vertical and through a partnership with the municipalities of San Clemente, Colbún and Quillota, in 2015 Colbún implemented a program intended to encourage the comprehensive formation of youths living in those districts, with a special focus on activities linked to nature and outdoor life.

In the case of Colbún, this program resulted in the training of 30 teachers of the Ignacio Carrera Pinto High school, including leadership and teamwork techniques. In Quillota, the program "Development of Social Undertakings" enabled the formation of students in the formulation and preparation of sustainable initiatives designed to resolve social issues affecting the district.



#### **ENTREPRENEURSHIP CENTERS**

In partnership with NGO Acción Emprendedora (Entrepreneurial Action), Colbún has two centers, one in Coronel and another in Santa Barbara. In 2015 in Santa Barbara Acción Emprendedora received 3,773 people belonging to the district and to Quilaco. In addition, in 2015, the program "Energy for Entrepreneurs" of the Angostura Plant awarded funding for 74 projects in the area, totaling about 244 projects supported since the program started in 2012.

In Coronel, meanwhile, through the fourth annual version of the seed capital program "I Undertake in Coronel" a total of 25 projects in partnership with CIDERE Biobío was awarded in 2015 by the NGO Acción Emprendedora and the Coronel Municipality. In the area of training for productive development, 220 training activities were delivered to strengthen the skills linked to entrepreneurship.



#### SOCIAL DEVELOPMENT FUNDS

This program, directed to neighbors associations and other grass-root organizations seeks to provide visibility to high social impact projects. It operates mainly through contest funds, advisories and training to leverage public resources and training.

In 2015, in Coronel, Social Development Funds (FDS) delivered benefits to 11 neighborhood associations (900 people) and 36 functional organizations (1,200 people). In the five years since the commencement of this program, FDS implemented more than 50 projects executed by neighborhood associations in Coronel and 70 functional organizations projects. In 2015, in Santa Barbara and Quilaco, the FDS delivered benefits to 13 projects.

#### **PESCA FUTURO**

This program seeks to generate new income, job sources and employment opportunities for small-scale fishermen and their families in Coronel, through scholarships, training or funds to project associative projects.

In 2015, 104 training activities were delivered to fishermen under this program, while 12 production projects linked to fishing unions made it to the implementation stage or operation. In addition, 90 scholarships were awarded.



to a nature trail and a lookout, a visitors' center, arboretum and two public beach resorts.

#### **ALTITUDE REGULATION:**

In order to enable the edges of the river for tourism purposes, the RCA commitment was established in the sense that the altitude would not vary by more than one meter.

The Angostura Hydro Plant (del Biobío

Region) was conceived as a Project to

generate energy and create a tourist

destination. Some of the keys to the development of this project have been:

**ANGOSTURA PARK** 

#### **INFRASTRUCTURE:**

Three camping areas were built and let to local entrepreneurs, in addition

### SANTA BÁRBARA AND QUILACO

Private-public instance created in 2011 and which has defined the main guidelines for the promotion of "Angostura del Biobío" as a tourist destination; the Angostura Park is part of this project. Representatives from the municipalities of Santa Bárbara and Quilaco, SERNATUR, the local chamber of commerce and Colbún are involved.

#### **ANGOSTURA IN NUMBERS**

129,469

42,447

4,780

twitter followers (@ AngosturaBiobio) \*



### MAIN SOCIO-ENVIRONMENTAL CHALLENGES

#### WHY IS IT MATERIAL?

The socio-environmental challenges are a relevant risk when seeking to develop projects or operating a power generation plant. Managing and preventing conflicts, legal claims or conflicts with the local authorities are vital for success

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

The socio-environmental conflicts aspect is an issue that impacts our communities, investors, workers, contractors, suppliers, vendors and the society in general.

#### WHAT IS OUR OBJECTIVE?

Our goal is to take a proactive stance when confronted with eventual conflicts relating to the community, maintaining an open and transparent dialogue.

#### **HOW DO WE MANAGE?**

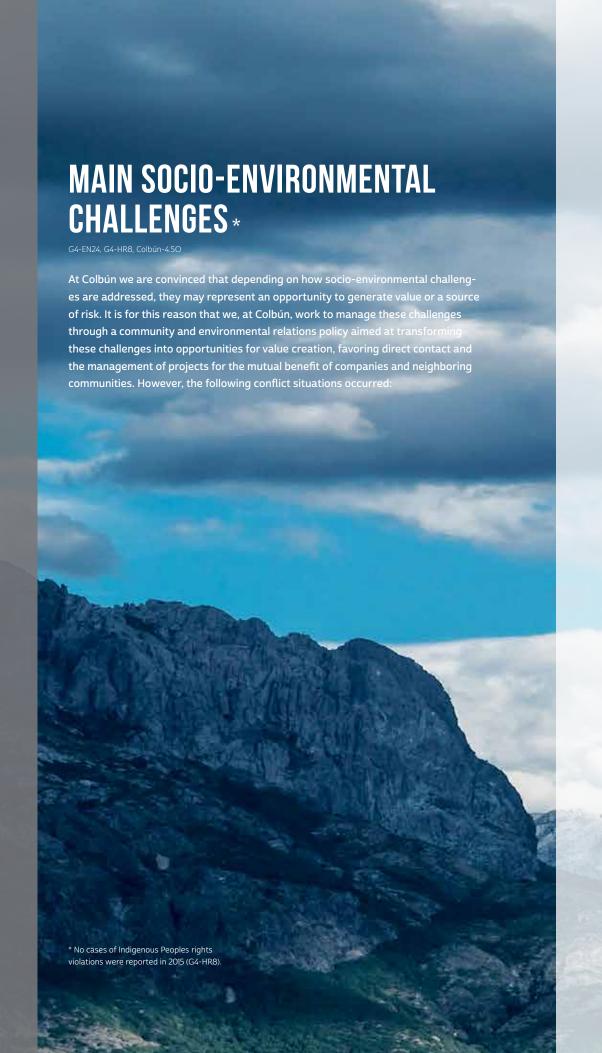
We have various mechanisms for dialogue and communication with communities. In the event of a conflict, we always remain open to dialogue, providing all the information necessary to those concerned or the respective authority and seeking ways to enable projects to be better inserted in their environment.

#### **HOW DO WE MEASURE?**

Describe the main 2015 socio-environmental issues and how they were addressed (Colbún-4.SO) / Number and total volume of significant spills (G4-EN24).

#### WHO IS ACCOUNTABLE?

Sustainable Development Division and



#### CONFLICT AND ZONE

#### DESCRIPTION

#### STEPS TAKEN BY COLBÚN

#### TRANSMISSION LINES

District of Colbún, Maule Region

In May of 2015, neighbors of the Colbún Plant demonstrated in front of the entrance of the facility to express their concern regarding the electromagnetic waves from power lines.

Colbún se reunió con estos vecinos Colbún met with the neighbors and local authorities, to explain that the Company does not own or operate any of the transmission lines associated to this demonstration and, therefore, it could not solve the issue. In a briefing meeting held in October with neighbors and opinion leaders in the district, Colbún again addressed these concepts.

It should be noted that the government promoted a work table with participation of residents, health agencies and other sectors in the area in order to address this problem.

#### **COLBÚN DAM ALTITUDE**

District of Colbún, Maule Region

For several years, groups of holiday-makers from edges of the Colbún reservoir have expressed their interest to set a minimum water level for this reservoir in the summer months in order to promote tourism. In 2014, the "Tourism Development Corporation of the Colbún Lake" was formed, bringing together tourism entities of the zone and the municipalities of Colbún and San Clemente.

In October of 2014, Colbún sent a letter to CDEC-SIC informing that the Company decided to initiate in 2016 a voluntary, temporary and experimental plan to harmonize the use of the Colbún reservoir waters with potential tourism in the area.

For reasons partially due to lesser mountain snow melting, and existing commitments with irrigators in the basin, towards the end of January, Colbún informed the community that it was not possible to maintain the levels proposed as a target. In fact, since January 6, the Colbún hydroelectric plant declared itself in depletion condition, so that the water leaving the reservoir was intended to fulfill the irrigation obligations with farmers.

The imposition of an all-event altitude could harm the primary purposes for which the Colbún Reservoir was created in the first place, namely, the generation of energy and the restoration of irrigation through canals.



**CONFLICT AND ZONE** 

### THERMOELECTRIC POWER PLANT OPERATION

District of Coronel, Biobío Region

#### DESCRIPTION

Coronel has had coal-fired plants for decades now.

In 2012, Colbún began operating Unit I of the Santa Maria Thermoelectric Complex, incorporating into its design technologies capable of meeting European emission standards; additionally, the Company has implemented a compensation plan which, in net terms, has been a positive contribution to the Great Conception Metropolitan Area. Aside from the objective facts, part of the population has opposed the development of power plants in the area. In September of 2015, a group of residents filed a complaint with the Superintendent of the Environment (SMA), considering that there was an overproduction of energy at Unit I. The same group filed an appeal for protection before the Concepción Court of Appeals for this reason, which was rejected in January 2016.

Colbún has declared that the plant does produce or sell the SIC (Interconnected System) more energy than authorized. More importantly, the plant has met and exceeded the environmental standards and emissions established in the

Environmental Qualification
Resolution and the Chilean new
emissions standard dated 2011, which
equals the emission parameters
required in Europe. Also, in 2015
a complaint was filed before the
Environmental Court of Valdivia by
six fishermen's unions in Coronel
and a group of fishermen from Lota,
who claim environmental damages
resulting from the operation of the
Santa Maria Plant. This claim has not
been served as yet.

#### STEPS TAKEN BY COLBÚN

Colbún has promoted various workshops in Coronel to maintain a permanent channel of dialogue with the community. Also, since 2013, the plant makes public accounts of its environmental and social performance. In the 2015 public address, all information regarding power generation authorized for the plant and all doubts to this regard were

With the same purpose, the Company regularly holds local radio and TV sessions, giving accounts of its environmental performance.

Guided tours of the plant have also been organized: in 2015, 1,800 people visited our Plant. Also, the Company is actively involved in the Coronel Council for Environmental and Social Recovery (CRAS) promoted by the Government.

Despite this communication effort and although the Plant is in full compliance with all environmental regulations, without any penalty or relevant sanctions in more than three years of operation, the public perception of power plants in Coronel remains negative.

#### **CONFLICT AND ZONE**

### SAN PEDRO PLANT OPERATION

Districts of Los Lagos and Panguipulli, Los Ríos Region

DESCRIPTION

San Pedro Plant Operation

Districts of Los Lagos and Panguipulli, Los Ríos Region In June of 2015, Colbún submitted the Environmental Impact Assessment (EIA) with the adjustments to the San Pedro Hydroelectric Project, an initiative with an approved RCA; the early construction works have commenced and resuming the project is subject to approval of the aforementioned adjustment by the competent institutions. The presentation of this EIA triggered the rejection of the project by some local players, including environmental groups, kayakers and politicians in the area.

#### STEPS TAKEN BY COLBÚN

In 2014, nine months before filing the EIA, Colbún initiated a series of presentations to trade associations, indigenous communities, neighbors associations, municipal councils and other players, in order to explain the adjustments made to the project and clarify doubts. When the EIA was filed, a web page was activated (www. centralsanpedro.cl) together with a program of guided visits to the project site. The environmental authority, however, decided in favor of the early termination of the EIA process in August of 2015, on grounds of lack of relevant and essential information (IRE). Colbún immediately began discussions and consultations with the technical services in order to prepare and complete the necessary information and satisfactorily respond to the requirements of the authorities.

### VEGETATION ANGOSTURA DAM

District of Santa Bárbara, Biobío Region The RCA of the Angostura Plant establishes the obligation to clear vegetation in the reservoir area, in order to prevent environmental impacts. However, in the particular case of the Aguas Blancas area, the authority allowed vegetation to be preserved to prevent erosion problems and to avoid hazardous tasks. Local residents expressed to Colbún that maintaining this vegetation generated difficulties in the use the reservoir, so they asked Colbún to clear the underwater vegetation and the land access to the reservoir.

A work table was formed between Colbún and the Aguas Blancas neighbors association. Colbún has conducted studies to find the best technical solution and has offered to clear the vegetation in the flood area, but the neighbors have manifested greater expectations. Hopefully, we will soon reach an agreement.



### **ENVIRONMENTAL PERFORMANCE**

Chapter "2015 Environmental Performance" shows the management of material aspects relating to Colbún's "nature capital" in Chile.

#### OUR PURPOSE IS TO GENERATE POWER WHILE MINIMIZING THE ENVIRONMENTAL IMPACTS AND USING THE RESOURCES IN AN EFFICIENT MANNER

**MATERIAL ASPECTS** 

**RELATED** RISKS

MANAGEMENT AND REGULATORY **FRAMEWORK** 

#### USE OF THE WATER RESOURCE

Payment of the green tax

#### **EMISSIONS AND CLIMATE CHANGE**

Legal claims against a project or a power

**BIODIVERSITY** 

#### **USE OF MATERIALS** AND EFFICIENCY

Emission of carbon credits

Participation in the Carbon Disclosure Program (CDP)

### **USE OF WATER RESOURCES**

G4-EN8, G4-EN10

The availability of the water resource is crucial for the development of our business and entails a risk due to the variability in precipitation patterns and changes in the water flow regimes.

(precipitations and water flow regimes), regulated hydroelectric power plants become more important (Colbún, Machicura and Canutillar stations), as they allow adjusting the supply, taking more load when consumption goes up and being an excellent complement for renewable technologies as the solar and wind power, which generation is variable. Colbún has set itself the task to build and operate its power plants pursuant to high environmental standards. For example, our reservoir hydroelectric power plants exceed the international efficiency standards established by the United Nations (more than 4 watts of installed capacity per square meter of flooded area) to qualify the projects as efficient in terms of water management and of low environmental impact. The goal is to maximize this indicator to minimize the environmental impact. Colbún strives to achieve this objective and has improved the relevant indicator at its power plants over time.

#### INSTALLED CAPACITY PER M2 OF FLOODED AREA

Colbún reservoir	10 W/ m <sup>2</sup>
Machicura reservoir	12 W/ m <sup>2</sup>
Angostura reservoir	44 W/ m²
San Pedro reservoir project	55 W/ m <sup>2</sup>



### **USE OF WATER RESOURCES**

#### WHY IS IT MATERIAL?

#### WHAT STAKEHOLDERS ARE **IMPACTED BY THIS MATERIAL** ASPECT?

The use of water is a material aspect affecting mainly our community, the environment and our shareholders. The availability of the resource and

#### WHAT IS OUR OBJECTIVE?

We have managed to gradually reduce water consumption in thermoelectric plant processes optimization of water usage in hydroelectric

#### **HOW DO WE MANAGE?**

our environmental performance.

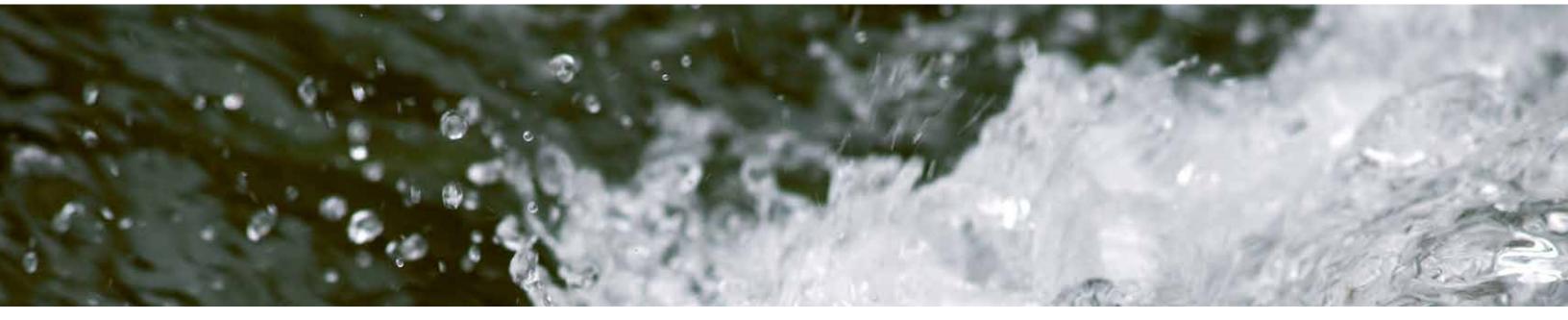
#### WHICH GLOBAL COMPACT PRINCIPLE IS THIS ASPECT RELATED TO?

Principles 7, 8 and 9: Companies must support the application of a precaution judgment regarding environmental issues / Adopt initiatives to

#### **HOW DO WE MEASURE?**

#### WHO IS RESPONSIBLE?

Engineering and Projects Division; Generation Division and Environmental Management belonging



The amount of water consumed (consumptive use) at Colbún, considering all plants, decreased by 8.5% in 2015; this is due mainly to the lower operation levels of Santa María Complex's Unit 1.

### TOTAL WATER INTAKE BY SOURCE (consumptive use) (G4-EN8)

Source	Metering Unit	2013	2014	2015
River/lake water (surface)	m3/year	3,506	10,760	9,115
Sea water (surface)	m3/year	233,554,495	343,330,691	313,124,801
Underground waters	m3/year	3,789,543	3,730,196	4,482,561
Water supply from municipalities or other water companies	m3/year	161,786	123,795	69,663
Total	m3/year	237,509,331	347,195,442	317,686,141



November.

Sea water is used to cool down Santa María thermoelectric power plant and is completely returned to its source.

Water coming from rivers, lakes and underground wells

is used for consumption at administrative offices and for cooling down processes, among others.

The lower water supply by sanitary or municipal water companies is due mainly to a reduction in the water consumption of Antilhue power plant, which in 2015 reduced its generation by 86%. The increase in the use of underground water is due mainly to the higher water consumption at Nehuenco and Los Pinos power stations that increased their generation as compared to the previous year. The use of sea water decreased by 10% as a

result of a slowdown in Santa María's Unit I thermoelectric power plant that entered a major maintenance process in

Water used in generating hydroelectric power is fully returned to its source. During 2015 there was a persistent drought in the central southern zone of the country and Colbún's water usage levels were 5% lower than in 2014. In addition, during 2015 an innovation process was developed in order to manage the Aconcagua basin water in a more efficient manner.







#### USE OF THE WATER RESOURCE AS TURBINE WATER

(only for power generation; non consumptive)

Power station	Metering unit	2013	2014	2015
Colbún	Million m3/year	9,826	13,326	12,893
Canutillar	Million m3/year	1,769	1,735	1,512
Carena	Million m3/year	289	285	285
Rucúe-Quilleco	Million m3/year	3,984	4,211	4,386
Aconcagua	Million m3/year	1,293	1,110	996
Angostura	Million m3/year	-	10,401	10,220
Total	Million m3/year	17,161	31,068	30,292

Note: Angostura started its testing phase and was commissioned in 2014.

#### **WATER SCARCITY AT THE ACONCAGUA BASIN**

As a result of the long-lasting water scarcity faced by the central southern zone of our country, in 2015 we sought to reduce our reliance on the use of fresh water.

Hence, in November of 2014, an automatic well control system was implemented at the Nehuenco Complex, with high standards that allow continuous operation, recording and

analysis to improve and optimize the use of water. Similarly, this monitoring system (SCADA) allows achieving greater levels of aquifer stability.

During 2015, we implemented two reverse osmosis pilot plants in order to process water purged from the cooling towers, and reutilize the water to reduce our demand.

The above brought about savings of up to 40% in the water consumed during the most critical months. Waste water, equivalent to 4% of the water captured in the Complex was delivered to third parties for reutilization purposes. This waste water reached 4% of the total water captured at the Complex.

#### HYDRAULIC SERIES: REUTILIZATION OF WATER

In order to promote energy efficiency and the sustainable use of its natural resources, Colbún has developed most of its electric generation power plants by reutilizing the waters that have been used by other Company's power plants situated upstream in the same basins (hydraulic series).

Consequently, at present close to 35% of the maximum water flows used by Colbún in its operations are used by more than a power generation plant owned by the Company, thus allowing a more efficient use of water.

