

# endesachile12

Santiago Stock Exchange

**ENDESA**

New York Stock Exchange

**EOC**

Madrid Stock Exchange

**XEOC**

Endesa Chile was incorporated in 1943 under the name of Empresa Nacional de Electricidad S.A. The company's bylaws were amended in 1994 to incorporate the trading name "Endesa" and in 2005 the trading name "Endesa Chile" was added. The company is registered in the Santiago Trade Register, folio 61 No.62 and folio 65 No.63 respectively on January 19, 1944. Its corporate domicile and head offices are at Santa Rosa street 76, Santiago, Chile. Its capital as of December 31, 2012 is ThCh\$1,331,714,085, represented by 8,201,754,580 shares. Its shares are quoted on the Chilean stock exchanges, the New York Stock Exchange (NYSE) in the form of American Depositary Receipts (ADR), and on the Madrid (Latibex) Stock Exchange. The objects of the company are to exploit the production, transport and distribution of electricity, and to provide consultation services, make investments in financial assets, develop projects and carry on activities in the energy field and in others in which electricity is essential, and also to participate in public-works infrastructure concessions in the areas of civil or hydraulic works. Endesa Chile is a leading company in the Chilean electricity sector and one of the principal electricity companies in the markets in which it operates. Its total assets amount to Ch\$ 6,488,689 million as of December 31, 2012.

It produced revenue of Ch\$2,369,386 million, operating income of Ch\$632,209 million and post-tax earnings of Ch\$234,335 million. At the end of 2012, the company's permanent workforce was 2,355, of which 1,177 worked in Chile, 501 in Argentina, 441 in Colombia and 236 in Peru.



*2012 Annual report*

01

p. 4  
Letter from  
the Chairman

02

p. 9  
Highlights

03

p. 15  
Principal  
financial and  
operating  
indicators

04

p. 19  
Identification  
of the  
company and  
constitution  
documents

05

p. 23  
Ownership  
and control

06

p. 27  
Management

07

p. 37  
Human  
resources

08

p. 45  
Stock market  
transactions

09

p. 49  
Dividends

10

p. 53  
Investment  
and financing  
policy 2012

11

p. 57  
Businesses of  
the company

12

p. 61  
Investments  
and financial  
activities

13

p. 69  
Risk factors

14

p. 75  
Regulatory  
framework of  
the electricity  
industry

15

p. 91  
Description of  
the electricity  
business by  
country

16

p. 115  
The  
environment  
and  
sustainable  
development

17

p. 121  
Technology  
and innovation

18

p. 125  
Participation  
in subsidiaries  
and associates  
and schematic  
table

19

p. 131  
Material  
information  
on the  
company

20

p. 139  
Identification  
of subsidiary  
and associate  
companies

21

p. 154  
Declaration of  
Responsibility

## Letter from the Chairman

Dear Shareholders,

You have in your hands the Annual Report and financial statements of Endesa Chile for the year 2012. In the following pages, you can revise in detail the principal highlights of the company's performance and the principal results for the year.

This is a very special moment for the company. Endesa Chile will celebrate in 2013 its 70th anniversary. Over all this time, we have accompanied the country in the principal stages of its development, providing it with the energy necessary for the growth of its companies and for the people to have access to increasingly better living conditions. We have been protagonists and part of the solution of many of the landmarks that Chile has crossed along this way, and we will continue to do so. To be an engine of development has been our principal vocation and this is the way we have replicated in each of the markets in which we are present.

We are today among the most important companies in the country, and this has been possible thanks to the efforts, tenacity and drive of every one of our employees, professionals and technicians. These have been the pillar of our growth and the principal asset for continuing to grow in the future.

I should like to sketch the principal aspects of the company's results in the following lines. Chile in 2012 again felt the effects of an already-prolonged drought which, together with other episodes, negatively affected our numbers.

Earnings attributable to the owners of the controller of Endesa Chile amounted to Ch\$234,335 million in 2012. This meant a fall of 47.6% compared to the year before. This was largely due to 5.6% less hydroelectric generation in Chile caused by the drought. At the same time, the company incurred increased expenses in the purchase of fuels which amounted to Ch\$43,641 million and faced increased transport costs of Ch\$34,648 million. Another aspect that adversely affected the result was the effect of the bankruptcy of Campanario, which implied a disbursement of Ch\$25,752 million. In addition, there was the reduced EBITDA generated in Argentina, amounting to Ch\$25,166 million.



Despite these unfavorable effects, our operations have proceeded along a growth path. Our generation in Latin America rose by 1.4% in 2012, to a total of 53,517.4 GWh. The company's Installed capacity grew by 6.2% in Chile, from 5,611 MW to 5,961 MW, thanks to the start of commercial operations of the Bocamina II plant which provided the country with an additional 350 MW of capacity.

We can also mention the 1.7% increase in energy sales which reached 59,020 GWh. This was mainly due to higher sales volumes in Colombia, Argentina and Peru. If we consider Brazil, where we have a capital investment through Endesa Brasil, energy sales were 66,311 MW in 2012, the equivalent of growth of 2.3% over 2011.

Total revenue thus reached Ch\$2,369,386 million. EBITDA was Ch\$833,850 million, a fall of 14.4%, mainly due to the reduced revenue received caused by the reduced average prices of energy sales in Chile and Argentina, a larger cost in fuel consumption in Chile, Colombia and Peru, higher energy purchase costs in Colombia, Peru and Chile, and increased transport expenses in Chile.

Endesa Chile has solid bases for continuing to occupy the leadership position it has in Chile and in the markets where we are present. This is ratified by the ratings granted us by the

international ratings agencies during 2012. Moody's confirmed the corporate rating of Baa2 with stable outlook. Standard & Poor's maintained its international rating of BBB+ with stable outlook, while Fitch Rating confirmed the local and foreign currency rating of BBB+ and the long-term rating on the national scale of AA (cl), with stable outlook.

Endesa Chile is a company with a clear international vocation. We are part of one of the largest energy groups in the world, the Enel group, and this gives us the support and guarantee for continuing to grow with confidence in a region that has been seen to be one of the most dynamic in the world at times when a large part of the developed economies are debating how to recover the growth path. Enel is present in 40 countries and generates, distributes and sells energy to over 60 million customers, while respecting the communities and the environment. This difficult-to-reproduce know-how and extraordinary experience we place at the service of the development and growth of the South American markets in which Endesa Chile has become a more-than-relevant player.

This capacity to grow and believe in development has been clearly shown in various of the nations where we are present. Chile, Colombia and Peru have followed similar paths, with clear commitments to open markets, a decisive opening to free trade and foreign investment, and the stability of their fiscal accounts. These have linked a common vocation that I would like to stress and which is expressed today in a shared belief in turning to the Pacific Ocean. These are dynamic economies with enormous growth potential and their need to continue developing the electricity sector will continue to increase. They have now managed to come together pragmatically as a new regional player, the Pacific Alliance, which has enormous prospects, where we as a company are relevant players in three of the four member countries, Chile, Peru and Colombia. In addition, there are the requirements of markets like those of Brazil and Argentina which, due to their large size, will continue to challenge us to be capable of accompanying their growth.

According to calculations we have made, all these countries (Chile, Peru, Colombia, Brazil and Argentina) will need to add over 100 GW of new

installed capacity for the period 2013-2022. In other words, to add 10,000 MW annually.

As you will see, the region has enormous growth potential for Endesa Chile and a special challenge will be our capability of taking advantage of the local, more abundant, clean and competitive energy sources of each country. The challenge is huge and if not assumed our nations could see their aspirations of reaching levels of development and wellbeing increasingly delayed.

I mentioned the integration efforts of these countries, all of which are endowed with natural resources that will underpin their development. There can be no development without energy. And we have it: Peru, gas; Brazil, Colombia and Chile, water. The challenge is to make full use of these primary energies, energy resources that are competitive, abundant, clean and local.

Together with our parent Enersis, we have a broad portfolio of projects for facing these requirements. And we are convinced that their realization can only be done by growing in a sustainable manner, as this is the only way to provide safe, reliable, environmentally-friendly and community-friendly electricity at competitive prices.

This portfolio of projects exceeds 11 GW in new installed generating capacity, a large part of which will be implemented in the countries that share that vocation toward the Pacific mentioned above.

In energy matters, it is notable that the Pacific Alliance has begun to make reality matters that before were only in the minds of academics and specialists. It is already possible to see progress in the regional interconnection of electricity grids. The subject has been amply discussed at governmental meetings as important as the recent summits of the Community of Latin American and Caribbean States held in Santiago, and that of the Pacific Alliance at the same time and place. If carried out, countries like Peru and Colombia are going to be able to export value added because, as mentioned, they have been endowed with natural sources that are convertible into energy.

We in Endesa Chile feel proud to be part of the country's principal electricity company. The challenges we have in the future oblige us to be serious and energetic about the kinds of decisions

that the country should take for achieving its dream of reaching full development in the next few years.

This is why today more than ever we have to make it clear that Chile will not achieve development unless we all assume our responsibilities for ensuring this. The companies, the different social players and above all the executive and legislative branches of government have to do their bit for the country to strengthen its energy matrix, by making full use of the primary energies it has: competitive, abundant, clean and local energy resources. A year ago, we were celebrating that the government had set a clear timetable in electricity policy, the National Energy Strategy, for the period 2012 – 2030, presented in January 2012. And today it is time to take charge as during this period nothing has been done to convert this timetable into reality.

Just as there are neighboring countries that have been blessed with resources like oil or natural gas, our geography and nature gave us a potent energy source. Water is the oil of Chile, and water is energy. It is time to stand up and take advantage of this resource which, as we remember once again and as I have said in numerous articles, will enable us to benefit from the window of opportunity of a decade that we have for reaching the income per capita of European countries before the crisis of 2008. But that will only be achieved if we have competitive, abundant, clean and local energy, like the case of our hydric sources.

However, silence is punishing us by not enabling its full use. Fortunately, some of the statements on the matter are beginning to be de-mystified like, for example, the development of plants like HidroAysén would flood the Patagonia.

I therefore am deeply disappointed that the Committee of Ministers has not met in almost 20 months to resolve on the complaints presented against the HidroAysén project. We should not forget that one of the principal advantages of having robust, efficient and fully-functioning institutions is the existence of periods of time that have to be met by everyone without distinction. These periods, I insist, have to be met.

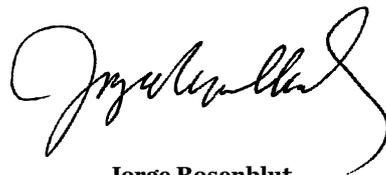
I would also like to mention another matter of great relevance to our electricity system: interconnection. In presenting its National Energy Strategy a little more than a year ago, the government outlined a proposal to interconnect the Central Electricity Grid (SIC) with the Northern Electricity Grid (SING). The principal objective was to fully take advantage of the existing generating capacities of both systems in a complementary manner. Many players from all political, business and academic spheres have joined to stress the importance and urgency of this initiative.

We know that this first attempt to concrete the interconnection through a tender could not be carried out. Meeting this task is the responsibility of the government, parliament, the companies and the whole society. Chile needs a robust, competitive and clean system. In making

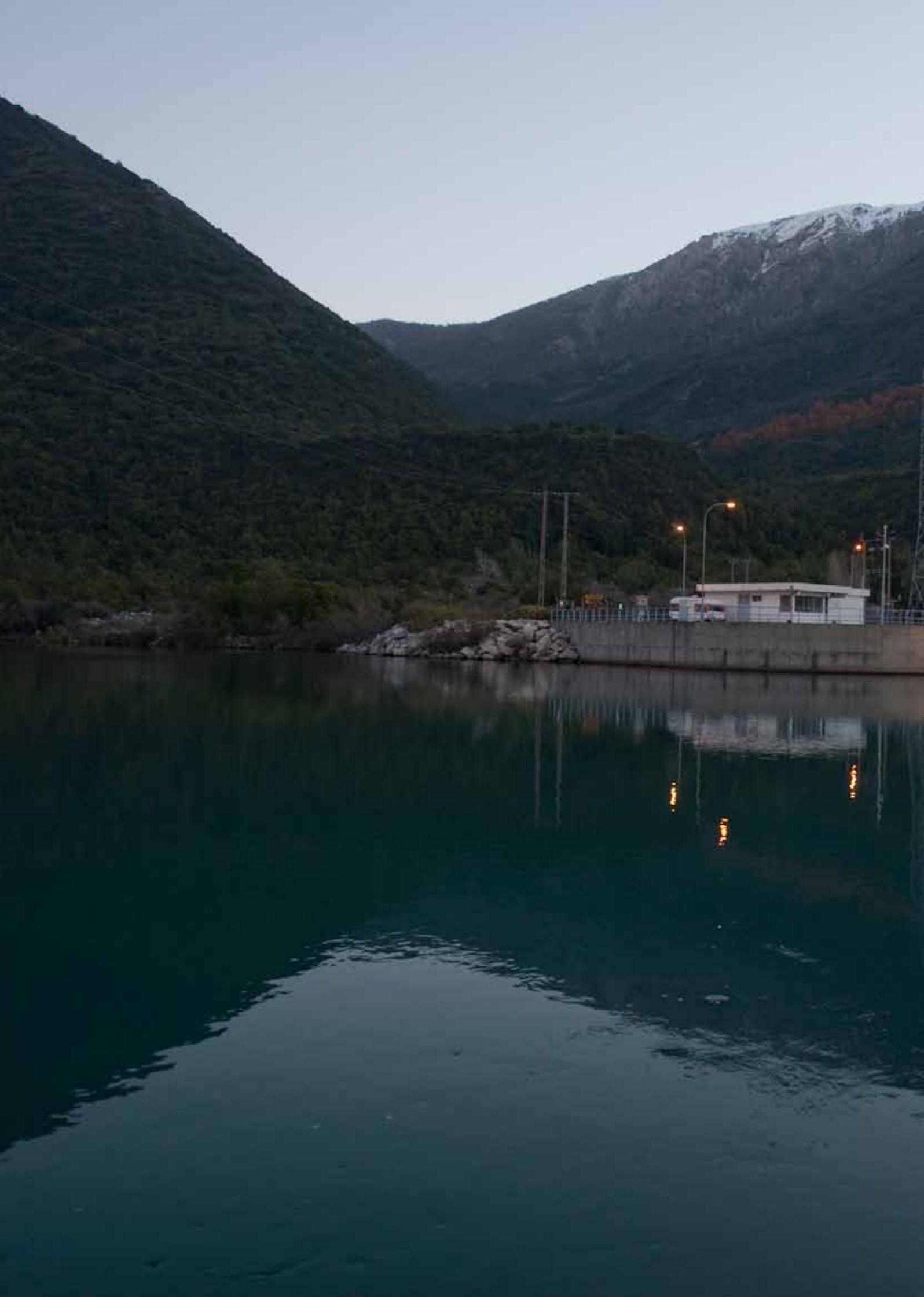
the corrections necessary for resolving this urgent need, we believe that all sectors should support these legal adjustments so that they can be put into effect quickly. We hope that the government will arrive at a good alternative that can be promulgated soon and that generates the necessary consensus. The country needs it and cannot wait.

As corresponds to any democratic system, 2013 will be a year in which citizens will elect the authorities and representatives who will have to guide the destiny of the country over the following four years. These electoral periods are defining moments for the directions that nations should adopt in their progress to full development, something which like never before we are close to achieving. The worst of the temptations is therefore that the political context leads us to abstention. The decisions we have to take about energy development cannot wait. We believe that the executive power and congress will be meet this challenge and adopt the necessary measures, as we know that they understand that their decisions will affect the development of our country not only in the medium term but the long term.

The target of crossing the threshold of full development depends on it.



**Jorge Rosenblut**  
Chairman



02



*highlights*



## Highlights 2012

### Agreement with Contac for predictive monitoring of generating plants

Endesa Chile signed an agreement with Contac which, together with the Universidad de Chile, will develop a technological predictive application from mathematical models based on similarity, which will contribute to the predictive monitoring of the company's generating equipment. The objective is to use this computer tool to support the Monitoring and Diagnosis Center (CMD) of Endesa Chile. This plays an important role in the permanent analysis of operating centers, to improve processes, detect anomalies and detect early warnings of possible faults in order to avoid them and thus be able to carry out maintenance in a programmed way.

### Corporate optimization commences for strengthening operations in the energy market

The board of Endesa Chile agreed to commence an operation of corporate optimization of certain of the company's Chilean subsidiaries, through a process of staggered and successive mergers. The operation seeks to simplify the corporate structure and will imply the absorption of the subsidiaries Ingendesa, Compañía Eléctrica San Isidro, Central Eléctrica Tarapacá, Inversiones Endesa Norte, Endesa Eco, Enigesa and Empresa Eléctrica Pangue.

### Outstanding participation in Latin America's Investor Relations Awards

Endesa Chile stood out in the first version of LirA'11 (Latin America's Investor Relations Awards 2011), with awards in 9 of the 12 categories contemplated. The company was awarded top place in the Best Communication of Corporate Governance and Best Communication of Financial Results, and was placed third in Best Investor Relations Department, in addition to Best Head of Investor Relations. The Lira prizes are the only ones in the region that recognize excellence in investor relations and communication of corporate governance of companies with a stock-market presence in Chile, Colombia and Peru.

## January



### Projects completed in Puerto Fuy to improve emergency, health and tourism services

Through the round tables that Endesa Chile has set up with the community of Puerto Fuy, as well as other localities and communities of Panguipulli, an initiative was developed for improving the services of emergency, health and tourism in the zone, benefiting over 500 inhabitants and those visiting the zone. The round tables, comprising local residents and the company, have enabled projects presented by the community to be carried out following their evaluation and study.

## February



### Pehuenche communities are trained in conservation methods, forage handling and agricultural machinery

Under the cooperation agreement between Endesa Chile, through Fundación Pehuén, and the Universidad Austral, 30 residents of the entity's member communities who have livestock farming as their principal source of income, were trained in conservation methods, forage handling and the use of machinery. The event was conducted by veterinary doctors of the university and included workshops for identifying the principal forage species and the agro-climatic variables that should be taken into account, together with the incorporation of chemicals.

## March



#### Endesa Chile and Energy Seremi (authority) provide diaries on energy efficiency at Alto Biobio school

Through its Energy for Education program, Endesa Chile, together with the Seremi de Energía (regional energy authority) for the regions of Maule, Biobio and Araucanía, Rodrigo Torres, handed over 350 Energy Efficiency (EE) diaries to teachers and pupils of the E-970 Ralco Basic School, which has ten levels, from pre-kindergarten to junior school. The diary was the work of Endesa Chile and the Santillana group, through the selection of subjects linked to EE, inserted in educational texts. This was done to bring the efficient use of energy closer to the new generations in a teaching and playful way.

#### Competitive funds begin for the community development of Coronel

For the fifth consecutive year, Endesa Chile invited postulations for competitive funds benefiting social organizations of the sectors Los Rojos, La Colonia and Cerro Obligado, in the municipality of Coronel. Ch\$30 million were dedicated to initiatives submitted by the organizations whose objective is community benefits. These funds form part of the CSR program promoted by Endesa Chile in sectors close to the Bocamina I and II plants.

#### First in Latin America in certification of a gas open-cycle plant under the ISO 50001 standard

Endesa Chile became the first company in the Latin American utilities sector to receive certification for the application of an energy management system (EMS) based on the international ISO 50001 standard, Energy Management Systems. The Quintero thermal plant was approved with zero non-conformities in the certification audit made by Aenor, making the plant the first open-cycle plant in the Enel Group in the world to receive this certification, and Endesa Chile the first company in the Latin American utilities sector to receive its ISO 50001 certification.

## April



#### Transport scholarships help students of Panguipulli

For the fifth consecutive year, Endesa Chile made available to 6 Panguipulli localities funds for transport scholarships, for school students of all ages who need to travel to the centers of study, whether in the area or in other parts of the country. These scholarships form part of the actions developed under the Energy for Education program which has benefited more than 2,600 local students in its years of operation.

#### Energy for Education program students improve their SIMCE scores

Students of the educational establishments belonging to the network supported by the Energy for Education program obtained excellent results in the examination of the National Evaluation System (SIMCE) set by the Ministry of Education. The schools forming part of the network that the company supports advanced significantly in their scores in language and mathematics. 25% of these establishments showed sustained progress in the SIMCE test, notably the schools Paranal, Francisco Chávez, Ralco Lepoy and Rosa Medel, with improvements of up to 80 points, reaching close to 300 points.

## May



## June



#### Thermal plant operators are trained with modern simulator

The objective of Endesa Chile is to have operators of a high professional level, a broad dominance of the technology used and with the necessary capacity to resolve complex operating situations. This was put into practice through a series of training courses for the country's thermal plant operators. A modern thermal plant simulator was therefore introduced, the first in the country used for specialized training, where participants have to face real crisis situations and contingencies.

#### Endesa Chile appeals to the Committee of Ministers to approve the EIA of Punta Alcalde

The company resorted to this level in order to secure the approval for the construction of the Punta Alcalde project after having been rejected by the Environmental Assessment Commission of the Region of Atacama on the basis of non-technical parameters and which did not consider all the information presented by Endesa Chile during the evaluation process which lasted for more than three years.

#### Credit rating

Moody's ratified the corporate rating at Baa2 for Endesa Chile, with stable outlook.

**Agreement reached with residents of El Esfuerzo, in Coronel, for carrying out a soil mechanical study**

Following months of negotiations, residents of El Esfuerzo and Endesa Chile signed an agreement to carry out a technical study to determine the situation of the land on the hill adjoining Bocamina II. The results will serve to define the state of the sub-soil in the sector in order to have certainty about the conditions of habitability. The agreement arises from the dialogue at a round table set up in 2011, whose members were the governor of the province of Concepción, Luis Santibáñez, the mayor of Coronel, Leonidas Romero, resident leaders and representatives of Endesa Chile.

**Agreement between residents of Colonia, municipality of Coronel, Serviu and Endesa Chile for the eradication of 80 families**

Eighty families from the Amengual sector of La Colonia in Coronel signed deeds as owners of their new homes, considerably improving their quality of life and living conditions. This was the result of an agreement between the residents, municipality of Coronel, Serviu (housing authority) of the Biobío Region and Endesa Chile through an open and transparent dialogue led by Serviu, following a definition by Sernageomin that the land where their homes were built was not habitable. The families left their old homes built on land incompatible with the construction and which put the safety of their inhabitants at risk.

**Inversiones Tricahue and Endesa Chile reach agreement on electricity supply contract**

The boards of both companies approved an agreement permitting the signing of a new electricity supply contract between Endesa Chile and its subsidiary Pehuenche. The agreement resolves the pending matters and also contemplates the payment of an interim dividend in Pehuenche S.A. in order to settle the price differences under the contract in effect since 2007.

**Important progress in ranking of the most responsible companies in Chile**

Endesa Chile occupied seventh place among the most socially responsible companies in Chile, according to the ranking prepared by Fundación PROhumana in conjunction with the magazine Qué Pasa and sponsored by the Confederation of Production and Commerce (CPC). Endesa Chile thus consolidates its actions in the area of corporate social responsibility, ratifying its leadership position in this survey, the most important at the national level. Concern for its personnel, the community and their surroundings, its customers and care for the environment make the generator one of the most sustainable companies in the country.

## July



**First place in Eva 2012 generating sector ranking**

In the Eva Ranking 2012, prepared by Econsult together with the magazine Qué Pasa, Endesa Chile was awarded first prize among companies of the energy-generation sector, praised by experts for the professional management that successfully balances the business variables. Eva measures the profitability generated by a company over that required on the resources employed, as a function of the risk of the company's activities.

**Recognition for the best creation of value in utilities sector**

In the ranking of leading companies in sales, profitability and creation of value, made by equities research department of Santander Global Banking and Markets, Endesa Chile was awarded the prize for the Best Creation of Value 2011, Utilities Sector. The ranking was prepared following a strict methodology in order to best decide the final series.

**Support plan benefits Pehuenche communities in Alto Biobío**

The continuity assistance plan of Endesa Chile is producing positive results. It provides permanent technical assistance and advice to families of the El Barco and Ayin Mapu communities located in Alto Biobío, in activities carried out through productive, social, cultural and touristic area programs. Technical assistance, training and empowerment of the community organizations and the strengthening of their roots to conserve their traditions are part of the many tasks performed with the communities.

## August



**Film cycle in 40 schools in eight regions of the country**

"Cinema in your school" was the initiative that Endesa Chile promoted and enabled 26 free functions to be held in a network of 40 educational establishments located in various parts of the country and which are part of the Energy for Education program. More than 7,500 students enjoyed a selection of the most popular films of the year. The film cycle contemplated the measurement of the carbon footprint of the whole event, in order to compensate the emissions with the purchase of carbon bonds, a process that will be certified and advised by Fundación Chile.

**Agreement with Crystal Lagoons will permit investigation into cooling technologies**

In the framework of its R&D area, Endesa Chile signed an agreement with the company Crystal Lagoons for the investigation on site of the application of the concept and technology of cooling pools for thermal plants as an alternative to conventional systems. The project, whose execution is subject to obtaining the environmental approvals, consists of making experiments to verify and improve the dissipating capacity of water bodies, using part of the refrigeration water of the San Isidro plant in a test pool of 5,000 m<sup>2</sup>, which will prove on site the effectiveness of this technology.

#### Canela II wind farm is registered in the United Nations CDM circuit

Endesa Chile registered in the Clean Development Mechanism (CDM) circuit of the United Nations Climate Change Office (UNFCCC) the Canela II wind farm that operates in the Region of Coquimbo. The entity ratified the registration with the publication on the organization's web site, which will permit verifying and later commercializing the GEI emissions, which are estimated to be 89,990 tons of CO<sub>2</sub> equivalent per annum (tonCO<sub>2</sub>e/year). The Canela II wind farm becomes the Group's fifth project in South America to be registered, added to the Ojos de Agua mini-hydroelectric plant (2007), Canela I wind farm (2009), Ventanilla thermal plant (2011) and the re-powering of the Callahuana hydroelectric plant (2008), both in Peru.

#### Agreement reached with Santillana for improving the quality of education in 40 establishments in Chile

In order to consolidate the educational work being undertaken since 2010 by the Santillana Group and Endesa Chile, these entities signed a cooperation agreement for improving the quality of the education of students living in vulnerable conditions. The agreement will permit the expansion of the work carried out in the 40 establishments that are part of the network of schools supported by Endesa Educa through its Energy for Education program.

#### Construction of Punta Alcalde will improve the quality of air in Huasco

In December 2012, the Committee of Ministers approved the EIA of the Punta Alcalde thermal project which will have an installed capacity of 740 MW. Punta Alcalde will adopt the highest standards in technology, efficiency and environmental commitment, considering international-standard parameters in terms of emissions and operation. The voluntary commitments made by Endesa Chile include an agreement with Compañía de Aceros del Pacífico (CAP) to install an electrostatic precipitator in a chimney of the pellets plant that CMP, a subsidiary of CAP, has in the area of Huasco.

#### Further information for the community of Huasco with community plan

A community relations plan was the strategy that Endesa Chile decided to follow, as owner of the Punta Alcalde thermal project, to engage with the community of Huasco and respond to all the doubts and questions relating to this energy initiative. The company set up a permanent on-site team and established a project open-house in Huasco for the residents, to inform and clarify the doubts they have about the project in its different phases of development.

## October



#### Class-room libraries are introduced in Energy for Education schools

Through this program, Endesa Chile is providing mathematics laboratories to 40 educational establishments that belong to its network of schools throughout the country. The class-room laboratories are a program of proximity and sensitivity to mathematics, which seeks to provide both teachers and students the resources for working effectively in this field.

#### Ratification of credit rating

Standard & Poor's confirmed the international rating for Endesa Chile at BBB+ with stable outlook. This took place in the revision made of Enel SpA and Endesa España days previously, when both ratings were maintained but with a reduction in outlook from stable to negative, as a result of the downgrade applied to Spain.

#### Bocamina II start its commercial operation

The company made available to the Central Electricity Grid the Bocamina II plant, with 350 MW of installed capacity.

## November



#### Residents of the community Juan Quintuman and locality of Neltume receive certification for training

More than 50 residents of the community Juan Quintuman and the locality Neltume, in the municipality of Panguipulli, were the beneficiaries of courses in animal health, knitted crafts and hairdressing. These training courses were proposed by the community itself and are promoted by Endesa Chile in its constant support for community development.

## December



#### Credit rating

Fitch Rating ratified the local and foreign currency credit rating of Endesa Chile at BBB+ and also its long-term rating on the national scale of AA (cl), with stable outlook.

endesa <sup>chile</sup>  
CENTROS DE 

EXPLOT

CONTR

CONTR

MONIT

*main financial and operating indicators*

p. 16  
Main financial and  
operating indicators



## 1. Main financial and operating indicators

	As of December 31 of each year (figures in millions of nominal pesos)				
	2008 (1)	2009 (1)	2010 (1)	2011 (1)	2012 (1)
Total assets	6,678,905	6,169,353	6,034,872	6,562,013	6,488,690
Total liabilities	3,976,951	3,214,351	2,930,045	3,120,873	3,054,046
Ordinary revenue	2,536,388	2,418,919	2,435,382	2,404,490	2,369,386
Ebitda	1,060,768	1,257,072	1,070,438	973,890	833,850
Earnings (2)	433,177	627,053	533,556	446,874	234,335
Current ratio	0.92	0.96	0.83	1.02	0.77
Debt ratio (3)	1.47	1.09	0.94	0.91	0.89

- 1) Until 2008, the annual financial statements were prepared in accordance with accounting principles generally accepted in Chile. Since 2009, the financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), also restating the company's 2008 financial statements under the new accounting standard. As a result of this change in accounting standards, jointly-controlled companies in which Endesa Chile participated became consolidated in the proportion that Endesa Chile's represents in the capital. Therefore, as of 2008, these jointly-controlled companies are included according to their percentage share of capacity, generation, energy sales and employees of these companies.
- 2) As from 2008, relates to earnings attributable to the dominant company.
- 3) Total liabilities/equity plus minority interest.

	As of December 31 each year				
	2008	2009	2010	2011	2012
<b>ARGENTINA</b>					
Unmber of employees	325	332	404	415	501
Unmber of generating units	20	20	20	20	20
Installed capacity (MW)	3,652	3,652	3,652	3,652	3,652
Electricity generated (GWh)	10,480	11,955	10,940	10,801	11,289
Energy sales (GWh)	11,098	12,405	11,378	11,381	11,852
<b>CHILE</b>					
Unmber of employees	1,123	1,172	1,151	1,155	1,177
Unmber of generating units	65	110	107	107	108
Installed capacity (MW)	5,283	5,650	5,611	5,611	5,961
Electricity generated (GWh)	21,267	22,239	20,914	20,722	20,194
Energy sales (GWh)	21,532	22,327	21,847	22,070	21,277
<b>COLOMBIA</b>					
Unmber of employees	404	415	430	441	441
Unmber of generating units	29	29	30	30	30
Installed capacity (MW)	2,895	2,895	2,914	2,914	2,914
Electricity generated (GWh)	12,905	12,674	11,283	12,090	13,294
Energy sales (GWh)	16,368	16,806	14,817	15,112	16,304
<b>PERU</b>					
Unmber of employees	219	224	228	230	236
Unmber of generating units	24	25	25	25	25
Installed capacity (MW)	1,467	1,667	1,668	1,668	1,657
Electricity generated (GWh)	8,102	8,163	8,466	9,153	8,740
Energy sales (GWh)	8,461	8,321	8,598	9,450	9,587





## *the company and constitution documents*

p. 20  
Identification of the  
company

p. 20  
Constitution documents

p. 21  
Corporate objects

## 1. Identification of the company

Name	Empresa Nacional de Electricidad S.A. (Endesa or Endesa Chile)
Type of entity	Open corporation registered in the Securities Register of the Superintendency of Securities and Insurance under No.114.
Tax No.	91.081.000-6
Address	Santa Rosa 76
Postal code	833-0099 SANTIAGO
Telephone	(56-2) 2630 9000
Fax	(56-2) 2635 3938 / (56-2) 2635 4720
PO Box	1392, Santiago
Web site	www.endesa.cl
Electronic mail	comunicacion@endesa.cl
Investor relations telephone	(56-2) 2353 4682
Investor relations fax	(56-2) 2378 4782
External auditors	KPMG Auditores Consultores Ltda.

## 2. Constitution documents

Empresa Nacional de Electricidad S.A. was incorporated by public deed dated December 1, 1943 before the Santiago notary public, Luciano Hiriart Corvalán.

By virtue of Supreme Finance Ministry Decree N°97 of January 3, 1944, the company's existence and bylaws were approved, stating that the company's objects were the production, transportation and distribution of electric energy and, particularly, to carry out the country's Electrification Plan approved by Corfo's Council in its N°215 session of March 24, 1943.

The abstract of the public deed and the above-mentioned decree were published together in the Official Gazette of January 13, 1944 and registered in Santiago's Commercial Registry on sheets 61 N°62 and leafs 65 (at the end) and N°63 respectively on January 17, 1944.

Its legal existence was declared by Supreme Decree of the Ministry of Finance N°1,226, of February 23, 1945, published in the Official Gazette of March 6, 1945 and registered in the Santiago's Commercial Registry on sheets 727 N°532, in March 16, 1945.

The company's bylaws have experienced numerous modifications, among them was that of 1980, which eliminated from its objects the

execution of the country's Electrification Plan, a responsibility that the Law assigned to the National Energy Commission; that of 1982, which adapted its bylaws to the Corporations Law N°18,046; that of 1987, which adapted its bylaws to the regulations of Decree Law N°3,500 of 1980, allowing funds managed by the pension funds managers (AFP) to be invested in securities issued by the company; and, that of 1988, which expanded the company's objects to include consultancy services.