# PERCENTAGE AND VOLUME OF WATER RECYCLED AND REUTILIZED BY HYDROELECTRIC POWER PLANTS (G4-ENIO) Metering 2013 2014 2015

	Metering unit	2013	2014	2015
Total turbine water	Mm3/year	17,160.6	31,068.8	30,291.8
Volume of "re" turbine water in series	Mm3/year	8,811.5	11,045.5	10,603
Percentage of reutilized water	%	51.3%	35.6%	35%

### OTHER ENERGY-EFFICIENT USES OF WATER

Hydroelectricity with water regulation potential allows generating other social benefits. This is the case of the water efficiency agreement signed with the Maule South Irrigators' Association, which permitted water savings for irrigation by 28% in 2015. This is a mutual benefit agreement, where irrigators are

compensated for saving water, while Colbún has more water available for power generation.

Colbún has also tapped on irrigation channels and on residual water to generate energy by efficiently using water without increasing the environmental impacts.

				Estima	ated Savings	
Name of Initiative	Description	Implemented at	Metering Unit	2013	2014	2015
water resource remnants from water flows, such as the	Development of new plants to use energy	San Ignacio	GWh	121	175	171
	San Ignacio, Chiburgo and San Clemente	Chiburgo	GWh	69	60	70
	plants	San Clemente	GWh	15	16	16









**SAN IGNACIO HYDROELECTRIC POWER PLANT (RUN-OF-THE-RIVER):** San Ignacio power plant takes advantage of the residual energy existing at Colbún-Machicura Complex's restitution channel, thus maximizing the use of energy and water of the complex with minimum environmental impact.

**CHIBURGO HYDROELECTRIC POWER PLANT (RUN-OF-THE-RIVER):** Chiburgo power plant was built in 2007 taking advantage of Colbún's facilities, which provides water for irrigation without disturbing its quality or quantity.

**SAN CLEMENTE HYDROELECTRIC POWER PLANT (RUN-OF-THE-RIVER):** This power station allows using the power losses generated along the Sanatorio Gorge, as it is used to return water to various irrigation channels. This power plant is registered under the United Nations' Clean Development Mechanism, resulting from CO2 emission reduction from its operation.

### USE OF MATERIALS AND EFFICIENCY

#### WHY IS IT MATERIAL?

Being able to generate the same amount of energy by using fewer materials and resources is relevant for the sustainability of the business and the protection of the environment.

# WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

The use of materials and efficiency is an aspect that impacts mainly our shareholders, clients, community and the environment

#### WHAT IS OUR OBJECTIVE?

Colbún seeks to move towards power generation based on high environmental efficiency indicators, in addition to technical and economic criteria

#### **HOW DO WE MANAGE?**

The Occupational Safety, Health and Environmental Management System helps us monitor and record our environmental performance.

#### ¿QUÉ PRINCIPIOS DEL PACTO Global están relacionados?

Principles 7, 8 and 9: Companies must support the application of a precaution judgment regarding environmental issues / Adopt initiatives to promote a greater environmental responsibility / Encourage the development and dissemination of environmentally safe technologies

#### **HOW DO WE MEASURE?**

Energy consumption reduction (G4-EN6)/Thermally efficient generation (2.6.3 DJSI) / Materials used per weight or volume (G4-ENI) / Investment in strategic supplies and main suppliers (Colbún-2.EC).

#### WHO IS RESPONSIBLE?

Business and Energy Management Division; Engineering and Projects Division; Generation Division and Environmental Management belonging to the Sustainable Development Division.

# USE OF MATERIALS AND EFFICIENCY

G4-EN6, G4-EN1, Colbún-2.EC

Over the past few years Colbún has made efforts to take advantage of residual energies and to incorporate generation equipment with state-of-the-art technology and greater efficiency, which has resulted in a better use of the resources.

One of the cases where this principle has been applied is Los Pinos power plant (combined cycle thermoelectric power plant). This unit reaches efficiencies in the order of 25 to 30% greater than other power plants of its kind, which enables it to contribute from 20 to 80 GWh/year more than a conventional facility for the same fuel consumption level.

#### SYSTEM ENERGY SAVINGS ATTRIBUTED TO COLBÚN'S POWER PLANTS

				Estin	nated sav	/ings
Name of the initiative	Description	Implemented at	Metering unit	2013	2014	2015
Optimization in the use of fossil fuels	Development of a thermoelectric power plant that shows efficiencies in the order of 25 to 30% greater than other power plants of its kind.	Los Pinos	GWh	17	39	45

If this efficiency is added the energy from irrigation waters and residual rainfall mentioned in the preceding paragraph (Chiburgo, San Clemente and San Ignacio power stations), an additional amount of approximately 300 GWh was obtained for generation in 2015 (4% up from 2014) associated with higher efficiency initiatives.









In turn, in connection with the use of materials, the main ones are fossil fuels used in our power plants. Lower diesel and coal consumption were recorded due to lower generation from Antilhue, Candelaria and Santa María thermoelectric power plants, added to the higher natural gas consumption resulting from the more extensive use of this fuel in Nehuenco Complex combined cycle units.

#### MATERIALS USED, BY WEIGHT OR VOLUME

U4-LNI)								
	Weight or Volume			Cost (in millions of US\$)			Supplier	
Material	2013	2014	2015	2013	2014	2015	2015	
Diesel Million m³	0.16	0.12	0.053	133	101.3	40	COPEC, ENAP, ENEX, Petrobras (Chile)	
Natural Gas Million m³	643	572	661	357.6	333.3	237	Metrogas S.A., ENAP (Chile)	
Coal Thousand tons	955	962	861	104.5	90.9	73	Various (Colombia, USA, Australia)	

#### **CLIMATE CHANGE**

#### WHY IS IT MATERIAL?

Risks associated with climate change can directly affect the sustainability of the power generation business; such risks include the availability and variability of water resources, sustained drought and amount of green taxes. These factors, combined with the commitments made in COP2I require the maintenance of increasingly efficient greenhouse gas emission management (GHG).

### WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Climate change is an aspect that impacts mainly our investors, communities and the environment.

#### WHAT IS OUR OBJECTIVE?

We seek to manage the climate change issues and maintain an emission factor below the SIC average. Regarding the other emissions, we seek to meet the requirements established under Supreme Decree 13/2011, issued by the Ministry of the Environment, establishing the local contaminant emissions standard (MP, NOx, SO2) for thermoelectric plants.

#### **HOW DO WE MANAGE?**

The main management measure for both GHG emissions and local contaminants is associated mainly to the use of highly efficient equipment, so as to produce the greatest amount of energy possible with the least amount of fuel, resulting in lower emissions.

In the specific case of the GHG emissions, these are managed through the development of a balanced generation mix between the thermoelectric and the renewable components, which enables Colbún to show an emission factor lower than the SIC average.

### WHICH GLOBAL COMPACT PRINCIPLE IS THIS ASPECT RELATED TO?

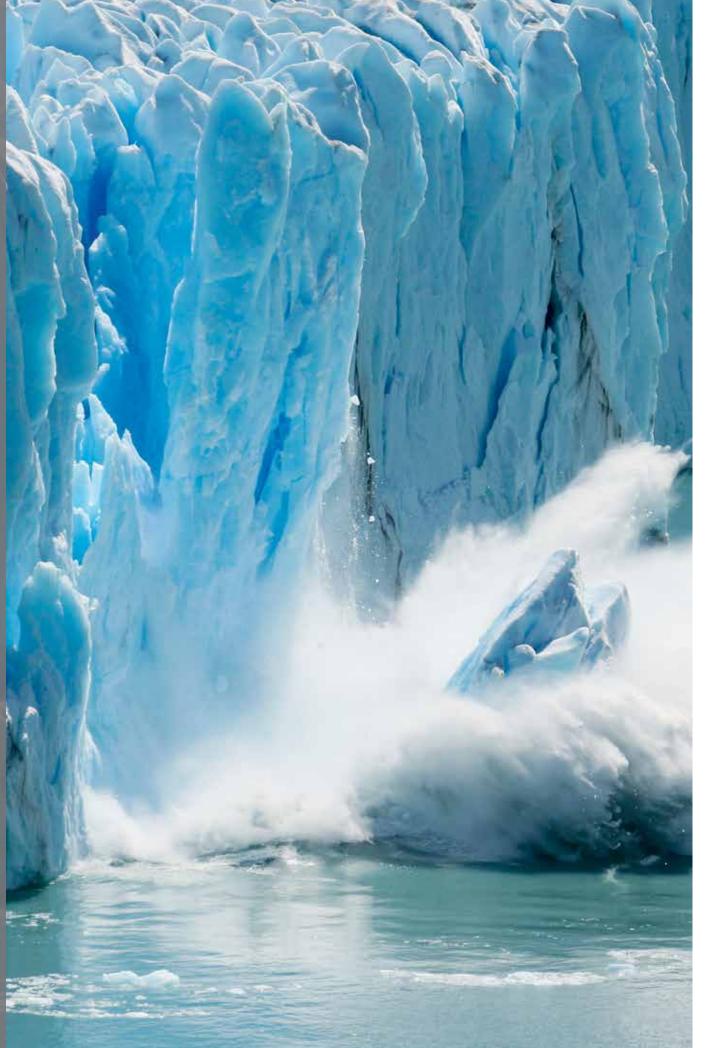
Principles 7, 8 and 9: Companies must support the application of a precaution judgment regarding environmental issues / Adopt initiatives to promote a greater environmental responsibility / Encourage the development and dissemination of environmentally safe technologies.

#### HOW DO WE MEASURE?

Direct GHG emissions ("Scope 1") (G4-ENI5) / Indirect GHG emissions during energy generation ("Scope 2") (G4-ENI6) / Other indirect GHG emissions ("Scope 3") (G4-ENI7) / Intensity of GHG emissions (G4-ENI8) / NOX, SO<sub>2</sub> and other significant emissions into the air per type and weight (G4-EN21).

#### WHO IS RESPONSIBLE?

Business and Energy Management Division; Engineering and Projects Division; Generation Division and Environmental Management belonging to the Sustainable Development Division.



### **CLIMATE CHANGE**

G4-EC2, G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19, EU5

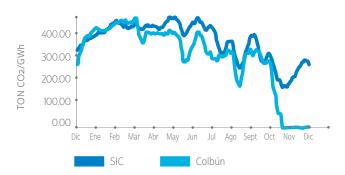
Climate change related risks can affect the Company. Faced with this scenario, we seek to reverse those risks and turn them into opportunities, working in a strategy that will allow us to better manage our business before the requirement to curtail CO2 emissions.

At Colbún we seek to generate a balanced generation mix, which means having a significant renewable energy component (hydro and NCRE) with an efficient thermal contribution, so as to maintain a CO2 emission factor below the SIC's average.

Also, our experience in the accreditation and certification of projects before the United Nations' Clean Development Mechanism and other standards, and the subsequent generation of carbon credits give us competitive advantages to develop more robust and profitable energy projects, which will enable us to be prepared in the face of potential emission reduction requirements.

An example of the above is La Mina hydroelectric power plant, which certification before the Verified Carbon Standard (VCS) we are currently working on to be able to issue carbon credits. This has been a pioneer project in Chile for being the first power plant that measures CO2 emissions from its construction stage.

#### COLBUN CO, EMISSIONS VERSUS SIC IN 2015



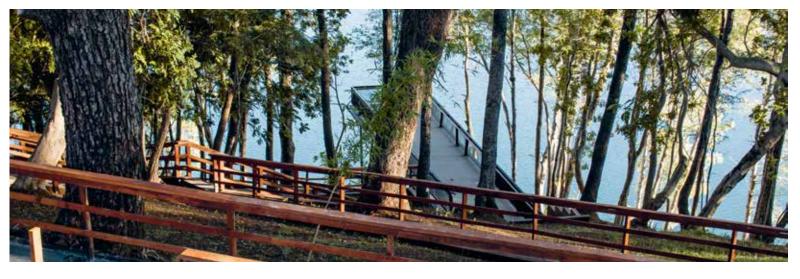
NOTE: Graph showing the behavior of Colbún 2015 emissions versus SIC, obtained from an internal Colbún tool. This application contains in its matrix all SIC plants and for each technology applied, emission factors are assigned per type of fuel.

#### POWER PLANTS CERTIFIED TO REDUCE EMISSIONS

At present, four of our power plants are registered with the Clean Development Mechanism, which in 2015 yielded CO2 reductions by 262,104 tons of CO2e. The issue of carbon credits during 2015 brought revenues by US\$1,134,773 to the Company. The San Pedro hydroelectric power plant adds to these four stations; San Pedro has been certified before the Verified Carbon Standard (VCS) to issue carbon credits once it is commissioned.

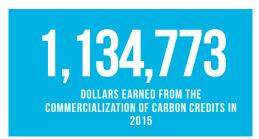
To help reducing greenhouse gas emissions (GHG) responsible for accelerating the climate change, Colbún has implemented a series of initiatives within this field over the last 15 years. To such end, we have stated that any eligible project shall be registered with the Clean Development Mechanism (CDM), or otherwise, with any voluntary market standard.

In 2002, our Chacabuquito power plant (25.7 MW, Aconcagua River) became the first hydroelectric power plant in the world to trade carbon credits.



#### **OUR CARBON FOOTPRINT**

The internal importance of Colbún's carbon footprint monitoring and measurement was ratified in 2009, upon becoming the first Chilean Company to report GHG emissions through the Carbon Disclosure Project (currently, CDP), which are informed from 2001 to 2015.



These documents are available at the CDP's website, where Colbún report was recognized in 2015 among the best in Latin America by the CDP. In addition, our 2010 - 2015 carbon footprint measurements have been verified by a third party, thereby enabling us to corroborate the scope and the quality of the calculations developed. A significant drop of GHG emissions was recorded in 2015 due to the lower generation by the Santa María I power station. Also, the operation of Angostura hydroelectric power plant allows us to maintain a balanced generation mix and to continue having a greenhouse gas effect emission factor (tonCO2e/MWh) much lower than the average Central Interconnected System's (SIC).

# GHG EMISSION FACTOR (G4-EN18) Emissions from fuel consumption 2015 Diesel (tonCO2e) 142,224 Coal (tonCO2e) 1,989,783 Natural Gas (tonCO2e) 1,293,975 Net Generation (MWh) 12,176,253 Intensity (tonCO2e/MWh) 0.281

NOTE: This indicator describes the behavior of Colbún's GHG emissions per unit of energy generated in all our facilities (tons of CO2e per MWh generated). Thus, by 2015 our GHG emission factor was 0.281 [tCO2e / MWh], representing a decrease of 5% over 2014, This decrease is due mainly to lower participation in the generation of the Santa Maria I thermoelectric power plant and the increased use of LNG at Nehuenco Complex and Candelaria

### COLBÚN CLEAN DEVELOPMENT MECHANISM (CDM) PLANTS

Hydroelectric Plants	Start Up Year	Installed Capacity (MW)	CDM Registration Year	2015 Emissions Reduction (ton CO2e)
Chacabuquito	2002	25.7	2007	31,491
Hornitos	2008	61	2008	77,366
Quilleco	2007	70.8	2008	143,761
San Clemente	2010	5.9	2011	9,486
Total				262,104

NOTE: A power generation plant becomes eligible for carbon accreditation systems when it shows that it reduces CO2 emissions, meets the requirements of "additionality" and "common practice", and contributes to the sustainable development of the power system. The CDM is a mechanism under the Kyoto Protocol, which certifies projects that help fight climate change, allowing them to emit carbon.

#### TOTAL COLBÚN GHG EMISSIONS IN CHILE, 2014-2015

(G4-LIVI)	-ENID, G4-ENIO, G4-ENI/)					
	Scope 1 (ton CO <sub>2</sub> e)	Scope 2 (ton CO <sub>2</sub> e)	Scope 3 (ton CO <sub>2</sub> e)			
	Direct Emissions	Indirect Emissions	Indirect Emissions			
	· Company vehicles	· Own electricity consumption	· Business trips			
	· Thermoelectric generation units		· Transportation of fuel to facilities.			
	· SF6 leaks from electrical equipment		· Maritime coal transportation			
	· CH4 emissions in reservoirs (they are		· Breakdown of organic waste			
	low in Chile)9		· Leased assets			
			· Coal and ashes movement			
			· Transport of employees			
2014	3,713,693	8,988	37,074			
2015	3,429,642	7,840	36,840			

Notes:

Scope 2: Although all of our power plants generate energy at some point in time, they also take a certain amount of power from the grid (especially during maintenance processes and to feed supplementary equipment which are far from the main station). The lower energy consumption from 2014 corresponds to less energy taken from the grid at Nehuenco and Los Pinos stations given their better operating levels during 2015.

Scope 3: For liquid fuels, consideration is made of the emissions associated with land transport from the refinery to the power plant using them; while for the liquefied natural gas no consideration is given to the maritime transport.

#### LA MINA HYDROFI FCTRIC POWER PLANT PROJECT

### **CARBON FOOTPRINT**



The first stage of the Project "Measurement of La Mina hydroelectric power plant carbon footprint" concluded in late 2015; this is a unique initiative in Chile that will allow discussing in depth the impact of the construction of a hydroelectric power plant on the climate change.

It entails a preliminary measurement of the Carbon Footprint (which started by late 2013) based on project information from basic and detail engineering to then compare the results with data monitored and reported by the main contracting companies throughout the construction stage (monitoring currently under development).

La Mina hydroelectric power plant Project: The preliminary results yielded a total of 43,000 tonCO2e associated with the complete construction of the power plant, including civil works, materials, earthworks, transport and land use change, among others. It is worth mentioning that these results confirm that the impact of hydroelectric power in terms of greenhouse gas effect emissions is completely marginal (considering the service life of this type of projects and the fact that they practically do not issue CO2 as a result of their operation), proving that this is an excellent technology alternative to transition our country toward a low carbon-producing economy.



# DEVELOPMENT OF NON CONVENTIONAL RENEWABLE ENERGIES (NCRE)

EU8

As a company, we think it is important for Chile to progress toward measures that promote the development of clean energies with low emission rates. Non-Conventional Renewable Energies (NCRE) have many positive attributes, namely, they do not generate greenhouse gases, can be inserted in adjustable blocks and are socially accepted.

However, the intermittence of wind and solar power entails that they must be supported by conventional power plants, so we should be cautious in forcing their penetration because they may entail additional costs to the system. Identifying and managing these costs is one of the main challenges of our power system according to Colbún.

Our company has two NCRE hydroelectric

Colbún owns 25.3 MW of own NCRE installed capacity and our purpose is to significantly expand this capacity. In order to expand the presence of this type of energies within our asset portfolio, in 2015 we set up a NCRE area inside the Business and Energy Management Division aimed at studying and developing solar and wind power projects without discarding other types of non-conventional renewable energies.

power plants (Chiburgo with 19.4 MW and San Clemente with 5.9 MW) in addition to six other mini-hydro power plants that are not officially qualified as such because they were built before the enforcement of the NCRE law. La Mina hydroelectric power plant (34 MW) will be the third NCRE station operated by Colbún.

Within this context, in 2013 Colbún signed two contracts linked to NCRE projects:

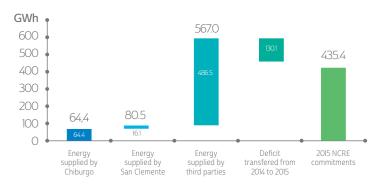
**Punta Palmeras wind farm:** 45 MW wind farm operated by Acciona Energía, situated in the municipality of Canela, IV Region.

Colbún signed a 12-year term contract to purchase the annual energy produced and the related NCRE attributes.

The subscription of this contract at a stabilized price – i.e., constant over time – allowed Acciona to build its first wind farm in Chile

Comasa Biomass Power Plant: this 26 MW power plant situated in the municipality of Lautaro, IX Region is operated by Comasa Generación. The contract subscribed by Colbún is also over a 12-year term and comprises the NCRE attributes.

#### 2015 NCRE BALANCE



Note: 1.5 GWh were carried over as surplus to the 2016 balance sheet.

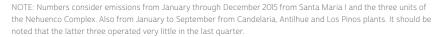




# ATMOSPHERIC EMISSIONS AND AIR QUALITY

G4-FN2





In 2015, Colbún reduced the gases issued by its power plants that have an effect on the quality of local air. The reduction in SO2 and particulate matter is due to the higher availability of natural gas at Nehuenco Complex, which translates into lower diesel consumption. The lower NOx emissions result from fewer operating hours of Santa María Complex's Unit I between November and December of 2015.

In 2015, we performed continuous monitoring of PM, NOx and SO2 emissions through the Measurement Systems already validated at Colbún's thermoelectric power plants. We implemented the Quality Assurance Plan, data reporting, auditing and Measurement System (CEMS, per its acronym in Spanish) revalidations. Such Plan corresponds to a specific requirement associated with the

compliance with the Emission Standards for Thermoelectric power plants (Supreme Decree 13/2011) from the environmental authority, which purpose is to ensure that emission monitoring systems already certified remain in optimum operating conditions.

In March of 2015, Santa María's Unit
I measurement system underwent a
recertification process, being validated by
the environmental authority for 2015 – 2016. It
should be noted that all continuous monitoring
systems shall be subject to quality assurance
tests on a daily, quarterly and annual basis.

As in Santa María, the CEMS of the generation units of Nehuenco Thermoelectric Complex and Los Pinos, Candelaria and Antilhue stations the necessary quality assurance tests have already been conducted.







It should be noted that by late 2015 the Environmental Superintendence (SMA) filed a claim against Colbún for non-compliance with Environmental Qualification Resolutions of the Nehuenco Complex in connection with atmospheric emissions, diesel operation under unauthorized conditions and liquid waste. The charges were mainly referred to situations, which, in the authority's opinion had taken place in 2013 and to a lower extent, in 2014. Regardless of the fact that most points identified by the SMA had already been resolved at the time of notification of the non-compliances or were not defaults as such and could have been the object of discharges, we presented a Compliance Program with the regulatory authority, which was approved early in 2016.

### SANTA MARÍA COMPENSATIONS PLAN AND AIR QUALITY

An outstanding case in this matter is the emission control of Santa María Complex's Unit I. This power plant features mitigation equipment that have allowed reducing by 99.9% the emissions of particulate matter and by 78% the emissions of sulfur dioxide (SO2), as well as low NOx burners to reduce nitrous oxide (NOx) emissions. All Santa Maria Complex emissions are within the standards – which are very similar to Europe's and in some cases, such as particulate matter, are close to 10 times below the regulatory limit.

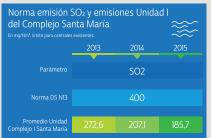
704 TONS

OF PARTICULATE MATTER
COMPENSATED BY SANTA MARÍA
POWER PLANT IN 2015

Within this context, and given that air quality is the result of many factors such as meteorological conditions and the behavior of other emitting sources (such as urban transport, the use of wooden logs with heating purposes and the operation of other industries), data show that breathable air in Coronel has not deteriorated since Santa María's Unit I commissioning in August of 2012. Moreover, when comparing air quality (PM) levels in winter and summer, a significant drop is seen in summer, which confirms that one of the main emission sources is the use of wooden logs for heating.

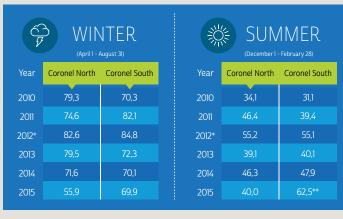
Due to the high efficiency of the filters already installed, and the fact that the authority proposed the removal of other particulate matter emitting sources upon authorizing Santa María power plant, in practice, the compensations plan has outperformed the emissions of this unit making a positive net contribution to the Great Concepción City in this regard.







#### CONCENTRATION OF MP10 CORONEL ug/Nm3



- \* The Santa María I plant started operating in August of 2012.
- The data submitted corresponds to the National Air Quality System (SNCA).
- \*\* In the summer of 2015 forest fires were recorded in Coronel-Patagual (Coronel South).

### **BIODIVERSITY**

Our environmental management shall always embrace, value and recognize biodiversity and the natural habitats where our projects and power plants are located.

Thanks to our power facilities and projects, we have the opportunity to know different ecosystems and natural habitats, and to recognize a rich variety of native fauna species. In order to bring each Colbún's worker, neighbor or stakeholder closer to this realm, we have edited and published a guide to help in the recognition of the most typical species. This document contains information from many of the species present from Valparaíso to Los Lagos Regions.

The following map summarizes the main measures adopted by Colbún in connection with biodiversity.

#### MAIN MEASURES RELATING TO BIODIVERSITY

Ν

#### ANGOSTURA PLAN

 In 2015 a degraded Roble-Raulí-Coihue (Quercus-Notophagus alpine-Nothofagus dombeyi) forest was replanted with native species as per the Preservation Plan with a total of almost 36 hectares.

 Native species were also established on the edges of the reservoir, along the Huequecura branch, in order to favor the habitat for the native fauna.

 Six fish species were detected in the Huequecura River and ten in the Biobío River, such as tollo (spotted dog-fish), bagre (cat fish), bagrecito (small cat fish), pejerrey (silverside) and puye (Brachygalaxias bullock).

#### 2 RUCÚE AND QUILLECO PLANTS

- A Geographic Information System (GIS) was developed to update legal backups of properties, define current uses, identify potential areas of state forest restoration and compensation, and evaluate the environmental values of the areas.
- Five fish species have been identified in the basins
  of the Laja and Rucúe Rivers: the freshwater
  dogfish and Concepción Carmelita (Myrichthys
  pardalis) (endangered), the small boy catfish and
  lake pocha (Percichthys melanops) (both
  vulnerable) and Chilean silverside (near
  threatened).

#### 3 CANUTILLAR PLANT

- The Canutillar plant, associated facilities and parts
  of the Chapo Lake are located in a highly valuable
  ecological area, such as National Park Alerce
  Andino and Reserva Nacional Llanquihue. For this
  reason, a SIG survey was conducted, which
  detected sectors with potential environmental
  hazards and possible actions were defined.
- After the eruption of the Calbuco volcano in 2015, which affected the Chamiza River, a study was carried out on the ecological conditions of the water systems in the basin in order to determine the effects on the physical-chemical conditions of the water and biologic units.

(\*) For further details, refer to the maps associated to each facility in the Append

#### ACROSS-THE-BOARD MATTERS

The presence of the Didymo invasive algae has been monitored in 2015 in the Laja, Biobío and San Pedro Rivers. In addition to the monitoring and communication with local Sernapesca offices, the Company maintains disinfection stations to control their possible spreading.

#### 4 NEHUENCO COMPLEX

Nehuenco I and II use water from a network of wells. To optimize the use of the resource, a control system and intelligent operation of the aquifer, its wells and the installation of two temporary reverse osmosis plants were implemented, resulting in water saving of about 100 liters / second.

#### 5 SANTA MARÍA PLANT

- In 2014 we tested the efficiency of the filters installed at the sea water intake; they operated with 99% reduction in the entry of biomass and no entry of fish. This situation was maintained in 2015.
- Sixty-eight point eight (68.8%) of the ashes generated by Unit I was reused as raw material for the cement and concrete industry, thereby reducing the disposal in the ash collection yard.
- The Complex has undertaken to compensate 100% of its particulate matter emissions. These measures have achieved a total reduction of 704 tons of MP in 2015.

#### 6 LA MINA PROJECT

- During the construction of the project, the felling of forest trees has been reduced by more than 50% as compared to the original plan (13 hectares of native forest).
- Helicopters are being used for the construction of the power line in the mountainous area of steep slopes to prevent the formation of roads or access tracks.
- In 2015, the communities of phytobenthos, zoobenthos, phytoplankton, zooplankton and fish in nine monitoring stations have been monitored. Among the species studied are the small dogfish and catfish, classified as "endangered" and "vulnerable."

#### 7 SAN PEDRO PROJECT

A monitoring plan has been in place since 2009 to study the condition of the native ichthyic fauna at the San Pedro River during the construction phase in order to get to know better the inter-annual natural dynamics of the ecosystem of the San Pedro River and the Project area.

#### **BIODIVERSITY**

#### WHY IS IT MATERIAL?

Power generation produces impacts on biodiversity both in the construction and operation phases of the projects Such impacts must be measured and properly managed in order to prevent those that could occur and minimize or compensate those that cannot be avoided.

### WHAT STAKEHOLDERS ARE IMPACTED BY THIS MATERIAL ASPECT?

Biodiversity is a matter that primarily impacts our communities and the environment.

#### WHAT IS OUR OBJECTIVE?

We seek for our projects and power plants to be inserted in the best possible manner in their local context, minimizing their environmental footprint and recognizing the existing environmental attributes.

#### **HOW DO WE MANAGE?**

Biodiversity is a variable present in the design of our projects that seeks to achieve geographical integration at the basin, sub-basin or project area in such a way that they add value and enhance the interaction of living systems. To such end, we conduct the necessary testing to know the species present, with special emphasis on protected species or categories of official conservation, and those located in areas that make up the National System of Protected Wild Areas (SNASPE). We seek to have a net positive impact on biodiversity.

### WHICH PRINCIPLE OF THE GLOBAL COMPACT IS THIS ASPECT RELATED TO?

Principles 7, 8 and 9: Companies must support the application of a precaution judgment regarding environmental issues / Adopt initiatives to promote greater environmental responsibility / Encourage th development and dissemination of environmentally safe technologies.

#### **HOW DO WE MEASURE?**

Surveillance, follow up and management plans for the land and water biota, measurement and monitoring of physical variables or parameters of the different habitats, forest and vegetation management (Colbún-13.MA).

#### WHO IS RESPONSIBLE?

Environmental Management belonging to the Sustainable Development Division



### **SCOPE**

During 2015, the most significant change in the size and structure of the Company was the purchase of a 51% stake in Fenix Power Perú, owner of a 570 MW combined cycle power plant based on natural gas located in Las Salinas, District of Chilca, Peru. However, as the purchase was done in the second half of December, this document only contains Colbún S.A. and its Chilean affiliates' performance, with no changes in the coverage or scope of the information submitted the previous year. Also, no indicators are shown for HidroAysén, Electrogas or Transquillota, as these are Colbún's related companies.

#### **METHODOLOGY**

This report was prepared in agreement with the principles of the International Integrated Reporting Council (IIRC), the compulsory requirements of the Superintendence of Securities and Insurance (SVS) and the Global Reporting Initiative (G4 quidelines and supplement for the power sector). Also, the Integrated Report is a progress communication (CoP) for the United Nations Global Compact.

If changes are made to the information reported these will be informed hereunder.

### **HOW THE ANNUAL INTEGRATED REPORT WAS BUILT**

G4-12, G4-18, G4-19, G4-20, G4-21 y G4-33

After four years of publishing our annual Sustainability Report, this | RELEVANT DOCUMENTS FOR THE POWER INDUSTRY AND year we wanted to give a step forward and publish our first Annual Integrated Report. This report integrates in a single document what we used to publish separately in the Company's Annual Report and Sustainability Report and is intended to communicate the way in which - within the context of its external environment - Colbún's strategy, performance, governance and projects create value within the short, medium and long-term.

#### MATERIALITY EXERCISE

Detail is provided of the construction process of the 2015 Annual Integrated Report, to which end we followed the "materiality data collection" process proposed by the fourth-generation methodology of the Global Reporting Initiative guidelines\*.

## RELEVANT DOCUMENTS FOR ENERGY INDUSTRY AND COLBUN + BUSINESS MODEL ANALYSIS SUSTAINABILITY CHALLENGES (LONG LIST) INTERNAL AND EXTERNAL STAKEHOLDERS CONSULTATION MATERIALS ASPECTS

\* 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 they have a significant influence on our stakeholders' decisions.

### COLBÚN

In order to identify the characteristics, forecasts and main challenges of the energy sector, we analyzed the following information:

#### RELEVANT DOCUMENTS FOR ENERGY INDUSTRY AND COLBUN

- ✓ CORPORATE OBJECTIVES COLBUN
- ⋄ DOW JONES SUSTAINABILITY QUESTIONNAIRE ANALYSIS
- ✓ ENERGY STRATEGY OF CHILE
- ✓ EDP. ISAGEN . ENDESA ANNUAL REPORTS (AMONG) OTHERS)
- ♥ PRESS RELEASE ANALYSIS

#### COLBÚN'S BUSINESS MODEL

G4-12

The business model allows identifying the manner in which a company transforms inputs into products and results, meeting the strategic objectives of the organization, managing its risks, strategically allocating its limited resources, measuring and tracking its operations and creating value within the short, medium and long term. The different business activities can have positive or negative impacts on the stakeholders and the environment.

#### SUSTAINABILITY CHALLENGES (LONG LIST)

After four years of publishing our annual Sustainability Report, this year we wanted to give a step forward and publish our first Annual Integrated Report. This report integrates in a single document what we used to publish separately in the Company's Annual Report and Sustainability Report and is intended to communicate the way in which – within the context of its external environment – Colbún's strategy, performance, governance and projects create value within the short, medium and long-term.

Profitability	Local development
Growth	Dialogue with the community
Ethics and Corporate Governance	Socio-environmental conflicts
Energy agenda and regulations	Evaluation and selection of suppliers
Availability and reliability of our power plants	Emissions and climate change
Business relationship standards	Effluents and waste
Career development	Biodiversity
Work environment	Use of water resources
Health and safety	Use of materials and efficiency
Diversity and non-discrimi- nation	Labor relations

### CONSULTATION TO OUR INTERNAL AND EXTERNAL STAKEHOLDERS

We think that the opinion of our stakeholders is decisive when it comes to defining the relevant aspects we should manage and communicate in this Integrated Report. This is why in December of 2015 and January of 2016, consulting companies interviewed our internal and external stakeholders, which was supplemented by perception surveys done from September to December of 2015 in order to collect data for our Corporate Reputation Index (CRI).

#### CONSULTATION TO OUR INTERNAL AND EXTERNAL STAKEHOLDERS

- ✓ INTERVIEWS TO FRONTLINE MANAGERS (3)
- ✓ INTERVIEWS TO BOARD MEMBERS (2)
- ✓ INTERVIEWS TO UNION LEADERS (2)
- ✓ INTERVIEWS TO POWER PLANT SUPERVISORS (2)
- ✓ INTERVIEWS TO INVESTORS (MONEDA ASSET MGMT AND SCOTIABANK)
- ✓ INVESTORS' PERCEPTION SURVEY (6)
- ✓ PERCEPTION SURVEY AT CORONEL (50) AND SANTA BÁRBARA-QUILACO (50)
- ✓ RELEVANT STAKEHOLDERS PERCEPTION SURVEY (73)
- ✓ CUSTOMER PERCEPTION SURVEY (5)
- ✓ KEY SUPPLIERS PERCEPTION SURVEY (2)
- ✓ CONTRACTORS AND VENDORS PERCEPTION SURVEY (142)

#### **MATERIAL ASPECTS**

G4-19, G4-20

After the consultation process, priority was given to the different subjects according to their relevance to the stakeholders interviewed and their impact on the Company's operations.

This Integrated Report will identify MATERIAL ASPECTS and answer will be provided as to why they are material, what is the stakeholder affected, what is the company's objective in connection with the subject, how it is managed, measured and who is the individual accountable inside the organization (G4-27)

#### PRIORITIZATION OF MATERIAL ASPECTS

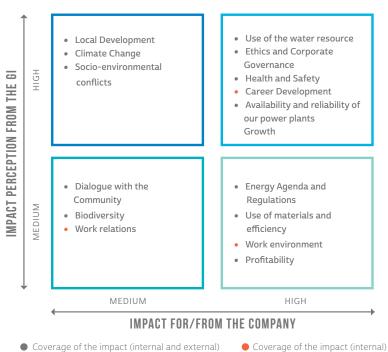
G4-2

The following Materiality Matrix was reviewed and validated by Thomas Keller, Colbún's Chief Executive Officer. The Board members were also presented with this Annual Report for review and comments.

The "Y" axis indicates the level of relevance our stakeholders assign to each topic. The "X" axis establishes the level of impact the topic can have on the Company, or – stated otherwise – the impact the Company's operation can have on the topic. For example, the efficiency in the use of resources and water is an aspect having a high impact potential on Colbún and, on the other hand, the Company's operation can affect the availability of the resource.

The coverage of the impact indicates whether it originates inside or outside the organization. For example, health and safety management can directly impact Colbún, but also the contractors and the communities. On the contrary, workers' career development does have a limited impact on the Company.

#### **MATERIALITY MATRIX**



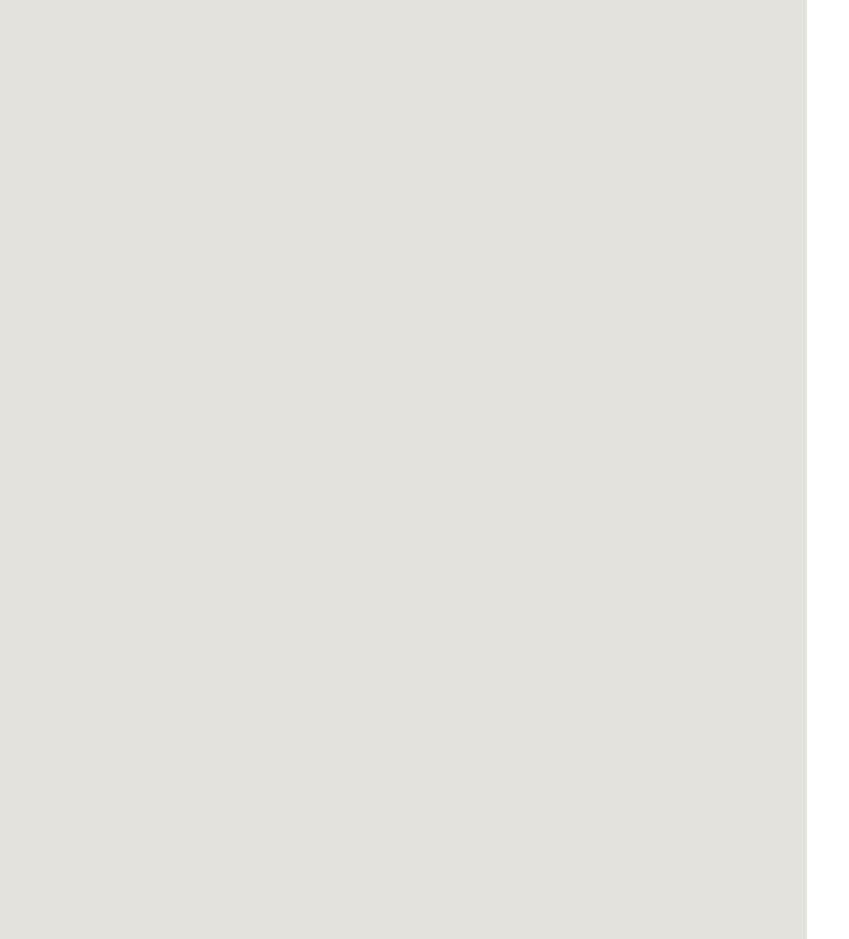
Note: This chart does not establish a relative priority of the topics inside the same box.

# VERIFICATION OF THE 2015 ANNUAL INTEGRATED REPORT

G4-3

The Annual Integrated Report was reviewed by the external auditor KPMG to ensure the reliability of the information provided herein and the compliance with GRI G4 (Global Reporting Initiative). This verification process included a detail review of the materiality data and enabled us to find opportunities for improvement.

It should be noted that the financial information relating to the Annual Report requirements by the Superintendence of Securities and Insurance is audited by E&Y.





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Independent Accountant's Report Colbún's 2015 Integrated Report

Sirs General Manager and Directors Colbun SA Present

We have reviewed the content and data related to the GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report for the year ended December 31, 2015.

Colbún's management is responsible for the preparation of the Integrated Report. Additionally, Colbún's management is responsible for the contents, affirmations, scope definition, management and information systems controls for reporting in the Integrated Report.

Our review was conducted in accordance with attestation engagement standards established by the Colegio de Contadores de Chile A.G. A review is substantially less in scope than an examination or audit, the objective of which is the expression of an opinion over the content and data related to the GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report Accordingly, we do not express such an opinion.

Contents and data related to GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report also reviewed considering the criteria established in the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines as described in the G4 version as well as its related Supplement for the Power Sector.

- Determine that the content and data related to the GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report are duly supported with sufficient evidence.
- Determine that Colbún has prepared the contents and data related to the GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report in accordance with the Principles on Content and Quality as established by the GRI guidelines in the G4 version and the Supplement for the Power Sector.