The amendment of 1992 should also be mentioned which again expanded the company's objects, permitting the company to make investments in financial assets, develop projects and carry out operations in the energy field and others in which electric energy is essential, and to participate in public works infrastructure concessions in civil or hydraulic areas, either directly or through subsidiary or associate companies, both Chile in and abroad. There was also the amendment of 1994, which added to its bylaws the business name of Endesa, increased its capital so that part of this could be placed in the international markets through the ADR mechanism, and adapted the bylaws to the new provisions introduced by Law 19,301 to Decree Law 3,500 of 1980 which permitted, among other things, an increase in the maximum

percentage of share concentration to 26%. The 1995 amendment modified the company's arbitration system, allowing disputes among shareholders or between them and the company or its managers to be settled, alternatively, by arbitration or by the ordinary courts of justice. In 1999, an amendment permitted an increase of the maximum percentage of share concentration to 65% of the capital with voting rights of the company. The 2005 amendment modified the bylaws to add the "Endesa Chile" business name to that of Endesa. The 2006 amendment, added to the bylaws a new title called Directors' Committee and Audit Committee, in order to include in the bylaws a number of regulations related both to the Directors' Committee, as referred to in Law 18,046, as to the Audit Committee, created by the board of the company to meet the provisions of the United States' Sarbanes Oxley Act, to which the company is subject, since it has ADRs and bonds registered in that market. The 2007 amendment modified permanent article 5° and transitory article 1° of the bylaws to reflect the Company's present capital and the manner in which it has been subscribed and paid. In 2008, the company amended clause 3° and 4° of article 44 adapting them to article 75 of the Corporations Law 18,946 in order to replace the board's obligation to forward a copy of the balance sheet and company annual report (not later than the date of the first publication of summons to an ordinary shareholders' meeting, to each shareholder registered in the respective shareholders' register) as well as its obligation to forward them a copy of the balance sheet and statement of income (whenever amended by the shareholder's meeting within the following 15 days) for the obligation, in both cases, of making the referred documents available to such shareholders on the same occasions indicated above. And, the 2010 amendment that modified: (a) several articles of incorporation in order to adapt some of them to the Corporations Law 18,046 and to the Securities Law -which were amended by

Law 20,382, concerning the improvement of corporate governance, as well as other articles in order to adapt them to the provisions of the regulations of the Corporations Law; and (b) Title IV of the Bylaws, Directors' Committee and Audit Committee for the purpose of merging both committees, thereby reflecting the changes and independence requirements introduced into article 50 bis of the Corporations Law 18,046 by Law 20,382.

### 3. Corporate objects

The company's main objects are to exploit the production, transportation, distribution and supply of electricity and to acquire and utilize the respective grants and concessions for those purposes.

It is may also provide consultancy services in all engineering and company management spheres and trades; acquire, design, build, maintain and develop civil or hydraulic infrastructure works directly related to public-works concessions; develop the goods that comprise its assets; invest, develop projects, operate or carry out operations in the energy field and in other operations or products directly related to energy; invest, develop projects, operate or carry out operations in industrial projects and processes where electric energy is essential, determinant and used intensively.

The company is also able to invest in real estate, financial assets, instruments or securities, equity in companies and in mercantile documents in general, provided they are related to its objects and may also acquire, manage or sell them.

In complying with its objects, the company may act directly or through its subsidiary or associate companies, both domestically and abroad.

No comments were received by the company concerning the progress of the business.



## *ownership and control*

p. 24  
Ownership structure

p. 24  
The controllers

p. 24  
Twelve largest  
shareholders in the  
company

p. 25  
Most important  
changes in  
shareholdings

p. 25  
Share transactions  
made by related parties

p. 25  
Summary of  
comments and  
proposals of  
the Directors'  
committee and of  
shareholders

## 1. Ownership structure

The company's share capital as of December 31, 2012 amounted to 8,201,754,580 subscribed and paid shares, distributed among 17,606 shareholders.

Shareholder	%
Energis S.A.	59.98%
ADRs (Citibank N.A.)	4.56%
Pension funds	14.13%
Individual persons	3.64%
Others	11.43%
Stockbrokers	6.27%

## 2. The controllers

Energis S.A. is the controller of Endesa Chile, with a direct 59.98% shareholding. Energis S.A. does not have a joint operation agreement.

There were no share transactions by the company's majority shareholders during 2012.

## 3. Twelve largest shareholders in the company

Name	Tax No.	Unmber of shares	% participation
Energis S.A. (1)	94.271.000-3	4,919,488,794	59.98%
Citibank N.A. under SVS Circular 1.375	59.135.290-3	373,637,010	4.56%
Banco de Chile on behalf of non-resident third parties	97.004.000-5	206,032,823	2.51%
Banco Itaú on behalf of investors	76.645.030-K	191,374,091	2.33%
AFP Provida S.A for pension fund type C	98.000.400-7	190,767,203	2.33%
AFP Habitat S.A. for pension fund type C	98.000.100-8	153,095,289	1.87%
Banco Santander on behalf of foreign investors	97.036.000-K	148,599,078	1.81%
AFP Capital S.A. for pension fund type C	98.000.000-1	127,078,708	1.55%
Banchile C. de B.S.A.	96.571.220-8	111,076,714	1.35%
AFP Cuprum S.A. for pension fund type C	98.001.000-7	101,764,663	1.24%
AFP Provida S.A for pension fund type B	98.000.400-7	69,150,116	0.84%
AFP Habitat S.A. for pension fund type B	98.000.100-8	66,776,268	0.81%
<b>TOTAL</b>		<b>6,658,840,757</b>	<b>81.19%</b>

(1) Energis S.A. is a subsidiary of Endesa Latinoamérica, S.A., a Spanish company controlled 100% by Endesa (Spain).



## 4. Most important changes in shareholdings

The most significant ownership changes in Endesa Chile during 2012 were the following:

- Citibank N.A., under SVS Circular 1.375, reduced its holding from 4.90% in 2011 to 4.56% in 2012.
- AFP Provida S.A. increased its holding from 3.83% in 2011 to 4.15%.
- AFP Habitat S.A. reduced its holding from 3.65% in 2011 to 3.50%.
- AFP Capital S.A. reduced its holding from 3.24% in 2011 to 3.10%.
- AFP Cuprum S.A. reduced its holding from 3.12% in 2011 to 2,75%.
- Banco Itaú, for account of foreign investors, increased its holding from 1.89% in 2011 to 2.33%.
- Banco Santander, for account of foreign investors, increased its holding from 1.54% in 2011 to 1.81%.
- LarrainVial S.A. Corredora de Bolsa, increased its holding from 0.45% in 2011 to 0.76%.
- BICE Inversiones Corredores de Bolsa increased its holding from 0.25% in 2011 to 0.34%.
- Santiago Stock Exchange reduced its holding from 0.31% in 2011 to 0.16%.

## 5. Share transactions made by related parties

No directors or senior executives traded shares in the company during 2012.

## 6. Summary of comments and proposals of the Directors' committee and of shareholders

The company received no comments regarding the progress of the company's business between January 1 and December 31, 2012 from its majority shareholders or groups of shareholder holding more than 10% of the voting shares issued, in accordance with the provisions of article 74 of Law 18,046, and articles 82 and 83 of the regulations of the Corporations Law, nor from the Directors' Committee, notwithstanding the contents of the committee's report contained in this annual report.



## *management*

p. 28  
Board of Directors

p. 29  
Directors' Committee

p. 32  
Organization structure

p. 33  
Senior executives

p. 34  
Management  
of the principal  
subsidiaries

## 1. Board of Directors



**CHAIRMAN**  
**Jorge Rosenblut**  
Industrial Civil Engineer  
Universidad de Chile  
Taxpayer ID: 6,243,657-3



**VICE-CHAIRMAN**  
**Paolo Bondi**  
B.A. in Administrative  
Sciences  
Università Commerciale  
Bocconi di Milano  
Passport: G084839



**DIRECTOR**  
**Francesco Buresti**  
Electronic Engineer  
Università Degli Studi di  
Bologna  
Passport: F685628



**DIRECTOR**  
**Manuel Morán Casero**  
Aeronautic Engineering  
Universidad Politecnica  
de Madrid  
Passport: AAB266217



**DIRECTOR**  
**Alfredo Arahuetes García**  
Ph.D. in Economics and  
Business  
Universidad Pontificia de  
Comillas  
Taxpayer ID: 48,155,220-8



**DIRECTOR**  
**Jaime Bauzá Bauzá**  
Civil Engineer  
Pontificia Universidad Católica  
de Chile  
Taxpayer ID: 4,455,704-5



**DIRECTOR**  
**Vittorio Corbo Lioi**  
Commercial Engineer  
Universidad de Chile  
Taxpayer ID: 4,965,604-1



**DIRECTOR**  
**Felipe Lamarca Claro**  
Commercial Engineer  
Pontificia Universidad  
Católica de Chile  
Taxpayer ID: 4,779,125-1



**DIRECTOR**  
**Enrique Cibié Bluth**  
Commercial Engineer  
Pontificia Universidad  
Católica de Chile  
Taxpayer ID: 6,027,149-6

The company is administered by a board of directors constituted by nine members elected at the shareholders' meeting. The directors have a three year term in office and may be reelected.

In the event of death, resignation, bankruptcy, incompatibilities or limitations to assume positions or other impossibility preventing a director from performing their duties or force them to cease them, the board must be totally renewed at the next shareholders' meeting and the board may appoint a substitute in the interim.

## 1.1. Directors' Remuneration

In accordance with article 50 bis of the Corporations Law, the ordinary shareholders' meeting must establish the compensation of the members of the Director's Committee and their expense budget.

Director	Directors' Remuneration received in 2012					
	Position	Fixed remuneration	Ordinary meetings	Extraordinary meetings	Directors' Committee	Total
Jorge Rosenblut	Chairman	54,834	35,832	8,969	-	99,635
Paolo Bondi (1)	Vice chairman	-	-	-	-	-
Jaime Estévez Valencia (2)	Director	9,088	5,939	-	5,039	20,066
Francesco Buresti (1)	Director	-	-	-	-	-
José María Calvo-Sotelo (2)	Director	9,088	5,939	-	-	15,027
Vittorio Corbo	Director	27,417	17,916	4,485	-	49,818
Jaime Bauzá Bauzá	Director	27,417	17,916	4,485	15,201	65,019
Felipe Lamarca Claro	Director	27,417	17,916	4,485	15,201	65,019
Alfredo Arahuetes García (3)	Director	18,329	11,977	4,485	-	35,171
Enrique Cibié Bluth (3)	Director	18,329	11,977	4,485	10,162	45,333
Manuel Morán Casero (1) ; (3)		-	-	-	-	-
<b>TOTAL</b>		<b>191,919</b>	<b>125,412</b>	<b>32,154</b>	<b>45,603</b>	<b>395,088</b>

(1) The directors Paolo Bondi, Francesco Buresti and Manuel Morán have renounced their remuneration for performing their duties as director of Endesa Chile.

(2) The directors Jaime Estévez Valencia and José María Calvo-Sotelo were directors of Endesa Chile until the ordinary shareholders' meeting of April 26, 2012.

(3) The directors Alfredo Arahuetes, Enrique Cibié and Manuel Morán were appointed as directors of Endesa Chile at the ordinary shareholders' meeting of April 26, 2012.

## 1.2. Incentive Plans

The company has no incentive plans for the directors.

## 1.3. Advisory expenses of the board

The board incurred no advisory expenses during 2012.

## 2. Directors' Committee

The Director's Committee of Empresa Nacional de Electricidad S.A. was elected at the extraordinary board meeting of Endesa Chile held on April 26, 2012, resulting in the appointment of Felipe Lamarca Claro, Jaime Bauzá Bauzá and Enrique Cibié Bluth. In accordance with the Corporations Law, all of them are independent board members. Prior to this appointment, the Directors' Committee members were Felipe Lamarca Claro, Jaime Bauzá Bauzá and Jaime Estévez Valencia.

## 2.1. Report of the Directors' Committee

In accordance with article 50 bis of the Corporations Law, amended by Law 20,382, published in the Official Gazette on October 20, 2009, the following report is submitted about the activities of by the Directors' Committee, its annual performance and the expenses incurred in the year 2012.

The Director's Committee of Empresa Nacional de Electricidad S.A. was elected at the extraordinary board meeting of Endesa Chile held on April 26, 2012, resulting in the appointment of Felipe Lamarca Claro, Jaime Bauzá Bauzá and Enrique Cibié Bluth. In accordance with the Corporations Law, all of them are independent board members. The director Felipe Lamarca Claro was elected as chairman of the Committee and Enrique Cibié Bluth as its financial expert for the purposes of the United States Sarbanes Oxley Act. The former director Jaime Estévez Valencia held this position the year before.

The Directors' Committee met on 13 occasions during 2012, and basically reviewed the company's operations and contracts with

related companies and, in general, ruled on those matters referred to in article 50 bis of the Corporations Law, reporting its decisions to the company's board. The Committee also ruled, when asked to do so, on the pre approval of the services provided by external auditors other than the regular audit services and accusations deriving from the company's Ethics Channel.

At its February 2012 meeting, the Committee agreed to proposal to the board the appointment of Feller Rate Clasificadora de Riesgo Limitada and Fitch Chile Clasificadora de Riesgo Limitada credit-rating agencies to provide national credit rating services during 2012, and the American Fitch Ratings Services, Moody's Investors Services and Standard & Poor's International Ratings Services to provide identical services with relation to the corporate international credit rating.

In March 2012, and prior to the company's ordinary shareholders' meeting, the Committee proposed to the company's board and to the ordinary shareholders' meeting the appointment of KPMG Auditores Consultores Limitada as the company's external auditors as the first option in compliance with Circular 718 of the Superintendency of Securities and Insurance.

The Directors' Committee analyzed the company's quarterly and annual financial statements and the reports issued by the external auditors and inspectors of accounts. In addition, KPMG Auditores Consultores Limitada, the company's external auditors, submitted to the Committee the annual audit plan and the report stipulated in Section 404 of the Sarbanes Oxley Law regarding the company's internal controls.

The Committee also gave its opinion on the document 20 F and authorized its submission to the US Securities and Exchange Commission.

In 2012, the Committee analyzed and reported favorably to the company's board on the market conditions on which the following specific transactions between related parties:

- Advisory and technical management services framework contract between Endesa Chile and Endesa Generación, a related company, which manages the electricity-generating assets of the Endesa Group in Spain and Portugal, do their projects in Europe.
- Contracts for the use and maintenance of OSISOFT licenses and of SOPHOS antivirus licenses and the maintenance of Nostrum systems with the related company Enel Energy Europe S.R.L., for amounts of US\$1,450,074.23, €18,019.85 and €35,294.76 respectively.
- Contracts for the transfer of non-conventional renewable energy surpluses between Endesa Chile and its subsidiaries Pehuenche and Celta for 6,775 MWh and 56 MWh respectively. The value of these transfers was US\$14 per MWh, which corresponded to the market price.
- Expansion of the specialized engineering support services contracts for the start-up and commercial operation of the second unit of Bocamina 2, with Enel Ingegneria e Ticerco S.p.A. for the sum of € 3,998,964..
- Swap hedge operation for the equivalent of 753,000 barrels of oil for March 2012 in order to cover positions under the company's hedging policy. This transaction was carried out with the trading division of Endesa, Spain, following quotations in the ICE markets.
- Extension of the all-risks and civil liability insurance policy from June 30 to October 31, 2012, in which the related company Compostilla Re intervened. The cost of the extension was US\$14 million, after having received a favorable report from the consultants Marsh with respect to market conditions.
- Purchase from the related company Endesa, Spain, of 75 million m3 of liquefied natural gas, equivalent to the capacity of a tanker ship, at a price of US\$16 per million BTUs.
- Procedure for the supply of coal and freight required by Endesa Chile for its coal-fired plants with the related company Carboex. This includes balance and market clauses to enable Endesa Chile to define its purchasing

requirements, complement the list of suppliers for participating in presenting offers, qualify the bidders, accept or not the recommendations of offers and confirm the closing of the operation, subject to the analysis and recommendation of the Directors' Committee and the approval by the board of Endesa Chile, and subject to justification that the transaction is made on market conditions. This should occur for each individual transaction.

- Amendment of a services contract that Endesa Chile has with DCV, in order to incorporate a new service in order to comply with SVS Circular 700. This instructs all entities regulated by the SVS to be permanently informed of the list of individuals and entities designated as Taliban, Al-Qaida and other groups, companies and entities related to them. This revision must be carried out constantly as a preventive control in accordance with the United Nations Security Council resolutions 1988 and 1989.

This additional service has a monthly cost of UF 2 paid by Endesa Chile and corresponds to an operation defined in article 93 of Law 18.046, as Pablo Yrarrázaval Valdés, chairman of the board of the parent Enersis S.A. is the vice-chairman of the board of Depósito Central de Valores.

- Supply and freight contract relating to 1,550 kilo tons with the related company Endesa Generación, at an average CIF price of US\$104.68 per ton, plus improvements in quality and flexibility such as the possibility of deferring shipments and adding new qualities without modifying the reference price. The award of this contract was within the framework of the procedure for the supply of coal and associated freight approved by the Directors' Committee and the board in June 2012.
- Contract for the use and maintenance of Oracle software licenses with the related company Enel Energy Europe S.R.L. for an

amount of €38,009.55.

- Transactional agreement between Endesa Chile and Inversiones Trichahue and others, the cancellation of an energy and power contract and signing of a new contract of the same nature with the subsidiary Empresa Eléctrica Pehuenche S.A. The director Jaime Bauzá Bauzá was excused in the analysis and discussion of this matter due to being a shareholder in Inversiones Trichahue S.A.
- Renewal of the company's insurance program for the period November 2012 – November 2013, within the corporate contracting scheme with Group companies. A favorable report was therefore obtained with respect to market conditions from the external consultant Marsh.
- Contract between Endesa Chile and the related company Enel Green Power for the purchase of fixed blocks of energy: the first for 37.7 MW generated by the Taltal wind project and the second for 24.9 MW generated by the Valle de los Vientos project, both EGP projects. The prices and terms of the contracts and the option granted to Endesa Chile for the purchase of the NCRE attributes of both projects were considered by the Committee as being on market conditions and contributing to the corporate interest, for which the Committee took into account the report of the independent consultant GTD Ingeniería. This was presented to the board, which concluded that the contract conditions corresponded to the market. The members of the Committee also expressly requested that the contract conditions should be those that are habitually negotiated in the market for this kind of contract.
- Forward contract to fix the Brent oil and coal prices during January 2012 and thus hedge the effects that might affect the margin. This transaction was carried out with Endesa, taking into account market factors. The transaction implied no fee.
- Purchase of an additional LNG shipment of approximately 85 million m3 from Carboex, a subsidiary of Endesa, Spain, at a price of between US\$ 14.5 and 16.5 per thousand BTUs, according

to the best quotation obtainable at the closing of the transaction and always taking into account the offers of different bidders.

With respect to all the above contracts and operations, the Committee checked market conditions through bids, requests for comparable offers or otherwise by observing the relevant market conditions.

The ordinary shareholders' meeting of Endesa Chile held on April 26, 2012 adopted the following resolution with respect to the remuneration and budget of the Directors' Committee: (a) set a meeting attendance remuneration of 56 Unidades de Fomento (UF), with an annual limit of 12 paid meetings; and (b) an annual expense budget of 6,000 Unidades de Fomento.

During 2012, the Directors' Committee members received a total remuneration of UF 672.

In 2012, the Directors' Committee made no use of the annual expense budget of UF 6,000 set by the ordinary shareholders' meeting.

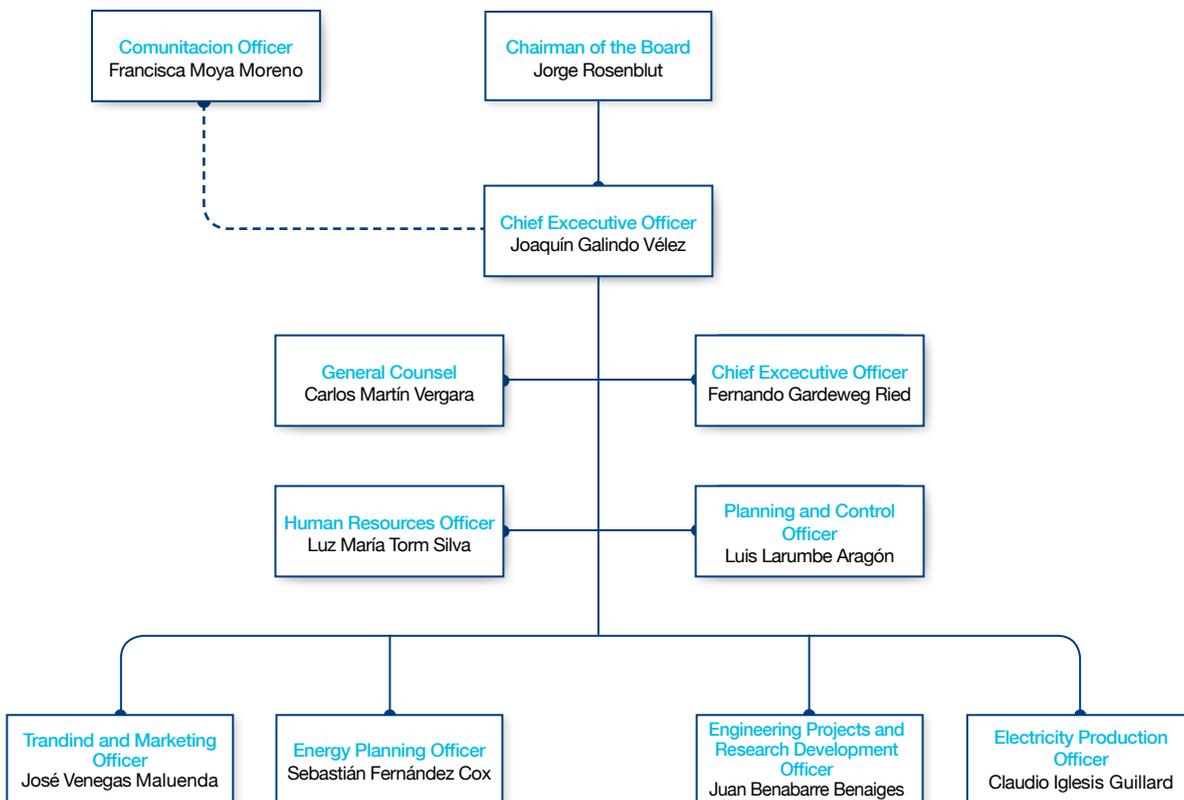
## 2.2. Directors' Committee expenses

The ordinary shareholders' meeting of Endesa Chile held on April 26, 2012 adopted the following resolution with respect to the remuneration and budget of the Directors' Committee: (a) set a meeting attendance remuneration of 56 Unidades de Fomento (UF), with an annual limit of 12 paid meetings; and (b) an annual expense budget of 6,000 Unidades de Fomento.

During 2012, the Directors' Committee members received a total remuneration of UF 672.

In 2012, the Directors' Committee made no use of the annual expense budget of UF 6,000 set by the ordinary shareholders' meeting.

## 3. Organization structure



## 4. Senior executives



**CHIEF EXECUTIVE OFFICER**  
Joaquín Galindo Vélez  
Superior Industrial Engineer  
and B.A. in Economic &  
Business Sciences  
Universidad de Sevilla  
Tax ID N°: 23,295,610-0



**COMMUNICATIONS OFFICER**  
Francisca Moya Moreno  
Journalist  
Universidad de Santiago  
de Chile  
Tax ID N°: 12,690,736-2



**GENERAL COUNSEL**  
Carlos Martín Vergara  
Attorney  
Pontificia Universidad  
Católica  
de Valparaíso  
Tax ID N°: 6,479,975-4



**ELECTRICITY PRODUCTION OFFICER**  
Claudio Iglesias Guillard  
Electrical Civil Engineer  
Universidad de Chile  
Tax ID N°: 7,289,154-6



**ENERGY PLANNING OFFICER**  
Sebastián Fernández Cox  
Commercial Engineer  
Universidad de los Andes  
Tax ID N°: 10,673,365-1



**ENGINEERING, PROJECTS AND RESEARCH DEVELOPMENT OFFICER**  
Juan Benabarre Benaiges  
Mechanical Civil Engineer  
Universidad de Chile  
Tax ID N°: 5,899,848-6



**CHIEF FINANCIAL OFFICER**  
Economics  
Universidad de Chile  
Tax ID N°: 7,004,467-4



**TRADING AND MARKETING OFFICER**  
José Venegas Maluenda  
Civil Industrial Engineer  
Pontificia Universidad  
Católica de Chile  
Tax ID N°: 7,893,919-2



**PLANNING AND CONTROL OFFICER**  
Luis Larumbe Aragón  
B.A. in Economic and  
Business Sciences  
Universidad Comercial de  
Deusto  
Tax ID N°: 23,303,647-1



**HUMAN RESOURCES OFFICER**  
Luz María Torm Silva  
Electrical Civil Engineer  
Universidad Católica de  
Valparaíso  
Tax ID N°: 7,208,766-6

#### 4.1. Remuneration of managers and senior executives

The total remuneration received by the managers of Endesa Chile in 2012 amounted to Ch\$2,118 million.

#### 4.2. Benefits for managers and senior executives

The company maintains complementary health insurance and catastrophic insurance cover for senior executives and their dependents. The company also has a life insurance cover for each senior executive. These benefits are granted according to the managerial level of each employee at any particular time. In 2012, the amount was Ch\$27 million, a sum that is included in the remuneration received by senior executives.

#### 4.3. Incentive plans for managers and senior executives

For the managerial level, Endesa Chile has an annual bonus plan based on compliance with objectives and individual contribution to company's results. This plan includes a definition of a bonus range for each management level. The bonuses granted to company executives consist of a specific number of their gross monthly salaries.

#### 4.4. Severance payments

In 2012, Endesa Chile made no severance payments to senior executives.

### 5. Management of the principal subsidiaries

#### Endesa Costanera

José Miguel Granged Bruñen  
Industrial Engineer  
Escuela Técnica Superior de Ingenieros Industriales de Zaragoza

#### Hidroeléctrica

El Chocón  
Fernando Claudio Antognazza  
Certified Public Accountant  
Universidad de Buenos Aires

#### Emgesa

Lucio Rubio Díaz  
B.A. in Economics and Business Sciences  
Universidad Santiago de Compostela

#### Edegel

Carlos Luna Cabrera  
Civil Engineer  
Escuela Colombiana de Ingeniería Julio Garavito

#### Pehuenche

Lucio Castro Márquez  
Civil Engineer  
Universidad de Chile

#### San Isidro

Claudio Iglesias Guillard  
Electrical Civil Engineer  
Universidad de Chile

#### Endesa Eco

Wilfredo Jara Tirapegui  
Mechanical Civil Engineer  
Universidad de Santiago de Chile







07

*human resources*

p. 38  
Workforce

p. 39  
Human resources  
activities



## 1. Workforce

The following table shows the permanent workforce of Endesa Chile and its subsidiaries as of December 31, 2012:

Company	Managers & senior executives	Professionals & technicians	Other employees	Total
<b>ARGENTINA</b>				
Endesa Costanera	6	433	13	452
Hidroeléctrica El Chocón	1	44	4	49
<b>Total workforce in Argentina</b>	<b>7</b>	<b>477</b>	<b>17</b>	<b>501</b>
<b>CHILE</b>				
Endesa Chile	10	949	68	1,027
Pehuenche	3	0	0	3
Pangué				0
Celta	1	0	0	1
San Isidro				0
Canela wind farm				0
Endesa Eco				0
Ingendesa (1)		1		1
Túnel El Melón	1	10	5	16
GasAtacama (2)	3	77	14	94
HidroAysén (2)	3	27	5	35
<b>Total workforce in Chile</b>	<b>21</b>	<b>1,067</b>	<b>92</b>	<b>1,177</b>
<b>COLOMBIA</b>				
Emgesa	6	420	15	441
<b>Total workforce in Colombia</b>	<b>6</b>	<b>420</b>	<b>15</b>	<b>441</b>
<b>PERU</b>				
Edegel	7	213	16	236
<b>Total workforce in Peru</b>	<b>7</b>	<b>213</b>	<b>16</b>	<b>236</b>
<b>Total workforce Endesa Chile and subsidiaries</b>	<b>41</b>	<b>2,174</b>	<b>140</b>	<b>2,355</b>

Notes:

- (1) The workforce of the Chilean subsidiary Ingendesa includes the employees of Ingendesa in Brazil.  
 (2) Includes the proportional workforce of joint ventures.



## 2. Human resources activities

### 2.1. Labor relations

In labor relation matters, 2012 was characterized by the collective bargaining process with the National Intercompany Union of Workers of Endesa Chile and subsidiaries, which groups 64 workers. This process was conducted under a regulated framework, in compliance with the dates established under current legislation. This negotiation concluded with a collective agreement covering 4 years which harmonizes the benefits and improved variable income, among other items.

Periodic meetings between union leaders and the company have provided opportunities for a continuous and direct dialogue to address matters of common interest for both parties, and to the benefit of workers.

### 2.2. Training

In order to define the 2012 training program of Endesa Chile, the company conducted a process to detect the training needs. Based on its results, a training schedule was set to meet its business needs, which resulted in training that follows two action avenues: a transversal plan with development training subjects and technical-functional training.

There was a special concern for safety and occupational health matters. The third version of the Risk, Safety and Occupational Health Management Diploma was completed successfully. Its purpose was to develop the skills needed for the administration of these principles and, at the same time, reinforce the tools that will strengthen their effective control.

Courses were also given in organizational re-induction in safety and occupational health, first aid, cardio-pulmonary resuscitation and the use of external defibrillator, water rescue, application of ergonomics at work, handling of defense and handling of fire extinguishers.

With the participation of 19 employees, Endesa Chile began the second version of the electrical markets diploma at the Universidad del Desarrollo. At the same time and in order to provide opportunities for development and improvement, study scholarships were given to workers, with 60 benefiting from this. The management skills development program sought to strengthen skills like leadership, strategic thinking, negotiations and coaching. This program involved the participation of 29 employees.

Another important program was the Young Professionals which seeks to broaden the outlook of young professionals so that they can contribute to the business with innovation and enterprise and prepare them for their career development within the company. 12 employees took part in this program which was given by the Universidad Adolfo Ibañez.

In the area of technical formation, the Technological Formation Center (CTF) has consolidated a combination of initiatives that have improved the formative standards for guaranteeing the quality of service in the energy-production areas. The working skills certification programs were extended to other plants which had not been considered at the start of the year, such as Tal Tal. Here the already-prepared profiles and skills were validated, ensuring their pertinence, in order to develop assessment instruments that finally permit an analysis of data for the accreditation. The CTF In 2012 also gave a fresh impulse to Campus Latam which increased its presence in the region. This initiative is being led by Chile, making possible the continuous and immediate flow of learning to the personnel and capturing the know-how of the electricity business for the efficient transmission to a large number of workers.

Training using the thermal-plant simulator continued for the second year, with the participation of 18 operators who spent 3 days rehearsing contingencies.

In the context of the detection of gaps in labor skills program of the CTF, 125 working-skill profiles were prepared in 2012 for the operation and maintenance areas and were incorporated in evaluating gaps which will be consolidated

during 2013, thus creating a permanent, significant and natural source of detection of training needs. In the same context, for example, a hydraulic and thermal generation topics activity was arranged in 2012 with the participation of 53 workers.

Seven counselors took part in the knowledge transfer program, in order to identify and define demand of technical requirements and specific knowledge by important specialties (equipment and critical actions), raise the present offer of experience and knowledge of internal players relating to the business, and define plans for the formation and maintenance of the knowledge of the specialists in the company, so that this knowledge can be used throughout the whole organization.

The following subjects were taught: the handling of design and construction contingencies of hydroelectric plants, vigilance of water rights, generators, theoretical and practical bases of laboratory geo-technical tests, and ecological flows (hydraulic - environmental).

Another novel program was advanced risk management in capital projects, with 21 participants, oriented to acquiring skills for knowing the practical steps and skills involved in the handling of project risks. There was also Lean Construction, with 24 participants, to apply new concepts of the Lean methodology relating to project control, and LAST PLANNER, with 33 participants, for the application of new concepts of the Last Planner methodology relating to project control.

## 2.3. Personnel development

### 2.3.1. Management skills development program

This program seeks to strengthen skills such as leadership, strategic thinking, negotiation and coaching. The development and preparation of this program was tailor-made to the company's needs in a strategic alliance with Universidad de los Andes. The program was led by outstanding lecturers of that institution and also included a round of talks given by managers of the Enersis Group in order to provide a strategic vision of the business.

### 2.3.2. Work Atmosphere

The second climate and safety study was carried out in 2012 for Endesa Chile. This represents a valuable channel of communication and diagnosis which is directed to all the employees. The focus of this latest version was to dwell further on matters related to health and safety, the group's number one global priority.

It is important to point out that the action and improvement plans defined in the previous survey in 2010 were all carried out, working on three relevant and transversal aspects:

- Valuation and recognition of merit.
- Formation and development.
- Communication and vision.

### 2.3.3. Eighth place among best companies for working mothers and fathers

Every year, Revista Ya, published by the El Mercurio newspaper, and Fundación Chile Unido prepare a ranking of the Best Companies for Working Mothers and Fathers. In 2012, and for the third consecutive year, the Enersis Group participated as a whole and obtained the 8th place in this ranking.