Our procedures consisted of management interviews and inquiries with the personnel involved in the development process of Colbún's 2015 Integrated Report and the preparation of the content and data related to the GRI indicators and other sustainability topics disclosed. In addition, we have performed other analytical procedures, that included:

- Interviews with Colbún's relevant personnel, in order to assess the 2015 integrated report preparation process, content definition and information systems used.
- Verification of the content and data related to the GRI indicators and other sustainability topics disclosed in "Colbún's 2015 Integrated Report" through supporting documentation provided by the administration.
- Analysis of collection process and internal controls of quantitative data related to GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report.
- Verification of data reliability using analytical procedures and testing on a sample basis and recalculations.
- Site visits to corporate offices and the Angostura, Santa Maria and Nehuenco, power plants.
- Review of the wording of the sustainability contents "Colbún's 2015 Integrated Report".

Based on our review, nothing came to our attention that caused us to believe that:

- Contents and data related to GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report are not duly supported with sufficient evidence.
- Contents and data related to GRI indicators and other sustainability topics disclosed in Colbún's 2015 Integrated Report have not been prepared in accordance with the Principles on Content and Quality as established by the GRI guidelines in the G4 version and the Supplement for the Power Sector.

The above translation is provided as a free translation from the Spanish language original, which is the official and binding version. Such translation has been made solely for the convenience of non-Spanish readers.

KPMG, Auditores y Consultores Ltda

Luis Felipe Encina. Partner

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#### LIABILITY STATEMENT

In compliance with what is set forth in the General Standard N° 283 of the Superintendence of Securities and Insurance, the subscribing parties declare under oath that the information contained in this Annual Report is faithful expression of the truth, and, as such, we undertake the corresponding legal liability.

> BERNARDO LARRAÍN MATTE PRESIDENTE

7.025.583-9

LUIS FELIPE GAZITÚA ACHONDO VICEPRESIDENTE

6.069.087-1

JUAN HURTADO VICUÑA

DIRECTOR

5.715.251-6

ARTURO MACKENNA ÍÑIGUEZ

DIRECTOR 4.523.287-5

LUZ GRANIER BULNES DIRECTORA INDESENDIENTE 7.040.317-K

JUAN EDUARDO CORREA GARCÍA DIRECTOR

12.231.796-K

ELIODORO MATTE LARRAÍN DIRECTOR

4.436.502-2

EDVARDO NAVARRO BECTRÁN DIRECTOR 10.36578

THOMAS KELLER LIPPOLD
GERENTE GENERAL

5.495.282-1

# **GRI G4 TABLE**

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-1	Declaration from the main individual accountable for the decisions on the relevance of sustainability for the organizational strategy.	4	Letter from Bernardo Larraín			Χ	X
G4-2	Brief description of the main effects, risks and opportunities inside the organization	4	Letter from Bernardo Larraín			X	X
G4-3	Name of the organization	2	Colbún in Numbers				X
G4-4	Most important Company trademarks, products and services.	3	Colbún 2015 in Numbers			Х	Х
G4-5	Place where the organization is located.		Appendices: Company identification				Х
G4-6	Description of the number of countries where the organization operates or conducts significant businesses having an impact on sustainability, which is the subject matter hereof.	2	Colbún in Numbers			х	×
G4-7	Ownership structure and legal requirements.	34	Ownership structure / Appendices Ownership structure				х
G4-8	Markets served.	3, 32	Colbún 2015 in Numbers				X
G4-9	Determination of the size of the company (number of employees; operations; net sales; capitalization; and number of products and services offered.	3	Colbún in Numbers			х	×
G4-10*	Headcount broken down by type of work contract, hourly schedule, region and sex. Report any significant change in the number of workers. Indicate the total number of subcontracted personnel.	85	Human Capital Development			×	х
G4-11*	Percentage of employees covered by collective agreements.  Total percentage of subcontracted personnel covered by collective agreements.	90	Labor Relations	Labor Relations		х	х
G4-12	Supply chain.	45	Our Business Model			Х	Х
G4-13	Significant changes over the period in terms of Company's size, structure, share ownership or supply chain.	34, 134	Ownership Structure / Scope				Х
G4-14	Indication of how the company addresses the precautionary principle, if applicable	45	Our Business Model		Principle 7		Х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-15	List of letters, principles or other external economic, environmental and social initiatives subscribed or adopted by the organization.		Appendices: Instances where we participate				х
G4-16	List of national or international associations and organizations the Company is part of.		Appendices: Instances where we participate				Х
G4-17	List of entities appearing in the consolidated financial statements. Please indicate if some of those entities are not shown in the Annual Report.	3	Colbún 2015 in Numbers				Х
G4-18	Description of the process used in determining the content of the Annual Report and the coverage of each Material Aspect.	135	How the Annual Integrated Report was Built			х	Х
G4-19	List of Material Aspects.		How the Annual Integrated Report was Built			Х	Х
G4-20	Coverage of each Material Aspect by the Company members.	135	How the Annual Integrated Report was Built			х	Х
G4-21	Coverage of each Material Aspect by the external stakeholders.	135	Appendices: How the Annual Integrated Report was Built				Х
G4-22	Consequences of the reformulation of the information provided in previous Annual Reports and their causes.	134	Appendices: Methodology				Х
G4-23	Significant changes in the scope and coverage of each Material Aspect.	134	Scope				Х
G4-24	List of the stakeholders related to our organization.	45	Our Business Model			Х	Х
G4-25	Reason behind the selection of stakeholders the Company has decided to work with.	45	Our Business Model			Х	Х
G4-26	Company's approach regarding the degree of involvement of our stakeholders.		Appendices: Dialogue and communication channels with our stakeholders			х	×
G4-27	Issues and problems resulting from stakeholders' involvement. Specify the key issues and concerns raised by each stakeholder.	135	How the Annual Integrated Report was Built			х	Х
G4-28	Period covered by the Annual Report.	2	Colbún 2015 in Numbers				Х
G4-29	Date of the last Annual Report.	2	Colbún 2015 in Numbers				Х
G4-30	Annual Report presentation cycle.	2	Colbún 2015 in Numbers				Х
<b>G4-31</b>	A contact point is provided to solve the doubts arising from the content of the report.		Appendices: Contact Information				х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-32	Indication of the «Conformity Option» selected by the organization and delivery of the GRI index of the selected option. Reference is provided to the external verification report.	134	Methodology				х
G4-33	Description of the policies and practices in force relating to the external verification of the Annual Report.	137	Verification of the 2015 Annual Integrated Report				Х
G4-34	Description of the governance structure of the organization, including the advisory committees of the Board. Indication of the committees responsible for the decision-making on economic, environmental and social issues.		Board of Directors			х	Х
G4-35	Description of the process whereby the highest governance body delegates its authority to the Upper Management and to specific employees in economic, environmental and social issues.	45, 72	Our Business Model / Risk and Opportunity Management			Х	х
G4-36	Indication of whether the organization features executive positions or individuals accountable for economic, environmental and social issues, and if the holders thereof render accounts directly to the highest governance body.	45	Our Business Model			x	х
G4-37	Description of consultation processes between stakeholders and the highest governance body relating to economic, environmental and social issues.	37, 45	Board of Directors / Our Business Model			х	х
G4-38	Members of the highest governance body and its committees	37	Board of Directors			X	Х
G4-39	Indicates whether the individual presiding over the highest governance body also holds an executive position.	37	Board of Directors			Х	Х
G4-40	Description of the designation processes and selection of the highest governance body and its committees.	37	Board of Directors			Х	Х
G4-41	Description of the processes whereby the highest governance body prevents and manages potential conflicts of interest.	69	Business Ethics and Corporate Governance	Business Ethics and Corporate Governance		х	х
G4-42	Description of the duties of the highest governance body and the Upper Management in the development, approval and update of the purpose, values, mission, strategies, policies and objectives relating to economic, environmental and social impacts affecting the organization.	70, 72	Ethics Based Culture / Risk and Opportunity Management			х	х
G4-43	Measures adopted to develop and improve the overall the highest governance body's knowledge and understanding on the economic, environmental and social issues	37, 45	Board of Directors / Our Business Model			Х	х
G4-44	Description of the performance assessment processes of the highest governance body. Indicate whether it is self-assessment.	37	Board of Directors			x	Х
G4-45	Duties of the highest governance body in identifying and managing the economic, environmental and social risks and opportunities.	72	Risk Management			x	х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-46	Duties of the highest governance body in the analysis of the efficiency of economic, environmental and social risk management processes.	72	Risk Manage- ment			х	Х
G4-47	Frequency of analysis by the highest governance body of economic, environmental and social impacts, risks and opportunities.	72	Risk Management			х	Х
G4-48	Committee or position charged with reviewing and approving the Company's Sustainability Report and with making sure all Material Aspects are properly explained and substantiated.		How this Annual Integrated Report was Built			х	х
G4-49	Process whereby all significant concerns are communicated to the highest governance body.	37	Board of Directors			Х	Х
G4-50	Nature and number of significant concerns communicated to the highest governance body.		Ethics Based Culture / Ethics Based Culture			х	Х
G4-51	Description of compensation policies for the highest governance body and the Upper Management.		Board of Directors			х	Х
G4-52	Process used in determining the compensation. Indicate if consultants are used to determine the compensation and if they are independent from the Management. Indicate any other type of compensated relationship between the consultants and the organization.	37	Board of Directors			x	х
G4-53	Explanation as to how the stakeholders' opinion is sought and considered in connection with compensation, including, if applicable, the results of voting processes on policies and proposals relating thereto.	37	Board of Directors				x
G4-56	Description of the values, principles, standards and norms of the organization.	69	Business Ethics and Corporate Governance	Business Ethics and Corporate Governance		х	х
G4-57	Description of internal and external advisory mechanisms to ensure an ethics business conduct.	69	Business Ethics and Corporate Governance	Business Ethics and Corporate Governance		х	×
G4-58	Description of the internal and external mechanisms to raise allegations on unethical or unlawful conduct or issue.	69	Business Ethics and Corporate Governance	Business Ethics and Corporate Governance		х	X
G4-EC1	Direct economic value generated and distributed	56	Financial Management	Profitability		Х	х
G4-EC2	Economic consequences and other risks and opportunities resulting from climate change and their impact on Company's activities.	123	Climate change				
G4-EC5	Relationship between the initial salary broken down by sex, and minimum local wage at sites where significant operations are developed		Appendices: Competitive compensations				

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-EC9	Money paid to local suppliers at sites with significant operations stated as a percentage	104	Local development	Local development			Х
G4-EN1	Materials by weight or volume	120	Use of materials and efficiency	Use of materials and efficiency			х
G4-EN6	Energy consumption reduction	120	Use of materials and efficiency	Use of materials and efficiency	Principle 8		х
G4-EN8*	Total water intake according to the source	115	Use of the water resource	Use of water resource		Х	Х
G4-EN9	Water sources that have been significantly disturbed by water intake						
G4-EN10	Total percentage and volume of water recycled and reutilized	115	Use of the water resource	Use of water resource	Principle 8		х
G4-EN11	Own, leased and locally managed facilities that are adjacent to, contain or are located in protected and non-protected areas with biodiversity value		Appendices: Biodiversity as compared to Colbún's indicator-13 MA	Biodiversity		х	х
G4-EN12	Description of the most significant biodiversity impacts of protected or non-protected areas resulting from Company's activities, products and services		Appendices: Biodiversity as compared to Colbún's indicator-13 MA	Biodiversity		Х	Х
G4-EN13	Protected or restored habitats		Appendices: Biodiversity as compared to Colbún's indicator-13 MA	Biodiversity		X	Х
G4-EN14	Number of species included in the red list of the IUCN and national conservation lists whose habitats are located in areas disturbed by Company operations, according to the species threatened with extinction		Appendices: Biodiversity as compared to Colbún's indicator-13 MA	Biodiversity		X	х
G4-EN15*	Direct greenhouse gas emissions (scope 1)	123	Climate change			Х	Х
G4-EN16*	Indirect greenhouse gas emissions upon generating energy (scope 2)	123	Climate change	Climate change		Х	Х
G4-EN17	Other indirect greenhouse gas emissions (scope 3)	123	Climate change	Climate change			х
G4-EN18	Intensity of greenhouse gas emissions		Climate change	Climate change		X	Х
G4-EN19	Reduction of greenhouse gas emissions	123	Climate change		Principle 8		Х
G4-EN21	NOx, SOx and other significant atmospheric emissions	128	Other atmospheric emissions and air quality			Х	Х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-EN22	Total waste water, by quality and final disposal		Appendices: Waste generated and disposed of				Х
G4-EN23	Total weight of waste, by type and treatment method		Appendices: Waste generated and disposed of			Х	Х
G4-EN24	Total number and volume of significant spills	108	Main socio- environmental challenges	Socio- environmental conflicts		Х	Х
G4-EN26	Identification, size, protection status and biodiversity value of water masses and the re- lated habitats significantly disturbed by spills and escorrentía resulting from Company's activities		Appendices: Biodiversity as compared to Colbún's indicator-13 MA	Biodiversity			х
G4-EN29	Monetary value of fines and number of non-monetary sanctions resulting from non-compliance with environmental laws and standards		Appendices: Detail of 2015 fines and sanctioning processes			×	х
G4-LA1*	Number and percentage of contracted employees and average employee turnover broken down by age, sex and region		Appendices: Turnover	Career development		Х	Х
G4-LA2	Social benefits for full-time employees not offered to temporary or part-time employees, broken down by significant activity location		Appendices: Work environment			Х	Х
G4-LA3	Job retention and reincorporation indices after maternity or paternity leave, broken down by sex		Appendices: Maternity/ paternity leave			Х	Х
G4-LA4	Minimum advance notice of significant operational changes and possible incorporation thereof to collective agreements		Appendices: Communication channels	Labor Relations			Х
G4-LA5	Percentage of workers represented in formal joint safety and health committees (management – employees) to help control and advice on occupational safety and health programs		Appendices: Safety and Health	Health and Safety		×	
G4-LA6*	Type and rate of injuries, occupational illnesses, days lost, absenteeism and number of work-related deaths, by region and sex	93	Safety and Health	Health and Safety		Х	х
G4-LA7	Workers whose profession displays high incidence or risk of illness	93	Safety and Health	Health and Safety		х	Х
G4-LA9	Average annual employee training hours, broken down by sex and work category	85	Human Capital Development	Career Development		Х	Х
G4-LA10	Skill management and ongoing training programs that promote workers' employability and help them manage the end of their professional careers.		Appendices: Training and development	Career Development		х	х
G4-LA11	Percentage of employees whose performance and professional development is evaluated regularly by sex and employee category.		Human Capital Development / Appendices: Performance Assessment	Career Development		Х	х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-LA12	Structure of governance bodies and payroll breakdown by employee category and sex, age, membership of a particular minority group and other diversity indicators		Board of Directors		Principle 6	X	Х
G4-LA13	Men and women base salary ratio by employee category and significance of activity location		Human Capital Development	Career Development	Principle 6	Х	Х
G4-LA14	Percentage of new suppliers examined based on work practices criteria		Appendices: our value chain				Х
G4-LA15	Significant, actual and potential negative impacts of work practices on the supply chain and measures adopted to address them		Appendices: our value chain				х
G4-LA16	Number of work-related allegations submitted, addressed and solved by means of formal allegation mechanisms		Appendices: Labor claims				х
G4-HR3	Number of discrimination cases and corrective measures adopted		Appendices: Human Rights		Principle 6		х
G4-HR4	Identification of power plants and significant suppliers whose freedom of association and right to subscribe collective agreements may be infringed or threatened and measures adopted to defend those rights		Appendices: Labor Relations		Principle 3		х
G4-HR5	Identification of power plants and suppliers with significant risk of child exploitation, and measures adopted to contribute to abolish child exploitation		Appendices: Human Rights		Principle 5		х
G4-HR6	Power plants and suppliers with significant risk of suffering forced labor episodes, and measures adopted to contribute to the elimination of all forms of forced labor		Appendices: Human Rights		Principle 4		х
G4-HR7	Percentage of safety personnel who have been trained in human rights policies or procedures		Appendices: Human Rights		Principle 2		х
G4-HR8	Number of reported cases of violation of indigenous peoples' rights and measures adopted	108	Main socio- environmental conflicts	Socio- environmental conflicts			х
G4-HR9	Number and percentage of power plants who have been the object of examination or impact assessment regarding human rights violation issues		Appendices: Human Rights		Principle 1		х
G4-HR10	Percentage of new suppliers examined in the basis of human rights criteria		Appendices: Human Rights		Principle 2		Х
G4-HR12	Number of human rights allegations submitted, addressed and solved through formal allegation mechanisms.		Appendices: Human Rights		Principle 1	Х	Х
G4-S01	Percentage of power plants where development, impact assessment and community involvement programs have been implemented.	100	Dialogue with the Community and the Society	Community dialogue		Х	Х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
G4-SO2	Power plants with significant potential or actual negative effects on local communities	100	Dialogue with the Community and the Society	Community dialogue		Х	Х
G4-SO3	Number and percentage of power plants where corruption and significant related risks have been detected and assessed	69	Business Ethics and Corporate Governance	Business Ethics and Corporate Governance	Principle 10	х	×
G4-SO4	Anti-corruption communication and training policies and procedures		Business Ethics and Corporate Governance	Business Ethics and Corporate Governance	Principle 10	х	х
G4-SO5	Confirmed cases of corruption and measures adopted		Business Ethics and Corporate Governance	Business Ethics and Corporate Governance	Principle 10	х	х
G4-SO6	Value of political contributions, by country and addressee					X	×
G4-S07	Number of claims relating to unfair competition, monopolistic practices or free competition and the result thereof	62	Safe, competitive and sustainable supply			х	Х
G4-SO8	Monetary value of significant fines and number of non-monetary sanctions resulting from non-compliance with environmental laws and standards		Appendices: Detail of 2015 fines and sanctioning processes			х	
EU1	Installed capacity, analyzed by energy source and regulatory regime.	3	Safe, competitive and sustainable supply			х	X
EU2	Net energy production broken down by energy source, country and regulatory regime.	62	Safe, competitive and sustainable supply			Х	Х
EU3	Number of residential, industrial, institutional and business customers.	62	Safe, competitive and sustainable supply				Х
EU4	Length of transmission and distribution lines by voltage.	3, 68	Colbún 2015 in Numbers / Safe, competitive and sustainable supply			х	х
EU5	Allocation of certified CO2 emissions analyzed by regulatory regime.	123	Climate change				Х
EU6	Management to ensure the short and long- term availability and reliability of power supply.	65	Availability and reliability of power plants	Availability and reliability of power plants	Principle 9		X
EU8	Research and development activities aimed at providing reliable and safe power supply and at promoting sustainable development.	127	Development of Non Conventional Renewable Energies (NCRE)		Principle 9		х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
EU10	Planned capacity versus forecasted power demand over the long-term, broken down by energy and regulatory regime.		Appendices: Growth perspectives	Growth			х
EU12	Transmission and distribution losses over the energy total, stated as a percentage.	68	The relevance of transmission			Х	X
EU13	Comparison between the biodiversity of disturbed habitats and biodiversity of transfer habitats.		Appendices: Biodiversity as compared to Colbún's indicator-13 MA	Biodiversity			х
EU14	Processes to ensure talent retention and renewal.		Human Capital Development			x	X
EU15	Percentage of employees who will be entitled to retirement within the next 5 to 10 years, broken down by employment category and region.		Appendices: Turnover				х
EU16	Policies and requirements relating to our own employees, contractor and subcontractors' safety and health.		Safety and Health			х	X
EU19	Stakeholders' involvement in decision-making process related to project planning and infrastructure development.	100, 103	Dialogue with the Community and the Society / Early citizen involvement	Community dialogue			x
EU20	Approach to managing the impact of transfers (local residents).		Appendices: Approach to manage the impact of transfers				х
EU21	Contingency planning measures, disaster and emergency management plan and training programs, and reclamation and restoration plans.	93	Safety and Health	Safety and Health			Х
EU22	Number of people transferred as a result of a facility expansion or the construction of a new project.		Appendices Social Performance - Local development				
EU25	Number of third parties injuries and fatalities involving Company's assets.	93	Safety and Health				Х
EU30	Average plant availability factor by energy source and regulatory regime.		Availability and reliability of power plants	Availability and reliabil- ity of power plants		Х	Х
Colbún-1. EC	EBITDA	56	Financial Management	Profitability		Х	Х
Colbún-2. EC	Investment in strategic inputs and main vendors	120	Use of materials and efficiency	Use of materials and efficiency			
Colbún-3. SO	Social investment by type of initiative	104	Generating op- portunities	Local development			Х