This award recognizes those companies with the best policies in the area of conciliation of work and family conciliation, which, in turn, promotes adopting these practices with company workers. In 2012, the pilot tele-work program was introduced.

### 2.3.4. Performance evaluation

Performance evaluation is important for Endesa Chile as a development tool for its workers. This is why, since 2010, the company has an evaluation system for all its Chilean companies, which includes a BARS (Behaviorally Anchored Rating Scales) behavioral evaluation and an objectives compliance evaluation. These evaluations are essential personal development tools and define a path to guide development training operations.

### 2.3.5. Great Place to Work

In May and June 2012, Endesa Chile took part in the survey of the best companies to work for prepared by "Great Place to Work".



The objective was to know employees' perceptions with respect to credibility, respect, impartiality, pride and comradeship.

This survey enables the company to compare itself with the best companies to work for in Chile and know their best work practices in order to design and execute action and improvement plans according to the needs of each management area or business.

### 2.3.6. Family responsible company

This is a Spanish standard from the foundation Masfamilia which points to improving human sustainability and strengthening the quality of life of the personnel, especially conciliation between personal life, working life and equality of opportunities. The Enersis Group took the challenge and commitment to opt for this certification, which has meant diagnostic work during 2012 relating to legal aspects, employees' opinions and those of their leaders, and a benchmarking with multinational companies in the market.

Following this diagnostic process, the certification was begun by the external auditor Aenor.

### 2.3.7. Pilot tele-work program

During 2012, the companies of the Enersis Group in Chile introduced a pilot tele-work program

in order to encourage conciliation between the working and home lives of employees, through a day of tele-work each week. This pilot program was carried out over two months and was positively received by part of the personnel. There was also an excellent evaluation of those taking part in the initiative. The basic principles of this practice are to consolidate a management style based on trust and commitment, measure the work in terms of results and not time spent at the work place, and favor conciliation of professional, personal and family lives. It is important to note that 50 quotas will be opened in 2013 based on a call for voluntary applications by employees.

### 2.3.8. Recognize-us program

This program was begun in 2012 and seeks to strengthen a culture based on meritocracy and recognition within the company. This model encourages the recognition of personnel on two levels, starting from a basic one of day-to-day recognition and a second of big achievements that permit public recognition of important and exceptional contributions of employees through recognition ceremonies. In this way, the "Recognize us" program helps to strengthen the commitment of employees with the company.

## 2.4. Safety and occupational health actions

Endesa Chile and its subsidiaries have managed to consolidate aspects of work safety and health through the development of activities that promote the integral protection of all its workers, stimulating a safe work attitude centered on company processes and operations.

**Diffusion of lesson learnt:** Project that involves the provision of a file with consultation and training documents which contain an analysis of every serious or fatal accident occurring in the Group. This analyzes the causes of the incidents and their preventive measures as lessons learnt. The document therefore contributes to the elimination of the sub-standard conditions and acts that are present daily in carrying out work with the risk of accident.

**Provision of rota-folio texts:** 100 educative and pedagogic texts handed to contractor companies addressed to both supervisors and workers, for them to understand and know how to analyze the personal behavior that can result in accidents.

**Ways to safety:** Activity developed for executives in 18 work places, consisting of on-site inspections to check compliance with procedures and use of suitable equipment, tools and machinery.

**Safety campaigns:** Development of activities in the framework of safety in April and November in order

to make known and reinforce preventive actions to avoid the occurrence of work accidents.

**Improvements in safety in working at height:**

Definition and introduction of equipment for working at height, with the provision of new safety harnesses and other accessories and equipment to reduce the risks of falls and permit rescue in emergency situations.

**Improvements in electric work safety:**

Definition and introduction of equipment for electrical installation work, with the provision of fireproof clothing and facial masks.

**Development of One Safety project:**

Implementation of a program of conduct observations on site in 13 generation facilities of Endesa Chile, by which workers' behavior is recorded in carrying out their activities and improvements set for the deviations detected.

**Study of the leadership profile in SSL in**

**supervisors and inspectors:** Development of study to identify the characteristics of leadership in risk prevention in 23 supervisors of contractor companies and 30 inspectors of the line of command in order to prepare a program of intervention to establish improvements in preventive actions.

**Development of training programs:** Carrying out training programs in the rescue of workers in emergency situations.



## 2.5. Selection

In order to promote the professional development of its workers within the organization, Endesa Chile has continued to strengthen its internal mobility, seeking to provide development opportunities for workers by giving priority to covering recruitment needs through internal vacancy applications. In this way, during 2012, there were 74 internal position changes (through internal competition and promotions), which corresponds to 25% of the processes managed by the Selection Chile area that were covered internally.

During 2012, there were 451 national selection processes of which 81% of them were covered by December. There was an average of 20.35 business days for the selection processes begun in 2012. A satisfaction survey was applied to internal applicants following the close of each process, obtaining 89% satisfaction of the service provided.

Resulting from its constant concern for its people, an induction program was introduced in 2012 for employees entering the company. The purpose is to facilitate a better adaptation to the company and their jobs, and to provide a tangible perspective of the company's electricity-generation business and the necessary tools for efficiently performing their respective jobs. The program, in which 120 people participated, included a welcoming breakfast, a day of business presentations, e-learning courses and visits to a part of the company's installations.

As a strategy to attract talent in the market, especially young professionals with a high potential who seek opportunities to pursue an international career, the company carried out its Young Professionals project. This pioneering program invites the best students from different universities. After recruiting over 500 young people, five candidates were selected to enter different areas

of the Group in a program that will enable them to pursue their career in the company.

The company in 2011 had an outstanding participation in labor fairs, confirming its strong reputation. These fairs are a significant recruiting source for the vacancies generated during the year. The company therefore participated in 17 labor fairs, recruiting more than 600 professionals with different degrees to fill the vacant positions.

In order to respond to the support needs of the company's different areas, the recruitment was begun of apprentices and memorists. This initiative provides the best students selected for this process. 213 students were received in 2012 to carry out their professional practice in various areas, being evaluated with satisfactory qualifications by their tutors. 13 people were also incorporated in the company to perform their practice in different jobs vacant in the organization during the year.

Endesa Chile continued to assume the challenge of providing jobs for disabled people. The Entrada project was promoted during 2012, incorporating eleven people with some kind of disability as students in practice.

Finally, the Crecer+ project was executed in the framework of the agreement between Fundación Adecco and Group companies to promote jobs for poor young people in Latin America, an activity consisting of a work formation plan for young people at social risk, offering participants the opportunity to receive a full orientation in seeking a job. Three workshops were arranged of four meetings each where 57 people between 17 and 18 from different educational centers could learn about their own potential and how to exploit it in their first search for work, covering subjects like self-knowledge, the preparation of their curriculum vitae, knowledge of the labor market, etc.



BOLSA DE

*stock market transactions*

p. 46  
Market information

p. 46  
Share trading



## 1. Market information

During 2012, the Chilean stock market was marked mainly by the predominance of uncertainty related to the debt crises of member countries of the Euro zone, as well as a weakening of banks and thus access to finance. While the developed countries show a sustained recovery in their main indicators in 2012, the local market has not managed to fully overcome the environment of international uncertainty.

During the last two years, the shares of Endesa Chile have shown an accumulated negative performance in the markets on which they are traded. However, Endesa Chile's share price on the local market showed a rise of 1.6% over the last 12 months, a favorable result given the world's uncertain economic scenario, especially in the European zone, and the drought that has affected Chile for three consecutive years. Similarly, the ADRs of Endesa Chile showed an increase of 10.1% on the New York Stock Exchange while the company's shares on the Madrid exchange rose by 7.7%.

### 1.1. Santiago Stock Exchange

The table shows the evolution of Endesa Chile's share price over the last two years with respect to the Selective Share Price Index (Índice Selectivo de Precios de Acciones, IPSA) in the local market:

Variation	2011	2012	Accumulated 2011-2012
Endesa Chile	-12.6%	1.6%	-11.2%
IPSA	-15.2%	3.0%	-12.7%

### 1.2. New York Stock Exchange (NYSE)

The following table shows the behavior of Endesa Chile's ADRs listed on the NYSE (EOC), with respect to the Dow Jones Industrial and Dow Jones Utilities indexes during the last two years:

Variation	2011	2012	Accumulated 2011-2012
EOC	-21.1%	10.1%	-13.2%
Dow Jones Industrial	5.5%	7.3%	13.2%
Dow Jones Utilities	14.7%	-2.5%	11.9%

### 1.3. Latin American Securities Market on the Madrid Stock Exchange (Latibex)

The table shows the performance of Endesa Chile's shares (XEOC) listed in the Madrid Stock Exchange (Latibex) over the last two years, with respect to the IBEX Index.

Variation	2011	2012	Accumulated 2011-2012
XEOC	-20.3%	7.7%	-14.2%
LATIBEX	-23.3%	-10.7%	-31.5%

## 2. Share trading

### 2.1. Market transactions on the Chilean stock exchanges

During 2012, the Santiago Stock Exchange traded 1,206.4 million shares of Endesa Chile for a volume of Ch\$965,300 million. The Chilean Electronic Exchange traded 143 million shares of Endesa Chile for a total volume of Ch\$114,006

million, and the Valparaiso Stock Exchange traded 1.8 million shares of Endesa Chile for Ch\$1,435 million.

In 2012, the Endesa Chile share price closed at Ch\$778.11 in the Santiago Stock Exchange, at Ch\$773.24 in the Electronic Exchange and at Ch\$780.50 in the Valparaiso Stock Exchange.

#### Quarterly share trading Information over the last three years

Santiago Stock Exchange			
Quarter	Shares traded	Volume traded (Ch\$)	Average Price (Ch\$)
1st 2010	433,014,057	376,020,533,681	868.38
2nd 2010	455,655,231	371,918,680,410	816.23
3rd 2010	401,368,264	348,049,847,524	867.16
4th 2010	395,276,668	351,743,398,059	889.87
1st 2011	455,389,983	385,642,098,459	847.04
2nd 2011	307,129,801	267,834,613,160	871.69
3rd 2011	287,328,831	228,241,714,742	794.14
4th 2011	222,858,074	170,561,978,207	765.33
1st 2012	290,555,832	234,502,299,034	807.08
2nd 2012	334,622,005	280,348,200,612	837.81
3rd 2012	280,874,570	225,716,601,603	803.62
4th 2012	300,312,523	224,732,476,734	748.33

Chilean Electronic Exchange			
Quarter	Shares traded	Volume traded (Ch\$)	Average price (Ch\$)
1st 2010	56,468,996	49,401,429,103	874.84
2nd 2010	41,990,639	34,251,126,745	815.68
3rd 2010	53,125,161	46,256,114,991	870.70
4th 2010	46,225,042	41,195,187,277	891.19
1st 2011	35,585,747	30,020,877,219	849.79
2nd 2011	51,603,185	45,057,903,142	871.55
3rd 2011	36,239,908	28,750,234,887	792.78
4th 2011	53,653,332	40,898,855,660	766.21
1st 2012	35,804,054	28,872,002,773	806.39
2nd 2012	41,165,728	34,351,939,614	834.48
3rd 2012	28,006,494	22,153,709,289	791.02
4th 2012	38,015,119	28,628,617,171	753.09

Valparaiso Stock Exchange			
Quarter	Shares traded	Volume traded (Ch\$)	Average Price (Ch\$)
1st 2010	3,371,493	2,937,445,334	871.26
2nd 2010	978,005	799,359,160	817.34
3rd 2010	2,285,812	1,993,085,466	871.94
4th 2010	528,415	477,693,820	904.01
1st 2011	380,755	319,073,979	838.00
2nd 2011	659,841	576,978,546	874.42
3rd 2011	185,755	150,672,131	811.13
4th 2011	343,116	261,997,012	763.58
1st 2012	506,364	413,060,752	815.74
2nd 2012	399,151	343,219,055	859.87
3rd 2012	306,705	244,105,374	795.90
4th 2012	577,030	434,434,366	752.88

## 2.2. Market transactions on the New York Stock Exchange (NYSE)

In the United States of America, 31.1 million Endesa Chile ADSs were traded in 2012, totaling US\$1,538 million. One ADS represents 30 Endesa Chile shares. The price of an Endesa Chile ADSR closed the year at US\$ 48.8.

#### Quarterly share trading Information over the last three years

New York Stock Exchange (NYSE)			
Quarter	Average ADS price (US\$)	Volume traded (US\$)	Units traded (No. of ADS)
1st 2010	10,340,291	522,947,214	50.57
2nd 2010	9,174,529	421,899,369	45.99
3rd 2010	5,802,804	293,800,125	50.63
4th 2010	6,213,507	345,653,774	55.63
1st 2011	6,968,620	365,815,218	52.49
2nd 2011	5,673,942	316,154,237	55.72
3rd 2011	9,362,161	467,199,612	49.90
4th 2011	8,678,411	391,722,030	45.14
1st 2012	8,063,211	400,563,192	49.68
2nd 2012	8,288,230	422,647,447	50.99
3rd 2012	7,919,187	394,950,154	49.87
4th 2012	6,810,680	319,674,648	46.94

## 2.3. Market transactions on the Madrid Stock Exchange (Latibex)

In 2012, 2.7 million contract units of Endesa Chile were traded on the Latin American Securities Market on the Madrid Stock Exchange (Latibex), for a value of €3.5 million. Each contract unit represents 30 Endesa Chile shares in the 2001-2010 period while 1 company share is the equivalent from 2011. The contract unit price closed the year at €1.21.

#### Quarterly share trading Information over the last three years

Latibex			
Quarter	Contract units	Volume traded (euros)	Average contract unit price (euros)
1st 2010	37,960	1,380,092	36.36
2nd 2010	117,283	4,258,270	36.31
3rd 2010	34,400	1,332,301	38.73
4th 2010	27,307	1,105,477	40.48
1st 2011	967,650	1,241,554	1.28
2nd 2011	1,587,111	2,040,143	1.29
3rd 2011	1,117,743	1,342,140	1.20
4th 2011	790,249	884,744	1.12
1st 2012	815,745	1,031,950	1.27
2nd 2012	710,996	953,620	1.34
3rd 2012	642,284	858,973	1.34
4th 2012	489,825	608,001	1.24





## *dividends*

p. 50  
Dividends

p. 50.  
Dividend policy 2013

p. 51  
Dividend policy  
2012

p. 51  
Distributable  
earnings 2012



## 1. Dividends

In accordance with number 5 of General Rule. 283, the following describes the company's dividends policy for the 2012 and 2013.

## 2. Dividend policy 2013

### 2.1. General

In compliance with the provisions of Circular 687 of February 13, 1987 issued by the Superintendency for Securities and Insurance (SVS), the following is the board's dividend policy.

### 2.2. Dividend policy

The board intends to distribute an interim dividend against the earnings for 2013 of up to 15% of the earnings to September 30, 2013, as shown by the financial statements as of that date, payable on January 2014.

The board intends to propose to the ordinary shareholders' meeting, to be held in the first four months of 2014, the distribution of a final dividend equivalent to 50% of the earnings for 2013.

The final dividend will be defined by the ordinary shareholders' meeting to be held during the first four months of 2014.

Actual compliance with this program will be subject, in the matter of dividends, to the earnings actually produced as well as the results regularly projected by the company, or to the existence of certain conditions, as appropriate.

### 2.3. Procedure for payment of dividends of Endesa Chile

For the payment of dividends, whether interim or final, and in order to avoid their improper

collection, Endesa Chile offers the following payment methods:

1. Deposit in a bank checking account, whose account-holder is the shareholder.
2. Deposit in a bank savings account, whose account-holder is the shareholder.
3. Mailing of a check or cashier's check via registered mail to the shareholder's domicile as recorded in the shareholders' register.
4. Collection of a check or cashier's check from the offices of DCV Registros S.A., as the share registrar Endesa Chile, or from the bank and branches defined for this purpose and informed in the dividend payment notice published.

Bank checking or savings accounts may be located anywhere in the country.

It should be emphasized that the payment method chosen by each shareholder will be used by DCV Registros S.A. for all dividends payments unless the shareholder communicates in writing their intention to change it and record a new option.

Shareholders who have not registered a particular payment method will be paid by method 4 indicated above.

In cases when checks or cashier's checks are returned by the post office to DCV Registros S.A., these will remain in its custody until collected or requested by the shareholder.

In the case of deposits in bank checking accounts, Endesa Chile may request, for security reasons, their confirmation by the respective bank. If the accounts indicated by shareholders are objected to, whether in a prior verification process or for any other reason, the dividend will be paid following the method indicated in 4 above.

The company has adopted and will continue to adopt in the future all the security measures required by the dividend payment process in order to safeguard the interests of the shareholders and Endesa Chile.

## 3. Dividend policy 2012

### 3.1. General

In compliance with the provisions of Circular 687 of February 13, 1987 issued by the Superintendency for Securities and Insurance (SVS), the following is the board's dividend policy.

### 3.2. Dividend policy (1)

The board intends to distribute an interim dividend against the earnings for 2012 of up to 15% of the earnings to September 30, 2012, as shown by the financial statements as of that date, payable on January 2013.

The board intends to propose to the ordinary shareholders' meeting, to be held in the first four months of 2013, the distribution of a final dividend equivalent to 50% of the earnings for 2012.

The final dividend will be defined by the ordinary shareholders' meeting to be held during the first four months of 2013.

Actual compliance with this program will be subject, in the matter of dividends, to the earnings actually produced as well as the results regularly projected by the company, or to the existence of certain conditions, as appropriate.

- (1) On November 29, 2012, in accordance with articles 9 and 10 paragraph 2 of Law 18,045 and the provisions in General Rule 30 of the SVS, the board of Empresa Nacional de Electricidad S.A. decided to distribute on January 24, 2013 an interim dividend of Ch\$3.04265 per share against the earnings for 2012, being 15% of the earnings as of September 30, 2012, in line with the Company's current dividend policy.

## 4. Distributable earnings 2012

The distributable earnings for 2012 are as follows:

Millions of pesos	
Earnings for the year attributable to the dominant company	234,335
Distributable earnings	234,335

Dividends distributed in recent years:

Dividend No.	Type of dividend	Closing date	Payment date	Pesos per share	Imputed to year	Annual dividend	% of earnings
40	Final	24/03/06	30/03/06	5.82	2005	5.8200	50%
41	Interim	16/12/06	22/12/06	2.57	2006		
42	Final	15/05/07	22/05/07	10.84	2006	13.4100	60%
43	Interim	19/12/07	26/12/07	2.1926	2007		
44	Final	23/04/08	29/04/08	11.5647	2007	13.7573	60%
45	Interim	12/12/08	18/12/08	5.3512	2008		
46	Final	06/05/09	12/05/09	15.933	2008	21.2842	40%
47	Interim	10/12/09	16/12/09	9.31235	2009		
48	Final	28/04/10	05/05/10	17.5305	2009	26.8429	35%
49	Interim	20/01/11	26/01/11	6.42895	2010		
50	Final	05/05/11	11/05/11	26.09798	2010	32.5269	50%
51	Interim	13/01/12	19/01/12	5.08439	2011		
52	Final	11/05/12	17/05/12	22.15820	2011	27.2426	50%
53	Interim	18/01/13	24/01/13	3.04265	2012		





## *investment and financing policy 2012*

p. 54  
Investment policy 2012

p. 54  
Financing policy 2012

p. 55  
Other matters



## 1. Investment policy 2012

During 2013, the company will make investments consistent with its bylaws in the following investment areas, indicating the maximum investment limit in each case:

### 1.1. Electricity generation

The maximum investment limit will be amount needed for the company to meet its main objects (the production, transport, distribution and supply of electricity), with a maximum amount equivalent to 15% of Endesa Chile's equity as of December 31, 2012.

### 1.2. Capital contributions in subsidiary and associate companies

Contributions will be made to local and foreign subsidiaries and associates so that they can complete their projects under development and make the investments and carry out the activities needed to meet their respective corporate objects.

The maximum global investment limit in all local and foreign subsidiaries and associates for 2013 will be a sum equivalent to 15% of Endesa Chile's equity as of December 31, 2012

### 1.3. Other investments

- Financial assets, certificates, rights, securities, real estate, contributions to companies and the creation of subsidiaries and associates, as established in the bylaws, in order to make investments in the electricity sector. The maximum investment limit will be the amount needed to take advantage of business opportunities, with a maximum amount for the year equivalent to 15% of Endesa Chile's equity as of December 31, 2012.

- Financial assets, certificates, rights, securities, real estate, contributions to companies and the creation of subsidiary and associate companies, as established in the bylaws, in order to undertake projects and operations or activities in industrial processes associated with obtaining energy sources, and those where electricity is essential, decisive and intensively used in such processes, for an equivalent amount not exceeding 5% of Endesa Chile's equity as of December 31, 2012.

### 1.4. Investments in financial instruments

Endesa Chile will invest in financial instruments according to the portfolio selection and diversification criteria set by company's management, in order to optimize the return on its cash surpluses.

Within the framework approved by the shareholders' meeting, the board should decide the specific investments in works and studies to be carried out by the company, defining the amount and financing methods in each case, and adopting the pertinent measures to control these investments.

## 2. Financing policy 2012

The company's financing policy considers that its level of indebtedness, defined as the ratio of total liabilities to equity, should not exceed 2.20 times. Funds will be raised from the following sources:

- Own resources.
- Supplier credits.
- Loans from banks and financial institutions.
- Placement of securities on local and international markets.
- Proceeds of the sale of assets and/or services provided by Endesa Chile.



### 3. Other matters

In order to carry out the investment and financing policies, the company's management will have sufficient powers for signing and modifying contracts for the purchase, sale or lease of the goods and services needed for conducting the company's activities, within the applicable statutory framework, observing market conditions relating to each case for goods and services of the same nature, quality and characteristics. The management will also have the authority to cancel obligations arising under such contracts in accordance with the law whenever convenient for corporate interests.

As provided in article 120 of Decree Law 3,500, the disposal of goods or rights declared in these policies as essential for the company's business, as well as the constitution of liens over them, must

be approved by an extraordinary shareholders' meeting. Consequently, and in compliance with article 119 of the same Decree, the following assets are declared as essential for the company's business:

- Generating plants and emergency and reserve units with a capacity of above 50,000 kW, in operation or under construction, owned by the parent company and subsidiaries.
- The shareholdings of Endesa Chile in Empresa Eléctrica Pehuenche S.A., Endesa Argentina S.A., San Isidro S.A., Celta S.A., Endesa Eco S.A. and Generandes Peru S.A., which imply retaining at least 50.1% of these companies' subscribed and paid shares.

The extraordinary shareholders' meeting should approve the granting of real or personal guaranties to secure third-party obligations, unless such obligations were assumed by the subsidiaries, in which case approval of the board will suffice.





## *businesses of the company*

p. 58  
Description of the  
company's business

p. 58  
Jointly-controlled  
installed capacity,  
generation and energy  
sales

p. 59  
Historical summary



## 1. Description of the company's business

The principal activities of Endesa Chile, its subsidiaries and jointly-controlled companies are related to the generation and sale of electricity, plus consultancy and engineering services in all areas. Endesa Chile and its subsidiaries operate 180 units in four South American countries, with a total installed capacity of 13,790 MW. If we the 50% of the capacity of the Atacama thermal plant, owned by the jointly-controlled company GasAtacama, is included, the total number of units reaches 186, with an installed capacity of 14,185 MW (1).

In Argentina, through Endesa Costanera S.A. and Hidroeléctrica El Chocón S.A., the company operates a total of 3,652 MW, representing 12% of Argentina's total electricity grid.

Endesa Chile, including 50% of Gas Atacama, is the leading electricity generating company in Chile and one of the largest companies in the country, operating a total of 5,961 MW of capacity and representing 33% of the installed capacity in the local market. 58.1% of the installed capacity of Endesa Chile, its subsidiaries and jointly-controlled companies in Chile is hydroelectric, 40.6% thermal and 1.3% wind. The company participates in the Central Electricity Grid, the country's principal electricity system, covering from Taltal to Chiloé, a territory holding approximately 93% of the population, where the installed capacity of Endesa Chile, its subsidiaries and jointly-controlled companies contributes a total of 5,389 MW to this grid, equivalent to around 40%. The company also participates in the Northern Electricity Grid (SING), through its subsidiary Celta and, indirectly through GasAtacama Chile S.A., a jointly-controlled company, supplying several mining companies. Celta has an installed capacity of 182 MW, representing 4% of the SING, and by including GasAtacama Chile S.A., in which Endesa Chile participates with a 50% holding, the installed capacity in the north of Chile reaches 12%.

In Colombia, through Emgesa, the company operates a total of 2,914 MW, equivalent to 20% Colombia's installed capacity.

In Peru, through Edegel, the company operates a total of 1,657 MW, representing 24% of the Peruvian electricity system.

Endesa Chile is also participates in the generation, transmission and distribution market in Brazil through its associate Endesa Brasil, in partnership with Enersis and ENDESA S.A., Spain. Endesa Brasil has an installed generation capacity of 987 MW, through Endesa Cachoeira and Endesa Fortaleza, and two transmission lines with a transmission capacity of 2,100 MW, through Endesa Cien. Endesa Chile operates the generating assets of Endesa Brasil.

- (1) The financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS). GasAtacama, a jointly-controlled company in which Endesa has a 50% holding, is therefore consolidated proportion to Endesa Chile's capital ownership and 50% of the generating capacity and sales of the Atacama power plant are included.

## 2. Jointly-controlled installed capacity, generation and energy sales

Installed capacity (MW) (1)	2011	2012
Argentina	3,652	3,652
Chile (2)	5,611	5,961
Colombia	2,914	2,914
Peru	1,668	1,657
<b>TOTAL</b>	<b>13,845</b>	<b>14,185</b>

Electricity generation (GWh) (3)	2011	2012
Argentina	10,801	11,289
Chile (2)	20,722	20,194
Colombia	12,090	13,294
Peru	9,153	8,740
<b>TOTAL</b>	<b>52,766</b>	<b>53,517</b>

Electricity sales (GWh)	2011	2012
Argentina	11,381	11,852
Chile (2)	22,070	21,277
Colombia	15,112	16,304
Peru	9,450	9,587
<b>TOTAL</b>	<b>58,012</b>	<b>59,020</b>

- (1) These values result from the maximum capacities determined by the Endesa Chile Operating Standard No. 38: "Standard for determining Endesa Chile's Maximum Capacity in Hydroelectric and Thermal Power Plants" issued on December 31 of each year. They correspond to the maximum design capacity of generating units; most of them corroborated by tests conducted by their suppliers to demonstrate that they meet their respective contract guarantees. In some cases, the maximum capacity values may differ from the capacity value declared by regulatory agencies and clients in each country, following the criteria defined by said entities and their compliance with the pertinent contract terms and conditions.
- (2) Endesa Chile has a 50% participation in the jointly-controlled company GasAtacama, consolidating it according to the proportion it represents of the capital. Consequently 50% of the generating capacity and energy sales of the Atacama power plant are included.
- (3) Corresponds to the total generation, discounting the company's own consumption.

### 3. Historical summary

Empresa Nacional de Electricidad S.A. was created on December 1, 1943 as a subsidiary company of Corporación de Fomento de la Producción (CORFO) (a state production development agency) in order to carry out Chile's Electrification Plan, including the generation, transport and distribution of electricity.

Empresa Nacional de Electricidad S.A. was owned for 44 years by the Chilean state, acquiring a predominant role in the sector and becoming one of the most important Chilean companies and the foundation of the country's electricity development. Large investments were made and the company built important engineering and electrification works.

The privatization process began in 1987 through a series of public share offerings and was completed in 1989. The offerings attracted investors such as pension fund managers (AFPs), company employees, institutional investors and thousands of small shareholders.

In 1992, the company took over Central Costanera S.A. (now Endesa Costanera S.A.) and in 1993 Hidroeléctrica El Chocón S.A., both of them in Argentina. In 1995, Edegel S.A.A. was bought in Peru. In December 1996, the company purchased Central Hidroeléctrica de Betania S.A. E.S.P. and in September 1997, Emgesa S.A. E.S.P., both in Colombia. In September 1997, the company acquired Centrais Eléctricas Cachoeira Dourada S.A., in Brazil.

On July 27, 1994, the New York Stock Exchange (NYSE) started trading Endesa Chile shares in the form of ADRs, with the EOC ticker symbol.

In December 2001, Endesa Chile shares were listed in the Latin American Securities Market of the Madrid Stock Exchange (Latibex), under the XEOC ticker symbol.

In May 1999, Enersis S.A., through a public share offering, became the company's controller, with 60% of the shares of Endesa Chile.

On September 13, 2004, Endesa Chile subscribed a letter adhering to the United Nations Global Compact, an international initiative whereby ten basic universal principles were adopted regarding respect for human rights, labor regulations, the environment and the fight against corruption.

On April 18, 2005, Endesa Chile incorporated Endesa Eco S.A. whose purpose is to promote and develop renewable energy projects and to act as depositary and seller of the emission reduction certificates obtained from such projects.

The Endesa Brasil S.A. holding company was incorporated in 2005 with the assets held in Brazil by Endesa Latinoamérica, Endesa Chile, Enersis and Chilectra. In this way, in October 2005, Endesa Chile ceased consolidating Cachoeira Dourada, while Enersis started consolidating Endesa Brasil S.A.

On September 29, 2006, Endesa Chile, ENAP, Metrogas and GNL Chile signed an agreement defining the structure of liquefied natural gas (LNG) project, in which Endesa Chile participates with a 20% holding. This project forms part of the strategy to diversify natural gas supplies in view of its unavailability from Argentina. The GNL Quintero regasification terminal was inaugurated on October 22, 2009.

Centrales Hidroeléctricas de Aysén S.A. (HidroAysén) was legally incorporated in March 2007 and is not consolidated with Endesa Chile. Its object is the development and operation of a hydroelectric project in the Aysén Region, called "Proyecto Aysén".

As of December 31, 2012, Endesa Chile, directly or through its subsidiaries and jointly-controlled companies, operates 180 generation units in South America with an installed capacity of 13,790 MW. If we the 50% of the capacity of the Atacama thermal plant, owned by the jointly-controlled company GasAtacama, is included, the total number of units reaches 186, with an installed capacity of 14,185 MW (1).





## *investments and financial activities*

p. 62  
Investments

p. 62  
Financial activities



## 1. Investments

In 2011, Endesa Chile and its subsidiaries invested a total of US\$665 million, as follows:

Investment	(millions of dollars) (1)
<b>Argentina</b>	
Endesa Costanera	46
Hidroeléctrica El Chocón	2
<b>Total investment in Argentina</b>	<b>48</b>
<b>Chile</b>	
Endesa Chile	101
Pehuenche	1
Pangue	0
San Isidro.	9
Celta	16
Ingendesa	0
Endesa Eco	5
Canela	0
GasAtacama (50%)	4
HidroAysén (51%)	6
Enigesa	0
<b>Total investment in Chile</b>	<b>142</b>
<b>Colombia</b>	
Emgesa	394
<b>Total investment in Colombia</b>	<b>394</b>
<b>Peru</b>	
Edegel	64
<b>Total investment in Peru</b>	<b>64</b>
<b>Total material investment in companies</b>	<b>649</b>
<b>Total financial investment</b>	<b>15</b>
<b>Total investment Endesa Chile consolidated</b>	<b>663</b>

(1) The exchange rate at the end of 2012 was used, of Ch\$479.96 per dollar.

## 2. Financial activities

### 2.1. Analysis of the consolidated financial statements 2012

Earnings attributable to Endesa Chile's majority shareholders at the close of December 2012 were Ch\$234,335 million, compared with earnings of Ch\$446,874 million in 2011, representing a fall of 47.6%.

The operating result for 2012 was Ch\$632,210 million, 19.8% lower than the Ch\$787,971 million mark recorded for 2011. The main causes of this

result were a lower average energy sale price, higher energy purchases costs of Ch\$45,543 million, higher fuel consumption costs of Ch\$43,641 million and higher transport costs of Ch\$34.648 million. These were partially compensated by lower variable procurement and service costs of Ch\$12,390 million and lower fixed operating costs of Ch\$30,926 million which reflect the non-recurring negative impact of the equity tax reform in Colombia in the first quarter of 2011 which caused a charge for the concept covering the period 2011-2014.

The EBITDA of Endesa Chile, or gross margin, declined by 14.4% with respect to the previous year, reaching Ch\$833,850 million. This does not include the contribution of the investment in Endesa Brasil which is not consolidated in Endesa Chile and whose results are shown under participations in the earnings (losses) of associates booked using the participation method, amounting to Ch\$107,504 million at December 2012.

The reduced ordinary revenue of Ch\$113,073 million in 2012 was mainly due to an 11.9% reduction in the average price of energy sales largely associated with the reduction of the indexation of contracts at marginal cost in Chile together with the loss of revenue for the concept of RM88 (Ch\$68,340 million in 2011). In addition, physical sales decreased by 3.6% as a result of the end of GasAtacama's contracts and a smaller hydroelectric availability. This was partially compensated by the indemnity agreed with the insurance company with respect to lost earnings of Ch\$55,057 million resulting from the disaster of February 27, 2010. There were also higher fuel-consumption costs of Ch\$53,099 million basically due to higher generation with LNG, plus larger transport expenses of Ch\$31,731 million as a result of the higher toll costs associated with the drought in the center-south of Chile. Energy purchase costs increased by Ch\$11,349 million as a result of higher spot market prices. As a consequence, the operating result fell by 55% to Ch\$182,431 million while EBITDA from the Chilean business amounted to Ch\$292,702 million in 2012, representing a fall of 40.9% with respect to the year before.