GRI Code	Indicator	Page	Section	Material issue	Global Compact	Dow Jones	Verificado por KPMG
Colbún-4. SO	Description of the main socio-environmental conflicts recorded this year and how they were addressed	108	Main socio- environmental challenges	Socio- environmental conflicts			х
Colbún-5. SO	Mechanisms to allow the community to notify or ask questions regarding spills or risk events	97	Public safety management in our communities				Х
Colbún-6. EC	Description of Company's project status, future growth-related perspectives and goals	76	Growth Perspectives	Growth			х
Colbún-7. EC	Colbún's vision of the energy agenda and new regulations	18	Draft laws and regulatory changes in Chile	Energy agenda and regulations			Х
Colbún-8. TR	Positions filled through internal contests	85	Human Capital Development	Career development			X
Colbún-9. TR	Dialogue and communication with our workers	90	Labor Relations				X
Colbún-10. TR	Work climate survey results / GPTW		Work environment				X
Colbún-11. TR	Reconciliation benefits and policies		Appendices: Work environment				Х
Colbún-12. TR	Percentage of workers in the healthy/ normal range health conditions	93	Safety and Health	Safety and Health			Х
Colbún-13. MA	Surveillance, follow up and management plans for the land and water biota, measurement and monitoring of variables or physical parameters of the different habitats, forest and vegetation management.		Appendices: Biodiversity	Biodiversity			х
NCG356	Diversity of the Board of Directors and the Organization	39	Board of Directors			Х	X
2.6.3 DJSI	Thermoelectric generation efficiency		Appendices: Use of materials and efficiency	Use of materials and efficiency		X	
1.1.10 DJSI	Requirements over the shares held by Company's management		Appendices: Who we are and what we do			X	
1.1.6 DJSI	Board of Directors effectiveness		Appendices: Board of Directors			X	
1.7 DJSI	Tax strategy		Appendices: Economic performance and governance			х	
2.7.2 DJSI	Reliability of power distribution and transmission		Appendices: Economic performance and governance			х	

NOTE: To review the Appendices, download the complete version at www.colbun.cl Biodiversity data is checked against the information reported by Colbun's indicator-I3.MA





# TABLE OF CONTENTS (APPENDICES)

- **157** Incorporation information
- **158** Chapter: The power sector
- 160 Chapter Colbún: what we do and who we are
- 179 Chapter: economic performance and governance
- 187 Chapter social performance
- 196 Chapter environmental performance

# 201 SUMMARY OF CONSOLIDATED FINANCIAL STATEMENTS

- 203 Report from the Independent Auditors
- 205 Report from the Account Inspectors
- 206 Consolidated Financial Statements Colbún S.A. and Affiliates
- 311 Reasoned Analyses of Consolidated Financial Statements
- 335 Summary of Financial Statements from the Affiliated Companies
- 366 Summary of Financial Statements from Related Companies

#### **INCORPORATION INFORMATION**

The legal incorporation of Colbún S.A., originally under the name of Empresa Eléctrica Colbún Machicura S.A. is recorded in public deed drawn up and formalized on April 30, 1986 by Santiago Notary Public Mario Baros González, whose abstract was enrolled in the 1986 Trade Registry of Talca folio 86 and reverse 86 and published in Chile's Official Gazette N° 32,484 dated May 31, 1986. At present, following the change of the company's business name, Colbún S.A. is inscribed in the Trade Registry of Santiago folio 12 773 N° 10 265 of 1999

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ANEXOS CAPÍTULO

# THE POWER SECTOR

## THE REGULATORY FRAMEWORK IN CHILE

Chile's electricity framework 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 nonconventional 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 into after July 1, 2013. This new system contemplates a gradual application of the standard.
- **Law No. 20,805** enacted in January of 2015, which improves the electric power supply bids for clients subject to price regulations.

#### **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, the Environmental Superintendence, the Environmental Courts 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 Board ("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 legislation breaks down the transmission system into three types: Trunk Transmission System, Subtransmission System and Additional Transmission System. A transparent, participative and regulated methodology was established to determine the tariffs associated with the use of the Trunk and Subtransmission Systems that subjects the use of Additional Systems to a bilateral negotiation between the owner and the user. The law grants Trunk Transmission and Subtransmission Systems the nature of public service and consequently this type of facilities is provided free access, i.e., the owners may not restrict the connection to any interested user. Transmission companies recover their investment through tariffs which, depending upon the type of transmission installation, are charged to generation companies, end customers or both. Trunk transmission and subtransmission tariffs are regulated and are set every four years by a decree issued by the Ministry of Energy.

## THE REGULATORY FRAMEWORK IN PERU

The Peruvian electric sector shows a well consolidated regulatory framework in force since 1992. This has encouraged a significant increase in power generation with a compound growth of 4.8% in installed capacity from 2000 to 2014. The main operational regulations and legal standards applicable to the power sector, where Fenix Power Perú S.A. develops its activities are as follows:

#### LAW ON ELECTRIC CONCESSIONS:

**Law No 25,844.** In agreement with this law, the Peruvian sector is divided into three large segments: generation, transmission and distribution. Starting in October of 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.

# 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 so as to avoid concentrations affecting free competition.

#### **REGULATION ON POWER SUPPLY BIDS:**

It is aimed at establishing the norms applicable to power supply bids in order to ensure well in advance the timely and efficient satisfaction of the bidders' demands, and to encourage competition and investment in new power generation plants within the legal framework.

# ENVIRONMENTAL PROTECTION REGULATION ON POWER SUPPLY ACTIVITIES (SUPREME DECREE NO. 29-94-EM):

The purpose of the regulation is to rule the interrelation of power generation, transmission and distribution supply activities and the environment, under the umbrella of sustainable development.

# COLBÚN: WHO WE ARE AND WHAT WE DO

## OWNERSHIP AND CONTROL

G4-

Shareholder	Corporate Tax- payer Number	No of shares	%
MINERA VALPARAISO S.A.	90.412.000-6	6,166,879,733	35.17
FORESTAL COMINCO S.A.	79.621.850-9	2,454,688,263	14.00
FORESTAL CONSTRUCTORA Y COMER- CIAL DEL PACIFICO SUR S.A.	91.553.000-1	34,126,083	0.19
FORESTAL Y MINERA CANADILLA S.A.	96.969.100-0	31,232,961	0.18
FORESTAL CAÑADA S.A.	96.969.110-8	22,308,320	0.13
FORESTAL BUREO S.A.	87.014.900-K	17,846,000	0.10
INVERSIONES ORINOCO S.A.	96.878.540-0	17,846,000	0.10
INVERSIONES COILLANCA LTDA.	77.320.330-K	16,473,762	0.09
TOTAL	77.525.550 IT	8,761,401,122	49.90

At December 31, 2015 Minera Valparaíso S.A., directly and through its affiliates listed below indirectly holds the control of the Company through single series shares. Minera Valparaíso S.A., is a corporation belonging to a business group (Matte Group) that holds investments in the electric power, financial, forestry, real estate, telecommunications and port services sectors, and whose ultimate controllers in the manner and proportions set forth below are the following individuals, all members of the families Larraín Matte, Matte Capdevilla and Matte Izquierdo:

Patricia Matte Larraín, ID N° 4.333.299-6 (6.49%) and her children María Patricia Larraín Matte, ID N° 9.000.338-0 (2.56%); María Magdalena Larraín Matte, ID N° 6.376.977-0 (2.56%); Jorge Bernardo Larraín Matte, ID N° 7.025.583-9 (2.56%), and Jorge Gabriel Larraín Matte, ID N° 10.031.620-K (2.56%);

Eliodoro Matte Larraín ID N° 4.436.502-2 (7.21%) and his children Eliodoro Matte Capdevila, ID N° 13.921.597-4 (3.27%); Jorge Matte Capdevila, ID N° 14.169.037-K (3.27%), and María del Pilar Matte Capdevila, ID N° 15. 959.356-8 (3.27%)

Bernardo Matte Larraín, ID N° 6.598.728-7 (7.79%) and his children Bernardo Matte Izquierdo, ID N° 15.637.711-2 (3.44%); Sofía Matte Izquierdo, ID N° 16.095.796-4 (3.44%), and Francisco Matte Izquierdo, ID N° 16.612.252-K (3.44%).

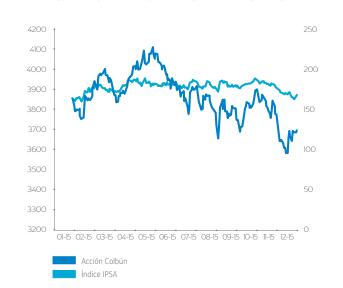
The shareholders mentioned above pertain by kinship to the same business group and have signed a joint action agreement which is already formalized.

Similarly, the Angelini group, through Antarchile S.A. (Corporate Taxpayer Number 96.556.310-5) holds 9.58% of Colbún's shares, which entitles it to appoint a Board member.

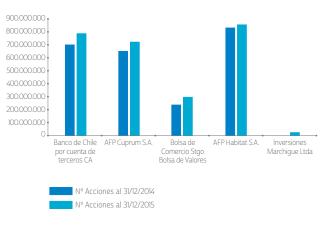
## **SHARE TRANSACTIONS**

The following graph shows the evolution of Colbún's share price and the IPSA price evolution over the last two years taking as base 100 at January of 2015.

#### COLBÚN SHARE PRICE AND IPSA INDEX EVOLUTION



#### 5 MAIN INCREASES IN SHARE OWNERSHIP 2014-2015

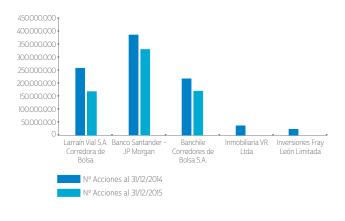


# SUMMARY OF COLBÚN'S SHARE TRANSACTIONS OVER THE LAST 2 YEARS

2014	Quarter	Units	Amount (CH\$)	Average Price (CLP/ Share)
	1	567,035,390	71,475,652,751	126
	2	608,015,603	84,745,993,158	139
	3	490,611,316	74,218,755,868	151
	4	640,428,318	101,851,804,801	159

2015	Quarter	Units	Amount (CH\$)	Average Price (CLP/ Share)
	1	590,664,049	102,963,309,117	174
	2	500,858,888	92,219,410,442	184
	3	522,308,756	94,755,706,467	181
	4	496,829,527	88,977,153,068	179

#### 5 MAIN DECREASES IN SHARE OWNERSHIP 2014-2015



ANNUAL INTEGRATED REPORT COLBÚN 2015 ANEXOS COLBÚN: QUIÉNES SOMOS Y QUÉ HACEMOS

Electronic Stock Exchange and the Valparaíso Stock Exchange. In the amounts in the stock exchanges where the Company's shares are first two Stock Exchanges our stock market presence is 100%, while on traded. the Valparaíso Stock Exchange our presence is 13.31%.

The Company's shares are traded on the Santiago Stock Exchange, the The following charts show information on the price, volumes and

Period	Number (shares)	Amount (CLP)	Higher price (CLP)	Lower price (CLP)	Average price (CLP)	Precio Cierre (CLP)
1Q15	24,946,122	4,255,509,023	183.96	159.45	172.46	182,80
2Q15	30,576,371	5,615,310,511	192.31	176.50	183.99	176,50
3Q15	24,109,823	4,372,579,212	188.21	175.41	180.89	181,03
4Q15	22,417,178	4,063,169,433	191.60	165.40	181.37	168,00
2015	102,049,494	18,306,568,179	192.31	159.45	179.86	168.00

Period	Number (shares)	Amount (CLP)	Higher price (CLP)	Lower price (CLP)	Average price (CLP)	Precio Cierre (CLP)
1Q15	565,713,425	98,707,055,750	184.90	157.21	174.66	184,49
2Q15	470,282,517	86,604,099,931	193.35	175.50	184.16	181,95
3Q15	498,198,933	90,383,127,255	190.00	171.96	181.57	179,36
4Q15	474,412,349	84,913,983,635	193.99	161.50	178.60	169,20
2015	2,008,607,224	360,608,266,571	193.99	157.21	179.53	169,20

Period	Number (shares)	Amount (CLP)	Higher price (CLP)	Lower price (CLP)	Average price (CLP)	Precio Cierre (CLP)
1Q15	4,502	774,344	172.00	172.00	172.00	172,00
2Q15	0	0	0	0	0	0
3Q15	0	0	0	0	0	0
4Q15	0	0	0	0	0	0
2015	4,502	774,344	172	172	172	172

# **DIVIDEND DISTRIBUTION**

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

# **REQUIREMENTS OVER THE SHARES** HELD BY THE COMPANY'S MANAGEMENT

1.1.10 DJSI

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 manner in which an executive shall purchase or sell Company's shares.

# **AFFILIATED COMPANIES**

# COLBÚN FILIALES

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.	100%	Luis Felipe Gazitúa A., Director of Colbún S.A.	Carlos Luna C., Generation Division Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.
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.	100%	Luis Felipe Gazitúa A., Director of Colbún S.A.	Carlos Luna C., Generation Division Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.
TERMOELÉCTRICA 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%	Luis Felipe Gazitúa A., Director of Colbún S.A.	Carlos Luna C., Generation Division Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.
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%	Legal Representative: Thomas Keller L., General Manager of Colbún S.A.		

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
RÍO 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%	Luis Felipe Gazitúa A., Director of Colbún S.A.	Carlos Luna C. , Generation Division Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.
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%	Luis Felipe Gazitúa A., Director of Colbún S.A.	Carlos Varea B.; Transmission Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.
COLBÚN DESARROLLO S.A.	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. Established in March 18, 2015. Colbún S.A. owns 100% of its shares.	100%	Thomas Keller L., General Manager of Colbún S.A.		Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of Colbún S.A. Sebastián Fernández C., Development Manager of Colbún S.A. Eduardo Lauer R., Engineering and Project Manager of Colbún S.A. Sebastián Moraga Z., Finance and Administration Manager of Colbún S.A.
INVERSIONES SUD SPA	Generation, transportation, transformation, distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy, without limitation.	Stock Company. Established on March 31, 2015. Colbún S.A. owns 100% of its shares.	100%	Luis Alberto Letelier H. Director of Colbún S.A.	Juan Eduardo Vásquez M, Energy Management Division Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
INVERSIONES ANDINAS SPA	Generation, transportation, transformation, distribution, supply, purchase, sale and any other activity relating to the commercialization of electric capacity and energy, without limitation.	Stock Company. Established on March 31, 2015. Colbún S.A. owns 100% of its shares.	100%	Luis Alberto Letelier H. Director of Colbún S.A.	Juan Eduardo Vásquez M, Energy Management Division Manager of Colbún S.A.	Luis F. Gazitúa A. Director of Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Juan Eduardo Vásquez M., Business and Energy Management Division Manager of de Colbún S.A.
COLBÚN PERÚ S.A. (formerly Inversiones Hacienda Montalbán 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%		Sebastián Fernández, Development Manager of Colbún S.A.	As the Owners: Bernardo Larraín M., Chairman of the Board Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Sebastián Fernández, Development Manager of Colbún S.A. As alternate directors Juan Eduardo Vásquez M., Business and Energy Management Division Manager of Colbún S.A., Rodrigo Pérez S., Legal Affairs Manager Colbún S.A. Eduardo Lauer R., Engineering and Project Manager Colbún S.A.

Company Name and Legal Purpose	Company Purpose	General Data	Direct and Indirect Participation	Chairman	General Manager	Board of Directors
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 or products; and the generation, transformation, 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%		Sebastián Fernández, Development Manager of Colbún S.A.	Bernardo Larraín M., Chairman of the Board Colbún S.A. Thomas Keller L., General Manager of Colbún S.A. Sebastián Fernández, Development Manager of Colbún S.A. Sebastián Moraga Z., Finance and Administration Manager of Colbún S.A. Mujeeb Ur Rehman Qazi Laurent Philippe Antoine Bernard Fortino Luis Martín Carranza Ugarte

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%		Mariella Paredes D.1	

#### NOTES

# **RELATED 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%	Carlos Varea B., Gerente de Transmisión de Colbún S.A.		Carlos Varea B., Gerente de Transmisión de Colbún S.A. Carlos Luna C., Gerente División Generación de Colbún S.A. Ricardo Santibáñez Z.
CENTRALES HIDROELÉCTRICAS DE AYSÉN S.A.	Development, financing, ownership and operation of a hydroelectric Project in the Eleventh Region of	Sociedad Anónima Cerrada. Constituida por escritura pública de fecha 4 de septiembre de 2006, otorgada en la Notaría de Santiago de don Eduardo Avello Concha. Colbún posee el 49% de la propiedad de esta sociedad.	49%	Juan Eduardo Vásquez M., Gerente División Negocios y Gestión de Energía de Colbún S.A.		Ignacio Quiñones S. Ramiro Alfonsín B. Carlo Carvallo A. Bernardo Larraín M., Presidente del Directorio de Colbún S.A. Luis Felipe Gazitúa A., Director de Colbún S.A. Juan Eduardo Vásquez M., Gerente División Negocios y Gestión de Energía de Colbún S.A.
ELECTROGAS S.A.	Buy, sell, invest and hold shares of Electrogas S.A.	Closed Stock Company. Established on March 11, 1999. Inversiones Electrogas S.A. is a company whose shareholders are	42,5%	Juan Eduardo Vásquez M., Gerente División Negocios y Gestión de Energía de Colbún S.A.	Allan Fischer H.	Juan Oliva V. Pedro de la Sotta S. Eduardo Lauer R., Gerente División Ingeniería Proyectos de Colbún S.A.

NOTE: The main commercial relationships between Colbún and its affiliates are energy purchase, sale and transport contracts. Such affiliates are fully consolidated and these contracts do not have an impact on the results. In connection with the relationship with all our affiliates/related companies, it should remain unchanged.

<sup>1</sup> On February 2016 Juan Miguel Cayo undertook the General Management, whereas Mariella Paredes, alternate General Manager resumed her position as the Corporate Affairs Manager.

<sup>-</sup> The main commercial relationships between Colbún and its affiliates are energy purchase, sale and transport contracts. Such affiliates are fully consolidated and these contracts do not have an impact on the results. In connection with the relationship with all our affiliates/related companies, it should remain unchanged.

#### SUBSCRIBED AND PAID IN CAPITAL, AFFILIATES AND RELATED COMPANIES

Affiliates	Currency	Subscribed Capital	Paid In Capital
Empresa Eléctrica Industrial S.A.	MUS\$	3,680,000	3,680,000
Sociedad Hidroeléctrica Melocotón Ltda.	MUS\$	1,114,000	1,114,000
Río Tranquilo S.A.	MUS\$	64,000	64,000
Termoeléctrica Nehuenco S.A.	MUS\$	212,000	212,000
Termoeléctrica Antilhue S.A.	MUS\$	3,332,000	3,332,000
Colbún Transmisión S.A.	MUS\$	20,503,000	20,503,000
Colbún Desarrollo SpA	MUS\$	160	160
Inversiones SUD SpA	MUS\$	10	10
Inversiones Andinas SpA	MUS\$	10	10
Colbún Perú S.A.	MUS\$	213,601	213,601
Inversiones Las Canteras S.A.	MUS\$	418,754	418,754
Fenix Power Perú S.A.	MUS\$	620,268	620,268

Related Companies	Currency	Subscribed Capital	Paid In Capital
Electrogas S.A.	MUS\$	21,266	21,266
Centrales Hidroeléctricas de Aysén S.A.	M\$	12,315,187	12,315,187
Transmisora Eléctrica de Quillota Ltda.	M\$	4,404,446	4,404,446

# PERCENTAGE THAT REPRESENTS THE INVESTMENT IN EACH AFFILIATED AND RELATED COMPANY OVER THE TOTAL ASSETS HELD BY THE PARENT COMPANY

Affiliates	Investment US\$	% over assets
Empresa Eléctrica Industrial S.A.	1,895	0.03%
Sociedad Hidroeléctrica Melocotón Ltda.	3,934	0.05%
Río Tranquilo S.A.	44,519	0.62%
Termoeléctrica Nehuenco S.A. *	-17,603	-0.25%
Termoeléctrica Antilhue S.A.	23,745	0.33%
Colbún Transmisión S.A.	93,187	1.30%
Colbún Desarrollo SpA	160	0.00%
Inversiones SUD SpA	10	0.00%
Inversiones Andinas SpA	10	0.00%
Colbún Perú S.A.**	211,907	2.96%

(\*) This Company has negative equity

(\*\*) Consolidated investment in the affiliated companies Inversiones Las Canteras S.A. and Fenix Power Perú S.A., with a stake of 51%

Related Companies	Investment US\$	% over assets
Electrogas S.A.	16,968	0.24%
Centrales Hidroeléctricas de Aysén S.A.	8,201	O.11%
Transmisora Eléctrica de Quillota Ltda.	10,843	0.15%

# BIOGRAPHIES OF COLBÚN'S BOARD MEMBERS

#### Vivianne Blanlot Soza

National ID card number: 6.964.638-7

Bborn 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.

#### Juan Eduardo Correa García

National ID card number: 12.231.796-k

Born in 1972. He is a civil engineer from the Pontificia Universidad Católica de Chile and a member of Colbún's Board of Directors since 2014. In addition, he is the General Manager of BICECORP S.A., the Chairman of BICE Vida Compañía de Seguros S.A., and the Vicechairman of the Banco BICE's Board of Directors; director of the Santiago Stock Exchange and of Inmobiliaria Almahue S.A.

#### Luis Felipe Gazitúa Achondo

National ID card number: 6.069.087-1

Born in 1955. He holds a Business Administration Major from the Universidad de Chile. He is director of Colbún since 2003, and since 2011 he is the Vice-chairman of the Board. In addition, he is the Chairman of Almendral S.A. and the Vice-chairman of Entel S.A. He is also a member of the following Board of Directors: Pesquera Iquique-Guanaye S.A., Orizon S.A., Corpesca S.A. and Minera Valparaíso S.A. and is also an advisor to the Board of Directors of Bice Vida Compañía de Seguros S.A.

#### Luz Granier Bulnes

National ID card number: 7.040.317

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 Gener as the Treasury Manager, Administration and Finance Manager of Norgener, and finally, as the Assistant Manager of International Investments.

#### Juan Hurtado Vicuña

National ID card number: 5.715.251-6

Born in 1948. He is a civil engineer from the Universidad de Chile and a member of Colbún's Board of Directors since 2007. He is also the Chairman of Entel S.A. and Pucobre S.A., and a Board member of Consorcio Seguros Vida S.A. and Santo Tomás S.A. He is also an advisor to the Board of Directors of the Foundation Arturo Irarrázaval.

#### Bernardo Larraín Matte

National ID card number: 7.025.583-9

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 in Business Administration from the University of Stanford. He undertook as Colbún's General Manager in 2005, and since April of 2012 he has been the Chairman of Colbún's Board. He is also a Board member of Minera Valparaíso S.A., Puertos y Logística S.A., and the Vice-chairman of ICARE, a non for-profit organization.

#### Arturo Mackenna Íñiguez

National ID card number: 4.523.287-5

Born in 1946. He is a civil industrial engineer from the Universidad de Chile and holds a PhD in Economics from the Massachusetts Institute of Technology. He joined Colbún's Board of Directors in 2006. He is also a Board member of Empresas CMPC S.A., Empresas lansa S.A., Almahue S.A. and the University Finis Terrae.

#### Eliodoro Matte Larraín

National ID card number: 4.436.502-2

Born in 1945. He is a civil industrial engineer from the Universidad de Chile, and obtained a Master in Business Administration from the University of Chicago. He joined Colbún's Board of Directors in 2011. He is also the Chairman of Empresas CMPC S.A. and member of the steering committee of Chile's Center for Public Studies (CEP). He is also a Board member of Foundation Juan Pablo II.

#### Eduardo Navarro Beltrán

National ID card number: 10.365.719-9

Born in 1965. He holds a Business Administration Major and a Master of Economics from the Pontificia Universidad Católica de Chile. He joined Colbún's Board of Directors in 2007. He is also the General Manager of Empresas Copec S.A., Pesquera Iquique-Guanaye S.A., and member of the following Board of Directors: COPEC S.A., Celulosa Arauco y Constitución S.A., Abastecedora de Combustibles S.A., Corpesca S.A., Orizon S.A. and Compañía Minera Can-Can S.A.

# **BOARD OF DIRECTORS' EFFECTIVENESS**

1.1.6 DJSI

Average attendance to Board of Directors' meetings	95%
Number of unrelated /independent Board members with 4 or fewer positions in other Boards of Directors	2

# 2015 DIRECTORS' COMMITTEE MANAGEMENT

During 2015, the Committee held 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 insomuch 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:

- Rental of new offices for the Company in Santiago with Bice Vida Compañía de Seguros S.A. 20-year term contract that will be enforced at the latest by June 30, 2018 for a value of approximately 0.51 UF/ m2, which must be added the standard equipment value that ranges between UF15 and UF19/ m2. The Committee reviewed the conditions of this contract as the directors Messrs. Bernardo Larraín M., Eliodoro Matte L., Luis Felipe Gazitúa A., Juan Eduardo Correa G. and Arturo Mackenna I. were elected directors of Colbún S.A. with the votes of the majority shareholder, which, in turn is the majority shareholder of Bice Vida Compañía de Seguros S.A.
- Financial contribution to the Sociedad de Instrucción Primaria (SIP), for an educational project, which is mainly aimed at promoting the music. The amount contributed was \$13,000,000. The Committee reviewed this transaction, as one of the directors of the Sociedad de Instrucción is Ms. Magdalena Larraín M., the sister of the Chairman Mr. Bernardo Larraín M. and the niece of the Director Mr. Eliodoro Matte L.
- Financial contribution to Chile's Center for Public Studies (CEP) for the study, promotion and debate of public policies within the economic, social and educational field, among others, aimed at fostering the development of the country. The annual amount contributed was UF 429 over 2015 and 2016, i.e. UF 858 in total. The Committee reviewed this transaction, as the President of the Steering Committee of Chile's Center for Public Studies is the Director Mr. Eliodoro Matte L, and the directors Messrs. Bernardo Larraín M. and Eduardo Navarro B. are members of the Advisory Committee of the said Study Center.

- Capital increase and later subscription of shares between Colbún S.A. and Centrales Hidroeléctricas de Aysén S.A., which purpose is mainly to provide for the lack of use of water rights and for attorneys' fees. Colbún's capital increase amounts to M\$2,499 million. This transaction was reviewed by the committee, as Messrs. Bernardo Larraín M. and Luis Felipe Gazitúa A., Chairman and Vice-Chairman of Colbún S.A., respectively, are directors of Centrales Hidroeléctricas de Aysén S.A.
- Consulting Services Contract between Colbún S.A. and MR Consult Limitada for the development, planning, management and control of the projects currently under development or to be developed by the Company, namely, transmission line projects, power substations, hydroelectric or thermoelectric power plants, and other industrial facilities pertaining to Colbún S.A. or to its affiliates. The contract is worth \$7 million per month, with a term of 12 months, and is the fourth time it is renewed. The contract was reviewed by the Committee as MR Consult Limitada is a company related to the director Mr. Arturo Mackenna I., who is at the same time its majority shareholder. In addition, the Directors' Committee conducted the following activities:

- Reviewed the Company's financial statements as at December 31, 2014;
- Met the representatives of the external auditing company Ernst & Young to discuss the scope of the services provided through 2014, accounting criteria used and the results of the audit as at December 31, 2014;
- Reported the activities conducted by the Committee during 2014, and issued the Annual Management Report;
- Evaluated the Management's proposals to designate the external auditing companies for 2015, and agreed to recommend the Board of Directors to propose the Shareholders' Committee to appoint as external auditors for the 2015 management period either of the two companies in the list, namely, Ernst & Young and KPMG;
- 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 two consulting services contracts with the external auditing company Ernst& Young regulated by Article 242 of Law 18,045 on the Securities' Market. The purpose of the contracts was the external verification of the Greenhouse Gas Emission inventory for 2014, and the performance of the due diligence of the Colombian company Isagen within the framework of the review of such company. Finally, in 2015, the Directors' Committee did not retain any consulting services or incur any expenses.

# SUMMARY OF SIGNIFICANT FACTS REPORTED TO THE SVS

#### JANUARY 30, 2015

The Board informed that on January 30th, 2015 the Regular Shareholders Meeting approved the Financial Statements as at December 31, 2014, reporting net profits by US\$79 million and EBITDA by US\$536 million. In addition, it provided information in connection with HidroAysén stating that the various assets grouped under Centrales Hidroeléctricas de Aysén S.A. were acquired and developed pursuant to the current institutionalism and to technical and environmental international standards; and, given the level of uncertainty faced by the project, the Company decided to post an impairment provision in the Financial Statements for its stake in HidroAysén S.A. by approximately US\$102 million.

#### MARCH 18, 2015

The Board informed that by means of public deed registered on March 18, 2015 a new affiliated company named "Colbún Desarrollo SpA" was incorporated with an initial capital of Ch\$100 million, fully subscribed and paid in by Colbún S.A.

#### MARCH 31, 2015

The Board informed it had agreed to propose to the Regular Shareholders' Meeting, among other matters, to distribute as definite dividend charged against the profits of the management period ended December 31, 2014, the sum of US\$ 12,764,661.38 equivalent to US\$0.000728 per share.

#### APRIL 23, 2015

The Board informed that at the Board Meeting held on April 22, 2015 the following agreements were made:

 Board Elections: The Board of Directors informed the renewal of its members being elected Mss. Vivianne Blanlot Soza and Luz Granier Bulnes, and Messrs. Bernardo Larraín Matte, Luis Felipe Gazitúa Achondo, Arturo Mackenna Iñíguez, Eliodoro Matte Larraín, Juan Hurtado Vicuña, Eduardo Navarro Beltrán and Juan Eduardo Correa García.

- 2. Designation of the external auditing company: Agreement was made to designate Ernst & Young Servicios Profesionales de Auditoría y Asesorías Limitada as the external auditing company for the 2015 management period, and
- **3.** Definite dividend: Agreement was made to distribute as definite dividend charged to the profits for the period ended at December 31, 2014, the total sum of US\$55,026,825.59 of which US\$42,262,264.21 correspond to the provisional dividend paid on January 6, 2015, while the difference by US\$12,764,661.38 of the definite dividend payable equals to US\$ 0.000728 per share.

#### APRIL 29, 2015

The Board informed that during a Shareholders' Meeting held on April 28, 2015 it had designated Mr. Bernardo Larraín Matte and Mr. Luis Felipe Gazitúa A. as the Chairman and Vice-Chairman of the Board, respectively. It also informed that its Board Committee, elected during the same meeting is made up of the following members: Mss. Vivianne Blanlot S. and Luz Granier B, who act as independent directors, and Mr. Luis Felipe Gazitúa A.

#### **DECEMBER 18. 2015.**

On such date, Colbún subscribed two Stock Purchase Agreements to acquire 100% of Fenix Power Perú S.A's shares. Peruvian power generation company owner of a combined cycle thermoelectric power plant based on natural gas situated in Chilca, Peru with an installed capacity of 570 MW, and which started commercial operations as a combined cycle power plant in December of 2014. The Board informed that the purchase would be made through a new Colbún affiliate in Peru, Inversiones Las Canteras S.A. (the "Buyer"). After the buyer meets certain conditions, the partnership will be joined by Blue Bolt A 2015 Limited, subsidiary of the fund Abu Dhabi Investment Authority (ADIA) with a participation of 36%; and by the Peruvian infrastructure investment fund SIGMA with a participation of 13%. It was informed that the price agreed over 100% of Fenix's shares amounts to US\$171.4 million. Considering a net debt of approximately US\$614.6 million (that includes a loan from one of the sellers by US\$224.1 to be paid by Fenix as at the Closing Date with resources provided by the Buyer), the price entails an asset valuation of US\$786 million.

# DIALOGUE AND COMMUNICATION WITH OUR STAKEHOLDERS

We participate in a sector that produces a fundamental asset for the economic development of the country and the quality of life of its inhabitants. This is why we seek to empathize and understand our stakeholders, through relationships that promote open communication based on trust and respect. The following communication channels are permanently available through the year.

Stakeholder	Communication and dialogue channels
Investors	Area dedicated to Investor Relations. Breakfasts and work meetings. National and international conferences. Perception survey. Consultation and allegation mechanisms linked to compliance with the Code of Business Ethics (hotline, email or manual)
Workers	Informative and participative meetings of members of the Organization and People Management team at the power plants.  Extended meetings of supervisors with the General Manager.  Meetings with unions and workers' associations.  Work climate survey specific to Colbún and Great Place To Work (GPTW).  Internal services survey.  Consultation and allegation mechanisms linked to compliance with the Code of Business Ethics (hotline, email or manual).
Environment	Early and voluntary citizen involvement.     Lectures at seminars and participative talks.     Environmental RSE Committee and Center of Leaders for Climate Change.     Dialogue worktables with community members.
Community and Society	<ul> <li>Dialogue worktables on general and specific subjects (e.g.: tourism, fishermen, indigenous communities, neighbors' associations, irrigators, agreements with municipalities, etc).</li> <li>Periodic meetings with authorities and neighbors.</li> <li>Early and voluntary citizen involvement in new projects.</li> <li>Visits to power plants, Colbún's Energy House and Angostura Visitors' Center.</li> <li>The Public Affairs team can be readily contacted in the field.</li> <li>Participation in union and regional associations (Board of Directors and worktables to address specific subjects).</li> <li>Periodic meetings with the national, regional and local media.</li> <li>Webpage www.colbun.cl</li> <li>Company's twitter @ColbunEnergia</li> <li>Work tables and dissemination of modifications to the San Pedro project. We also have a webpage www.centralsanpedro.cl</li> <li>Angostura del Biobío Facebook page.</li> <li>Energy House Facebook page</li> <li>Entrepreneurial Centers in Santa Bárbara-Quilaco, Coronel and Concepción (data collection of the community's productive development concerns and interests).</li> <li>Public addresses and reportability accounts at Santa María Complex in Coronel and Concepción.</li> <li>"Open door" policy on Fridays at Santa María Complex to take care of the neighbors' concerns and the community in general.</li> <li>Participative noise monitoring at Coronel.</li> <li>Perception survey at key communities: Quilaco, Santa Bárbara, Coronel.</li> <li>Perception survey of relevant players linked to all of our projects and power plants.</li> <li>Newspaper "+Energy" (contact email.document).</li> <li>Webpage (communications email)</li> <li>Reception of letters at the power plants.</li> <li>TV show in Coronel "+Energy TV"</li> <li>Consultation and allegation mechanisms linked to compliance with the Code of Business Ethics (hotline, email or manual).</li> </ul>

Stakeholder	Communication and dialogue channels
Contractors and Suppliers	<ul> <li>Participation at business forums</li> <li>Suppliers and bidders' website.</li> <li>Feedback delivery meetings.</li> <li>Perception survey.</li> <li>Consultation and allegation mechanisms linked to compliance with the Code of Business Ethics (hotline and email).</li> </ul>
Clients and Vendors	<ul> <li>Our commercial team provides personalized service to clients and vendors.</li> <li>Perception survey.</li> <li>Consultation and allegation mechanisms linked to compliance with the Code of Business Ethics (hotline and email).</li> </ul>

# **INSTANCES WHERE WE PARTICIPATE**

G4-15, G4-16

Red Pacto Global	Dasta Clabal bussa famontar al grasimiento sustantable y la regiona del distribuidad	2015
Red Pacto Giodai	Pacto Global busca fomentar el crecimiento sustentable y la responsabilidad cívica de empresas, las que se comprometen a adoptar los diez principios universales en sus acciones cotidianas, a nivel mundial.	2015
www.pactoglobal.cl	The UN Global Compact seeks to promote sustainable growth and corporate social responsibility; companies commit to adopt the ten universal principles in their daily activities around the world.	2015
Center for Business Sustainability	Promueve el monitoreo y medición del uso de los recursos hídricos, a nivel mundial.	2011
www.cbs.uai.cl	Identifies and provides solutions to the main sustainability challenges faced by the businesses in Chile.	2015
Water Disclosure Project (Water CDP) www.cdp.net/water	Promotes the monitoring and the measurement of water resources usage around the world.	2011
Programa Bota por mi Vida www.funda- cionsanjose.cl	Paper recycling at the offices of the Metropolitan Region and the 5th Region of Chile.	2011
Carbon Disclosure Project (CDP) www.cdp.net	Promotes the measurement of carbon emissions from private companies and government entities around the world.	2009
Centro de Líderes Empresariales para el Cambio Climático www.clgchile.cl	Fosters policies and actions to face the climate change in Chile.	2009
Concurso Junior del Agua www.juniordelagua.cl	Seeks to increase the interest, creativity and knowledge amongst high-schoolers to promote water awareness in Chile.	2009
Centro de Estudios Públicos (CEP) www.cepchile.cl	Its goal is the study and the dissemination of the values, principles and institutions that serve as the basis for a free society in Chile.	2008

#### UNION AND BUSINESS ASSOCIATIONS WHERE WE PARTICIPATE Description Stakeholders Member Organization Involved since Asociación Gremial de Riego y Drenaje Promueve el profesionalismo del sector de Riego y Drenaje, Socios relacionados 2015 (AGRYD) contribuyendo al uso eficiente de los recursos hídricos, a la protección del medio ambiente y al desarrollo agrícola sostenible Corporación Regional de Desarrollo Promotes the professionalism of the irrigation and drainage Associates 2015 del Biobío sector, contributing to the efficient usage of the water resources, the environmental protection and the sustainable agricultural Corporación Municipal de Desarrollo Seeks to facilitate the Company's social work in the municipality Associates, Board 2015 Coronel (CORCORONEL) of Coronel. of Directors and work committees 2015 Visión Valdivia Instancia de coordinación, promoción y difusión de esfuerzos Socios integrados de cooperación entre los sectores Privado, Público, Académico y Científico. Cámara Chilena de la Construcción Instance of coordination, promotion and dissemination of 2015 Associates (CChC) Valdivia integrated cooperation efforts between the private and public areas, the academia and the scientific world. Cámara de Comercio en Industria de Contributes to the well-being of Chilean families through the 2015 Associates Valdivia development of the construction sector and the private initiative, together with the improvement of the public sector, as promoters of progress and equity in the country. Asociación Gremial de Generadoras Represents the union interests of a large portion of the business Associates 2015 and industrial workers of Valdivia. Acción RSE 2011 Promotes the development of power companies in Chile. Associates, Board of Directors and work committees Asociación de Industriales del Centro Fosters CSR-related work and sustainable development in Chile. Associates, Board 2011 de Talca (ASICENT) of Directors, work committees, event sponsoring Cámara de la Producción y del Comer-Seeks to collaborate with the development of its associates and Associates 2011 cio de Concepción (CPCC) with the progress of the Maule Region. 2010 Corporación Industrial para el Desar-Fosters the productive development of Biobío Region. Associates rollo Regional del Biobío (CIDERE) Corporación para el Desarrollo de la Works for the development of the Biobío Region. Associates, Board 2010 Región de Los Ríos (CODEPROVAL) of Directors, work tables and CSR Instituto de Ingenieros de Chile Non-for-profit organization that conducts multi-sectoral work to Associates and 2010 promote the growth of Los Ríos Region. sponsoring of events Confederación de la Producción y del 2010 Promueve condiciones que permiten crear iniciativas Socios Comercio (CPC) empresariales y alentar la libre competencia y el crecimiento sustentable en Chile. Sociedad de Fomento Fabril (SOFOFA) Promotes the conditions that allow creating business initiatives Associates 2010 and promote free competition and sustainable growth in Chile. Corporación Pro Aconcagua Promotes and disseminates good business practices. Associates and 2009 advisor www.proaconcagua.cl Fosters the sustainable development of the Aconcagua Valley in Associates and 2009 Board of Directors the Valparaíso Region.

# **ECONOMIC PERFORMANCE AND GOVERNANCE**

### TAX STRATEGY

1.7 DJS

Companies in Chile must fully comply with their tax obligations stemming from the business activities 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.

Hence, 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 Superintendence of Securities and Exchange (SVS) contain an explanation of the tax policy and provide further detail on the Effective Tax Rate and the Tax Rate Reconciliation, among others.

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.

# THE IMPORTANCE OF TRANSMISSION

272 DI

Transmission reliability data correspond to the system's annual average reliability over a 5-year trailing window. Data was obtained in agreement with the methodology required for the power sector in the country, the Technical Safety and Service Quality Standard, which is compulsory for the sector.