The operating result in Argentina reduced by Ch\$27,681 million in 2012, mainly the result of an 11.8% fall in ordinary revenue due to a reduced booking of operating and labor costs and a lower payment for capacity in Endesa Costanera as a result of the non-renewal of the agreement between the energy authority and the generators of the wholesale electricity market formalized in November 2010. Personnel expenses rose by Ch\$3,396 million, largely due to a union negotiation and a larger workforce in Endesa Costanera. This was partially compensated by a rise of Ch\$852 million in the revenue of El Chocón, as a result of larger physical sales on the spot market associated with the greater hydroelectric generation and lower fuel-consumption costs of Ch\$27,834 million in Endesa Costanera, associated with reduced generation with gas-oil. The EBITDA of the operations in Argentina therefore totaled Ch\$25,166 million, 45.6% down on 2011, while the EBITDA of Endesa Costanera passed from a positive Ch\$19,735 million in 2011 to a negative Ch\$1,981 million in 2012. This was partially compensated by the 3.3% rise in the EBITDA of El Chocón which amounted to Ch\$27,451 million in 2012. The effect of translating the financial statements from Argentine pesos to Chilean pesos in both years produces a reduction in Chilean pesos of 8.6% in 2012 with respect to 2011.

The operating result of our business in Colombia showed an increase of 33.2% to a total of Ch\$337,651 million in 2012, mainly as a result of higher ordinary revenue of Ch\$81,581 million. This was due to a 7.9% increase in physical sales associated with greater hydroelectric generation and an 8.3% increase in the average energy sale price in peso terms due to higher exchange price since August 2012. The operating result also benefited from the non-recurring effect of equity tax reform in Colombia booked in the first quarter of 2011 which caused an impact of Ch\$43,533 million that year. This was partially compensated by higher energy purchase costs of Ch\$19,705 million due to the higher spot-market price and higher fuel-consumption cost of Ch\$12,269 million, basically related to the larger back-

up fuel supply requested by the authorities because of the Summit of the Americas held in Cartagena in the first quarter of 2012. The EBITDA, or gross margin, in Colombia increased by 29.3% over 2011, to a total of Ch\$376,145 million. The effect of translating the financial statements from Colombian pesos to Chilean pesos in both years produces an increase in Chilean pesos of 3.4% in 2012 with respect to 2011.

In Peru, operating income was Ch\$100,898 million in 2012, reflecting a decline of 3.4% from the year before, mainly due to the non-recurring effect in personnel expenses booked in June 2011 which meant reclassifying a provision for profit sharing for the employees, generating a one-off gain of Ch\$14,572 million. In addition, there were higher energy-purchase costs of Ch\$14,743 million due to larger purchases on the spot market to cover plant maintenance, plus higher fuel-consumption costs of Ch\$6,107 million, partly due to a greater generation with diesel due to maintenance of dual gas units. This was partially compensated by a 17.6% growth in ordinary revenue, reflecting a 15.3% increase in the average energy sale price due to higher contract prices following the price-indexation of fuel and the higher bar price from May 2012. The EBITDA of the Peruvian business, or gross margin, therefore amounted to Ch\$139,837 million in 2012, which represents a decline of 1% with respect to 2011. The effect of translating the financial statements from Peruvian soles to Chilean pesos in both years produces an increase in Chilean pesos of 5% in 2012 with respect to 2011.

The financial result of Endesa Chile for 2012 was a loss of Ch\$146,034 million, an increase of 20.4% over the end of 2011 when it was a loss of Ch\$121,296 million. The principal variations in this result were due to a larger financial expense of Ch\$11,690 million, a larger exchange loss Ch\$4,273 million and reduced financial income of Ch\$13,117 million, compensated by a larger gain from indexation of Ch\$4,342 million.

The results of the participation in related companies were Ch\$116,945 million in 2012, a 4.9% reduction from 2011. This result mainly

consists of the proportional participation in the results of the associate Endesa Brasil S.A., whose contribution amounted to Ch\$107,504 million.

Income taxes declined by 11.9%, or Ch\$25,094 million, compared to 2011.

The company's total assets at December 2012 show a fall of Ch\$73,323 million from December 2011, mainly due to:

1) Reduction in current assets of Ch\$125,069 million, equivalent to 13%, mainly due to a) a fall in cash and cash equivalents of Ch\$144,487 million, mainly less time deposits and repurchase agreements of Endesa Chile of Ch\$187,444 million, compensated in Emgesa by a higher operating collections net of dividends paid of Ch\$51,513 million, b) a reduction in trade debtors and other accounts receivable of Ch\$65,749 million and c) a decline in accounts receivable from related companies of Ch\$21,521 million, compensated by increases in inventories of Ch\$9,754 million and tax assets of Ch\$69,854 million.

2) Increase in non-current assets of Ch\$51,746 million, mainly explained by a) an increase in property, plant and equipment of Ch\$55,558 million, basically due to investments in the year of Ch\$289,199 million compensated by depreciation of Ch\$186,803 million, negative translation effects of Ch\$39,164 million and losses for impairment in Celta of Ch\$12,578 million, and b) an increase in other financial assets of Ch\$19,804 million, mainly financial derivatives, compensated by a fall in deferred tax assets of Ch\$29,194 million.

The company's total liabilities declined by Ch\$73,323 million compared to December 2011, mainly due to:

1) Reduction in non-current liabilities of Ch\$215,096 million, equivalent to 9.9%, mainly explained by a) a reduction in other non-current financial assets of Ch\$202,442 million, principally in Endesa Chile due to the transfer to short term of bonds in Unidades de Fomento (UF) and in dollars 144-A for Ch\$286,936 million and a smaller exchange difference of Ch\$45,398 million. In Endesa Costanera there was a reduction of Ch\$49,749 million mainly due to the transfer to short term of the debt with Mitsubishi. In Edegel there was a fall of Ch\$30,399 million, mainly due

to a translation difference of Ch\$9,693 million and the transfer to short term of loans, bonds and leases of Ch\$20,849 million, compensated by the transfer from short term of the syndicated loan of Emgesa for Ch\$82,656 million, the issue of bonds for the El Quimbo project for Ch\$135,502 million and translation difference of Ch\$8,864 million. b) a reduction in non-current non-financial liabilities of Ch\$16,181 million. Emgesa reduced by Ch\$10,460 million mainly due to the payment of the third quota of the equity tax, GasAtacama reduced by Ch\$1,925 million mainly due to the obligation with AFIP of Argentina and San Isidro reduced by Ch\$2,569 million for the transfer to short term of the LTSA Mitsubishi contract which was paid in the last quarter, and c) a reduction in deferred tax liabilities of Ch\$6,995 million, all compensated by an increase in other non-current provisions due to the provision for the dismantling of plants of Endesa Chile for Ch\$5,089 million.

2) Increase in current liabilities of Ch\$148,269 million, equivalent to 15.8%, mainly explained by a) an increase in other current financial liabilities of Ch\$107,549 million, mainly Endesa Chile from the transfer from long term of bonds in Unidades de Fomento (UF) for Ch\$90.134 million, 144-A dollar bonds for Ch\$192,100 million and accrual of interest of Ch\$53,452 million, compensated by payments of interest and bank loans of Ch\$56,221 million and Series F and K bond repayments of Ch\$121,210 million. In Endesa Costanera there was an increase of Ch\$45,095 million, mainly the transfer from long term of the debt with Mitsubishi and Crédit Suisse for Ch\$51,409 million, exchange difference of Ch\$5,739 million and a negative translation difference of Ch\$16,319 million, compensated by a reduction in Emgesa due to the transfer to long term of the syndicated loan of Ch\$82,656 million, b) an increase in accounts payable to related companies of Ch\$78,214 million, all the above compensated by a fall in trade creditors and other accounts payable and current tax liabilities of Ch\$39,353 million.

Equity declined by Ch\$6,496 million with respect to December 2011. The dominant equity reduced by Ch\$17,295 million, mainly explained by the booking of the minimum dividend 2012 and final dividend 2011 for Ch\$159,675 million and a reduction in the translation reserve of

Ch\$119,074 million. This was compensated by the earnings for the year of Ch\$234,335 million and an increase in the hedge reserve of Ch\$30,382 million.

The participation of minorities increased by Ch\$10,799 million, mainly due to the result of the minorities of Ch\$184,708 million, compensated by the booking of the minimum and final dividends of Ch\$167,164 million

## 2.2. National financing in 2012

At the end of 2012, Endesa Chile has fully-committed credit lines available for the equivalent of US\$ 200 million.

The committed credit-line contracts signed in February 2013 add US\$113.2 million, which makes a total amount of US\$313.2 million. Endesa Chile and its national subsidiaries also have at the end of 2012 un-committed credit lines in the domestic market for the equivalent of US\$235 million.

At the end of 2012, commercial paper lines remained unused for an aggregate maximum amount of US\$ 200 million. These commercial paper facilities were registered in the Securities Registry of the Superintendence for Securities and Insurance Companies (SSIC/SVS) in January 2009.

In addition to the revolving credit facilities and bond programs already mentioned, Endesa Chile and its Chilean subsidiaries (excluding associate companies) closed the year with US\$ 13 million in cash.

The consolidated financial debt of Endesa Chile as of December 2012 was US\$ 4,080 million. This debt is composed mainly of bank debt, and local and international bonds. Endesa Chile's consolidated cash closed at US\$ 630 million, so the net consolidated debt amounted to US\$ 3,450 million at December 2012.

Cash surpluses were used during 2012 to prepay local debt and finance the Bocamina II project.

Two domestic bond issues in UF were prepaid, The first were the Series F bonds, prepaid on February

1 for a principal amount of US\$63 million, and the second the Series K bonds which were prepaid for a principal amount of US\$187 million on April 16.

## 2.3. International financing in 2012

The year 2012 was marked by the fragility of the euro zone due to its fiscal and financial problems. Despite this, most of the emerging economies showed a solid performance in terms of growth. The debt markets in most of the countries where the assets of Endesa Chile are located remained open and permitted its foreign subsidiaries to continue to refinance their debts at longer terms, even improving interest rate levels, and comply with a policy for controlling financial risks. In Argentina, the complex operating situation has generated instability in the companies' cash flows. However, a balance has been achieved at the close of 2012 through different operative and financial operations.

Several financial operations were carried out in 2012, both refinancings and new financings and hedges, in the foreign subsidiaries for a total amount equivalent to US\$683 million of which US\$104 million relates to Argentina, US\$554 million to Colombia and US\$24 million to Peru.

a) In Argentina, during 2012, Endesa Costanera refinanced bank maturities for an amount equivalent to US\$99 million, and Hidroeléctrica El Chocón obtained bank finance for US\$8 million for working capital.

b) In Colombia, the most important operations of our subsidiary were the refinancing of a syndicated loan for the approximate equivalent of US\$173 million and the structuring of a domestic bond issue for the equivalent of US\$283 million whose proceeds will be used to finance the El Quimbo project.

c) In Peru. Chinango, a subsidiary of Edegel, signed a bank loan for US\$10 million for a 5-year term, whose proceeds were used to refinance maturities. Interest-rate hedge instruments were also contracted for a total of US\$10 million.

## 2.4. Hedging policy

### 2.4.1. Exchange rate

The Group's exchange-rate hedging policy is based on cash flows and aims to maintain a balance between flows indexed to a foreign currency (dollar), and the levels of assets and liabilities in that currency. During 2012, Endesa Chile's financial operations permitted the maintenance of a level of dollar denominated liabilities adjusted to expected cash flows in that currency.

As part of this policy, Endesa in Chile contracted forwards totaling US\$ 149 million in order to hedge dividends in various currencies from its Latin American subsidiaries. The rest of the companies in the region contracted exchange-rate forwards for US\$ 10 million to redominate future disbursements in line with the indexation of their cash flows.

### 2.4.2. Interest rate

The Group's policy consists of maintaining levels of fixed-rate and hedged debt to total net debt within a band of around 10% with respect to the ratio established in the annual budget. In the event of any deviation from the budget, hedge operations are carried out according to market conditions.

Interest-rate swaps were therefore contracted in 2012 for US\$10 million to fix the LIBOR (London Interbank Offering Rate). By the end of December, the consolidated ratio of fixed and hedged debt to total net debt was 71%.

## 2.5. Credit rating

Endesa Chile's current ratings are sustained by its diversified asset portfolio, the strength of its financial indicators, the appropriate debt-maturity profile and ample liquidity. The company's geographic diversification in South America provides a natural hedge against various regulations and climatic conditions. Endesa Chile's

subsidiaries have a leadership position in the different markets where they operate.

Moody's ratified its corporate rating for Endesa Chile at Baa2 with stable outlook on June 18, 2012.

Similarly, Standard & Poor's on October 19, 2012 confirmed its international rating for Endesa Chile at BBB+ with a stable outlook. This took place as a result of the revision made of Enel SpA and ENDESA SA. some days before, when both ratings were maintained but with a reduction in outlook from stable to negative, as a result of the downgrade applied to Spain.

On December 19, 2012. Fitch Rating ratified its rating of Endesa Chile in local and foreign currency at BBB+ and also its long-term rating on the national scale at AA (cl), with stable outlook.

## 2.6. Insurance

### 2.6.1. Operational

On July 2012, Endesa Chile and its subsidiaries extended the terms of their regional insurance program, all risks and civil liability, until October 31, 2012.

In this way and in order to make an orderly tender and have sufficient time, the renewal date of the program was changed from July 1 to November 1, 2012.

The insurance policy renewal process was carried out through an international tender to which the world's principal insurers were invited. The policies were renewed until October 31, 2013.

The characteristics of the insurance policies currently in force for all Endesa Chile's subsidiaries in Argentina, Chile, Colombia and Peru and the Brazilian associates are as follows:

- All-risk cover of fixed assets and business interruption, with an indemnifiable limit



- of US\$ 500 million per claim. This measure is intended to provide a greater protection for generation plants and the principal transformation substations against the risk of earthquake, avalanche, fire, explosion, flood, machinery breakdown and operational faults.
- Non-contractual civil liability insurance for the sum of US\$ 500 million a year, covering the physical damage caused that the company's activities might cause to third parties demanding damages.

In addition, as of January 1, 2012, and for a term of one year, an insurance against terrorist acts and political risks was renewed with an indemnity limit of US\$80 million.

Endesa Chile's subsidiaries also have maritime, air and land transport insurance policies for the transfer of machinery, equipment and supplies, and personal life and accident insurance for traveling personnel, and those required by current legislation.

### 2.6.2. Works insurance

Endesa Chile has maintained existing insurance policies for construction and start-up delays for

all its construction works. This insurance was contracted after a private bidding process, to which the principal insurers were invited.

The insurance program established for all projects contemplates all-risk insurance cover for construction and assembly, transportation, civil liability and start-up delays, with limits and deductibles in line with the company's risk policy.

### 2.6.3. Insurance claims

The earthquake of February 27, 2010 caused significant damage to both the Bocamina plant and the Bocamina II plant under construction. The damage repair costs and the reduced income caused by the lower generation of Bocamina or the start-up delay of the Bocamina II plant due to the earthquake, are covered by insurance policies, with the company only having to assume the respective deductibles of each policy.

At the end of 2012, agreement was reached on the losses covered. In the case of Bocamina I, covered by operational insurance, the indemnity amounted to US\$85 million, while in the case of Bocamina II, covered by construction insurance, the indemnity was US\$113 million.



## *risk factors*

p. 70  
Risk factors

p. 71  
Commodities risk

p. 72  
Risk measurement

p. 70  
Interest-rate risk

p. 71  
Liquidity risk

p. 73  
Other risks

p. 70  
Exchange risk

p. 71  
Credit risk

## 1. Risk factors

The Group's companies are exposed to certain risks that they handle through systems of identification, measurement, limitation of concentration and supervision.

The basic principles defined by the Group include the following:

- Compliance with good corporate governance standards.
- Strict compliance with the Group's regulatory system.
- The Group's Risk Committee is the entity in charge of defining, approving and updating the basic principles to guide risk-related actions.
- Risk governance is organized operationally through the functions of Risk Control and Risk Management, which are independent of each other.
- Each business and corporate area defines:
  - I. The markets and products where it can operate as a function of a sufficient knowledge and capability in order to ensure an effective risk management.
  - II. Counterparties criteria.
  - III. Authorized operators.
- Business limits are ratified by the Group's Risks Committee.
- Businesses, corporate areas, lines of business and companies establish the risk-management controls necessary for ensuring that transactions are carried out in accordance with Endesa Chile's policy, standards and procedures.
- All operations of the corporate business and areas are performed within the limits approved for each case.

## 2. Interest-rate risk

Interest rate fluctuations modify the fair value of assets and liabilities accruing interest at fixed rates, as well as the future flows of assets and liabilities based on a variable interest rate.

The objective of the interest-rate risk management is to achieve a debt structure equilibrium which allows minimizing the debt cost with reduced volatility in the statement of results.

In accordance with the current interest-rate hedging policy, the percentage of fixed and/or hedged debt stood at 71% of total net debt as of December 31, 2012.

Depending on the Group's estimates and the objectives of the debt structure, hedging operations are performed by contracting derivatives to mitigate such risks. The instruments currently used to implement this policy are variable-to-fixed interest-rate swaps.

The structure of the Group's financial debt according to fixed, hedged and variable interest rates, after the derivatives contracted, is as follows:

### Net position

	Dec-11 %	Dec-12 %
Fixed interest rate	83%	71%
Variable interest rate	17%	29%
<b>Total</b>	<b>100%</b>	<b>100%</b>

## 3. Exchange risk

Exchange-rate risks are associated primarily with the following transactions:

- Debt contracted by Group companies in currencies other than that to which their cash flows are indexed.
- Payments payable in the international markets for project-related materials and payments of corporate insurance policies in currencies other than that to which their cash flows are indexed.
- Revenues of Group companies that are directly linked to the value of the dollar.
- Cash flows from foreign subsidiaries to Chilean parent companies that are subject to exchange-rate fluctuations.

In order to mitigate such risk, the Group's exchange-rate hedging policy is based on cash flows and contemplates the maintenance of an equilibrium between flows indexed to dollars and the levels of assets and liabilities in that currency. The objective is to minimize the exposure of cash flows to exchange-rate fluctuations.

The instruments currently used to comply with this policy correspond to currency swaps and exchange-rate forwards. The policy also seeks to refinance debt in the functional currency of each company.

## 4. Commodities risk

Endesa Chile is exposed to certain commodity price fluctuations, primarily through:

- Fuel purchases in the process of generating electricity.
- Energy purchase and/or sale operations occurring in local markets.

In order to reduce the risk in situations of extreme drought, the company has designed a commercial policy that defines levels of sale commitments according to the capacity of its generating plants in a dry year and includes risk-mitigation clauses in some of its contracts with non-regulated customers.

In view of the operational conditions faced by the electricity-generation market in Chile, i.e. drought and commodity-price volatility on the international markets, the company is constantly checking the convenience of hedging to reduce the impacts of such price variations on results. As of December 31, 2012, there are swap contracts covering 462 thousand barrels of Brent for January 2013 and 365 thousand tons of coal for the period February-June 2013 (see Note 18.3.a).

According to the operative conditions which are constantly updated, these hedges can be modified or other commodities included.

## 5. Liquidity risk

The Group maintains a liquidity policy consisting of contracting committed long-term credit facilities and temporary financial investments, for amounts sufficient to support projected needs for a period that is a function of the situation and the expectations of the debt and capital markets.

The above projected needs include the maturities of net financial debt, i.e. after financial derivatives. For more details regarding the characteristics and conditions of financial debt and financial derivatives, see Notes 16 and 18 and Appendix 4 respectively.

As of December 31, 2012, Endesa Chile has a liquidity of ThCh\$ 276,794,675 in cash and cash equivalents and ThCh\$ 193,708,000 in unconditional and available long-term credit lines. As of December 31, 2011, Endesa Chile had a liquidity of ThCh\$ 421,282,284 in cash and cash equivalents, and ThCh\$ 199,892,000 in unconditional and available long-term credit lines.

## 6. Credit risk

Given the current economic situation, the Group has been conducting a detailed credit risk follow-up.

### 6.1. Trade accounts receivable

With respect to the credit risk associated with trade accounts receivable, this is historically very limited as the short payment terms from customers do not permit the individual accumulation of very significant sums.

In some countries payment defaults warrant energy supply cuts, and in almost all contracts payment default is a cause for terminating the contract. Credit risk is constantly monitored and the maximum amounts exposed to such payment risk are continuously measured. As mentioned above, this payment risk is limited.

### 6.2. Assets of a financial nature

Investments of cash surplus are made with reputable domestic and foreign financial entities (with investment grade credit ratings), within established limits for each entity.

In selecting banks eligible for investing, those that have investment grade ratings from at least 2 of the 3 principal credit-rating agencies (Moody's, S&P and Fitch) are considered.

These investments are backed by treasury bonds of the countries where we operate and/or by debt notes issued by first line banks, preferring the former where possible and according to market conditions.

Derivatives are contracted with highly-solvent entities, so that all such operations are contracted with investment-grade ratings.

## 7. Risk measurement

Endesa Chile prepares a measurement of the Value at Risk of its debt and financial derivative positions in order to ensure that the risk assumed remains consistent with defined risk exposure, thereby limiting volatility in the statement of results.

The portfolio of positions included for the purposes of calculating the current Value at Risk comprises:

- Debt.
- Financial derivatives.  
The calculated Value at Risk represents the potential loss of value of the portfolio of positions previously described in a 1-day term and with 95% confidence. For this purpose, we carried out a volatility study of the risk variables that affect the value of the portfolio of positions, including:
  - US dollar LIBOR rate.
  - In the case of debt, considering the different currencies in which our companies operate, the habitual indices used in banking practice.
  - The exchange rates of the various currencies involved in the calculation.

The calculation of the Value at Risk is based on the generation of possible future scenarios (overnight) of the market values (both spot and term) of risk variables through bootstrapping

methodologies. The number of scenarios generated ensures the compliance of the convergence criteria of the simulation. For the simulation of future price scenarios, we apply the matrix of volatilities and correlations between the different risk variables calculated based on the historic record of logarithmic price returns.

Once price scenarios are generated, the reasonable value of the portfolio is calculated under each scenario to obtain the distribution of possible overnight values. The overnight Risk with 95% confidence is calculated as the percentile of 5% of the possible value increments reasonable for overnight portfolios.

The valuation of the different debt and financial derivative positions included in the calculation has been made pursuant to the methodology of calculation of the economic capital reported.

Considering the above hypotheses, the Value at Risk of the company's investment positions, broken down by position type, is shown in the following table:

Financial positions	Balance as of	
	31-12-2011 ThCh\$	31-12-2012 ThCh\$
Interest rate	36,951,206	7,929,596
Exchange rate	3,122,801	1,503,495
Correlation	(470,475)	(2,609,351)
<b>Total</b>	<b>39,603,532</b>	<b>6,823,740</b>

The Value at Risk positions have evolved during 2012 and 2011 according to the initiation/expiry dates of operations throughout each year.



## 8. Other risks

As is habitual practice for bank loans and capital-market operations, a portion of Endesa Chile's financial debt is subject to cross-default provisions.

Payment defaults, following any applicable grace period, of debts of Endesa Chile whose individual outstanding principal exceeds the equivalent of US\$ 50 million and whose amount in arrears also exceeds the equivalent of US\$ 50 million, could lead to the accelerated payment of the syndicated loan. In addition, this loan contains provisions under which certain events other than non-payment in the company, such as bankruptcy, insolvency or adverse enforceable

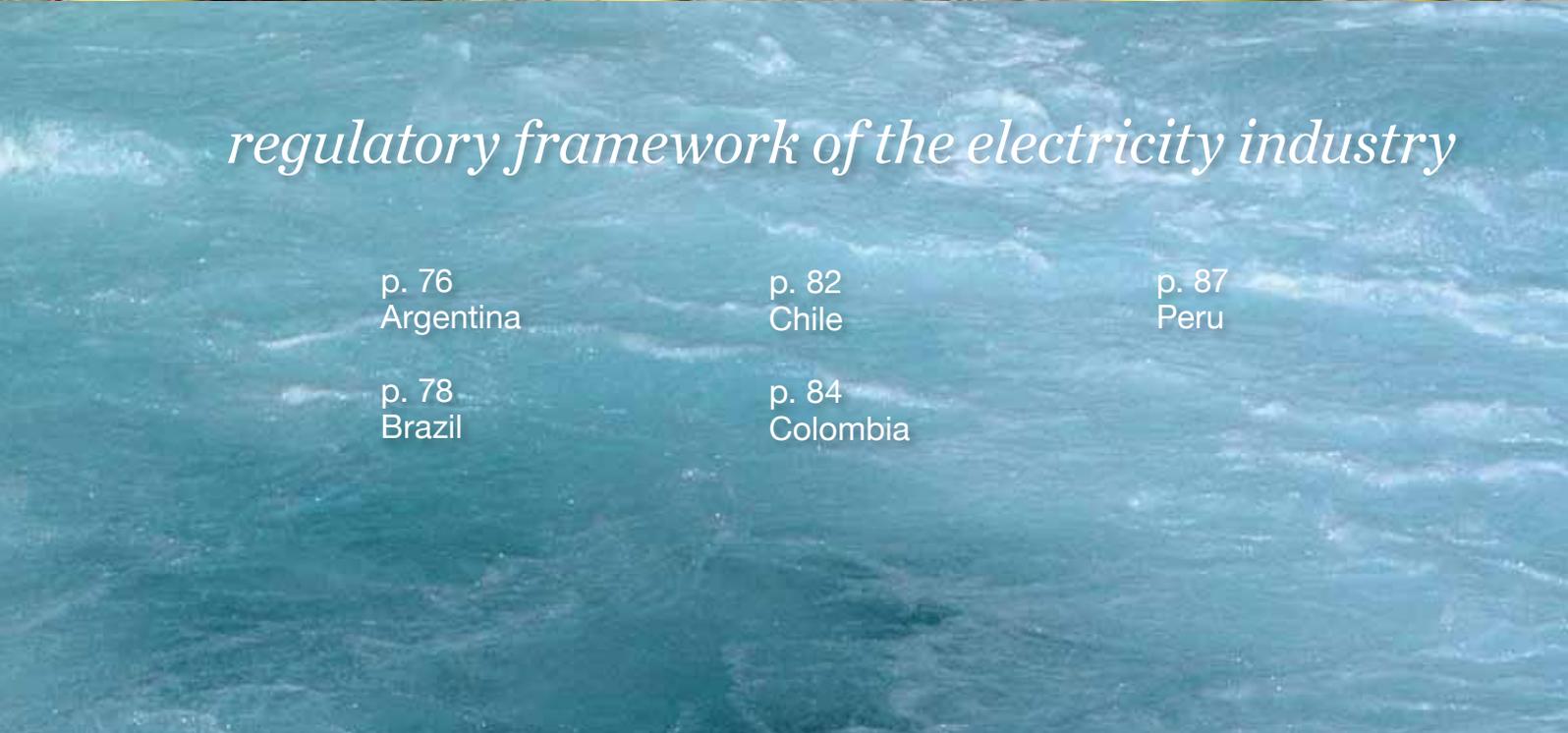
judicial judgments for amounts in excess of US\$ 50 million and the expropriation of assets, among others, could cause the acceleration of this loan.

The non-payment, after any applicable grace period, of any debt of Endesa Chile or of any of its Chilean subsidiaries, with an outstanding principal in excess of US\$ 30 million, could lead to the accelerated mandatory payment of the Yankee bonds.

Finally, in the case of Endesa Chile's domestic bonds, the accelerated payment of this debt is triggered only by default by the Issuer.

There are no clauses in the loan agreements by which changes in the corporate rating or that of the debt of these companies by the credit rating agencies that trigger the obligation to prepay debt.





*regulatory framework of the electricity industry*

p. 76  
Argentina

p. 82  
Chile

p. 87  
Peru

p. 78  
Brazil

p. 84  
Colombia



# 1. Argentina

## 1.1. Industry structure

The Argentine electricity sector is governed by Law 15.336 of 1960 and Law 24.065 of 1992.

In the Wholesale Electric Market (WEM/MEM) there are 4 categories of local agents (generators, transmitters, distributors and large customers) and foreign agents (generation and demand trading companies) that are authorized to buy and sell electricity as well as its related products.

The generation sector is organized on a competitive basis, with independent generators selling their product on the spot market of the WEM/MEM, or under private contracts to customers within the WEM/MEM market, or to CAMMESA through special transactions and contracts.

Transmission operates under monopolistic conditions and comprises several companies to which Argentina's Federal Government grants concessions.

Distribution operates under monopolistic conditions and is provided by companies that have been granted concessions. Distribution companies are responsible for ensuring that electricity is made available to the end customers within their specific concession area, regardless of whether the customer has a contract with a distributor or a generator.

Due to the severe economic crisis that affected the country in 2002, Emergency Law 25.561 was promulgated. This obliged the renegotiation of concession contracts, broke the parity with the US dollar and imposed the conversion to Argentine pesos of the obligations and rights assumed previously in dollars. This obligatory nominal conversion of dollars to pesos had a severe impact on the whole Argentine electricity industry. The government also approved various regulatory measures that gradually invaded the industry's development. In this context, the government announced in 2012 its intention to advance in the implementation of a new regulatory model based on average costs, maintaining a segmentation by type of activity to ensure a balance between remuneration, a level of investment and reasonable profitability. Until its full implementation in 2014 and during the transitory period in which we find ourselves, the Group companies in Argentina are reaching

different specific agreements with the energy authority to permit the correct continuity of the companies' operations.

## 1.2. Regulation of generating companies

All the generators that are agents of the WEM/MEM must be connected to the national electricity grid (NIG/SIN) and are required to comply with the dispatch order to generate and deliver energy for this to be sold on the spot market and on the forward market. Distribution companies, trading companies and large customers that have signed private supply contracts with generation companies pay the contractual price directly to the generator and also pay a toll to the transmission and distribution companies for the use of their systems.

The emergency regulations enacted after Argentina's crisis of 2001 had a significant impact on energy prices. Among the measures implemented by virtue of the emergency regulations was the conversion of dollars into Argentine pesos for prices in the spot market, and the requirement that all spot prices be calculated on the absolute availability of gas, even in circumstances when many generators have an alternative fuel like diesel, to meet demand due to natural-gas supply difficulties. This forced a reduction in the market price as operating with gas is cheaper than with liquid fuels.

Besides the energy payments for effective delivery at the prevailing prices on the spot market, generators would receive compensation for the capacity made available to the SIN, including others like reserve capacity (for the system's capacity shortages) and complementary services (such as the regulation of the frequency and voltage control).

The regulatory framework that governs the payment for generation capacity remained the same as that existing in 2002, with generators that receive compensation for the available capacity of Ar\$ 12 per MW today. During 2011, there was an incentive to increasing installed capacity by increasing the payment for capacity in thermal generating units, especially steam turbine and combined cycle, but this was not renewed for 2012.

Generator can also sign contracts in the term market to sell energy and capacity to distributors



and large customers. Distributors are authorized to buy energy through agreements in the term market instead of buying energy on the spot market. Term contracts usually stipulate a price based on the spot price plus a margin.

In order to stabilize generation prices and their effect on the tariffs perceived by customers, the market defines a seasonal price which is the price of the energy paid by distributors for their purchases of electricity traded in the spot market. It is a fixed price determined every 6 months by the Energy Secretariat after CAMMESA has recommended a seasonal price for the next period in accordance with its spot price estimates, which are based on an evaluation of the projected supply, demand and available capacity, among other factors. The seasonal price is maintained for at least 90 days. A stabilization fund was created to adjust the differences between this price and the real cost of generation. If the seasonal price is lower than the generation cost, a withdrawal is made from the fund to compensate the generation; otherwise a contribution is made to the fund. Since 2002, the energy authority has in practice maintained the average seasonal price. This has therefore created large deficits in the stabilization fund, which the Argentine state has been covering with subsidies.

Within the framework of the agreements reached with the government for developing our operations in Argentina, Endesa Costanera signed an agreement on October 12 for the implementation of an investment plan in the

generating units of the Endesa Costanera plant in order to optimize the reliability and availability of the equipment, for a total amount of US\$304 million over a period of 7 years. The agreement also contemplates the payment of the maintenance contract obligations (long-term service agreement, LTSA) of the plant's combined-cycle units.

### 1.3. Distribution company regulations

Distributors have to meet the whole electricity demand in their exclusive concession area at the prices (tariffs) and conditions established in the regulation. Concession agreements include penalties for not supplying. The concessions were granted for distribution and retail sales, with specific terms for the concessionaire, as established in the contract. The concession periods are divided into "administration periods" that allow the concessionaire to quit the concession at certain time intervals.

Most of the distribution companies renegotiated their contracts during 2005 and although tariffs were partially and temporarily increased, the comprehensive tariff review (RTI) is still pending.

During 2006, the distributor company Edesur signed an agreement for the renegotiation of the concession contract. This established, among several other conditions, a transitional tariff regime which included an increase in VAD, a

service quality regime and a comprehensive tariff review (RTI) to be implemented by NEERE/ENRE. The agreement considers the definition of a semi-annual tariff-adjustment mechanism known as the costs monitoring mechanism (MMC). The first inflation adjustments were made in 2008 but, since then, it has ceased to be officially recognized. Nevertheless, the Argentine government has created different regulatory alternatives that have allowed distributors to continue providing the electricity service.

One of these alternatives has been called energy efficiency program (EEP/PUREE). This was created in 2004 and established bonuses and penalties for customers depending on the level of energy savings based on a consumption benchmark. The net difference between the bonuses and the penalties were originally deposited in the stabilization fund, but this was later modified at the request of Edesur and Edenor, as authorized by the Energy Secretariat, to be used to compensate cost variations not recognized in the MMC cost increases.

Additional charges were also approved to the tariffs of customers to finance new investments in expansion and quality of the distributors. In November 2012, Resolution ENRE 347 was approved, authorizing the application of this charge differentiated by customer against the future RTI. The application of this charge by Edesur supposes additional annual revenues of 437 million pesos, which represents a 40% increase in VAD and 20% in tariffs.

## 1.4. Transmission regulations

Transmission was designed on the basis of the general concept and principles contained in Law 24,065 for the transmission business, adapting the activity to the general criteria contained in the concession granted to Transener S.A. by Decree 2,473/92. For technological reasons, the transmission business is related to economies of scale that do not permit competition. It is therefore a monopoly and subject to considerable regulation.

## 1.5. Environmental regulations

Electricity installations are subject to federal and local environmental laws and regulations, including Law 24,051 or Law of Dangerous Waste and its related regulations.

Certain obligations such as reporting, monitoring and emission standards are imposed on the electric sector. Failure to comply with these requirements enables the government to impose penalties, such as the suspension of operations that in the case of public utilities may result in the loss of the concession.

Law 26.190, promulgated in 2007, defined the use of renewable sources for the production of electricity as of national interest setting an 8% market share goal for renewable energies to be reached within 10 years.

## 2. Brazil

Although Endesa Chile does not have subsidiaries in Brazil, we have capital investments through Endesa Brasil.

### 2.1. Industry structure

The electricity industry in Brazil is organized in a large interconnected electricity system, the Brazilian National Grid, that comprises most of the country's regions and many other smaller isolated systems. Generation, transmission, distribution and trading are legally separated operations in Brazil.

The generation sector is organized on a competitive basis with independent generators that sell their production through private contracts with distributors, marketers and unregulated clients. The differences are sold to short-term or spot markets at the Difference Adjustment Price, or PLD.

The industry is regulated by the federal government through the Ministry of Mines and Energy (MME) and also the National Electricity Agency, ANEEL.

Under Law 10.848 of 2004, the wholesale electricity market is residual, as a tool for the formation of the spot price. The wholesale price is based on the average prices of tenders, there being independent tender processes for existing energy and new energy. The latter contemplate long-term contracts in which new generation projects should cover growth in forecasted demand by the distributors. Old energy tenders consider shorter contract terms and seek to cover the contract needs of the distributors arising on



the expiry of previous contracts. Each tender is coordinated centrally, the authority defines maximum prices and thus signs contracts where all the participating distributors buy pro rata from each of the offering generators.

Transmission works under monopoly conditions. The tariffs of transmission companies are fixed by the Brazilian government. The transmission charge is fixed and the transmission revenues do not depend on the volume of electricity transmitted.

Distribution is a public utility that works under monopoly conditions and is provided by companies that have also received concessions. Distributors on the Brazilian grid are not authorized to (i) develop operations related to the generation or transmission of electricity, (ii) sell electricity to non-regulated customers, except those within their concession area and under the same conditions and applicable tariffs as for their captive customers in the regulated market, (iii) maintain direct or indirect holdings in any other firm, corporation or company, or (iv) carry on activities unrelated to their respective concessions, except as permitted by law or in the corresponding concession agreement. Generators are not authorized to have equity holdings in distribution companies in excess of 10%.

The unregulated market includes the sale of electricity between generation concession-holders, independent producers, self-producers, electricity traders, importers of electricity, non-regulated consumers and special

customers. It also includes contracts between generators and distributors existing under the old regulatory framework until their expiry, at which time the new contracts have to adjust to the new regulatory framework. According to the specifications established in Law 9,427/96, non-regulated consumers in Brazil are those that (i) demand a capacity of at least 3,000 kW and choose to contract their energy supply directly from generators or traders, or (ii) demand a capacity within the range of 500 to 3,000 kW and choose to contract their energy supply directly from generators or traders.

The Brazilian grid is coordinated by the Operator of the Brazilian Grid (ONS) and is divided into four sub-systems: Southeast, Central West, South, Northeast and North. In addition to the Brazilian Grid there are also some isolated systems, i.e. systems that do not form part of the Brazilian grid and are generally located in the north and north-eastern regions of the country and whose only energy source is coal or oil thermal plants.

## 2.2. Generation company regulations

Generator agents, whether public generation concessionaries, IPPs or self-producers, as well as traders, can sell electricity within the regulated contracts area (ACR) or free contracts area (ACL), maintaining the competitive nature of generation and of all agreements, regardless of their being

signed in the ACR or ACL, are registered in the CCEE and form part of the basis for the accounting and determination of adjustments for differences in the short-term market.

In accordance with market regulations, 100% of the energy demanded by distributors has to be met through long-term contracts prior to the expiry date of the current regulated environment.

Generators may sell their energy to other generators through direct negotiations through freely agreed prices and conditions.

Another aspect of the electricity sector is the separation of the bidding contests of “previously existing energy” and “projects of new energy.” The government believes that a project of new energy needs more favorable contractual conditions such as the term of energy purchase contracts (15 years for the thermal plants and 30 years for the hydroelectric plants) and certain price levels for each technology. Existing energy, which includes depreciated plant,s can be sold at lower prices and with contracts for shorter terms.

Sales agents are responsible for the payments to purchasing agents if they are unable to meet their delivery obligations. ANEEL regulations establish fines applicable to the electricity sales agents based on the nature and materiality of the violation (including warnings, fines, temporary suspension of the right to participate in tenders for new concessions, licenses or authorizations and confiscation). ANEEL can also impose restrictions on the terms and conditions of the agreements between related parts and, under extreme circumstances, terminate those contracts.

Decree 5,163/2004 establishes that the sales agents must ensure 100% of physical coverage for their energy and capacity contracts. This coverage can be constituted by physical guarantees of their own generation plants or of any other plant, in the latter case through a sale contract of energy or capacity. Among other things, Resolution 109/2004 of ANEEL specifies that when these limits are not achieved the agents are subject to financial penalties.

Generation agents can sell their energy production through contracts signed within the ACR or in the ACL. Public service generators and the IPPs must provide physical coverage for their own energy generation for 100% of their sale contracts. Self-producers generate energy

for their exclusive use and after obtaining the authorization of ANEEL can sell the excess energy under contracts.

Lastly, the government on September 11, 2012 approved its Provisional Measure 579 which sets the conditions for electricity-sector concessions to be renewed which expiry between 2015 and 2017 and the reduction of liens in the electricity tariff. The measure was approved to reduce the final price of the electricity tariff and relaunch economic activity in Brazil. It does not affect any of the concessions of the subsidiaries of Enersis in Brazil. The Official Gazette of January 14, 2013 published Law 12.783 converting the provisional measure.

## 2.3. Regulations of distribution companies

In the regulated market, distribution companies purchase the electricity through tenders regulated by ANEEL and organized by CCEE. Distributors must buy the electricity in public tenders. The government also has the right to call special tenders for renewable electricity (biomass, mini hydro, solar and wind plants). ANEEL and CCEE arrange tenders annually. The contracting system is multilateral, with generation companies signing contracts with all the distributors that calling tenders.

The distribution tariffs to end customers are subject to revision by ANEEL, which has the authority to adjust and revise these tariffs in response to changes in energy-purchase costs and market conditions. When adjusting the distribution tariffs, ANEEL divides the annual reference value for distribution company costs into (i) costs that are beyond the control of the distributor (“Part A Costs”) and (ii) costs that are under the control of the distributor (“Part B Costs”), the aggregate distribution costs. Every concession agreement of a distribution company establishes an annual tariff adjustment.

The Concessions Law establishes 3 types of tariff reviews to end consumers: annual, ordinary and extraordinary tariff reviews. Reviews are made every 4/5 years and as established in the concession contracts (every 4 years in Companhia Energética do Ceará S.A. and every 5 years in Ampla Energia e Serviços S.A.). The annual review adjusts the costs of the VAD according to inflation for the year

(tariffs are adjusted annually in Brazil). Finally, extraordinary reviews occur when an important event occurs in the sector that significantly affects the value of the tariff.

The pricing for distribution companies is aimed at maintaining the concessionaire's operating margins constant permitting tariff profits due to Part A costs and permitting the concessionaire to retain any profit due to efficiencies achieved in specific time periods. The tariffs for end customers are also adjusted according to the cost variation incurred in the purchase of electricity.

The ordinary tariff review considers the company's entire tariff-setting structure, including the costs of providing services, the costs of purchasing energy, and the return for the investor. In accordance with its concession contracts, Coelce and Ampla are subject to tariff reviews every 4 and 5 years respectively. The asset base for calculating the permitted return to the investor is the market replacement value, depreciated throughout its useful life from an accounting perspective, and the rate of return of the distribution asset is based on the weighted average cost of capital (WACC) for a model company. The WACC is revised in each tariff cycle and its value for distribution is currently a real 11.4% before tax.

The law guarantees an economic and financial equilibrium for a company in case there is a substantial change in its operating costs. Should the components of Part A costs, such as the purchases of energy or taxes, increase significantly within the period between two annual tariff adjustments, the concessionaire may submit a formal request to ANEEL to have such costs passed on to end customers.

## 2.4. Transmission regulations

Any agent of the electricity market that produces or consumes energy is authorized to use the basic grid. Non-regulated market consumers also have this right, provided that they comply with certain technical and legal requirements. This condition is called open access and is guaranteed by law and by ANEEL.

The operation and management of the basic grid is the responsibility of ONS which is also responsible for managing the energy dispatch from the plants in optimal conditions, involving

the use of the interconnected grid, reservoirs and thermal plants.

The Portarias Ministeriales 210/2011 and 211/2011 were published in the Official Gazette on April 5, 2011 which equip the two interconnection lines of Compañía de Interconexión Energética S.A. to public utility concessions, with payment of the regulated toll. The Receita Anual Permitida (RAP) is adjusted annually in June according to the Broad National Consumer Price Index (IPCA) with tariff reviews every four years. The gross remuneration base of 1,760 million reales (US\$885 million) was approved and a net base of 1,160 million reales (US\$585 million). In 2012, ANEEL authorized the implementation of reinforcements to the transmission installations, recognizing an additional investment of 47 million reales (US\$23 million) in the remuneration base. The rate of remuneration applicable was defined according to current regulations at 7.24% (real after tax). The term of the authorization is until June 2020 for Line 1 and July 2022 for Line 2, with indemnity for un-amortized investments.

## 2.5. Environmental regulations

Although the Brazilian Constitution enables the federal government as well as the state and local governments to dictate laws for protecting the environment, most environmental regulations in Brazil are passed at the state and local levels.

Hydroelectric plants must obtain concessions for water rights and environmental approvals. Thermal generation companies, transmission companies and distributors must obtain environmental approvals from the environmental regulatory authorities.

## 3. Chile

### 3.1. Industry structure

The electric industry in Chile is divided into 3 segments or businesses: generation, transmission and distribution.

The generation sector is integrated by electricity generating companies. These sell their production to distribution companies, non-regulated customers and other generation companies. The transmission sector comprises companies that transmit at high-tension

the electricity produced by the generation companies. Finally, for regulatory purposes, the distribution sector is defined as comprising any supply to end customers at a voltage not exceeding 23 kV.

There are four interconnected electricity grids in Chile. The principal grids that cover the most populated areas of Chile are the Central Electricity Grid (SIC) which covers the central and center-south sectors of the country, where 93% of the Chilean population lives, and the Northern Electricity Grid (SING) which operates in the north of the country, where a large part of the mining industry is located. The operation of the electricity generation companies is coordinated by economic load dispatch centers called CDEC (CDEC-SIC and CDEC-SING), which are autonomous entities integrated by generators, transmitters, sub transmitters and important customers. The CDECs coordinate the operation of their systems as efficient markets in the sale of electricity, where the generator with lowest marginal costs is used to meet demand. As a consequence, in any specific level of demand the appropriate supply will be provided at the lowest possible production cost that exists in the system at any given time.

### 3.2. Generation company regulations

The generation segment comprises companies that own electricity production facilities whose energy is transmitted and distributed to end consumers. The segment is characterized for being a competitive market where production is sold to distributor companies, non-regulated customers, other generating companies and on the spot market.

The operation of the generation companies in each of the 2 principal interconnected grids is coordinated by its respective dispatch center, or CDEC, an autonomous entity which brings together the generators, transmission companies and large customers. A CDEC coordinates the operation of its system applying an efficiency criterion, where lower marginal cost producers are used to suitably meet the demand at any moment. As a consequence, at any level of demand the system delivers an adequate supply at the lowest possible production cost, given available alternatives. The marginal cost is used as the price at which generators trade their

energy on an hourly basis, including system injections or withdrawals and purchases to supply customers.

Generators take part in tenders for energy for up to 15 years. These are carried out according to the demand requirements through distribution and are supervised by the National Energy Commission (CNE), the regulator. This allows generators to obtain stable and foreseeable revenue, avoiding marginal cost volatility and motivating investment in the sector.

There is payment for capacity in Chile as the amount that remunerates the development of a gas turbine as the marginal unit for contributing to the system's demand. The rate of return for the industry is considered to be 10%. The payment for capacity grants generators a fixed income for being available to the grid and contributing to the country's reserve margin.

### 3.3. Distribution company regulations

The distribution segment is defined, for regulatory purposes, as all the electricity supplied to end customers at a voltage not exceeding 23 kV. Distribution companies operate under a public-utility concession system, with the obligation to supply regulated customers at regulated tariffs.

Distribution companies supply regulated customers whose demand is less than 500 kW, a segment whose price and supply conditions is the result of tenders regulated by the National Energy Commission, and non-regulated customers with bilateral contracts with generators whose terms & conditions are freely negotiated and agreed.

Consumers are defined according to the size of their demand, as follows: i) non-regulated customers are those with a connected capacity over 2,000 kW; ii) regulated customers are those whose connected capacity does not exceed 2,000 kW; and iii) customers that opt for either regulated tariffs or a non-regulated regime for a minimum of 4 years in either regime, available to those whose connected capacity ranges between 500 and 2,000 kW.

The distribution tariff-setting processes are carried out every four years. Both the CNE and the company representative of its typical area contract studies from independent consultants to fix the distribution added value for its typical



area. The preliminary basic tariffs are obtained by weighting the results of the study ordered by the CNE and that by Chilectra on a 2/3rds – 1/3rd basis respectively. With these basic tariffs, the aggregate return of the Industry is checked within the established range of 10%, with a dispersion of 4%. The rate of return for the Industry recognized by law is 10%.

Every four years, tariff reviews are made of the sub-transmission system (corresponding to the high-tension substations that connect the distribution and transmission networks). This process is followed alternately with the distribution tariff review process, so that both are two years distant from each other.

In addition, a review is made every four years of associated services, being those services not covered by the distribution reviews.

The Chilean distribution model is a consolidated one, with eight tariff settings made since the privatization of the sector.

### 3.4. Transmission regulations

The transmission segment covers a combination of lines, substations and equipment for electricity transmission from its production centers (generators) to consumers or distribution centers. Transmission in Chile is defined as lines or substations with a voltage or tension over 23 kV. The transmission system operates under open access and transmission companies establish

rights of way over the available transmission capacity through the payment of tolls.

Since transmission assets are built according to the concessions granted by the government, the law requires companies to operate under an open access system in which users can obtain access to the system, contributing to the exploitation costs, maintenance and, if necessary, the system's expansion.

### 3.5. Environmental regulations

Chile has numerous laws, regulations, decrees and municipal ordinances which can present environmental considerations. Among them are waste disposal regulations, standards for the deployment of industries in areas with a potential public health impact and the protection of water for human consumption.

There is a law for non-conventional renewable energies (NCREs), Law 20.257, which states that for every electricity company taking energy from the electrical grids with installed capacity of over 200 MW to sell to distributors or end customers, 10% of these annual withdrawals will have to be injected by means of non-conventional renewable generation, whether their own or contracted. This limit will initially be 5% from 2010 to 2014, increasing in 0.5% increments annually from 2015. This progressive increase will be applied such that withdrawals subject to the obligation in 2015 should meet 5.5%, those of 2016 6% and so successively until reaching 10% in 2024.

## 4. Colombia

### 4.1. Industry structure

The Colombian electricity sector was structurally reformed by Laws 142 and 143 of 1994. According to Law 143, different economic, public, private or mixed agents may participate in the sector's activities, whose agents have the freedom to develop their functions in a context of free-market competition. To operate or initiate projects, permits should be obtained from the competent authorities with respect to environmental, sanitation and water rights aspects, and those of a municipal nature that are required.

The Colombian Wholesale Electricity Market (MEM) is based on a competitive market model and operates under open access principles. For its effective operation, the MEM counts on a central agency known as Commercial Exchange System Manager (ASCI).

There are 2 categories of agents, generators and traders, who are allowed to buy and sell electricity on the MEM.

The generation sector is organized on a competitive basis, with independent generators that sell their product on the spot market or through private contracts with large customers. Generation companies must participate in the MEM with all their generation plants or units connected to the Colombian grid whose capacities are at least 20 MW (those with capacity of between 10 MW and 20 MW may participate optionally). Generation companies declare the available energy and the price at which they want to sell. This electricity is centrally dispatched by the National Dispatch Center (CND).

Trading consists of the intermediation between the actors that provide the generation of electricity, transmission and distribution services and the users of such services, whether or not such activity is carried out together with other electricity sector activities.

Electricity trading on the MEM is carried out under energy spot market methods (short-term or daily market), bilateral contracts (long-term market), and firm energy.

Transmission operates under monopolistic conditions and with a guaranteed fixed annual

income which is determined by the new replacement value of the networks and equipment and for the resultant value of the bidding processes that award new projects for the expansion of the national transmission grid (SNT). This value is distributed among SNT traders in proportion to their energy demands. The National Electricity Grid (SIN) attends to 98% of the country's demand. The unconnected systems serve isolated parts of the country.

Distribution is defined as the operation of the local distribution and regional transmission networks. Any customer can have access to a distribution network for which a connection fee is payable. Distributors and network operators are responsible for the planning, investment, operation and maintenance of electricity networks.

### 4.2. Generating company regulations

The Colombian state may participate in the execution and development of generation projects like the private sector. The state is only authorized to sign concession agreements related to generation where there is no existing entity prepared to assume such operations under comparable conditions.

The wholesale market facilitates the sale of excess energy that has not been committed under contracts. In the wholesale market, the spot price is established and calculated every hour for all the units dispatched, based on the price offered by the highest energy-price unit for that period. Every day, the CND receives the price offers from all the participating generators in the wholesale market. These bids indicate the prices and available capacity for each hour of the following day. Based on this information, the CND, guided by the principle of optimal dispatch (which assumes an infinite transmission capacity on the grid) establishes the optimized 24-hour dispatch considering initial operational conditions, thus determining which generators will be dispatched on the following day to meet the expected demand. The price for all generators is fixed as the price of the most expensive generator dispatched every hour under the optimal dispatch.



The CND also plans the dispatch which takes into account the limitations of the grid as well as other necessary conditions to meet the energy demand expected for the next day in a safe, reliable and efficient manner, from a cost perspective. The cost differences between the “planned dispatch” and the “optimal dispatch” are called “restriction costs.” The value of each restriction cost is allocated proportionately to all traders on the Colombian grid according to their demanded energy, and these costs are passed on to end customers.

Generators connected to the Colombian grid can also receive “reliability payments”, which are the result of firm energy obligations (OEF) assumed with the system. The OEF is a commitment by the generation company, backed by its physical resources, that enables it to produce firm energy (estimated for hydroelectric plants as the maximum of electricity that a generating plant is capable of dispatching continuously during a year in extreme conditions of water availability, and for thermal plants according to their historic availability and the guarantee of fuel supply and transport). The generator that acquires an OEF will receive a fixed compensation during the commitment period, whether the fulfillment of its obligation is required or not. The assignment of the OEF for new projects is done through bidding for which generators should declare and certify their firm energy. Existing generators may participate in these tenders, accepting the resultant price. The assignment for existing

generators is made annually, and for up to 20 years for new projects. When there are no tenders, the assignment of the OEF is made by the regulator proportionally to the firm energy declared by each generator.

The price per kWh hour of OEF corresponds to the closing value in the tender for firm energy, or reliability load. When this firm energy is required, which occurs when the spot price exceeds the scarcity price, apart from the reliability load the generator also receives the scarcity price for each kWh associated with its OEF. Should the energy generated be greater than the obligation specified in the OEF, this additional energy is paid or remunerated at the spot price.

### 4.3. Distribution company regulations

Distribution charges are fixed by the CREG for each company based on the new replacement cost of the existing distribution assets, the capital cost as well as the operational and maintenance costs, in four levels of voltage: Level 1 up to 1 kV. Level 2 up to 30kV. Level 3 up to 57.5 kV and Level 4 up to 115 kV. Levels 1, 2 and 3 or tension are called local distribution systems (SDL) and Level 4 is called Regional Transmission System (STR).

During 2009, after auditing the information reported by the companies, the CREG determined the distribution charges applicable up to 2013. The charges are fixed for a 5-year period and are

updated monthly according to the price index. The rate of return recognized was fixed by the CREG at 13.9% before taxes for the local distribution assets and 13% for the regional transmission assets, based on the CAPM methodology. The methodology for calculating the distribution charges includes a scheme of incentives for the management costs of operation and maintenance, quality of service and energy losses.

#### 4.4. Transmission regulations

Transmission companies that operate at least 220 kV constitute the National Transmission Grid (STN). The transmission tariff includes a charge that covers the operating costs of the facilities and a usage charge applicable only to traders who pass it on directly to end users..

CREG guarantees a fixed annual income to transmission companies. Income is determined by the new replacement value of the network and equipment, and by the resultant value of tenders that have awarded new projects for the expansion of the STN. This value is attributed to the STN traders in proportion to their respective energy demand.

The construction, operation and maintenance of new projects is awarded to the company which bids the lowest present cash flow value necessary to carry it out.

#### 4.5. Trading regulations

The trading market is divided into regulated and non-regulated customers. Customers in the non-regulated market can freely contract their electricity supply directly from a generator or distributor acting as traders, or from a pure trader. The market for non-regulated customers consists of those clients with a maximum demand over 0.1 MW or a minimum monthly consumption of 55 MWh.

Trading can be carried out by generators, distributors or independent agents who comply with certain requirements. The parties freely agree the trading prices for non-regulated clients.

The energy trader is responsible for charging the electricity costs to the end consumers and for transferring the payments to the industry agents. Trading for regulated customers is subject to a “regulated freedom system” in which the tariffs are fixed by each trader using a combination of the general cost formulas given by the CREG and the individual trading costs approved by the CREG for each trader. The tariffs include, among other things, energy supply costs, transmission charges, distribution charges and a trading margin. In addition, the final costs of the service are affected by subsidies or contributions applies according to the socio-economic level of each user.

The formula for trading fees became effective on February 1, 2008. The principal changes in this formula are the introduction of a fixed monthly charge and the introduction of a charge for reducing the costs of non technical energy losses in trading charges. CREG also permits traders in the regulated market to choose tariff options to manage their tariff increases.

#### 4.6. Environmental regulations

The legal framework of Colombia’s environmental regulations was established by Law 99/1993, which also created the Ministry of the Environment as the environmental policy authority. The ministry defines issues and carries out the policies and regulations focused on the recovery, conservation, protection, organization, administration and use of renewable resources.

Any entity contemplating the development of projects or activities relating to the

generation, interconnection, transmission or distribution of electricity which could cause an environmental impairment should first obtain an environmental license.

According to Law N° 99, generation plants having a total installed capacity over 10 MW must contribute toward the conservation of the environment through a payment for their activities at a regulated tariff to the municipalities and environmental corporations of the localities where their plants are located. Hydroelectric plants must pay 6% of their generation and thermal plants pay 4% of their generation, at annually-determined tariffs.

Law 1450 of 2011 issued the National Development Plan 2010-2014. The plan established that between 2010 and 2014 the government must develop matters concerning environmental sustainability and risk prevention.

In 2011, Decree 3,570 established the new structure of the environmental sector, creating the Ministry of the Environment and Sustainable Development (previously, the functions of this ministry had been assumed by the Ministry of Housing).

In recent years, the environmental regulation of the electricity sector have focused on regulatory aspects related to plant emissions, hydraulic policies (including water discharges and basin management) and environmental licenses and penalties.

## 5. Peru

### 5.1. Industry structure

The main features of Peru's electricity industry are (i) the separation of the 3 main activities: generation, transmission and distribution, (ii) a non-regulated market for the supply of energy under competitive market conditions, (iii) a

system of regulated prices based on the principle of efficiency and a system of tenders, and (iv) the privatization of the operation of interconnected electricity grids subject to the principles of efficiency and service quality.

There is an interconnected grid, the National Interconnected Electricity Grid (SEIN) and various isolated regional systems of a minor size that supply electricity to specific areas.

### 5.2. Generating company regulations

Generation companies that own or operate a generation plant with an installed capacity of over 500 kW require a concession granted by the MINEM. A concession for electricity generation is an agreement between the generator and the MINEM, while an authorization is only a permit unilaterally granted by the same public authority. Authorizations are granted by the MINEM for an unlimited period of time, although its termination is subject to the same considerations and requirements as the termination of a concession under the procedures established in the Law of Electricity Concessions and its related regulations.

The dispatch coordination of electricity operations, the determination of spot prices and the control and management of economic transactions that take place on the SEIN are controlled by the COES-SINAC. Generators can sell their energy directly to large consumers and purchase the deficit or transfer the surplus between the energy contracted and the effective production in the pool at spot prices.

Sales to non-regulated customers are made at mutually agreed prices and conditions, which include tolls and compensations for the use of transmission systems and, if necessary, to the distribution companies for the use of their networks.

Sales to distributors can be made under bilateral contracts at a price not higher than the regulated

price in the case of regulated customers, or at an agreed price in the case of non-regulated customers. Apart from the bilateral method permitted by the Law of Electricity Concessions, Law 28,832 has also established the possibility for distributors to meet the demand of their regulated or non-regulated customers under contracts signed following tenders for capacity and energy.

The Law for Assuring the Efficient Development of Electricity Generation established a regime of tenders for the acquisition of energy and capacity by distributors through a mechanism that determines the prices for the term of a contract. The approval of this mechanism is important for generators because it establishes a mechanism to determining a price over the life of contract, which is not fixed by the regulator and may have a term of up to 20 years.

New contracts for the sale of energy to distribution companies for re-sale to regulated customers should be at fixed prices determined by public bidding. Only a small part of the electricity bought by distribution companies, including old contracts, are still maintained at the bar prices which are set by Osinermin annually. These contracts include the maximum price of electricity acquired by the distributors at which these may pass on to regulated customers.

In Peru, there is a payment for capacity as the amount that remunerates the development of a gas turbine as the marginal unit for supporting demand in the system. The rate of return for industry is considered to be 12%. The payment for capacity provides generators with a fixed income for availability to the system and contributes to country's reserve margin.

### 5.3. Distribution company regulations

The electricity tariff for regulated customers includes energy and capacity charges for generation and transmission and the Distribution Value Added (VAD) which considers a regulated return on investments, fixed charges for operation and maintenance, and a standard percentage for energy losses in distribution.

The VAD is set every 4 years. The Osinermin classifies companies into groups according to the "typical areas of distribution," based on economic factors that group together the companies with similar distribution costs for population density which determines the requirements of network equipment.

The real return on investments of a distribution company depends on its performance with respect to the fixed standards by Osinermin for a theoretical model company. The tariff system permits a higher return for the distribution companies that are more efficient than the model company. Preliminary tariffs are calculated as an average of the results of the study contracted by Osinermin and the study of the companies. The preliminary tariffs are checked to ensure that they provide an annual average internal rate of return of between 8% and 16% over the replacement cost of electricity-related distribution assets. Peruvian law defines the profitability for the industry of 12%.

The last tariff setting process was carried out in November 2009 and it will remain in effect until November 2013.



#### 5.4. Transmission regulations

Transmission activities are divided in 2 categories: principally, and which is for common use and permits the flow of energy through the national grid; and secondarily, those lines that connect a power plant with the system or a substation with a distributor company or an end consumer. The main lines of the guaranteed system are available to all generators to allow the supply electricity to all customers. The transmission concessionaire receives a fixed annual income, as well as revenue from variable tariffs and connection tariffs per kW. The lines of the secondary and complementary system are available to all generators but are used only by certain customers who are responsible for making payments in relation to the use of the system. These are remunerated at a fixed rate for 20 years, revising only any additional investments.

#### 5.5. Environmental regulations

The environmental legal framework applied to activities related to energy in Peru is established in the Environmental Law (Law 28,611) and in the Environmental Protection Regulation for Electricity Activities (Supreme Decree 029-94-EM).

In 2008, the MINEM promulgated Supreme Decree 050-2008 to provide incentives for the generation of electricity through non-conventional renewable energies (NCRE). The decree stipulates that 5% of the demand from SEIN must be supplied using NCRE. This 5% goal may be increased every 5 years. Technologies considered as renewable resources are: biomass, wind (aeolic), tidal, geothermal, solar and mini-hydroelectric (below 20 MW).



## *description of the electricity business by country*

p. 92  
Operations in Argentina

p. 98  
Operations in Chile

p. 111  
Operations in Peru

p. 96  
Operations in Brazil

p. 107  
Operations  
in Colombia



## 1. Operations in Argentina

### 1.1. Installed capacity, generation and energy sales

Installed capacity (MW) (1)	2011	2012
<b>Endesa Costanera</b>		
Costanera (steam turbine)	1,138	1,138
Costanera (combined cycle)	859	859
Central Buenos Aires (combined cycle)	327	327
<b>Total</b>	<b>2,324</b>	<b>2,324</b>
<b>El Chocón</b>		
El Chocón (hydroelectric)	1,200	1,200
Arroyito (hydroelectric)	128	128
<b>Total</b>	<b>1,328</b>	<b>1,328</b>
<b>Total Argentina</b>	<b>3,652</b>	<b>3,652</b>
<b>Electricity generation (GWh)</b>	<b>2011</b>	<b>2012</b>
Endesa Costanera	8,397	8,488
El Chocón	2,404	2,801
<b>Total generation in Argentina</b>	<b>10,801</b>	<b>11,289</b>
<b>Electricity sales (GWh)</b>	<b>2011</b>	<b>2012</b>
Endesa Costanera	8,493	8,655
El Chocón	2,888	3,197
<b>Total sales in Argentina</b>	<b>11,381</b>	<b>11,852</b>

(1) Capacities calculated according to Endesa Chile's Operating Standard N°38 ("Standard for determining maximum capacities at Endesa Chile's hydroelectric and thermoelectric plants of"), as of December 31 of each year.

### 1.2. Activities and projects

Endesa Chile participates in the generation of electricity in Argentina through Endesa Costanera and Hidroeléctrica El Chocón, which it controls directly and indirectly with 69.8% and 65.4% shareholdings respectively.

These companies altogether account for an aggregate capacity of 3,652 MW. This capacity represented 11.7% of Argentina's installed SIN capacity at the end of 2012.

The electricity generation of these companies amounted to 11,289 GWh, 9% of the country's total generation, while physical sales of energy reached 11,852 GWh, 9.8% of the total sold.

Endesa Costanera and El Chocón participate in companies in charge of the operation of 2 combined-cycle plants; initiatives coordinated by the Fund for Needed Investments that Permit Increasing Electricity Supply for the Wholesale Electric Market (FONINVEWEM/MEM), with 5.326% and 18.85% of the ownership respectively.

During 2010, commercial operations began under complete cycle of the Manuel Belgrano and José de San Martín thermal plants.

The combined-cycle operation determined the entry into effect of the contract for the operation and maintenance management of the plants and the supply contract, for which the companies that participate in the FONINVEWEM, including Endesa Costanera and El Chocón, began to recover their credits with the flows generated by the project through its 10-year production sale contract with MEM managed by CMMESA, with installments collected as of December 31, 2012 as planned.

With respect to the Vuelta de Obligado S.A. (VOSA) project, which contemplates the installation of a combined-cycle plant of around 800 MW, and in addition to that reported the previous year, the energy authority in 2012 approved the tender conditions for the plant prepared by VOSA's team. On July 5, the Federal Ministry of Planning, Public Investments and Services announced the adjudication of the turnkey project for completion within 36 months to the consortium comprising General Electric, Duro Felgueras and Fainser. Once it is functioning, the generator (foreseen for 2014) will start the repayment of the debt of CMMESA with the generating companies that contributed to this project, including HECSA and Costanera, under a 10-year supply contract with an interest rate of 30-day Libor plus 5%, in accordance with the generators agreement 2008-2011.

Other generators connected to the Argentine SIN are AES Alicura, Sadesa, Capex, Petrobras, Pampa Generación and Pluspetrol.



### 1.2.1. Endesa Costanera

This company is located in the city of Buenos Aires and owns 6 steam-turbine units for a total of 1,138 MW, which can generate using either natural gas or fuel oil. It also operates 2 combined-cycle plants of 859 MW and 327 MW respectively, with a total installed capacity of 2,324 MW.

In 2012, the net generation was 8,488 GWh and total sales reached 8,655 GWh, while the demand of Argentina's electricity system increased by 4.2% with respect to 2011.

The thermal values of summer and winter during 2012 were normal. A new record was broken in demand for capacity of 21,949 MW in February, passing the record in 2011 by 1.8%.

The hydrological contributions of the rivers Limay and Collón Curá basins were substantially reduced from May, leading to a dry year in those basins. The availability of gas to the system was similar to previous years, basically due to greater cuts in the winter period, producing a large generation with alternative liquid fuels in order to supply the thermal dispatch growth.

In August 2012, the government announced future changes in the regulatory framework for generation, transmission and distribution, including a modification of the present "marginalist" system for determining generation prices to a new model based on the costs of each generator plus a reasonable return.