In addition, at Colbún we are always carrying maintenance and refreshing activities to achieve the most reliable, safe and efficient operation possible.

	2013	2014	2015
Transmission reliability (as a % of time)	99.78%	99.64%	99.52%

# **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 and financing of terrorism.

	Board of Directors	Workers
Total members	9	962
Members informed of the anti- corruption procedures	9	962
% of members informed of anti- corruption	100%	100%
Members trained in anti- corruption procedures	3	143
% of members trained in anti- corruption	33.3%	14.86%

ANNUAL INTEGRATED REPORT COLBÚN 2015 ANEXOS DESEMPEÑO ECONÓMICO Y DE GOBERNANZA

## **RISK MANAGEMENT**

#### RISK MANAGEMENT POLICY

Our Risk Management strategy is aimed at reinforcing the principles of stability and sustainability, eliminating or mitigating the uncertainty variables 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 also 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 a Risk Committee with the support of the Corporate Risk Management in coordination with the other divisions of the Company.

The Company's activities are exposed to various risks that have been divided into business and financial risks.

#### **BUSINESS RISKS**

Risk management is a key strategic pillar to safeguard the Company's stability and sustainability principles, eliminating or mitigating the uncertainty variables that could affect compliance with its objectives. Comprehensive risk management includes identifying, evaluating and controlling the various risks faced by the different management areas of the Company, and also 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.

The risk management function is performed by a Risk Committee with the support of the Corporate Risk Management in coordination with the other divisions of the Company.

#### **Hydrological Risk:**

In Chile, 48% of Colbún's power plants are hydroelectric; hence, they are exposed to variable hydrological conditions. 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 inefficient thermoelectric power plants or otherwise purchase energy on the spot market.

This situation increases 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 thermoelectric power plants) 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, whose impact may be mitigated with water purchased from third parties and/or by operating these open cycle units.

In Peru, Colbún owns a combined cycle power plant and its business policy is aimed at selling such base energy. 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 greater natural gas availability than the Chilean power market.

#### **Fuel Price Risk:**

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 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.

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.

Consequently, the Company's exposure to the risk of fuel price variations is largely mitigated.

#### Fuel supply risks:

holds agreements with suppliers and has own storage capacity that delays. Alternatively, term and construction cost estimates include allows it high reliability in the availability of this type of fuel.

term contracts with ENAP and Metrogas, and in Peru, Fenix power of income relating to the delayed commissioning as a result of a loss, 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.

power plant, the company has called to new bids, inviting renown

#### Equipment failure and maintenance risks:

The availability and the reliability of Colbún's generation power plants Colbún has strived to harmoniously integrate the social and and transmission facilities are fundamental for the business. Therefore, environmental dimensions to the development of its projects. The Colbún's policy reinforces scheduled, preventative and predictive Company has developed a community relationship model enabling it to maintenance of its equipment, pursuant to the manufacturers' work with neighboring communities and the society in general starting recommendations, and holds insurance policies for all its physical an early citizen involvement and a confidence building process in the assets including coverage for physical damages and business early stages that extends throughout the project life. interruption losses.

In connection with this risk and although the Company keeps daily track of its operations, on October 16, 2015, while Unit 1 of Chacabuquito generation, where investment projects involve long development, power plant (25.7 MW) in Los Andes district, was undergoing execution and return on investment times. Colbún deems that that has kept it out of service. Its commissioning is expected for the power system and the adequate investment incentives. It is important first half of 2016.

#### **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 In connection with the supply of liquid fuels, in Chile the Company commercial policy that contemplates the effects of eventual project certain allowances. In addition, the Company's exposure to this risk is partially covered by the contracting of "All Construction Risks" Regarding natural gas supply in Chile, Colbún has subscribed medium insurance policies that provide both for physical damages and for 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 become more With respect to coal purchases for Santa Maria's unit I thermoelectric and more active in the search of more participation and relevance. In addition to the challenges involved in the incorporation of new international vendors and awarding the supply to competitive and infrastructure, the projects have to go through long and uncertain financially sound companies. The above is in line with an early purchase environmental approval processes, followed by litigations of the policy so as to substantially mitigate the risk of running out of this fuel. same characteristics. The above has brought about a reduction in the number of large size projects.

#### Regulatory risks:

Regulatory stability is fundamental for a sector such as power maintenance, an incident was recorded with a medium voltage breaker regulatory changes must be made considering the complexities of the to have a regulation that provides the industry players with clear and transparent rules.

ANNUAL INTEGRATED REPORT COLBÚN 2015 ANEXOS DESEMPEÑO ECONÓMICO Y DE GOBERNANZA

In Chile, the energy agenda promoted by the government contemplates FINANCIAL RISKS several regulatory changes, which could represent an opportunity or a risk to the Company depending on how they are implemented. Especially the (i) new transmission law that would redefine fundamental aspects in this segment, and a new structure for the CDEC that contemplates the consolidation of CDEC-SIC with the CDEC-SING, (ii) the Water Code reform, and (iii) the tariff equity law that seeks certain equivalence in the tariffs throughout the country to facilitate the development of new electric projects locally. The importance of transversal projects such as the so called "Labor Reform" should also be noted, particularly in what refers to the generation industry, as the qualification of "strategic companies" and the "minimum services" for workers' replacement in the case of a strike. Relevant sectoral initiatives to be outlined are (i) the definition of the country's long-term Energy Policy (2050) and (ii) the Law on Biodiversity and Protected Areas currently discussed in the Company's functional currency. Congress, among others.

energy industry. Among the regulatory changes we may mention the following: (i) Proposal to modify the Law on Electric Concessions regarding the definition of free and regulated customers and how the regulated commitments could be modified before an eventual shift from regulated to free customers, and (ii) Proposal to regulate the short-term market in connection with providing free customers with the possibility to have direct access to the spot price market.

The balanced development of the power market over the next few years will largely depend upon the quality of this new regulation and The Company mitigates its exposure to the mismatch of accounting the signals provided by the authority.

# Risk in the variation of electric power demand/supply and sale

The forecasted electric power demand is very relevant to determine the market price.

In Chile lower than forecasted medium-term growth in demand would bring about unbalance between the supply and the demand, thereby affecting energy prices. In addition, this unbalance could be further increased by the greater development of NCRE projects at more competitive costs that contribute efficient supply.

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) entailing a reduction of energy prices over the last few months

They are associated with the impossibility of conducting transactions relevant are the changes being currently discussed in Congress about or meeting commitments from operating activities due to the unavailability of funds, interest rate and exchange rate variations, bankruptcy of our counterparts or other financial market variables that may affect Colbún's equity.

#### 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 made 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

Our exposure to the variation of currencies other than the U.S. dollar In Peru, the authority is promoting certain modifications to the 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.

> 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.

> Consequently, as at December 31, 2015 the Company's exposure to this risk is guite limited, which translates into an exchange rate difference of approximately US\$1.8 million in quarterly terms, based on a sensitivity analysis with 95% of reliability.

#### 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 Liquidity risk: derivatives contracted is as follows

#### Financial debt profile

Interest rate	dec -15	sept -15	dec-14
Fixe	100%	100%	100%
Variable	0%	0%	0%
Total	100%	100%	100%

As at December 31, 2015, 100% of the Company's financial debt is contracted at fixed rate.

#### Credit risk:

The Company is exposed to credit risk as a result of a counterpart's or financial loss. Historically, all the counterparts that hold energy US\$518 million on financial interests and debt amortization. These 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 be financed with Colbún's own cash generation. periodic basis.

funds (of our bank affiliates) and term deposits in national and international banks. The former are short term mutual funds with a BBB- by Standard & Poor's (S&P), both with stable perspectives. term not exceeding 90 days known as "money market". In the case of banks, local institutions have a local risk rating equal to or greater Consequently, we deem that the Company's liquidity risk is currently than AA- and foreign entities have an investment degree international limited. risk rating. At the closing of the period, the financial institution that concentrates the greatest participation in cash surpluses reaches 19%. In connection with the existing derivatives, the Company's international counterparts have a risk rating equal to or greater than A- and the national counterparts have a local risk rating of AA- or greater. It should be mentioned that no counterpart holds more than 15% in notional terms.

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.

At December 31, 2015, Colbún holds cash surpluses by US\$1,061,5 million. invested in 60-day term deposits and in short-term mutual funds with a holding period of less than 90 days. Also, the Company has additional liquidity sources, namely: (i) a credit facility with local entities by UF 4 million, (ii) two bond lines registered with the local market by a total amount of UF 7 million, (iii) negotiable instruments registered with the local market for UF 2.5 million and (iv)uncommitted lines for approximately US\$175 million.

failure to meet its contractual obligations thereby causing an economic Over the next twelve months, the company shall pay approximately disbursements consider the refinancing of the current Fenix's bank debt by approximately US\$362 million that will take place during the first guarter of 2016. It also considers an amortization of US\$40 million on an international credit facility granted to Colbún S.A. This loan, together with the other interests and minor amortization amounts will

At December 31, 2015, at a national level Colbún was rated A+ by Fitch As at December 31, 2015, cash surplus investments are held in mutual Ratings and AA- by Humphreys, both with stable perspectives. At an international level, the company was rated BBB by Fitch Ratings and

ANNUAL INTEGRATED REPORT COLBÚN 2015 ANEXOS DESEMPEÑO ECONÓMICO Y DE GOBERNANZA

#### **RISK MEASUREMENT**

The Company periodically conducts analyses and measurements of its exposure to different risk variables, as presented in previous we may mention the committed and uncommitted credit lines. paragraphs.

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.

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 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.

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, among which

The interest rate variation risk is fully mitigated as 100% of the financial In connection with business risks, especially those relating to variations debt is contracted at a fixed rate (directly and through the use of

The exchange rate risk is also 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 In order to mitigate equipment failure or project construction risks, 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.

> Due to the above, as at December 31, 2015 the Company's exposure to this risk is quite limited that translates into an exchange rate difference of approximately US\$1.8 million in quarterly terms, based on a sensitivity analysis with 95% of reliability.

# DETAIL OF FINES AND SANCTIONING PROCESSES DURING 2015

G4-EN29, G4-SO8

During 2015 Colbún had no environmental fines of any nature or severity. Below is a summary of the main fines and sanctioning processes in other areas.

#### **FINE BY THE SEC:**

By means of Exempt Resolution No. 4233 of July 15, 2014, the Superintendence of Electricity and Fuel (SEC) fined Colbún with 1,800 U.T.M. (Monthly Tax Units) for lack of compliance with its obligation to was notified on December 2, 2015 that rejects the complaints filed by preserve the safety of the electric power service and to ensure the most economic operation for the whole group of electric utilities; the above whereby Colbún sought to reduce its exposure to the spot market. supplementary appeal is pending resolution. Colbún filed a claim of unlawfulness against this resolution, mainly arguing that the SEC had wrongly qualified the facts that motivated the fine, which was rejected by the Court of Appeals of Santiago. However, this court admitted the subsidiary petition filed by Colbún, consisting of a rebate in the fine applied, establishing it at 1,000 Monthly Tax Units.

#### APPEAL FOR PROTECTION AGAINST SANTA MARIA THERMOELECTRIC POWER PLANT:

A group of neighbors filed an appeal for protection with the Court of Appeals of Concepción, arguing that the operation of the power plant would affect their right to live in an environment free of contamination, as it would generate greater capacity than forecasted will open up the proceeding. in its environmental evaluation. They requested an injunction from the Court of Appeals, so that it orders the reduction of Santa Maria's gross capacity while the appeal is processed, which was rejected as the court did not have background information justifying such a measure.

Concepción, and the parties are waiting for the resolution from the Supreme Court.

#### TAX PROCEEDING AGAINST EMPRESA ELÉCTRICA INDUSTRIAL S.A. BEFORE THE INTERNAL REVENUE SERVICE:

By means of tax assessment No. 373 of August 30, 2010, the Regional Director of the Internal Revenue Service contested some entries of the 2007 annual tax return of Empresa Eléctrica Industrial S.A. (EEI). The initial amount assessed was \$403,409,933 (lawsuit case record 10-120-2010). Later, by means of tax assessments No.439, 440 and 441, all of August 29, 2011, the IRS challenged 3 entries of EEI's annual tax returns corresponding to the 2008, 2009 and 2010 tax periods. The initial amounts assessed were \$183,768,837, \$249,905,875 and \$254,555,414, respectively (lawsuit case record 10-541-2011) plus the fines and interests applicable thereto. The court issued a resolution in first instance, which the company. The company filed an appeal for reconsideration with a supplementary appeal against this sentence on December 14, 2015. as a result of the subscription of an energy purchase and sale contract As of today, January 20, 2016, the appeal for reconsideration with a

#### TAX CLAIM TERMOELÉCTRICA ANTILHUE S.A:

By means of tax assessment No. 257 of September 24, 2015, the IRS determined differences in first category taxes for the 2013 tax period for an amount of MMCLP 870, in addition to the fines and interests applicable thereto that was challenged by means of a voluntary administrative reconsideration (RAV). On December 30, 2015 the Company was notified of the rejection of the voluntary administrative reconsideration by the IRS, after which it filed a Tax Claim with the Tax and Customs Courts (TTA) of the Metropolitan Region. The claim was filed on January 14, 2016, and Colbún is waiting for the resolution that

#### SANCTIONING PROCEEDING BY THE SMA AGAINST NEHUENCO THERMOELECTRIC STATION:

On November 18, 2015 the Environmental Superintendence (SMA) filed This appeal for protection was dismissed by the Court of Appeals of charges against Colbún for a total of 14 defaults of the environmental standards as a result of the operation of Nehuenco Thermoelectric Power Plant, due mainly to the exceedance of maximum emission values, and the operation with diesel in circumstances that do not qualify as emergency situations. Colbún submitted a Compliance Program including measures to address the 14 charges made. On February 1, 2016, the merged Compliance Program was approved by the SMA which led to the suspension of the sanctioning administrative proceeding.

#### ANEXOS CAPÍTULO

# **SOCIAL PERFORMANCE**

## **GROWTH PERSPECTIVES**

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 (G4-EU10)

Classification		2015	2016	2017	2018	2019
Energy source	Reservoir hydroelectric power plant	1,057	1,057	1,057	1,057	1,057
	Run-of-the river hydroelectric power plant	532	532	532	532	532
	Coal-fired thermoelectric power plant	342	342	342	342	342
	Thermoelectric LNG/diesel power plant	1,347	1,347	1,347	1,347	1,347
	Hydroelectric power plant under construction			34	34	34
Total planned capacity		3,278	3,278	3,312	3,312	3,312
Colbún's maximum forecasted generation capacity P70 (GWh)		19,500	19,500	19,690	19,690	19,690
Total forecasted demand		49,911	51,851	53,869	56,210	58,742
		39%	38%	37%	35%	34%

Refer to Colbún's installed capacity on the webpage www.colbun.cl

Forecasted demand of the SIC defined by the National Energy Commission in the node price setting report of October 2015

The peak generation capacity differs or may differ from the capacity actually generated by the Company in 2015 or from what it expects to generate in the future. P70 implies a medium to dry hydrological scenario.

# **HUMAN CAPITAL DEVELOPMENT**

ers. We are a diverse group: 114 people under 30 years; 356 from 30 to 48 from 6 to 9 years; 8 from 9 to 12 years, and 14 female workers joined 40; 282 from 41 to 50; 163 from 51 to 60; 45 from 61 to 70, and 2 people

In connection with the seniority of male workers in the company: 192 WORKERS PER TYPE OF HOURLY SCHEDULE people have been with the company less than 3 years; 198 from 3 to 6 years; 174 from 6 to 9 years; 44 from 9 to 12 years, and 182 people joined the Company more than 12 years ago. Similarly for female workers: 43

Colbún's headcount amounts to 962 workers, of which 13 are foreignhave been with the company less than 3 years; 59 from 3 to 6 years; the Company more than 12 years ago.

Out of the total number of workers, 12 are FTEs, 7 women and 5 men. Similarly, in 2015 the Company retained 4 part-time employees.

#### **TURNOVER**

#### AVERAGE EMPLOYEE TURNOVER, BROKEN DOWN BY AGE AND SEX (G4-LA1)

		2014		2015		
		Workers who left the Company (No)	Turnover rate (%)	Workers who left the Company (No)	Turnover rate (%)	
Sex	Male	83	10.4%	63	7.9%	
	Female	6	3.5%	11	6.3%	
Age	Under 30	6	5.9%	10	8.7%	
	From 30 to 50	58	8.9%	38	5.9%	
	Elder than 50	25	11.9%	26	12.8%	
Total		89	9.2%	74	7.6%	

- This chart shows the voluntary and involuntary turnover rate.
- 14.7% of the workers will be entitled to retirement within the next 5 to 10 years. The various collective agreements available in Colbún contemplate an incentive consisting of improved retirement for those who decide to retire.

#### **COMPETITIVE REMUNERATIONS**

#### RATIO BETWEEN THE INITIAL SALARY AND THE LOCAL MINIMUM SALARY (G4-EC5); **GROSS AVERAGE MONTHLY SALARY IN CHILEAN PESOS**

	Initial salary in Colbún	Ratio between the initial salary and the local minimum salary		
Sites with significant operations	Women	Men	Women	Men
Metropolitan Region	257,523	351,461	1.07 times higher	1.46 times higher
V Region	374,712	410,955	1.55 times higher	1.79 times higher
VII Region	785,159	410,696	3.26 times higher	1.70 times higher
VIII Region	674,734	524,186	2.80 times higher	2.28 times higher

NOTE: Chile's minimum wage was set at Ch\$241,000 in 2015 186

ANNUAL INTEGRATED REPORT COLBÚN 2015 ANEXOS DESEMPEÑO SOCIAL

#### PARENTAL LEAVE

#### TRAINING AND DEVELOPMENT

leave; all of them resumed their normal duties.

During 2015, 17 women and 32 men were entitled to their 5-day parental The development and personal growth of our workers is essential to Colbún. The company bets on the training and the internal promotion of its workers as mechanisms to enhance peoples' management excellence, one of the goals set forth in our corporate guidelines.

		201	4	2015	
Training program	Description	Number of beneficiaries	% of beneficiaries over the total	No. of beneficiaries	% of beneficiaries over the total
Undergraduate schol- arships	Technical or university studies	55	5.7%	53	5.5
Post-graduate scholar- ships	Studies in Chilean and foreign universities	4	0.4%	41	4.3%
Leadership program	Leadership skills supervisory areas of the Company	134	13.9%	56	5.8%
Safe driving program	Training in safe driving		0.0%	22	2.3%
Livelink Documentary Manager Program	Documentary manager attributes	6			
E-learning induction program	Inform relevant aspects of the business to those who join the Company	24			
Onsite induction program	Inform relevant aspects of the business to those who join the Company	40			
Induction program visit to power plants	Show the power plants to new personnel and people from the Parent Company who have been working in the Company for many years	30			
Languages	Training in foreign languages	89			
Capacítate	Soft and technical skills for workers	62			
Technical training	Train workers in specific technical areas	565			
Total		1009			

#### PERFORMANCE ASSESSMENT

	2014			2015		
	Women	Men	Total	Women	Men	Total
Total workers	167	794	961	172	790	962
No of workers assessed	163	782	945	164	780	944
% over the total num- ber of workers	97.60	98.49	98.34	95.35	98.73	98.13

# **WORK PRACTICES**

Collective agreements	Site	No of workers subscribed	% over the total number of workers in the facility	% over Colbún's total	Date of last agreement	Term
Nehuenco Union	Quillota	43	57%	4%	10-2012	10-2016
Inter-provincial	Los Andes	84	72%	9%	12-2012	12-2016
Union No.2	Los Andes	19	16%	2%	12-2012	12-2016
Hidroeléctrica Guardia Vieja S.A.	Los Andes	84	72%	9%	12-2012	10-2016
Union No. 1					09-2013	08-201
Hidroeléctrica Aconcagua	Los Andes	19	16%	2%	12-2012	12-2016
Candelaria	Santiago	18	75%	2%	09-2012	08-201
Union No.1 Colbún S.A. and Affiliates					09-2013	08-201
- Colbún Complex	Talca	56	70%	6%		
- Rucúe-Quilleco	Los Ángeles	24	59%	2%		
- Angostura	Los Ángeles	4	9%	0%		
- Santiago	Santiago	24	6%	2%		
Angostura	Los Ángeles	29	62%	3%	04-2014	03-201
Los Pinos	Concepción	15	71%	2%	05-2013	05-201
Santa María	Coronel	49	56%	5%	02-2015	12-2018
Antilhue	Valdivia	12	75%	1%	10-2012	09-201
Canutillar	Puerto Montt	12	63%	1%	10-2012	09-201
Union of Empresa Eléctrica Industrial S.A.	Santiago	26	76%	3%	05-2013	05-201
Total		415		43%		

NOTE: No activities have been identified where the contractors or suppliers' rights may be threatened in connection with their right to free association or to collective negotiation.