In the operational area, the most important maintenance tasks in 2012 were the carrying out of the Summer Plan 2013, begun in November 2012, for the inspection of Unit 6 and the common auxiliary services for all the conventional units and major maintenance of the combined cycle I.

The financial strategy adopted in previous years was continued, giving priority to the conservative management in order to ensure the funds necessary for the proper operation of the plant.

In the commercial field, the company continued to make big efforts for maintaining and even increasing the level of contracting on the term market (MAT).

Regarding the Agreement for the Management and Operation of Projects, Increase of Availability of Thermal Generation and Adaptation of Generation Remuneration 2008-2011" signed by the generators with the energy authority in November 2010, the authority did not recognize its continuity during 2012, which impacted the company's operating results.

An agreement was signed in October 2012 between Endesa Costanera and the energy authority for the implementation of an investment plan in the plant's generating units in order to optimize their reliability and availability, for an amount of US\$304 million over 7 years. This will result in increased generation and important cost savings for the system.

The plan contemplates works on the steam-turbine units and short, medium and long-term investments necessary for ensuring the plant's operational continuity, and also the continuity of the combined-cycle maintenance contracts with Mitsubishi and Siemens.

The financing of this plan will come from two contracts of commitment of availability of MEM equipment, whose signing by CAMMESA and Endesa Costanera was ordered by the energy authority. CAMMESA and Endesa Costanera therefore signed the commitment contract of availability of combined-cycle equipment on the MEM on December 19, 2012, and the commitment contract of availability of steam-turbine equipment on the MEM on January 18, 2013.

As of December 31, 2012, Endesa Costanera has a negative equity of US\$340.8 million as a result of recurring losses mainly due to the growing deficit between revenue and expenses, caused by the existing regulations. This situation has led to requests for reconsideration to the corresponding authorities to adopt measures for reverting this situation.

### 1.2.2. Hidroeléctrica El Chocón

Hidroeléctrica El Chocón S.A. (HECSA) is a hydroelectric generation company which makes hydrological use of El Chocón and Arroyito, located on the Limay River. It is located in the provinces of Neuquén and Río Negro. The hydroelectric complex has a total installed capacity of 1,328 MW and covers the El Chocón power plant with a total installed capacity of 1,200 MW (hydroelectric power plant with an artificial reservoir) and the Arroyito power plant, with an installed capacity of 128 MW which uses the waters of the rivers Limay and Collón Curá for its generation.

The El Chocón hydroelectric complex is located in Comahue, formed by Argentina's provinces of Río Negro, Neuquén and the southern part of the provinces of Buenos Aires and La Pampa. El Chocón is on the Limay River, some 80 km upstream from its confluence with the river

Neuquén. Arroyito is the compensator dike of El Chocón and is located on the same river, 25 km downstream.

During 2012, the hydrological contributions of the basins of the Limay and Collón Curá rivers were substantially reduced starting May, resulting in a dry year in these basins. The operative criteria applied therefore by the Dispatch Agency was to restrict the use of accumulated strategic reserves. This resulted in the consolidation of the Comahue energy reserves.

As a result of the dispatch of the El Chocón reservoir at the end of 2012, the net generation of the El Chocón-Arroyito complex was of 2,801 GWh, the water level reaching 374.89 meters over sea level. The energy reserve in the Comahue reservoirs was 5,279 GWh, of which 1,832 GWh correspond to El Chocón's production, both values measured according to the condition of the minimum water level of the Extraordinary Operation Band.

With regard to operations, the accumulated availability in 2012 of the El Chocón-Arroyito complex was of 98.9%, having successfully completed the major maintenance of the No.2 turbo-group unit of the Arroyito plant. This major maintenance consisted of the comprehensive revision and maintenance of the turbine, generator, excitation systems, protections, electrical and mechanical auxiliaries and principal transformer. The installation of the fire-fighting system was also completed in Units 1, 3, 4, 5 and 6 of the El Chocón plant and the vibrations monitoring system in that plants Units 3, 4 and 5.

In the commercial aspect, we continued in 2012 with the defined strategy focused on ensuring the company's economic and financial sustainability, centering in diversifying the customer portfolio through trading on alternative markets at spot and prioritizing long-term profitable relations with solid customers.



As a result of the actions taken over several years, 98% of contractual capacity with large users on the term market was achieved and maintained, with a high percentage signed for periods of over a year and with first-class customers. Sales in 2012 were 1,886 GWh on the spot market and 1,311 GWh under contracts.

In regulatory matters, the changes in the regulations of the MEM continued in force, as well as the accumulation of credits of the generators due to delays in payment for energy sold on the spot market.

In August 2012, the government announced future changes in the regulatory framework for generation, transmission and distribution, including a modification of the present “marginalist” system for determining generation prices to a new model based on the costs of each generator plus a reasonable return. Since then, there have been no government regulations changing the current ones.

With respect to the agreement of November 25, 2010 between the Energy Secretariat and the principal generating companies, including HECSA, and in addition to that announced, the Energy Secretariat in January 2012 issued its Note S.E. N°495/12 which ordered the non-

application until further notice of the payment for increases of O&M and capacity recognized in the generation agreement. This regulation was rejected by HECSA.

In the finance area, the company repaid part of its debt of US\$25.8 million, especially considering the complex scenario affecting the electricity sector. Two new financings were obtained: one with the Banco Hipotecario for \$10 million for a one-year term, repayable in 12 monthly installments and interest at the Corrected Private Badlar rate plus a spread of 5.5%, and the other with Banco Macro for \$20 million, at a term of 180 days and a fixed interest rate of 18%; this was renewed in December on similar conditions.

The principal investment projects are i) the modernization of the protections, excitation and starting/stopping sequence systems of Units 1, 2, 5 and 6 and the principal transformers T1CH and T5CH of the El Chocón plant, and ii) completion of installation of on-line vibrations monitoring equipment of Units 1 and 6 of El Chocón. It is also planned to complete the improvements made in 2012 in the technological updating of the remote-control system of the Arroyito compensator dike, stage 3, which has been approved by the authority.

## 2. Operations in Brazil

### 2.1. Endesa Brasil

The Endesa Brasil S.A. holding company was incorporated in 2005 with the contribution of the existing Brazilian assets of Endesa Latinamérica, Enersis, Endesa Chile and Chilectra. Endesa Chile therefore ceased to consolidate Cachoeira Dourada, and Enersis began to consolidate Endesa Brasil S.A. Endesa Chile holds 38, 88% of the shares of Endesa Brasil S.A.

Endesa Brasil S.A. controls the following companies:

#### 2.1.1. Endesa Cachoeira

This company is located in the State of Goiás, 240 km south of Goiania. It has 10 units with a total installed capacity of 665 MW. This is a pass-through hydroelectric power station that uses the waters from the Paranaíba River. Its net generation in 2012 was 3,722 GWh, while sales amounted to 4,344 GWh.

#### 2.1.2. Endesa Fortaleza

Endesa Fortaleza is located in the municipality of Caucaia, 50 km from the capital of the State of Ceará. This is a combined-cycle 322 MW power plant that uses natural gas and has the capacity to generate one-third of the electricity needs of Ceará, with a population of around 8.2 million. Built over an area of 70,000 m<sup>2</sup>, it is part of the infrastructure of the industrial and port complex

at Pecém in the municipality of Caucaia, and it is part of the federal government's priority thermal-electricity program (PPT). Its location is strategic in promoting regional growth as well as making the development of other industries viable. Its main customers are COELCE and Petrobras. The 2012 energy generation was 1,454 GWh, while its sales amounted to 2,947 GWh.

#### 2.1.3. Endesa Cien

Compañía de Interconexión Energética S.A. (Endesa CIEN) is a Brazilian energy transmission company. Its complex consists of 2 frequency conversion stations, Garabi I and Garabi II, which convert Brazil's (60 Hz) and Argentina's (50 Hz) frequencies both ways, as well as transmission lines. On the Argentine side, these lines are managed by 2 subsidiaries: Compañía de Transmisión de Mercosur S.A. (CTM) and Transportadora de Energía S.A. (TESA), in both of which Endesa Cien controls 100% of the capital.

The interconnection system consists of 2 transmission lines, covering a total length of 1,000 kilometers, and the Garabi conversion station.

Endesa Cien's annual allowable compensation (Remuneración Anual Permitida - RAP) value was published in the Official Gazette on April 5, 2011. The regulating entity thus equates Endesa Cien (whose assets consist of the Garabi 1 and 2 lines) with the public utility transmission concession-holders. The RAP value is reviewed annually in June and the tariff-revision process





takes place every 4 years. Effective April 2011, therefore, Cien is officially authorized to receive payments under this new business focus.

#### 2.1.4. Ampla

AMPLA is an energy distribution company operating in 73.3% of the territory of the State of Rio de Janeiro which covers an area of 32,613 km<sup>2</sup>. Its population is approximately 8 million people spread over 66 districts, the main ones being Niteroi, São Gonçalo, Petrópolis, Campos and Cabo Frío.

During 2012, AMPLA delivered electricity to 2,712,359 customers, 3% more than in 2011. Of that total, 90% corresponds to residential customers, 6% to commercial and 4% to other users.

The company distributed 10,816 GWh to its end customers which represents an approximate increase of 6% over 2011. Of the total energy distributed, 40% corresponds to residential users, 20% commercial, 9% industrial customers and 31% other users (which includes toll customers with 14%).

Since 2003, Ampla has placed great emphasis on combating energy theft, with a reduction of 4.01 percentage points in this indicator (from 23.64% to 19.63%). The sustainable reduction is only possible thanks to the combination of positive results obtained from Ampla's projects (the use of technology and social actions). For several years, the company has won a series of prizes indicating the excellence of its projects. However,

energy losses today continue to represent one of Ampla's main challenges. The year 2012 closed with a reduction of 0.03 percentage points, passing from 19.66% to 19.63%, thus managing to offset the severe market aggressiveness which has increased the risk zones in the company's concession area.

#### 2.1.5. Coelce

COELCE is Ceará state's electricity distribution company, in the northeast of Brazil, covering a concession area of 149 thousand km<sup>2</sup>. The company serves a population of 8.4 million.

In 2012, Coelce was recognized as the best distributor in Brazil (Abradee Prize) and Latin America (CIER Prize), both for the fourth consecutive year.

At the close of 2012, COELCE had a total of 3,338,163 customers, representing an increase of 3.5% compared to the previous year. Of these, 73% correspond to residential customers, 13% rural, 5% commercial and the rest other customers.

The energy sold totaled 9,878 GWh which accounted for an increase of 10.1% over 2011. Of this growth, rural customers accounted for 35% due to low rainfalls which motivated the use of electrical pumps for irrigation. These are followed by toll customers with growth of 17%, public entities 15% and residential and commercial customers with 9% growth. Industrial customers on the other hand declined by 7%.

### 3. Operations in Chile

Endesa Chile and its subsidiaries and jointly-controlled companies in Chile have a generating park of 108 units along the Central Electricity Grid (SIC) and 8 units along the Northern Electricity Grid (SING).

#### 3.1. Generating plants of Endesa Chile, subsidiaries and jointly-controlled companies

Plant	Company	Technology	Installed capacity (MW) (1)	
			2011	2012
Los Molles	Endesa Chile	Hydroelectric	18	18
Rapel	Endesa Chile	Hydroelectric	377	377
Sauzal	Endesa Chile	Hydroelectric	77	77
Sauzalito	Endesa Chile	Hydroelectric	12	12
Cipreses	Endesa Chile	Hydroelectric	106	106
Isla	Endesa Chile	Hydroelectric	70	70
Abanico	Endesa Chile	Hydroelectric	136	136
El Toro	Endesa Chile	Hydroelectric	450	450
Antuco	Endesa Chile	Hydroelectric	320	320
Ralco	Endesa Chile	Hydroelectric	690	690
Palmucho	Endesa Chile	Hydroelectric	34	34
Taltal	Endesa Chile	Fuel/Gas	245	245
Diego de Almagro (2)	Endesa Chile	Fuel/Gas	24	24
Huasco TG	Endesa Chile	Fuel/Gas	64	64
Bocamina (3)	Endesa Chile	Coal	128	478
San Isidro 2	Endesa Chile	Fuel/Gas	399	399
Quintero	Endesa Chile	Fuel /Natural gas	257	257
Ojos de Agua	Endesa Eco	Hydroelectric	9	9
Pehuenche	Pehuenche	Hydroelectric	570	570
Curillinque	Pehuenche	Hydroelectric	89	89
Loma Alta	Pehuenche	Hydroelectric	40	40
Pangue	Pangue	Hydroelectric	467	467
San Isidro	San Isidro	Fuel/Gas	379	379
Canela	Central Eólica Canela	Wind	18	18
Canela II	Central Eólica Canela	Wind	60	60
Tarapacá TG	Celta	Fuel/Gas	24	24
Tarapacá carbón	Celta	Coal	158	158
Atacama (2)	GasAtacama	Diesel / Natural gas	390	390
<b>Total</b>			<b>5,611</b>	<b>5,961</b>

- 1) These values result from the maximum capacities established by Endesa Chile's Operative Norm No.38: "Norm for determining the maximum capacity in Endesa Chile's hydroelectric and thermo-electric power plants" as of December each year. These correspond to the hydroelectric and thermal generating units' maximum design capacity, for the most part substantiated by the contractual guarantee satisfaction tests performed by the suppliers of such generating equipment. In some cases, the maximum capacity values may differ from the capacities declared to the regulatory entities and customers in each country, based on the criteria defined by such entities and to the satisfaction of the relevant contractual frameworks.
- 2) Endesa Chile holds a 50% holding in the jointly controlled company GasAtacama, consolidated in proportion it represents of the capital, thus this figure includes 50% of the capacity, generation and energy sales of this plant.
- 3) Effective October 28, 2012, the commercial operation was declared of the TV2 unit of the Bocamina plant, by CDEC-SIC Resolución 1141/2012.

The electricity sales of Endesa Chile and its subsidiaries on the SIC amounted to 19,918 GWh in 2012. This represents a share of 43% of total sales on the SIC, including sales to customers and net sales on the spot market. Sales to regulated customers represented 70% and non-regulated customers 26%, with 4% in net operations on the spot market.

Energy sales of the subsidiary Celta, on the SING, were 961 GWh in 2012, representing a share of 6% of total sales on that grid. The sales of the jointly-controlled company GasAtacama were 399 GWh, 3% of the SING's total sales.



### 3.2. Installed capacity, generation and sales of energy of Endesa Chile, subsidiaries and joint ventures

Intalled Capacity (MW) (1)	2011	2012
Endesa Chile	3,407	3,757
Pehuenche S.A.	699	699
Pangue S.A.	467	0
San Isidro S.A.	379	846
Endesa Eco	87	87
Celta S.A.	182	182
GasAtacama (2)	390	390
<b>Total</b>	<b>5,611</b>	<b>5,961</b>

Electricity generation (GWh)	2011	2012
Endesa Chile	11,458	12,339
Pehuenche S.A.	2,983	2,625
Pangue S.A.(3)	1,713	326
San Isidro S.A. (3)	2,460	3,529
Endesa Eco	173	204
Celta S.A.	908	803
GasAtacama (2)	1,026	369
<b>Total</b>	<b>20,722</b>	<b>20,194</b>

Electricity sales (GWh)	2011	2012
<b>Sales to end customers</b>		
Endesa Chile	17,320	18,724
Pehuenche S.A.	260	318
Pangue S.A.	1	0
San Isidro S.A.	-	0
Endesa Eco	-	0
Celta S.A.	917	925
GasAtacama (2)	1,754	338
Sales to CDEC	1,817	971
<b>Total</b>	<b>22,070</b>	<b>21,277</b>

(1) These figures result from the maximum capacities determined by Endesa Chile's operative regulation No.38 "Regulation for defining maximum capacity in the hydroelectric and thermal plants of Endesa Chile", as of December 31 each year. They relate to the maximum design capacity of the generating units, mostly corroborated with contractual guarantee satisfaction tests made by the supplier of the generating equipment. In some cases, the figures of maximum capacity may differ from the capacity declared to the regulatory bodies and customers in each country, due to criteria defined by these entities and satisfaction of the corresponding contractual frameworks.

(2) Endesa Chile has a 50% shareholding in the joint venture GasAtacama, consolidating it in the proportion it represents of the capital, so 50% of the capacity, generation and energy sales of this plant are included. The reduction in sales of GasAtacama follows the expiry of the contracts that GasAtacama had with the distributors Empresa Eléctrica de Arica S.A. (Emelari), Empresa Eléctrica de Iquique S.A. (Eliqsa) and Empresa Eléctrica de Antofagasta (Elecda)

(3) With effect from May 1, 2012, the company Pangue was merged with San Isidro. There are therefore significant differences in installed capacity and generation with respect to the previous year in these two companies.

### 3.3. Principal customers and suppliers

The principal customers of Endesa Chile are CGE, Chilectra, Chilquinta, Codelco Salvador, Grupo Saesa, Grupo CAP, Carmen de Andacollo, Compañía Minera Los Pelambres, Collahuasi, Emelectric, MVC (customer of Pehuenche), Cementos Bío Bío, GNL Quintero, Emelat, Masisa, CMPC Celulosa Laja, OXY, Melón and AngloAmerican.

The company's main suppliers are GNL Chile (BG and GNLQ), YPF, TGM, Gas Andes (Chile and Argentina), Electrogas, GasAtacama, Endesa S.A., Norden, WBC, Froward S.A., Copec and Transelec.

The principal competitors of Endesa Chile are Colbún, AES Gener, E-CL and Guacolda.

There is no degree of dependence that might be considered relevant with respect to each of the principal customers and suppliers of Endesa Chile.

## 3.4. Operational and commercial environment

### 3.4.1. Events that influenced operating and commercial performance

The Central Electricity Grid (SIC) was affected for the third consecutive year by a dry hydrology. This caused a rationing prevention decree in early 2011 which was extended to August 28, 2012. This situation, together with high prices of the fuels used for electricity generation and delays in the start-up of two coal-fired plants which have lower production costs, implied that the SIC recorded high electricity supply costs in 2012. As a result there were also high electricity prices.

While these events impacted the company's margin during 2012, these were mitigated by the characteristics of its generating park in terms of size, diversity, productive efficiency and the application of a commercial policy that has been designed taking into account unfavorable operating scenarios such as the occurrence of the dry hydrological condition described, and delays that affect electricity sector projects, like those that are occurring in both the electricity generation and transmission segments.

### 3.4.2. Hydrological conditions and supply situation on the SIC

The year 2012 began with a normal-dry thaw, without rain, until the end of May, when a brief period of heavy rain began which lasted for little more than a month until early July. There were ten occasional light rainfalls which results in 2012 being a dry year, with a probability of accumulated excess flows of close to 85%.

While the first two quarters were less dry, with probability of accumulated excess flows of 65% and 64% respectively, the panorama changed substantially during the rest of the year. Due to the absence of rains, the hydrological situation of the third quarter worsened notably to be recorded as a dry condition corresponding to a probability of accumulated flows of around 87%. This meant that during the last quarter there

was a very scarce thaw in the months of October and November, with a slight improvement in December when there were rainfalls of an unusual magnitude for the time of year, but did not prevent the quarter from finally concluding with a very dry condition, with a probability of accumulated excess of 97%.

### 3.4.3. Generation and supply cost on the SIC

The dry condition in 2012 implied a high proportion of thermal generation, which represented 57.4% of the total supply on the SIC, a percentage that was 54.6% in the year before. This thermal generation comprised 29.1% of production with coal (21.9% in 2011), 21.2% with LNG (almost the same as the 21.8% in 2011) and 7.1% with oil (reduced from 8.2% in 2011). Hydroelectric generation, as in 2011, remained at depressed levels, representing just 41.9% of total generation, even lower than the 44.7% of 2011. This was due to the annually-regulated reservoirs such as Lago Laja and Laguna del Maule continuing to operate during a large part of the year in the zone of extraction restriction because of the low water levels, with slight recoveries in the months when it rained. Wind generation represented 0.8%, similar to 2011.

As mentioned above, fuel prices stayed at the high levels of 2011 which contributed to generation costs on the SIC also remaining high. While the average price of coal, the principal fuel used in thermal generation in 2012, declined by around 17% (from US\$150 per ton to US\$126 per ton), the annual average prices of other fuels rose: LNG by around 9% (from US\$518 per Dm3 to US\$566 per Dm3); fuel oil No.6 by 5% (US\$622 per ton to US\$654 per ton) and diesel by 3% (from US\$823 per ton to US\$845 per ton).

The high generating costs in 2012 in turn meant high energy prices on the spot market, similar also to those of the year before. The annual average hourly marginal cost at the Alto Jahuel - 220 kV node was around US\$194 per MWh, 3% lower than the average of US\$200 per MWh in 2011. At the monthly level, the average marginal costs in 2012 were lower than in 2011 only in February and March, months in which the thaw was not seen to

be very dry, and in June and July due to the rains concentrated in those months.

#### **3.4.4. The importance of liquefied natural gas (LNG) and record of thermal generation**

The supply of LNG in 2012 to Endesa Chile's plants on the SIC was fundamental in containing the costs of thermal generation in the context of dry hydrology and delay in the operation of the Bocamina II plant. The generation of Endesa Chile with LNG was 5.74 TWh.

The GNL Quintero terminal unloaded 39 ships containing 3,089 million cubic meters of natural gas, of which 1,118 million cubic meters corresponded to Endesa Chile. This enabled the saving of over US\$ 400 million by replacing purchases of oil. Some 735 million cubic meters of gas of other partners in the terminal were also used for electricity production through its sale to other SIC generators. This also permitted cost savings in the electricity sector due to reduced oil-fired generation.

LNG purchases during the year were essentially made under a long-term supply contract with the supplier British Gas. However, Endesa Chile required two additional shipments due to the drought, one of which was provided by Endesa Energía.

#### **3.4.5. Regulatory aspects relating to the electricity sector: projected laws and regulations.**

Two bills were discussed in Congress which will have a favorable effect on the development and operation of the system: the electrical roadmap and the project for modifying electricity concessions and facilitating procedures.

The electrical roadmap project is presently in its first constitutional reading in the Senate and includes actions for facilitating the development of transmission capacity on the grid and additional branches, whose installations will be designed with greater capacity space, attending economic

planning with broader time horizons, whose costs will be remunerated in a shared way between the different users who will benefit from less loaded transport systems. The basic purpose of this project is the future development of sources of generation or demand in different parts of the country, principally renewable energies including hydroelectricity.

The other project intends to free up the procedures and periods of time associated with electricity concessions, including actions that affect the different phases contemplated in these procedures. This will reduce problems of construction delays that currently affect transmission projects and that impede a fluid and efficient economic operation for the electricity supply between the different zones of the country.

Another two projects are also being debated which have remained pending for a longer period of time (2010). One is the modification of Law 20.257 governing NCREs, which seeks to motivate the incorporation of these generation technologies and make them more competitive, and the other the modification of geo-thermal concessions that intends to promote the development of this type of electricity generation.

As part of the government's pro investment and competitiveness agenda, a packet of measures was announced for different areas of the economy, including energy. Endesa Chile participated in 2012 with its observations to the following regulatory initiatives for the sector: i) the regulation of complementary services that regulate the prices and remuneration of these, which was promulgated in the Official Gazette on December 31, 2012; ii) the regulation of the Economic Load Dispatch Center (CDEC), which modifies the current regulation on the management and operations of the CDEC in order to strengthen the autonomy and independence of this entity in exercising its functions; and iii) the regulation of tenders for supplies to distributor companies, also in the stage of preparation, which modifies the present regulation by introducing improvements to tender bases.

### 3.4.6. Commercial commencement of contracts tendered by electricity distribution companies

As from May 1, 2012 the contract took effect for electricity supplies under the tender process of SAESA and Cooperatives, in the framework of Law 20.018, also called the Short Law 2, which amended the General Electricity Services Law. The energy committed is by blocks of 308 GWh p.a., 704 GWh p.a. and 924 GWh p.a. for 2012, 2013 and 2014 respectively,

### 3.4.7. The operational and commercial effect in Endesa Chile

The strength of Endesa Chile for facing the impacts of different variables that affect its operational and commercial activity is having a competitive generating park. This is achieved through a majority proportion of hydroelectric origin. Its park is also strengthened with the entry of the Bocamina II plant which contributes an important proportion of efficient thermal generation, allowing the company to maintain low production costs. Endesa Chile has also designed and applied a balanced commercial policy with a low exposure to hydrological risk, by committing itself in contracts to a level of energy in line with the size and composition of its generator park, maintaining a diversified portfolio of customers and applying a pricing policy that enables it to sustain margins even in situations of dry hydrology and high marginal costs in the spot market like those of 2012.

## 3.5. Endesa Chile's actions in 2012

### 3.5.1. Exploitation of the installations

Operational excellence of the installations of Endesa Chile has been a permanent feature in the company's efforts to maintain high standards of availability, efficiency and safety in the operation of its plants, allowing it reach a leadership position in the electricity market. This operational excellence is shown, by way of example, by the following events occurring in 2012:

- Unit 1 of the Bocamina plant broke a new record in gross annual generation by producing 1,043 GWh. This record easily replaces that of 2007 when 1,009 GWh was generated.
- Unit 2 of the Bocamina plant entered commercial service on October 28, at 23:58 hours, and produced 507 GWh in 2012.
- The National Safety Council awarded the Tarapacá and Bocamina plants its prizes "Efforts in Risk Prevention", "Excellence in Risk Prevention" and the National Safety Council Prize. The last-named was awarded to the company's gas thermal plants and their Hydroelectric Plants of the South and Hydroelectric Plants of the Center exploitation centers.
- The Antuco plant was awarded the prize for operative excellence 2011 in the hydroelectric plant category. This prize recognizes the plant's best performance among the Group's hydroelectric units in South America. It evaluates the behavior of the plant in aspects like operation, maintenance, environment and work safety.
- The Quintero thermal plant became the first plant in the Enel Group in the world to certify an energy management system (EMS) under the ISO 50.001 standard, with the approval by the audit made by AENOR of the implementation of this energy management standard.
- The autonomous starting and closure against dead bar abilities were certified in 30 of the 31 generator units that have this capability. This is a step forward in improving Endesa Chile's response to electricity system contingencies.
- The whole generating park of Endesa Chile is certified under the standards ISO 14.001 and OHSAS 18.001. In addition, six of the generating plants are certified under the ISO 9.001 standard.

Some of the actions of 2012 designed to impact favorably on the operating results and the value of the company were those for improving and modernizing existing installations, like:

- Three units were modernized of the Sauzal plant and the unit of the Sauzalito plant which, apart from raising the standard of their installations, gave compliance with the safety and quality of service technical standard.
- "Full Notice to Proceed" was issued to Alstom-Chile in November for the supply and implementation of a sleeve filter in the Tarapacá plant. This equipment will permit

- compliance with the emissions standard which will come into effect in December 2013 with respect to particulate matter.
- In July, through the first of three audits, compliance was verified with the plan for implementing the actions established in the clean production agreement of the Puchuncaví-Quintero industrial zone.
  - In order to support the investigation of cooling lagoons and their efficiency in thermal plant refrigeration processes, Endesa Chile signed an agreement with Crystal Lagoons for the construction of pilot cooling lagoon of 5,000 m<sup>2</sup> at the San Isidro thermal plant. This will check the applicability of this cooling system that might provide environmental advantages over traditional systems.
  - The maintenance contract for the San Isidro I and II plants signed with Mitsubishi was amended, permitting a reduction in the duration of programmed maintenance and extending their frequency from 8,000 to 12,000 hours equivalent.
  - The assembly at Quintero plant of two emergency groups was acquired and begun, each of 3.3 MVA, which will permit the autonomous start-up of the plant in the event of blackouts.

### 3.5.2. In the commercial area

In order to maintain its leadership position in the industry and a level of commitments in line with its commercial policy, Endesa Chile signed new electricity supply contracts to strengthen its customer portfolio, and carried out a series of activities with them in 2012.

- New contracts were signed with Saesa, Frontel, Luz Osorno and the cooperatives Coelcha, Copelec, Coopelan, Crell, Cooprel and Socoepe through the tender of Saesa and Cooperatives for the supply of electricity in the period May 2012 to December 2014. They are 308 GWh p.a., 704 GWh p.a. and 924 GWh p.a. for 2012, 2013 and 2014 respectively. A contract was also signed with ESO La Silla for 2013, with Emelectric (for its customer Minera La Florida) and a contract extension for non-regulated customers with

CGE Distribución (from December 2012 to December 2015).

- Endesa Chile continued its policy of strengthening its commercial relations with its customers. As part of its customer integral service plan, a visit was made by customers in July to the hydroelectric plants Pangué and Ralco in the Region of Biobío. In August, seminars were organized with customers in the cities of La Serena and Copiapó and in September with customers in Concepción and Valdivia.
- In November, the VIII Seminar with Customers of Endesa Chile and subsidiaries was given in Santiago, with the presence of representatives of companies that the company supplies with electricity. Presentations were made concerning the supply situation, the electrical roadmap project and on the hydro-meteorological prospects for the generation sector.
- According to the results of the 8th service quality survey, the customer satisfaction indicator reached 80.4 %, which qualifies the portfolio as “Satisfied”. The best evaluated areas were communication channels and invoicing process.
- Endesa Chile and CMPC reached agreement in the arbitration between the companies with respect to the application of the supply contract. The terms of the settlement established that CMPC will pay Endesa Chile a total of US\$59.9 million in cash, reductions in consumption and contributions of NCREs.

In order to face transmission limitations on the SIC, Endesa Chile signed with Transelec in 2012 a contract for the construction of an “SVS PLUS” at the Diego de Almagro substation. This was conceived and promoted by Endesa Chile in order to increase the capacity of the Maitencillo/Cardones 220 kV in 80 MVA transmission system without building new transmission lines. This will permit the transportation of a larger volume of economic energy from the central part of the SIC to the north and thus increase the security of supply and enable lower prices for the energy supplied to the company’s customers. This project also has the participation of the companies Guacolda and AES Gener and is expected to start operating in the second quarter of 2013.

## 3.6. Projects under construction of Endesa Chile

### 3.6.1. Bocamina plant expansion, second unit

The Bocamina plant expansion, second unit, segunda unidad, located in the town of Coronel, province of Concepción, Region of Biobío, contemplated the construction of a 350 MW coal-fired thermal plant alongside the Bocamina plant, using as fuel pulverized bituminous coal. The plant is connected to the SIC by a link with Transelec's Lagunillas substation.

The unit was synchronized with the SIC at the end of October 2012, reaching 350 MW, and was declared In commercial operation.

## 3.7. Projects under study of Endesa Chile

### 3.7.1. Los Cóndores Hydroelectric Plant

The Los Cóndores hydroelectric plant project will be located in the Maule Region, province of Talca, municipality of San Clemente. It contemplates the construction of a pass-through 150 MW installed capacity hydroelectric plant, with a mean annual generation of 560 GWh that would take advantage of the waters of the Laguna del Maule reservoir via a 12 km long adduction channel. The plant will connect with the SIC through a double circuit 220 kV link between the Los Cóndores plant and the Ancoa substation, approximately 90 km in length.

In May 2012, the project's transmission line received the approval of its environmental qualification resolution.

### 3.7.2. Neltume Hydroelectric Plant

The Neltume hydroelectric plant will be located in the Los Ríos Region, province of Valdivia, municipality of Panguipulli. The initiative envisages the construction of a pass-through 490 MW hydroelectric plant with a mean annual generation of 1,880 GWh, which will take advantage of the existing energy potential between the lakes Pirehueico and Neltume. The plant will connect to the SIC by a double circuit 220 kV transmission line which between the Neltume plant and Pullinque.

The project has its basic engineering finalized and is in the process of its environmental evaluation by the region's Environmental Evaluation Service (SEA). During 2012 the necessary studies were prepared in response to ICSARA N° 3 which will be presented during 2013.

The project's Neltume-Pullinque transmission line is currently undergoing its environmental evaluation. During 2012, the studies were completed and response given to ICSARA N°2. In June 2012, the SEA issued ICSARA N°3 to which responses were advanced. It is expected that these will be submitted in the second quarter of 2013.

### 3.7.3. Punta Alcalde Thermal Plant

The Punta Alcalde thermal plant will be located in the Atacama Region, in the Huasco province and municipality, 13 km south of this town. The project envisages the construction of a thermal power plant that will burn sub-bituminous coal as its main fuel. It will have 2 units of 370 MW installed capacity each. The plant will be connected to the Maitencillo trunk substation by a double 220 kV circuit transmission system of approximately 40 km in length.

Endesa Chile submitted the project to the EIA in 2009 for evaluation. During that year and 2011 there was a regulatory change regarding emissions which led to important changes in the project. On June 25, 2012, the Atacama region environmental evaluation commission (CEA) decided to reject the project. Endesa Chile then appealed to the Committee of Ministers.

On December 3, 2012, the Committee of Ministers decided unanimously to reverse the decision of the Atacama region CEA, and approved environmentally the project.

During 2012, work progressed on the preparation of the feasibility studies and preparation of the EIA of the transmission line to connect the plant to the SIC.

### 3.7.4. Renaico Wind Farm

This project will be located in the Región of the Araucanía, town of Renaico.

It contemplates a wind farm formed by 44 wind generators of 2 MW installed capacity each with an axle box height of 95 meters, which together will



generate 255 GWh annually. The energy will be fed over two transmission lines. The principal one, a simple circuit line of 27 km in 220 kV to the new Bureo substation to be built in the Región of Biobío, and the second, in 66 kV, will be connected to the Renaico-Angol line.

The basic engineering was completed in 2012 and the process of tendering of the supply contracts begun. The environmental qualification resolutions of the wind farm and of the 220 kV transmission line were obtained.

### 3.7.5. Piruquina Mini-Hydroelectric Project

The Piruquina mini-hydroelectric project on the island of Chiloé, town of Dalcahue, province of Chiloé, Region of Los Lagos.

Piruquina is a mini-hydroelectric plant that seeks to use the waters of the river Carihueico in a zone characterized for having a natural narrow of the river.

The installed capacity at full capacity would be 7.6 MW.

The mini-plant would use the waters of the river Carihueico through an adduction tunnel and pressure tube.

The conceptual optimization of the project was proceeded with during 2012, together with a simplification of the civil works.

## 3.8. Proyectos de empresas asociadas

### 3.8.1. HidroAysén

HidroAysén, a company that is 51% owned by Endesa Chile and 49% by Colbún, is developing a project for the construction and operation of five hydroelectric plants on the Baker and Pascua rivers in the Region of Aysén.

The plants will have a total installed capacity of 2,750 MW and an annual average generating capacity of 18,430 GWh, which represents 38% of the consumption of the SIC in 2012. The total reservoir surface area, taking into account the 5 plants, will cover 5,910 hectares, equivalent to 0.05% of the Aysén Region.

The HydroAysén project is the most important hydroelectric initiative developed in Chile to date, because of its significant contribution to the nation's energy matrix and its exceptional world-class efficiency.

In accordance with Law 19.300, the project submitted its environmental impact assessment (EIA) in August 2008 and obtained a favorable RCA in May 2011 after three years of complete and exhaustive evaluation.

Since then, the project had focused its efforts on continuing with the transmission studies that will transport the energy generated by the five

plants to the principal centers of consumption, and with strengthening links with the community of the Region of Aysén.

During 2012, the company completed a long judicial process brought by opposition parties to the project who tried to detain the initiative through legal proceedings. In April 2012, the Supreme Court in Santiago sentenced in favor of HidroAysén, rejecting the appeals presented by environmental organizations that had previously been seen by the Coyhaique Court of Appeal and then by the Puerto Montt Court of Appeal, judging in favor of the company. The country's senior court has therefore confirmed the environmental approval of HidroAysén.

An important event during the year was the recommendation by Colbún to suspend the environmental studies of the transmission line in May 2012. By a material information report sent to the Superintendency of Securities and Insurance (SVS), the company suggested to the board that its postpone the environmental proceedings of the HidroAysén project transmission line until there is consensus on the country's energy policy.

On June 20, 2012, HidroAysén, by a public declaration, indicated that the company's board had asked the management to make a series of evaluations for making a determination with respect to the recommendation made by Colbún.

In August, HidroAysén restructured its management team and created the community and communications management, based in the Region of Aysén, in order to strengthen the company's links with the community and promote a policy of transparency, dialogue and direct communication with the residents.

Since then, HidroAysén has focused its attention on the region, to give compliance with the commitments assumed with the community, respond to the concerns about the project,

correct erroneous information introduced by protestors and mainly to advance in the development of a socially-viable project.

In this context, HidroAysén in December carried out house-to-house communication in the districts of Coyhaique and Puerto Aysén, when it could respond to the questions made by the community and inform the residents of the project's progress, mainly with respect to the benefits committed with the region.

The work plan produced visits to 11,131 homes in Coyhaique and Puerto Aysén, equivalent to 60% of their populations. It involved 60 people, 40 company employees and 20 local people, comprising young people employed by the project and social leaders. Thanks to this work, it was shown that these communities are very interested in knowing and talking about the project. One of the matters arousing most interest by the residents was the benefit of cheap energy promised by the company, which seeks to reduce electricity bills by 50% for the people of Aysén, compared to the tariff levels and demand of 2011. This is a commitment that HidroAysén acquired voluntarily with the region and which is already a company obligation, included in the project's environmental qualification resolution (RCA).

The principal benefits the project would bring for the region's development were also explained, like job opportunities, benefits in education and important infrastructure works that will remain in the region, thus contributing to its development and connectivity.

Giving continuity to its policy of relations with the community, HidroAysén in 2012 firmly maintained its commitment with the region's education, providing 45 annual superior technical training scholarships to young people from Coyhaique and the province of Capitán Prat, managing to benefit around 197 students in the last five years.



## 4. Operations in Colombia

### 4.1. Installed capacity, generation and energy sales

Installed capacity (MW) (1)	2011	2012
<b>Emgesa</b>		
Guavio (hydroelectric)	1,213	1213
Guaca (hydroelectric)	325	325
Paraíso (hydroelectric)	276	276
Cartagena (thermal)	208	208
Termostiza (thermal)	236	236
Charquito (hydroelectric)	20	20
Limonar (hydroelectric)	15	15
La Tinta (hydroelectric)	20	20
Tequendama (hydroelectric)	20	20
La Junca (hydroelectric)	20	20
San Antonio (hydroelectric)	20	20
Betania (hydroelectric)	541	541
Total	2,914	2,914
<b>Total Colombia</b>	<b>2,914</b>	<b>2,914</b>

Electricity generation (GWh)	2011	2012
Emgesa	12,090	13,294
<b>Total generation in Colombia</b>	<b>12,090</b>	<b>13,294</b>

Electricity sales (GWh)	2011	2012
Emgesa	15,112	16,304
<b>Total sales in Colombia</b>	<b>15,112</b>	<b>16,304</b>

(1) Capacity is calculated according to Endesa Chile's Operating Standard N° 38 ("Standard for defining maximum capacity in Endesa Chile's hydroelectric and thermal power stations"), as of December 31 each year.

## 4.2. Activities and projects

### 4.2.1. Hydroelectric plants with contributions above their historic average

Water inflows were above their historic average in the first five months of 2012 as a result of the La Niña weather phenomenon 2011-2012. For the rest of the year, inflows were slightly down. The year's average contribution to the grid (National Aggregate System) amounted to 103.3% of the historic average. In January, the useful volume in the reservoirs was equivalent to 9,920 GWh, representing 73.4% of the aggregate useful volume. The total fed to the grid was 2,434 GWh.

The average inflow to the Guavio reservoir was 106% of the historic average, similar to that of 2011. The reservoir began with 91% of useful volume in January and ended in December with 68.5%. 804 GWh was spilled from the reservoir between May and August.

The average non-regulated inflows in 2012 in the basin of the river Bogotá were 136% of the historic average. The Tominé and Muña reservoirs began in January with 64.6% and 100% of their useful volume, and ended in December with 70.3% and 72.8%, respectively.

In Betania in 2012, inflows were the equivalent of 101% of the historic average, and 93 GWh was

spilled, mostly in March, when inflows reached 159.9% of the historic average. At the end of the year, the reservoir was at 79% of its useful volume.

#### 4.2.2. Preventive plant maintenance

Preventive maintenance and special projects in the production centers were carried out in 2012 in accordance with the previously-established plans and routines. These include the change of coilings at the Paraíso and Guaca plants, the change of runners in Unit 2 of Guavio and the inspection of that plant's escape tunnel, major maintenance of Units 1 and 2 of Cartagena and completion of the repairs to the Unit 2 boiler of Termostiza.

#### 4.2.3. Extension of river Bogotá waters concession

The Autonomous Regional Corporation of Cundinamarca (Corporación Autónoma Regional de Cundinamarca - CAR) was asked for the extension of the term established in Resolution 1,014 of July 30, 1998 granting Emgesa the concession of underground and surface waters of the Bogotá, Tominé and Muña rivers as well as the El Rodeo, Obasas, Vitelma, Santa Marta and La Junca creeks, in order for the concession to have a term of 50 years. In support of this request, the changing technical, environmental, economic and legal conditions surrounding the water concession issue were taken into account.

#### 4.2.4. Canoas pumping station

An agreement was made between Empresa de Acueducto y Alcantarillado de Bogotá (EAAB) and Emgesa to join forces to ensure the construction of the Canoas pumping station through the funding and operational support offered by Emgesa.

This was in view of the pumping station's location, before the Pondaje de Alicachín, since on the one hand the EAAB will not have to assume additional costs for the location of the Canoas pumping station upstream of the site called Carbonera, which will be assumed by Emgesa (operation and maintenance), and on the other hand, Emgesa can ensure and maintain the flow conceded by the environmental authorities, since the waste waters that flow along the

overflow tunnel can be discharged before the Pondaje de Alicachín in order to be pumped into the Muña reservoir. Furthermore, the operating process of the Canoas pumping station by Emgesa will allow for the passage of the waters through the Muña Reservoir, which has a positive impact on the quality of the river water by reducing its levels of organic, total suspended solids and nutrients as it passes through, thus improving the quality of the Bogotá River waters.

Through the National Royalties Fund and the Ministry of Housing, Towns and Territories, the COP\$ 190,000 million disbursement for the funding of this project was approved, whose total costs are estimated at COP\$ 1.1 billion. This figure includes COP\$ 327,000 million for the construction of the pumping station and COP\$ 750,000 million for the construction and commissioning of the treatment plant. The remaining funds will be provided by the District, EAAB, Emgesa and the Government of Cundinamarca

#### 4.2.5. Cartagena port company starts operations

On June 16, 2011 the Superintendencia for Ports notified the SPCC, in a press release of the Surveillance and Inspection Coordinator, of its registration as a supervised port company.

Port operations started formally in the second half of 2011, involving the unloading of fuel into the principal tanks of the Cartagena plant, for a total of 10 liquid fuel unloading operations in 2011 from barges belonging to the supplier C.I.Petromil S.A.A., representing 7,350 metric tons (approximately 47,600 barrels) as of December 31, 2011.

In December, 2011 the design stage of the wharf construction was completed, this being an obligation stated in the July 2010 INCO-SPCC concession contract, thus initiating the review process of these designs by an engineering services provider.

During 2012, there were 21 port operations for unloading liquid fuel (heavy type) from barges of the firm CI PETROMIL S.A.S. to the Cartagena plant, representing 88,354 barrels (12,587 metric tons).

<sup>1</sup> Esta Resolución modificó la Resolución 603 del 29 de abril de 1997.



The adjustment stage of the wharf design was performed in December 2012 in accordance with the obligations agreed in the current concession contract between SPCC and INCO in order to carry out its construction in 2013.

#### **4.2.6. Colombia–Panama interconnection progress**

As part of the Colombia-Panama interconnection project, two events were programmed for late August to make viable the financing scheme for the line and enable the participation of Colombian agents in the Panamanian wholesale energy market, making use of the link: the auction of financial access rights to the line capacity and the act of concurrence for the purchase of capacity and energy by Panamanian distributors.

Given the growth opportunity of the interconnection for Emgesa, and after analyzing the corresponding feasibility, the company decided to participate in the DFACI tender and act of concurrence. The corresponding authorizations were obtained for the participation and all the necessary guarantees were arranged. The company Emgesa Panamá S.A. was constituted in July with Emgesa holding 100%, as previously authorized by the board and ordinary shareholders' meeting.

Emgesa complied with all the requirements in each of the stages of the DFACI tender, was pre-qualified and finally allowed to participate together with another two Colombian agents.

Despite progress with the process and before the date of the DFACI tender, the company Interconexión Eléctrica Colombia Panamá (ICP), in charge of the project, postponed it indefinitely as some conditions were not met for the viability of the project, relating to financial, technical and social-environmental aspects, according to information given by ICP. The governments of the two countries have brought forward conversations ratifying interest in the project, for which additional technical consultancies are being advanced consisting of the revision of the conceptual design in order to make viable an integrated system with maximum use of the interconnection and direct benefit for the markets, whose results are expected in early 2013

#### **4.2.7. El Quimbo project**

The El Quimbo project will be located in Huila Province, in south-east Colombia, and will be fed mostly from the Magdalena river flow. It envisages the construction of a 400 MW installed capacity hydroelectric reservoir power plant with a mean annual generation of approximately 2,216 GWh.

In Colombia, following the completion of the process of firm energy commitment allocations (Asignación de Obligaciones de Energía Firme) for those projects entering operation between December 2014 and November 2019, the Colombian Ministry of Mines and Energy selected the El Quimbo hydroelectric project and an energy supply commitment of up to 1,650 GWh/year. The contract term is of 20 years from December 2014.

The project's foundation stone-laying ceremony was held on February 24, 2011. On May 27, 2011, the Ministry of Environment, Housing and Territorial Development (MAVDT) approved the amendment to the environmental permit, through Resolution 0971, authorizing Emgesa to build the road along the left bank and use new sources of materials and warehousing. On September 30, 2011, the Impregilo OHL Consortium, the civil works contractors, completed the connection between Ventana 1 and Ventana 2 underground excavation fronts, at the vault level. On November 18, 2011, the complementary vulnerability study, in accordance with Resolution 0025, was submitted to MAVDT. Meanwhile, the Magdalena river diversion landmark took place in the first quarter of 2012.

Work continued in 2012 on the principal works of the project, with the completion in February of the construction of the diversion tunnel, the completion in March of the construction of the diversion tunnel exit portal (the river diversion was finished in October) and the completion in early November of the cofferdam works. With respect to the dam, it is important to stress the progress in the first stages of the fillings and progress under the contract for the design, manufacture, supply, assembly and start-up of electro-mechanical equipment services. The manufacture began in April of the main equipment, culminating in August with the manufacture of the Unit 1 pre-distributor whose movement was begun at the end of November from Pasacaballos, Cartagena port, to the works zone by river (river Magdalena).

In line with Emgesa's firm commitment to comply with all the obligations deriving from the

project's environmental permit, it continued to advance in carrying out the social-environmental management plan, with activities like progress in the preparation of collective relocations, the carrying out of four individual relocations (making a total of 8 with those of 2011, for whose families involved the agricultural production plan was activated for the restitution of their economic activity), the payment of 118 compensations to families owning/possessing land of less than 5 hectares, psycho-social help for residents of the project's direct area of influence and the organization of six round tables comprising national, provincial and local authorities and representatives of the communities, to deal with aspects relevant to the project and resolve the concerns of the communities.

As part of the employment restitution program of the El Quimbo project, focused on the population identified as non-resident, more than 900 beneficiaries graduated for the School for Sustainable Development (these people were given a Capital Seed and took part in a 6-month training process).

#### 4.2.8. Salaco project

By this project, major maintenance and modernization will be carried out on the minor plants San Antonio, Limonar and La Tinta-La Junca so that they can operate as water-file center dispatch plants like Salto II, Laguneta and Dario Valencia respectively.

This will represent for Emgesa a growth in installed capacity of 144.8 MW and a mean increase of expected energy generation of 482 GWh. The plants will start operating with their original names, Salto II (passing from 19.4 MW to 35 MW), Laguneta (passing from 18 MW to 36 MW) and Dario Valencia (passing from 38.8 MW to 150 MW). The project will last for 24 months.

The rotor cube was manufactured for Unit 5 of the La Tinta plant at the workshops of Mitsubishi in Japan. This will be one of the three units of Dario Valencia within the project.



## 5. Operations in Peru

### 5.1. Installed capacity, generation and energy sales

Installed capacity (MW) (1)	2011	2012
Edegel		
Huinco (hydroelectric)	247	247
Matucana (hydroelectric)	129	129
Callahuanca (hydroelectric)	80	80
Moyopampa (hydroelectric)	66	66
Huampani (hydroelectric)	30	30
Yanango (hydroelectric)	43	43
Chimay (hydroelectric)	151	151
Santa Rosa (thermal) (2)	429	426
Ventanilla (combined cycle) (3)	493	485
<b>Total</b>	<b>1,668</b>	<b>1,657</b>
Electricity generation (GWh)	2011	2012
Edegel	9,153	8,740
<b>Total generation in Peru</b>	<b>9,153</b>	<b>8,740</b>
Electricity sales (GWh)	2011	2012
Edegel	9,450	9,587
<b>Total sales in Peru</b>	<b>9,450</b>	<b>9,587</b>

(1) The capacities were calculated according to Endesa Chile's Operating Standard N° 38 ("Standard for defining maximum capacity in Endesa Chile's hydroelectric and thermal power stations"), as of December 31 each year.

(2) Effective September 5, 2012, the declared gross capacity of Unit 7 of Santa Rosa was reduced from 123.91 MW to 121.02 MW, in accordance with Resolution COES-D-DP-802-2012 of 03 09 2012.

(3) Effective August 30, 2012, the declared gross capacity of the combined cycle of Ventanilla was reduced from 492.74 MW to 485.00 MW, in accordance with Resolution COES-D-DP-785-2012 of 29 08 2012.

### 5.2. Activities and projects

#### 5.2.1 Edegel

##### 5.2.1.1 Change of speed regulator at Huinco plant

Between January 10 and 24, 2012, the change of the speed regulator was successfully completed in Unit 4 of the Huinco plant.

##### 5.2.1.2 Repairs to the Huampani plant adduction canal

Between March 25 and April 1, 2012, 767 meters of walls were built in the adduction canal. The annual maintenance, clearing of weeds and removal of waste along the canal were also performed.

Preventive maintenance work was also carried out on the generation groups and the roof change of the Huampani hydroelectric plant.

##### 5.2.1.3 Change of runners in the Matucana plant

The change of the Pelton runners in Group 1 of the Matucana hydroelectric plant was made in May. Runners were removed with 119,070 hours of service, being replaced by new Andritz-Hydro runners made with Microguss technology.

Preliminary measurements indicate an increase in the weighted average productivity of 6.7% in Group 1 with respect to Group 2, plus an

average increase in capacity of 4 MW in Group 1. An increase in annual generation of 35 GWh is estimated, with an estimated benefit of around US\$900,000 annually.

#### 5.2.1.4 Stea turbine inspection at Ventanilla plant

The steam turbine of the Ventanilla thermal plant was out of service between January 28 and February 11, 2012 for programmed minor maintenance. Inspection works were performed on the generator, preventive maintenance on the heat recovery boilers 11 and 12, adjustment to control valves of steam entry to the turbine, general replacement of materials in the cooling towers and preventive maintenance of the balance-of-plant equipment and auxiliary services.

#### 5.2.1.5 Repairs to Group 4 of Ventanilla plant

Between March 13 and 18, 2012, during the programmed minor inspection work of the TG4 of the Ventanilla thermal plant, damage was detected to one of the plates and base material of the combustion chamber and in some fixed and mobile turbine blades.

The damaged blades were changed together with the repair of the casing and metal base of the plate affected in the combustion chamber. On May 17, 2012, the corrective maintenance work was completed with the re-entry of the unit in combined cycle.

#### 5.2.1.6 Change of panels in Boiler 11 of Ventanilla plant

The change of two upper panels was made in June 2012 of the HRSG11 boiler of the Ventanilla thermal plant. The work was performed under strict planning supervised by a specialist of the boiler manufacturer, and the production of the new panels and the corresponding dismantling and assembly was carried out by local companies, complying with the required execution safety and quality standards.

#### 5.2.1.7 Major inspection of Group 3 of Ventanilla plant

Between June 5 and July 16, 2012, major inspection work was carried out successfully on the TG3 unit of the Ventanilla thermal plant. The work was performed within the manufacturer's long-term maintenance contracts and included this time corrective work on the turbine rotor due to slight corrosion of its components and the corresponding dynamic balancing of the unit.

On October 5, 2012, major inspection programmed maintenance work, begun on September 22, was successfully completed of the burners in the unit TG8 of the Santa Rosa thermal plant.

### 5.3. Projects under study

#### 5.3.1. Curibamba hydroelectric project

This plant will be located upstream of the Chimay hydroelectric plant intake, in the municipality of Junín, and use the waters of the Comas and Uchubamba rivers.

The project contemplates the construction of a pass-through plant with 188 MW of capacity, with a design flow of 86m<sup>3</sup>/s to produce 1,010 GWh/year, and a transmission line to the Pachachaca substation, 134 km in length in 220 kV of simple circuit.

During 2012, the plant's basic engineering designs were concluded, the pre-operability study was presented to the system operator (COES) and a start made on the tender processes for the civil works and equipment contracts. The basic designs of the transmission line are complete for over 80% of its length.

In October 2012, the approval was received of the plant's environmental impact assessment (EIA). The EIA of the transmission line is being processed.





*the environment and sustainable development*

p. 115  
The environment and  
sustainable development



## 1. The environment and sustainable development

Within the framework of its commitment with corporate sustainable development (CSD) Endesa Chile has since 2003 had a corporate sustainability policy that guides its actions and decisions. This policy addresses the 3 dimensions of CSD: economic, environmental and social. It also establishes the company's priorities through 7 commitments; with good governance and ethical behavior; the creation of value and profitability; the development of the communities in which it operates; the quality of service; the health, safety and personal and professional development of its personnel; environmental protection; and innovation and efficiency. Furthermore 2 further challenges are incorporated in response to demands by various stakeholders: climate change, and local engagement and social legitimacy.

Endesa Chile is responsible for reporting its performance in sustainability transparently through its Sustainability Report which covers the company's social, environmental and economic performance for the year for its various stakeholders. This document is prepared under the globally-accepted Global Reporting Initiative (GRI) methodology, meeting the highest standards on the matter.

As part of its commitment to CSD, Endesa Chile has since 2004 adhered to the United Nations Global Compact, an initiative that seeks to promote corporate social responsibility (CSR). Through its Communication of Progress (COP), the company reports annually about the progress made in its application of the pact's principles. In June 2012, for the 6th consecutive year, Endesa Chile's COP received the top Global Compact rating, qualifying for the Advanced Program for its outstanding response to its commitment.

In seeking to extend its sustainability policy to the company's workers, different activities were carried out in 2012 to create a consciousness and commitment among them on these matters. Notable was the annual sustainability talks for all the company's installations and productions centers in Chile.

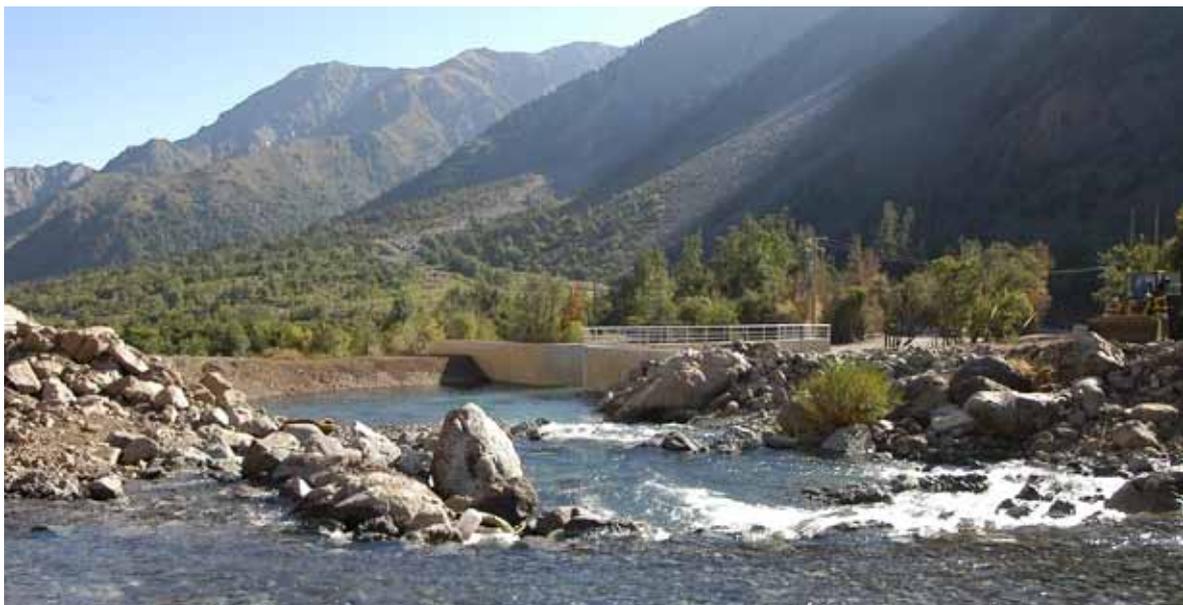
In August 2012, the results of the 8th National Ranking of Corporate Social Responsibility (CSR) were published, prepared annually by Fundación PROhumana, Qué Pasa magazine and the Confederation of Production and Commerce (CPC). On this occasion, Endesa Chile was recognized among the most socially responsible in Chile, occupying 7th place and improving its position by 4 places compared to 2011.

Within the framework of the company's stakeholder engagement commitment and seeking to respond to the challenge of local engagement, the stakeholder map was updated in 2012. This is an essential input for the design of strategic relationship plans with stakeholder groups.

The Sustainability Committee met in programmed sessions during 2012. This committee is the top internal level responsible for carrying out the strategic objectives relating the sustainability of Endesa Chile.

On environmental matters, Endesa Chile made environmental inspections of 17 installations out of a total of 29 in 2012, representing 58 of the total. The objective of these inspections is to ensure the constant compliance with environmental legislation and voluntary environmental commitments of the installations; detect substandard environmental conditions early; and promote the best environmental practices among the generating plants in Chile. In 2012, it also made an exhaustive revision of the different environmental management systems of the installations to prepare a base line with a view to the standardization and implementation of just one environmental management system for the Chilean installations.

Of the 29 installations that Endesa Chile has operating in Chile, 28 successfully carry out their follow-up audits or re-certification of their environmental management systems (EMS) under the ISO 14.001 standard. The start of the certification of the Bocamina II plant remains pending as it only entered the generating park in October 2012 and therefore has not yet certified its EMS. As of December 31 therefore, 94.1% of the installed capacity of Endesa Chile has its EMS certified under ISO 14.001.



Environmental liabilities refer to equipment, components, materials, buildings or other temporary structures associated with the Group's electricity generation projects which are in disuse and for which there is no reutilization or recycling plan. Their classification is either major, medium or minor, depending on the potential environmental impact, safety risks, size and area involved. During 2012, three environmental liabilities were resolved, all at the Rapel hydroelectric plant. These relate to the elimination the remains of buildings in disuse, the removal of oily material in disuse and the dismantling of old installations.

On January 24, 2012, the public-private work team was officially constituted which has acted as coordinator committee for the implementation of the clean production agreement (APL) for the Puchuncaví Quintero industrial zone. The APL, signed by 10 companies including Endesa Chile, has an implementation period of 24 months from the date of the document, on December 1, 2011.

The Quintero thermal plant obtained in 2012 the sanitation report from the regional ministerial secretariat (Seremi) of health for the Valparaiso region, which accredits that this industrial facility has implemented the measures promised to avoid risks and disturbances to the workers and the community.

In addition, the Quintero thermal plant became the Group's first open-cycle plant in the world, and placed Endesa Chile as the first utility in South America, to have an energy management system (EMS) certified under the ISO 50.001 standard, with the successful approval of the certification audit made by the specialized firm Aenor. The purposes of having an EMS include improving the performance of the generating units, increasing efficiency and reducing environmental impacts, apart from expanding competitive advantages in the market without altering the generator's productivity.

Endesa Chile began in April 2012 the process of loading the environmental commitments of the various environmental qualification resolutions (RCA) of the generator plants into the system of loading environmental commitments of the Superintendency of the Environment. The loading of 17 sheets with the RCA environmental commitments of the installations was finalized last October.

The company received in May the re-vegetated zones in the sector of the spillway of the Ojos de Agua mini-hydroelectric plant. These works were carried out in 2010, in compliance with the RCA No.11/06 of the installation. In November 2012, various public utilities checked compliance with the re-vegetation project, giving their conformity.

As part of the agreement with indirect affected parties of the Ralco hydroelectric plant, and specifically of the sub-program of housing subsidies, the company granted funds to 24 beneficiaries and made the definitive delivery to its owners of the restored land in the sector of Palmucho. Endesa Chile also provided funds to the municipality of Alto Biobío under the agreement for the transfer, administration and financing of the Alto Biobío museum project for the period 2012. In November, the consultancy firm GHD presented to Endesa Chile the final report of the ex-post evaluation of the relocation plan of the Pehuenche families for the construction of the Ralco hydroelectric plant, corresponding to 72 families who completed 10 years of the continuity assistance plan. This report was sent to the environmental authority.

Endesa Chile published its 2011 Annual Regional Environmental Report in 2012, which consolidates the environmental management in 2011 of its facilities, subsidiaries and associates in South America, seeking to meet commitments arising from its environmental policy. This report is available on Endesa Chile's web site.

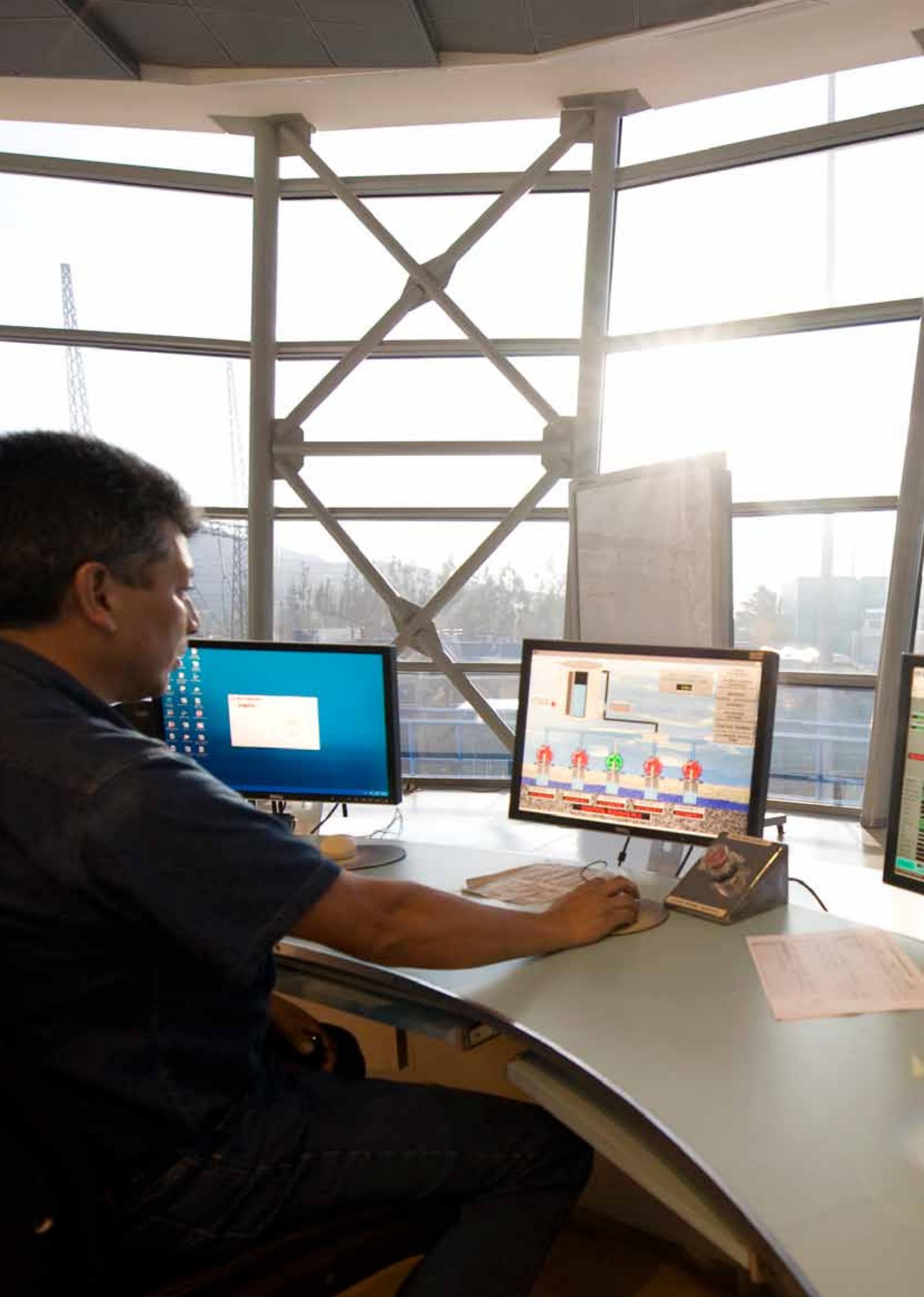
Endesa Chile did not submit any projects for environmental evaluation in 2012. However, the environmental approvals were given for the projects "Los Condores hydroelectric plant transmission line - Ancoa substation"; "Renaico wind farm" and "Renaico wind farm substation

electricity transmission line - Bureo substation". On the other hand, the project "Punta Alcalde thermal plant" was approved by the Committee of Ministers, after having been rejected at the regional level. The Supreme Court also ordered that the project "Optimization Bocamina II thermal plant" be submitted to environmental assessment through an environmental impact study. As of December 31, 2012, the environmental proceedings continued for the following projects: "Neltume hydroelectric plant" and "Neltume - Pullinque substation high-tension line".

Regarding the strategy for the use of renewable energies as a significant factor in the struggle against climate change, on August 12, 2012 the United Nations Framework Convention on Climate Change (UNFCCC) approved the registration of the Canela II wind farm in the Clean Development Mechanism (CDM). In the voluntary market, efforts continued toward recording greenhouse gas emissions avoided by the Canela wind farm between the start of its commercial operation and their registration in the CDM (December 27, 2007 and April 3, 2009), as certified by Gold Standard. An analysis was also made of the carbon markets in order to evaluate and determine the actions necessary for the new project that might qualify in CDM.