#### **COMMUNICATION CHANNELS**

#### LA-4

Any time there is a change in the organization the employees receive an email with the reason for the change and the individuals involved; collaboration is sought for the new challenge. When the change involves unionized workers, the union is informed in advance.

#### **WORK ENVIRONMENT**

#### Benefits

We believe that offering our employees benefits that are in agreement with their needs contributes to the sense of belonging and pride for the Company. Colbún provides benefits and offer special instances so that our workers can share with their families.

Benefit	Implementation year	Type of benefit	No of workers entitled to the benefit	Percentage over the total payroll	% respecto del total de la planilla de colaboradores 2015
Supplementary health insurance	1988	Medical insurance	950	98.75	819
Life insurance	1988	Life insurance	950	98.75	0
Maintenance of remunerations due to medical leave	1988	Other	950	98.75	
Death benefit	1988	Other	922	95.84	311
Christmas present for our workers' children	1988	Other	962	100	19
Christmas party for our workers' children	1988	Other	962	100	470
Scholarships for children	2008	Other	922	95.84	490
Birth, wedding and death subsidies	1988	Other	950	98.75	505
Disability coverage	1988	Disability coverage	950	98.75	56
Birthday present	2008	Other	962	100	0
Christmas basket	2008	Other	962	100	962
Dental refund	2008	Other	922	95.8	
Drug bonus/refund	2008	Other	922	95.8	
Eye-glasses refund	2008	Other	922	95.8	
Unrestricted or emergency loans	2008	Other	856	89.0	

#### NOTF:

All workers holding indefinite work contracts are entitled to more social benefits than those required by the law. These are granted directly by the Welfare Service, either through Collective Contracts or the Individual Work Contract, as agreed to upon joining the Company.

Academic excellence award	Seventh version of the award that seeks to recognize the workers' families symbolically and economically, by rewarding outstanding academic performance at both school and university levels.
Work day with children	This is the seventh version of this initiative that takes place at all Colbún's power plants and also at the Santiago offices.
Cultural conferences	Cultural conference cycles with the Cultural Network in Santiago and in regions where all workers and their families are invited.
Indulgence days	The workers are given two administrative days per year to be used whenever they want. They can be broken down in four half-days.
Friday half day	At the parent company, workers work until 13:30 pm every Friday. This modality is recently being introduced in some power plants.
Sandwich days	The employee can either apply to a free Monday or Friday (to have a long week-end). That day must be recovered with a Friday afternoon.
Flexible Schedule	In Santiago we offer our employees the possibility to bring back and forth the arriva time. Three new schedules plus the current one are available. The employee must choose one and keep it through the year.

#### LABOR CLAIMS

#### G4-LA16

No labor claims were filed during 2015; nor are there outstanding claims before the Labor Inspection Bureau.

## **HUMAN RIGHTS**

G4-HR3, G4-HR5, G4-HR6, G4-HR7, G4-HR9, G4-HR10, G4-HR12

As part of our commitment with sustainability and transparency, this year the company joined Global Compact Chile, entity that seeks to promote the corporate commitment with human rights, labor standards, the environment and anticorruption.

Although none of our power plants, projects or corporate offices have been specifically subject to assessment by human rights watch organizations, during 2015 no human rights or discrimination-related cases were recorded (principles number 1 and 2 of the Global Compact). In any case, it should be noted that 100% of our security guards have been trained in these matters. On the other hand, there is no risks relating to the development of child or forced labor (principles number 4 and 5 of the Global Compact).

With respect to our contractors, our contractual clauses provide for the practices promoted by the Global Compact and the work legislation. In addition, we have a platform called Achilles, where we can access the subcontractors' historical records and review their human rights indicators and review, for example, their accident rates or the claims before the Labor Inspection Bureau.

# **OUR VALUE CHAIN**

G4-LA14, G4-LA15

At Colbún we are committed to the exchange of good practices with our contractors and suppliers, seeking to promote high safety, environmental, quality, environmental and social standards, supporting their growth and development. This will allow us to achieve excellence throughout our value chain.

All of our bidding and award processes with subcontracting companies have incorporated environmental principles and other safety and work-related issues. Such guidelines are reflected in the Special Standard for Contracting and Subcontracting Companies (REECS) and the Integrated Management System (SIGECS) among other initiatives. We check 100% subcontractors' compliance with the requirements set forth in the Environmental Qualification Resolution (RCA) of the service that is being contracted.

Number of new suppliers / contractors with whom the company has evaluated starting a relationship (1)

250

(1) Estimated value. Equivalent to 10% of suppliers currently working with Colbún.

# N° DE NUEVOS PROVEEDORES/CONTRATISTAS QUE SE EXAMINARON EN FUNCIÓN DE CRITERIOS RELACIONADOS A LAS SIGUIENTES PRÁCTICAS LABORALES (G4-LA14)

Criteria	No. of new suppliers	% of new suppliers over the total		
Employment practices	182	73%		
Safety and health practices	116	46%		
Labor relations	182	73%		
Salaries and remuneration	182	73%		

(1) Suppliers registered with the Achilles system with whom a purchasing or service relationship was established during 2015.

(2) Suppliers enrolled in a safety insurance provider (Mutual).

#### NEGATIVE, ACTUAL AND POTENTIAL IMPACTS OF WORK PRACTICES ON THE SUPPLY CHAIN (G4-LA15)

	Actual Impacts	Potential Impacts
Significant negative impacts of work practices on the supply chain	Failure to meet the labor legislation. Failure to meet occupational health standards.	Payment of salaries, forced labor, poor working conditions, accidents

#### NUMBER OF SUPPLIERS AND/OR CONTRACTORS AND 2015 ASSESSMENT OF THE WORK PRACTICES

	N°	%
Contractors whose work practices impact has been assessed (1)	182	73%
Contractors with significant negative, actual and potential work impacts (2)	80	32%
Contractors with negative work impacts with whom improvements have been agreed to	102	41%

<sup>(1):</sup> Suppliers registered with the Achilles system with whom a purchasing or service relationship was established during 2015.

# SAFETY AND HEALTH

	20	014	2	2015
	Workers represented	Contractors represented	Workers represented	Contractors represented
Canutillar station	18	54	18	49
Biobío complex	79	136	79	220
Colbún complex	77	142	71	88
Carena station	42	35	42	27
Aconcagua complex	133	146	107	150
Antilhue station	16	20	14	16
Los Pinos station	16	81	16	90
Candelaria station	23	31	15	70
Nehuenco complex	65	82	62	107
Santa María complex	69	349	73	327
Santiago office	396	22	384	24
Transmission Management	0	0	33	91
La Mina project	25	8	26	400
San Pedro project	11	26	10	19
Santa María project	0	0	9	0
Blanco project	0	0	0	22
Assistant Management project	0	0	0	105
Other small projects	0	0	0	67

#### NOTE:

- In facilities with less than 25 workers, Parity Committees are set up.
- The total represents the annual workers' average.

<sup>(2):</sup> Suppliers with provisional infractions + accidents.

## LOCAL DEVELOPMENT

#### **EDUCATIONAL PROGRAMS**

#### Energizate (Santa María Complex)

Educational project implemented in 2013 as a result of a strategic alliance between the University of Concepción through the Interactive Center for Sciences, Arts and Technology (CiCAT), the Municipality of Coronel and Colbún. The initiative is a methodological innovation proposal that seeks to bring 5th graders and pre-college students from the municipal schools in the district closer to energy related subjects, which are part of the official curricula of both levels. In 2015 this initiative benefited 1,200 students from 18 schools.

#### Supplementary Training (several power plants)

Program developed jointly with Inacap which purpose is to provide technical tools to improve the training and the employability of students from the districts where Colbún operates. The program is developed in 15 districts along the country and has benefited 1,000 students to date. In 2015, a total of 137 students were trained under the FORCOM.

#### Youth Orchestra of Cochamó (Canutillar station)

Made up of students from Cochamó district, the orchestra have spread its recognition and taken its music to different points of the southern zone of our country under the motto that music is an educational channel that promotes values such as discipline and continuous improvement.

#### PRODUCTIVE DEVELOPMENT PROGRAMS

# Framework Agreement with the Association of Maule South Channel Irrigators' (Colbún Complex)

Agreement between Colbún and the Association of Maule South Channel Irrigators in force since 2011 that provides tools to promote water savings and irrigation efficiencies, which brings about benefits for agriculture and power generation. With the technical assistance of the Center for Global Change from the Catholic University the program has enabled the irrigation of more than 100 hectares of

crops, promoting good practices under an association that groups 2,500 farmers. In 2015 it completed the second stage of the project "Irrigation Technology Transfer Program", which allowed increasing by 20% the average irrigation efficiency of different crops and increase the yield by 25% in the farms where it was applied.

# Beekeeping Productive Development Project (Los Pinos station)

Project developed through the NGO Acción Emprendedora, in El Progreso and Charrúa sectors of the Cabrero district. Its objective is to provide tools and knowledge to local entrepreneurs, together with contributing with value added to the products.

#### Newen Maqui (Angostura station)

In 2014, GECO, with the support of Colbún, Fosis's IDEA Fund and the American organization The Aspen Institute developed a beverage based on maqui, seeking to create a new market for this wild fruit. This project points at generating work opportunities for the communities from the south, fostering a traditional activity such as maqui fruit-picking. There are 91 fruit-pickers enrolled in this program from different zones of the south of Chile, including 34 fruit pickers from Santa Bárbara and Quilaco who, in 2015 received their first profits.

# Antuco Tourist and Productive Development Worktable (Rucúe-Ouilleco stations).

Worktable set up in 2015, made up of public and private parties, namely the municipality, SERNATUR, local businessmen and Colbún, among others. Thanks to a year-round, joint and systematic work, the worktable has defined and promoted training and entrepreneurial tourist programs.

#### SPORTS PROMOTION PROGRAMS

# Support to Chapo Lake neighbors and fishermen (Canutillar station)

As a result of the emergency resulting from the eruption of Calbuco volcano, Colbún provided assistance to the Chapo Lake neighbors and to the Federation of Local Fishermen from the Reloncaví Estuary (FEPAER) by delivering pet food and seeds, among other initiatives.

#### Sports promotion program in Coronel (Santa María Complex)

Among the most important sports promotion initiatives of 2015, it is worth noting the implementation of the Jaime Osorio Cup championship in alliance with the Football Association of Coronel, activity that benefited 120 people, with the participation of 10 organizations and 2,200 attendees. Also in Coronel, the company and the municipality financed the construction of a roofed multipurpose court at Caleta Lo Rojas, project that benefited 500 people from 5 organizations.

# Football School "Energía para Campeones" (Aconcagua Complex)

Initiative aimed at 100 children and youngsters who live by the International Road and who pertain to the districts of Los Andes and San Esteban, which purpose is to promote sports and a healthy lifestyle.

#### OTHER PROGRAMS

# CSR Agreement with the Municipality of San Esteban (Aconcagua Complex).

Within the framework of this CRS agreement, we inaugurated the roofed multipurpose court of the school Río Colorado, which will allow the neighbors who live close to the International Road to practice sports and recreational activities, as well as cultural and civic gatherings through the year. Also, the Company donated equipment to the Second Fire Department of the International Road, consisting of uniforms and rescue gear, all certified in agreement to high quality standards.

# $\ensuremath{\mathsf{CSR}}$ Agreement with the Municipality of Quillota (Nehuenco Complex)

Within the framework of the agreement with the municipality, 200 parking lots for bicycles were inaugurated at 18 strategic points of the district, close to 400 sports implements were donated to 13 academies in Quillota and 51 youngsters were benefited with scholarships for college education. The scholarships included five professional practice posts at the Nehuenco Complex.

#### Support to the Fire Department (various power stations)

Within the context of the significant work of the Fire Department and their contribution to the society as a whole, Colbún has provided support to several units in the zones where it operates, namely the districts of Curacaví (Carena station), Yerbas Buenas (Colbún complex), Antuco and Quilleco (Rucúe-Quilleco stations), Cabrero (Los Pinos power plant) and Quilaco and Santa Bárbara (Angostura power station).

# APPROACH TO MANAGE THE IMPACT OF RESETTLEMENT

G4-EU20, G4-EU22

At present, the Company is not developing any project that contemplates a resettlement plan. However, our corporate vision entails considering the particularities of each community and accompanying the families through all the stages of the process with the support of psychologists, social assistants and entrepreneurial experts.

The stages considered in the Resettlement Plan may vary according to the specificities of each project and site:

- Preparation Program: Consists of providing all the information and support necessary so that every family feels free to select the most adequate compensation procedure.
- Transfer Program: Every family is provided with technical assistance, resources and multi-disciplinary support in preparation for the transfer. It includes the moving allowance and the conditioning of the land and the housings.
- Continuity Program: After the move, the Company provides the technical assistance, the resources and the multi-disciplinary support required to ensure a successful resettlement.
- Economic and Social Development program: We provide support for the development of entrepreneurial skills, opportunities for economic and professional development.

# VALUE OF POLITICAL CONTRIBUTIONS

G4-SO6

Colbún S.A. made no political contributions during 2015.

ANEXOS CAPÍTULO ANEXOS DESEMPEÑO AMBIENTAL

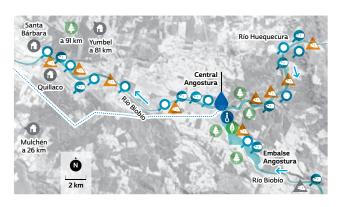
# **ENVIRONMENTAL PERFORMANCE**

# **USE OF MATERIALS AND EFFICIENCY**

	2014	2015
Coal-fired power plant efficiency (% BTU/kWh)	34,8%	35,2%
Open/combined cycle gas power olant efficiency (% o BTU/kWh)	53,0%	52,9%

- The efficiency measure only considers the power plant operation at full capacity, i.e., the start-up, interruption and operation times are brought to the minimum  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ required technical level.
- Combustion improvements have been made, which explain the higher coal efficiency for 2015. The major maintenance of November brought about system improvements, which should translate in greater efficiency for 2016.
- In connection with the efficiency of open/combined cycle gas power plants, the values correspond to Nehuenco combined cycle power plant that show the highest utilization factors, against the simple cycle units that had low utilization factors.





#### COMPLEJO COLBÚN Y PROYECTO LA MINA



Ciudad cercana Central de pasada

Zona de fauna íctica en estado de conservación

Dirección del caudal del río



temperatura del agua

Zona de fauna íctica en



Ciudad cercana

Quillota a 8 km 200 m a 99 km 0

#### **COMPLEJO NEHUENCO**



Pozos de agua

Líneas de

PM

a 30 km

Ciudad cercana



Medición de emisione atmosféricas en

--- Cortina vegetal

0

Concepción a 25 km Proyecto a 165 km a 14 km Coronel Coronel

calidad de aire

**CENTRAL RUCÚE Y QUILLECO** 

Zona de fauna íctica en estado de conservación Central de pasada que genera bonos de carbono

Líneas de

Ciudad cercana



Monitoreo

# **BIODIVERSITY**

#### **CENTRAL ANGOSTURA**

chimenea CEMS Centro de ac de cenizas

relocalización de especies

Ò 500 m

Medición de ruido Filtros malla, captación de agua de mar Ciudad cercana

Medición de emisiones atmosféricas en PM Compra de derechos de emisión

de las cenizas

# Ô

#### **CENTRAL SANTA MARÍA**



y/o revegetación

calidad de aire

a 30 y 120 km

Zona de especies en estado de conservación

PROYECTO SAN PEDRO

Zona de fauna íctica en estado de conservación

caudal del río

## **WASTE GENERATION AND DISPOSAL**

G4-FN2

As a result of the industrial processes necessary for power generation some activities produce solid wastes, which are segregated at the power plants and managed independently, according to their hazardousness and the possibility of valuing them.

Hazardous waste generated by the operation of our facilities involves in general: fabrics contaminated with fuels, waste oils, fluorescent tubes, paint cans, solvent containers, cells and batteries. Non-hazardous waste comprises residential waste and includes organic waste, bags, plastics and others.

		2013	2014	2015
Residential/Non hazardous (Ton)	Thermoelectric power plants	422	255	341
nazardous (1011)	Hydroelectric power plants	48	69	68
	Santiago offices	44	44	42
Hazardous (Ton)	Thermoelectric power plants	436	212	523
	Hydroelectric power plants	33	77	53
	Santiago offices	0	0	0

NOTE: The increase in hazardous waste generated by thermoelectric power plants in 2015 is due mainly to the interruption of Santa María power plant as a result of a major maintenance process, in addition to a failure in one of the turbines which forced us to interrupt the power plant for a second time.

	2014		2015	
	Ton	%	Ton	%
Ash storage (carried by KDM)	71,837.6	68%	30,347.7	31%
Reutilization by cement plants	34,341.6	32%	66,985.8	69%
Total	106,179.2	100%	97,333.5	100%

It is worth noting the increase in the use of ashes for recycling at Santa Maria's Unit I from 32% in 2014 up to 70% in 2015; ashes are used as raw material for the cement and concrete industries.

	2014	2015
Cementos Bío Bío	15,927	35,129
Bicentenario	254,189	310,856

#### **WASTE WATER DISPOSAL**

The disposal of waste water coming from thermoelectric plants is made in a planned manner in agreement with what is set forth in the environmental permits and the monitoring self-control resolutions issued by the Superintendence of Sanitary Services (SISS), which are specific for each facility.

Waste water	Metering unit	2013	2014	2015	Final disposal
Candelaria station	m3	38,421	11,359	22,196	Codegua estuary
Los Pinos station	m3	55,105	58,937	95,555	Bankless channel irrigation
Nehuenco complex	m3	1,896,024	1,719,900	1,349,900	Aconcagua River
TOTAL	m3	235,597,936.3	345,178,734.4	314,616,926.1	
TOTAL	m3	235.544.045	345.120.887	314.592.452	

#### NOTES:

Water surplus associated with the Antilhue power plant is drained and adequately monitored in connection with its standard irrigation parameters (NCh 1333 Of.87). The surplus water was 57,847 m3 in 2014 and 24,474 m3 in 2015. The drop observed is due to a variation in the operational criteria of the reverse osmosis plant, which reduced its weekly operating hours to maintain the stability of the processing water. This measure helped to decrease the water volume used in the backwash of coal and sand filters, in addition to reducing the amount of waste water. Drained water is within the permitted range.

The sea water flow associated with Santa María's Unit I is not considered waste water, as it is used to cool down the power plant and is fully returned to its source. Santa María's Unit I was stopped during November as a result of a major maintenance of its facilities and during December due to a failure of one of its turbines. The above brought about a reduction in the cooling down requirements from 343,330,691 m3 in el 2014 to 313,124,801 m3 in 2015.



#### Información de Contacto

G4-31

Para mayor información, sugerencias, inquietudes o consultas respecto a este documento, puedes escribir a Miguel Alarcón (malarcon@colbun.cl), (56 2) 2460 4394, Área Relación con Inversionistas.

y Ana Luisa Vergara (alvergara@colbun.cl), (56 2) 24604428, Área de Asuntos Públicos.

#### Identificación de la Sociedad

G4-3, G4-5

Razón Social:

Colbún S.A.

Rol Único Tributario:

96.505.760-9

Tipo de Entidad:

Sociedad Anónima Abierta

Inscripción en el Registro de Valores:

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Auditores Externos Estados Financieros:

Ernst & Young Servicios Profesionales de Auditoría y Asesorías Limitada

Auditores Externos Indicadores de económicos, sociales y ambientales:

KPMG

Apoyo en el desarrollo metodológico y de contenido:

Gestión Social S.A.

Diseño gráfico:

100% Diseño

Impresión:

Ograma