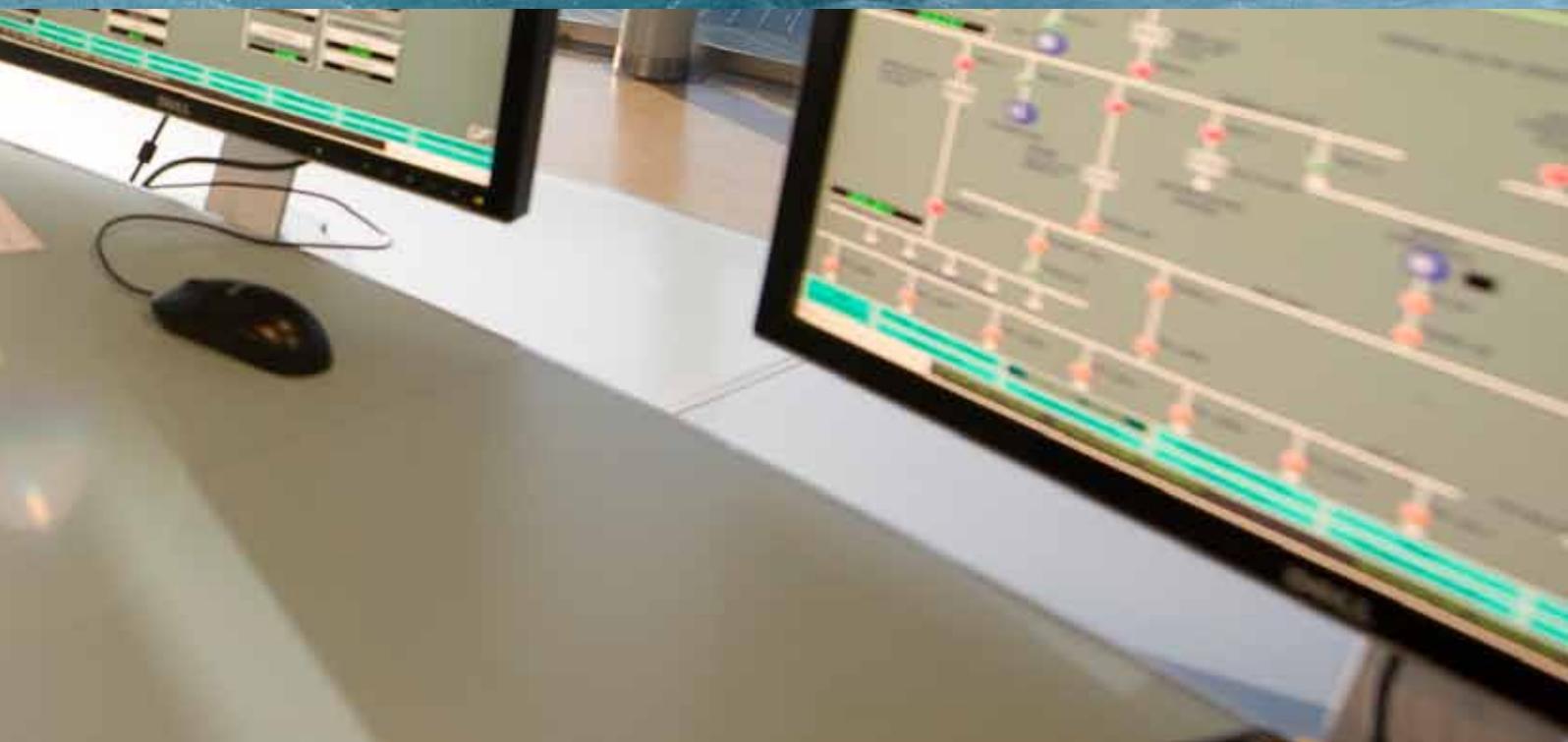
Further information on the company's environmental, social and economic performance is available on its web site: [www.endesa.cl/rse](http://www.endesa.cl/rse).





## *technology and innovation*

p. 122  
Research, development  
and innovation



# 1. Research, development and innovation

Endesa Chile aims to maintain and improve its leadership position in the field of innovation, becoming at the same time a benchmark for the electricity industry. It believes that innovation should contribute toward creating an innovative culture among workers and obtaining value-creation projects, turning this into a differentiating and competitive factor. One of the main challenges has been to raise awareness throughout the organization regarding a grounded innovative culture, climate and practices, supported by initiatives that encourage the workers' talents.

## 1.1. Innovation culture of the company

The following activities were carried out in 2012 to strengthen the innovation culture of the organization.

### 1.1.1. Innovation week

The innovation week was held between May 14 and 18 in order to motivate the creative capacity of the workers, viewing work from an innovative perspective and strengthening the concept of submitting ideas. During the week, motivational lectures, dynamics aimed at encouraging creativity and a technological fair were organized to present the main projects developed by the employees. Different on-site activities were also organized, to strengthen an innovative culture among workers of the company's production plants.

### 1.1.2. Training activities

A training plan was introduced in 2012 in Endesa Chile with respect to innovation. This is intended to achieve an important percentage of employees trained in innovation to shape their daily activities differently in the way of doing things and thus add value to the company. The activities carried out this year covered 60 people in Santiago and 60 elsewhere (in regions) and consisted of workshops, training days, and motivational talks given by leading experts.

### 1.1.3. Innovation survey

An innovation survey was made during the first half of 2012. With a high level of participation, important data was gathered for this activity and important conclusions reached. The survey showed the importance that employees effectively give to the innovation culture within the organization and the level of support that they feel in transforming an idea into a project. It could also be seen that employees greatly value belonging to a company that defines innovation as one of its development parameters.

### 1.1.4. Definition of innovation focus

With the active participation of the company's executives, two working days were arranged to define what the innovation focuses should be to guide the company's actions in R+D+i over a four-year horizon. These resulted as follows:

**Focus 1:** Construct a sustainable integration with the communities (social, political and environmental).

**Focus 2:** Collaborate proactively in solutions to the energy challenges that the country faces in its sustainable growth.

**Focus 3:** Strengthen the value of the company's assets, identifying initiatives that result in additional uses or of greater efficiency to those originally considered for those assets.

**Focus 4:** Attract, manage, construct and train talent and knowledge of high value to the company.

### 1.1.5. Executive innovation committee and board innovation committee

The executive innovation committee and the board innovation committee met in 2012. With both committees motivated in their role of complying with the innovation program of Endesa Chile, their contribution was fundamental for the approval of programs, projects and availability of resources.

## 1.2. Capturing ideas

The process of capturing employee ideas is a cornerstone of the company's innovation program, so it is necessary to maintain the IT platform updated and attractive. A new program for capturing ideas, Eidos, was introduced in 2012, based on the collective intelligence and dynamics of the market. With this tool, a large number of ideas were captured from the personnel. The challenge this presents is the evaluation and later transformation of these ideas into projects of value.

Two cycles were launched in this program: the first at the corporate level, and the second at the local level which responded to local challenges presented by company executives.

## 1.3 Projects of value to the company: cooling lagoon

This project seeks to evaluate the implementation of crystalline lagoons as alternative technology for cooling thermal plants. The head of the project is the company Crystal Lagoons, leader in the development of large crystalline lagoons for recreation. This was granted funds by CORFO for testing this system on site. This site test will be carried out on land of the San Isidro plant and contemplates the construction of a lagoon of 5.000 m<sup>2</sup> (10,000 m<sup>3</sup>) which will be operated for four months, connected in thermal terms to the plant's cooling system. In order to study the performance of the technology.

### 1.3.1. Intogener

The Intogener project is being developed by the Spanish company Starlab, which intends to develop an operating system for predicting thawing flows using satellite information. This is with the perspective of improving the forecasts used for the operation of the electricity system. Endesa Chile participates as user of the system during the pre-operational phase.

### 1.3.2. Prize-winning projects by employees and innovation in the function:

As part of the process of capturing ideas, the executive committee in 2012 awarded prizes to seven innovative projects developed and presented by employees.

## 1.4. Technological surveillance

Technical surveillance (TS) is an essential tool in the development of technological solutions and serves as support in the organizations' decision-taking. TS detects and analyzes exterior information to convert it into internal knowledge, fundamental to business innovation.

Endesa Chile developed a procedure for offering TS services to the whole organization based on the experience obtained after a pilot program in the engineering area. This pilot project, whose results were very successful, not only defined the importance of the service in the organization but also permitted a diagnosis both of matters of interest to the company and the difficulties there are when searching for information.

## 1.5. Program guides

Endesa Chile worked in 2012 on developing programs for conserving and transferring internal knowledge. One was the guides program, which seeks that the vast experience in engineering that currently resides in many company documents and people is preserved and transferred to new generations. This first stage of the program contemplated the development of six critical knowledge courses in engineering, given by nine guides chosen for their experience and dominance of these subjects.

## 1.6. Challenges

The target for the next years is to change the culture to ensure that people from the organization carry out new R+D+i projects oriented to the generation of new businesses, the improvement of internal production processes, energy efficiency and the search for new sources of generation, all oriented to increasing the value of the company. The challenges proposed will be leveraged on a suitable innovation management program and a network enabling the use of the organization's strength and capacities and the improvement spaces identified.



## *participation in subsidiaries and associates and schematic table*

p. 126  
Participation in  
subsidiaries, associates  
and jointly-controlled  
companies and  
associates

p. 128  
Schematic table



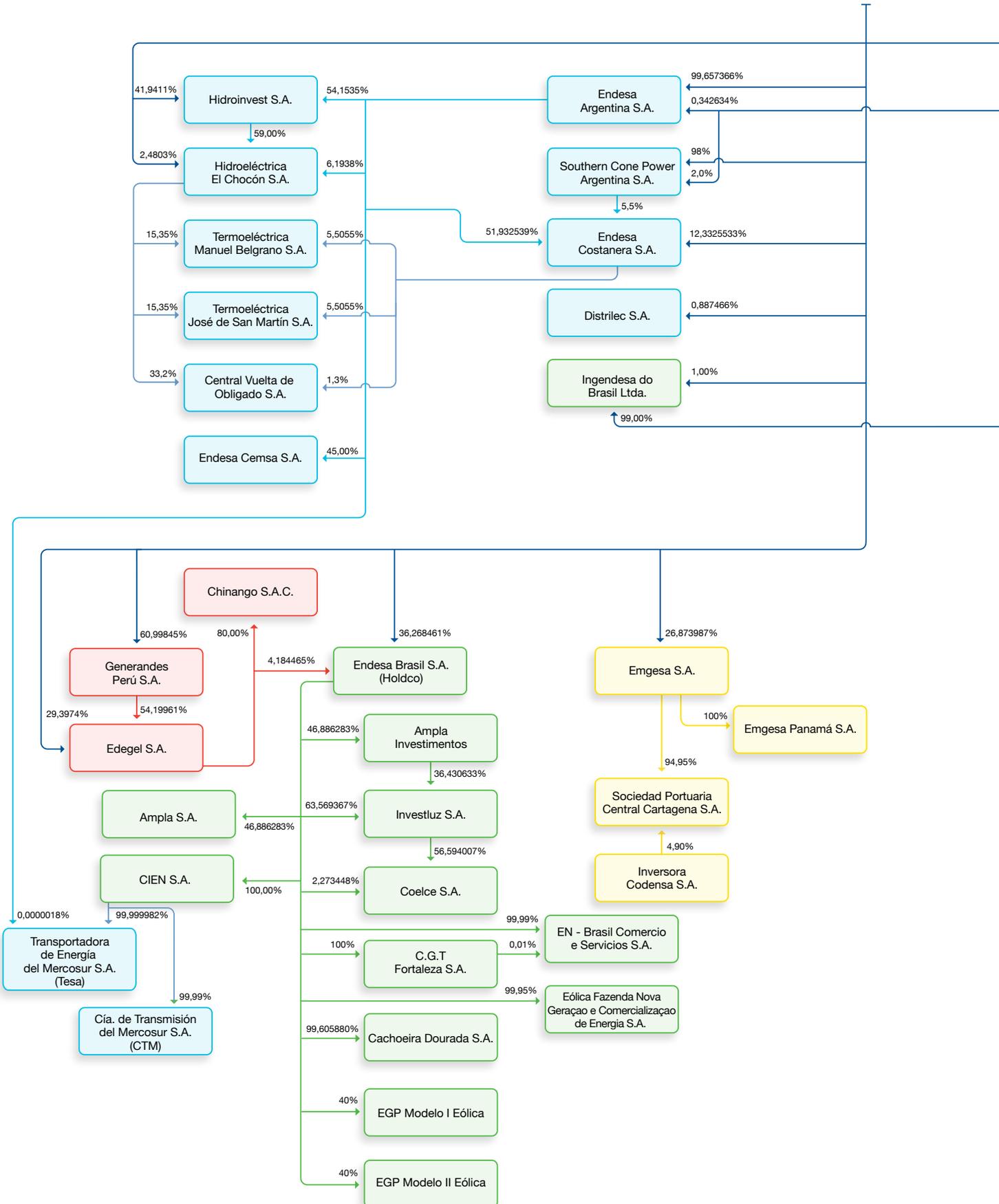
# 1. Participation in subsidiaries, associates and jointly-controlled companies and associates

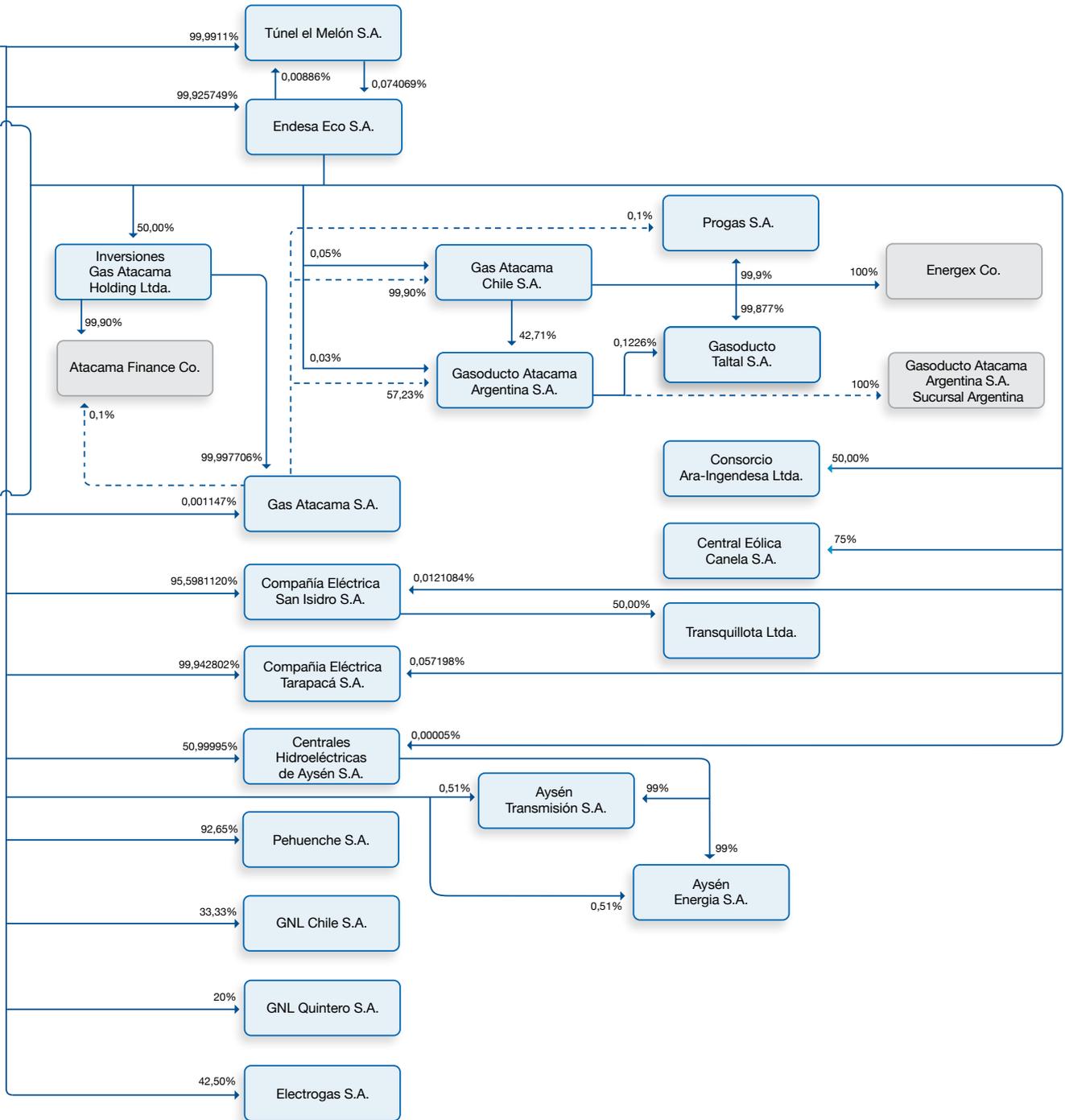
Subsidiary company	Share		Jointly-controlled company (1)	Share	
	2012	2011		2012	2011
<b>Argentina</b>					
Endesa Argentina S.A.	100.00%	100.00%			
Endesa Costanera S.A.	69.77%	69.76%			
Hidroeléctrica El Chocón S.A.	65.37%	65.37%			
Hidroinvest S.A.	96.09%	96.09%			
Southern Cone Power Argentina S.A.	100.00%	100.00%			
<b>Brazil</b>					
Ingendesa do Brasil Ltda.	100.00%	100.00%			
<b>Chile</b>					
Central Eólica Canela S.A.	75.00%	75.00%			
Compañía Eléctrica San Isidro S.A. (San Isidro S.A.)	95.61%	100.00%			
Compañía Eléctrica Tarapacá S.A. (Celta S.A.)	100.00%	100.00%			
Empresa de Ingeniería Ingendesa S.A. (Ingendesa)	0.00%	100.00%			
Empresa Eléctrica Pangué S.A. (Pangué S.A.)	0.00%	94.99%			
Empresa Eléctrica Pehuenche S.A. (Pehuenche S.A.)	92.65%	92.65%			
Endesa Eco S.A.	100.00%	100.00%			
Endesa Inversiones Generales S.A. (Enigesas)	0.00%	99.96%			
Inversiones Endesa Norte S.A.	0.00%	100.00%			
Sociedad Concesionaria Túnel El Melón S.A.	100.00%	100.00%			
<b>Colombia</b>					
Emgesa S.A. E.S.P. (Emgesa)	26.87%	26.87%			
Sociedad Portuaria Central Cartagena S.A.	25.52%	25.52%			
<b>Peru</b>					
Chinango S.A.C.	49.97%	49.97%			
Edegel S.A.A. (EDEGEL)	62.46%	62.46%			
Generandes Perú S.A.	61.00%	61.00%			
<b>Chile</b>					
Aysén Energía S.A.	51.00%	51.00%			
Aysén Transmisión S.A.	51.00%	51.00%			
Centrales Hidroeléctricas de Aysén S.A. (HidroAysén)	51.00%	51.00%			
Consorcio Ara- Ingendesa Ltda.	50.00%	50.00%			
Consorcio Ingendesa Minmetal Ltda.	0.00%	50.00%			
Gas Atacama Chile S.A.	50.00%	50.00%			
GasAtacama S.A.	50.00%	50.00%			
Gasoducto Atacama Argentina S.A.	50.00%	50.00%			
Gasoducto Taltal S.A.	50.00%	50.00%			
Inversiones GasAtacama Holding Limitada	50.00%	50.00%			
Progas S.A.	50.00%	50.00%			
Sociedad Consorcio Ingendesa-Ara Ltda.	0.00%	50.00%			
Transmisora Eléctrica de Quillota Ltda.	47.81%	50.00%			
<b>Cayman Islands</b>					
Atacama Finance Co.	50.00%	50.00%			
Energex Co.	50.00%	50.00%			

(1) Jointly-controlled companies are those in which the parent company controls the majority of the voting rights, or, should this not be the case, where it has the capacity to govern their financial and operating policies by virtue of an agreement with other shareholders or jointly with them. The jointly-controlled companies are consolidated by the proportional integration method, i.e. in the same proportion as Endesa Chile participates in their equity.

Associate company	Share		Investments financial cost	Thousands of pesos	Proportion of the investment in assets of the parent
	2012	2011			
<b>Argentina</b>					
Compañía de Transmisión del Mercosur S.A. (CTM)	38.88%	38.88%	Endesa Brasil S.A.	423,383,418	10.89%
Distrilec Inversora S.A.	0.89%	0.89%	Edegel	209,147,426	5.38%
Endesa Cemsa S.A.	45.00%	45.00%	Pehuenche	162,155,435	4.17%
Termoeléctrica José de San Martín S.A.	13.88%	13.88%	Emgesa	143,702,869	3.70%
Termoeléctrica Manuel Belgrano S.A.	13.88%	13.88%	Generandes Perú	127,817,912	3.29%
Transportadora de Energía S.A. (TESA)	38.88%	38.88%	Cía. Eléctrica San Isidro	102,726,503	2.64%
			Endesa Argentina S.A.	98,804,618	2.54%
			Celta (Cía. Elect. Tarapacá)	81,251,309	2.09%
			Endesa Eco S.A.	78,246,254	2.01%
			Centrales Hidroeléctricas de Aysén S.A.	78,137,878	2.01%
			Hidroinvest	28,737,651	0.74%
			GNL Quinteros S.A.	11,158,892	0.29%
			Túnel El Melón	10,005,053	0.26%
			Southern Cone Power Argentina S.A.	5,167,170	0.13%
			Electrogas S.A.	4,419,693	0.11%
			Hidroeléctrica El Chocón	3,708,267	0.10%
			Distrilec	3,033,039	0.08%
			Endesa Costanera S.A.	2,672,100	0.07%
			GNL Chile S.A.	527,490	0.01%
			Gas Atacama S.A.	446	0.00%
			HidroAysén Transmisión S.A.	114	0.00%
			Aysén Energía S.A.	25	0.00%
			Inversiones Endesa Norte	0	0.00%
			Pangue	0	0.00%
			Ingendesa	0	0.00%
			Enigesas	0	0.00%
			Ingendesa do Brasil	0	0.00%
			Inversiones Electrogas	0	0.00%
<b>Brazil</b>					
Ampla Energia e Serviços S.A.	18.23%	18.23%			
Ampla Investimentos e Serviços S.A.	18.23%	18.23%			
Centrais Elétricas Cachoeira Dourada S.A.	38.73%	38.73%			
CGTF-Central Geradora Termelétrica Fortaleza S.A.	38.88%	38.88%			
Companhia Energética do Ceará (Coelce)	18.63%	18.63%			
Compañía de Interconexión Energética S.A. (CIEN)	38.88%	38.88%			
En-Brasil Comercio e Serviços S.A.	38.88%	38.88%			
Endesa Brasil S.A.	38.88%	38.88%			
Eólica Fazenda Nova o Geraco e Comercializacao de Energia S.A.	38.86%	38.86%			
Investluz S.A.	31.36%	31.36%			
<b>Chile</b>					
Consorcio Ara- Ingendesa Sener Ltda.	33.33%	33.33%			
Electrogas S.A.	42.50%	42.50%			
GNL Chile.S.A.	33.33%	33.33%			
GNL Quintero S.A.	20.00%	20.00%			
Inversiones Electrogas S.A.	0.00%	42.50%			

## 2. Schematic table







*material information on the company*

p. 132  
Endesa Chile



## 1. Endesa Chile

- In accordance with clauses 9° and 10°, subsection 2 of the Securities Market Law 18,045 and General Rule 30, and duly authorized by the Board of Directors for this purpose, the Superintendency was informed of the following significant event:

- A) The Board of Endesa Chile, at its meeting held on February 29, 2012, agreed to initiate an organizational structure simplification involving certain of its Chilean subsidiaries, through a staggered and successive merger process which is expected to end this year. Endesa Chile will be the continuing entity for its subsidiaries Ingendesa, Compañía Eléctrica San Isidro S.A., Empresa Electrica Pangué S.A., Central Eléctrica Tarapacá S.A., Inversiones Endesa Norte S.A., Enigesa, and Endesa Eco. These staggered and successive mergers need to be approved by the respective extraordinary shareholders meetings in due course. The reorganization has no relevant economic and financial effect on the results of Endesa Chile given the high ownership that the Company holds in these subsidiaries. However, this process will have a positive effect on corporate and operational terms due to a simplification of the current organizational structure.
- B) The Board of Directors, at its ordinary meeting held on February 29, 2012, agreed to amend the Dividend Policy for 2011 informed at the last Ordinary Shareholders' Meeting. The amendment consists of reducing the 2011 dividend payout ratio from 55% to 50%. Accordingly, the Board will propose to the Endesa Chile Ordinary Shareholders' Meeting, to be held in April, 2012, to distribute a total dividend of Ch\$ 27.24259 per share, which would represent a total distribution of Ch\$223,437,021,500. From this amount, the interim dividend of Ch\$ 5.08439 per share, paid in January 2012, would be deducted. Therefore, subject to approval by the Ordinary Shareholders' Meeting, the final dividend to be distributed to shareholders will amount to Ch\$ 22.1582

per share, payable at a date to be determined by the Company.

- Pursuant to articles 9 and 10, paragraph 2 of Law 18,045, and the provisions of General Norm 30 of the Superintendencia, and in the exercise of the powers thus bestowed upon me by the Company's Board of Directors, the SVS was informed of the following essential fact:

On April 19, 2012, Empresa Nacional de Electricidad S.A. (Endesa Chile) and CMPC Celulosa S.A. (CMPC) signed two documents denominated "Settlement and Termination Empresa Nacional de Electricidad S.A. CMPC Celulosa S.A." and "Electricity Price Determination Agreement of the supply of Empresa Nacional de Electricidad S.A. to CMPC Celulosa S.A.", by means of which they end, by settlement, the arbitration proceedings before the Arbitral Tribunal conformed by Mr. Urbano Marín Vallejo, Mrs. Olga Feliú Segovia and Mr. Andrés Jana Linetzky, arbitration which was seeking to identify the price due by CMPC to Endesa Chile for the consumption that a previous arbitration, among the same parties, had established that Endesa was not under the obligation to supply at the price established in the third clause of the Capacity and related Electric Energy Supply Contract dated May 31, 2003.

Through these agreements of settlement and price determination, CMPC is obliged to pay US\$59,900,000 plus VAT, by making a US\$25,000,000 cash payment in 2012 and by using formulas of reduced consumption and contributions of non-conventional renewable energy attributes, which are guaranteed installments of the balance of price to be paid by CMPC in years 2012 and 2013 for a total of US\$34,900,000, as agreed in the closing instruments signed.

The Board of Directors of the Company, at its meeting held on April 25, 2012, adopted the following policy on routine operations that correspond to the ordinary course of business, which will take effect as of this date, and that allows for transactions with related parties without the compliance requirements and procedures set forth in paragraphs 1 to 7 of Article 147 of Law 18,046:

## 1.1. Policy for routine operations

1. Routine operations include financial transactions with related parties that, under a trade account and/or financial loans, are held for the optimization of cash management of the respective companies.
  2. Routine operations include related party transactions dealing with power supply contracts at regulated prices or resulting from electricity supply bids.
  3. Routine operations include financial or intermediation transactions carried out by the Company in the ordinary course of business with related parties, consisting of banks or their subsidiaries, such as fixed income or equity investments, buy and sell foreign currencies, financial derivatives, swaps, repurchase agreements, fixed-term deposit, credit lines, loans, letters of credit, performance bonds, stand-by letters of credit, forward agreements, interest rate hedges, options and futures, transactions related to current accounts of the Company or other routine financial transactions carried out by our Treasury Department.
  4. Routine operations include related party transactions related to IT services, infrastructure services, data center, microcomputers, software and hardware, and to data management in general.
  5. Routine operations include related party transactions relating to financial management, management and other similar services, comprising among others, accounting, financial reporting, fixed assets, sales and purchases ledger, treasury and banks, taxation advisory, insurance, procurement, internal controls and internal audit.
- In accordance with articles 9 and 10.2 of Law 18,045 and General Norm 30 of the Superintendency (SVS), the SVS was informed of the following significant event:
- a) The Ordinary Shareholders' Meeting of Endesa Chile held on April 26, 2012 agreed to distribute a minimum mandatory dividend (partially integrated by the interim dividend No. 51 of Ch\$ 5.08439 per share) and an additional dividend, for a total of Ch\$ 27.24259 per share. Since the interim dividend No. 51 was already paid, the remaining amount of the final dividend

No.52 of Ch\$ 22.15820 per share will be paid.

- b) The Shareholders' Meeting of Empresa Nacional de Electricidad S.A. elected a new Board of Directors of the Company for a period of three years from the date of the meeting.

The members of the Board are:

Alfredo Arahuetes García  
Jaime Bauzá Bauzá  
Paolo Bondi  
Francesco Buresti  
Enrique Cibié Bluth  
Vittorio Corbo Lioi  
Felipe Lamarca Claro  
Manuel Morán Casero  
Jorge Rosenblut

The Board of the company at its ordinary meeting held on April 26, 2012, agreed to appoint Jorge Rosenblut as Chairman of the Board and of the Company and Paolo Bondi as the Vice Chairman of the Board.

The same meeting agreed to appoint Jaime Bauzá B., Enrique Cibié B. and Felipe Lamarca C. as members of the Directors' Committee.

- At a Board meeting of Empresa Nacional de Electricidad S.A. held on May 31, 2012, the Company agreed to report as a "significant event" the decision to request its representatives on the board of directors of Hidroeléctricas de Aysén S.A. (HidroAysén) to convene an extraordinary board meeting in the latter company, in order to pronounce on the suspension of the studies for the preparation of the Environmental Impact Study of the transmission project associated with the hydroelectric plants, whose Resolution of Environmental Qualification (RCA, in its Spanish acronym) was approved in 2011.
- The Board agreed to instruct the executive management to consider all the variables that allow for a technical and well founded statement concerning this matter in the extraordinary HidroAysén Board meeting.
- The Board expressed Endesa Chile's permanent commitment with national electricity development and reiterated the option and historical vocation of Endesa Chile for a clean, sustainable, renewable and domestic source of energy such as hydroelectricity.

- Pursuant to the provisions of articles 9° and 10°, subsection 2 of Law No. 18,045, and the provisions contained under Chilean General Norm 30 of the SVS, the SVS was informed of the following significant event on June 5.

Complementing the significant event dated February 29, 2012, which reported that the Board of Endesa Chile had agreed to propose, in the corporate bodies of the respective subsidiaries, to initiate an organizational structure simplification involving certain of its Chilean subsidiaries, through a staggered and successive merger process which is expected to end in the current year, Endesa Chile will be the continuing entity for its subsidiaries Ingendesa, Compañía Eléctrica San Isidro S.A., Empresa Eléctrica Pangué S.A., Central Eléctrica Tarapacá S.A., Inversiones Endesa Norte S.A., Enigesa, and Endesa Eco. Endesa Chile informs the SVS that the legalization process of the first two mergers has been completed, corresponding in this first stage to the merger of Empresa Eléctrica Pangué S.A. into Empresa Eléctrica San Isidro S.A. and the merger of Ingendesa and Enigesa into the acquiring company Endesa Norte S.A.

Both mergers are already completed and have legal effect as of May 1, 2012.

- Pursuant to articles 9 and 10, paragraph 2 of Law 18,045, and the provisions of General Norm 30 of the SVS, the SVS was informed of the following significant event on August 21:

At an extraordinary meeting held today, the Board of Directors of Empresa Nacional de Electricidad S.A. (Endesa Chile) approved a related party operation pursuant to Title XVI of the Companies Act, consisting of the execution of a settlement agreement with Inversiones Tricahue S.A. (Tricahue) and other minority shareholders of Endesa Chile's subsidiary, Empresa Eléctrica Pehuenche S.A. (Pehuenche), in the context of arbitration proceedings under the energy and power contract dated November 19, 2007, between Endesa Chile and Pehuenche. The settlement agreement voluntarily dismisses the claims and

criminal charges filed by Tricahue and other Pehuenche minority shareholders, and avoids potential lawsuits from Pehuenche minority shareholders against the companies that executed the aforementioned contract.

As a result of this agreement, the Board of Endesa Chile agreed today to propose to its subsidiary Pehuenche the rescindment of the referenced energy and power contract, and the subscription of a new contract with the following features:

- The energy price will be the marginal cost of the system at the Alto Jahuel 220 Kv node.
- The power price will be the one established by the CDEC for power transfers between generation companies.
- The New Contract shall take effect as of the subscription date, and will be in force until December 31, 2021.
- The New Contract will comprise the same amount of energy and power in the original contract.

Consequently, Pehuenche, acting through its relevant corporate bodies, must pronounce on this proposal, for which the settlement agreement calls for a Pehuenche extraordinary shareholders' meeting for rescinding the current contract and the signing of the new contract. Under the agreement, Endesa Chile and Tricahue undertake to vote in favor of the execution of the new contract in this shareholders meeting to be held at a date to be determined by the Pehuenche Board of Directors.

The Settlement Agreement also considers the payment by Endesa Chile to its subsidiary Pehuenche of a contractual calculated price difference arising in 2007, which will enable Pehuenche to pay out an interim dividend, at the appropriate time, charged against the payment to be made, to all of Pehuenche's shareholders. The amount to be distributed as an interim dividend for all minority shareholders in the aggregate, representing 7.35% of Pehuenche, is estimated at

- approximately US\$ 28 million.
- Pursuant to articles 9 and 10, paragraph 2 of Law 18,045, and the provisions of General Norm 30 of the SVS, the SVS was informed of the following significant event:
 

On September 5, 2012, Empresa Nacional de Electricidad S.A. (Endesa Chile) was notified of a request for arbitration filed by Southern Cross Latin American Private Equity Fund III, LP (Southern Cross) in the arbitration proceedings initiated by the latter company due to discrepancies regarding the shareholders agreement of the companies which compose the GasAtacama group dated August 1, 2007, arbitration managed by the arbitrator Víctor Vial del Río. Southern Cross, the shareholder that holds 50% of the companies which compose the Gasatacama group, has sued Endesa Chile for an alleged breach of that agreement, specifically a breach on Article VI relative to the “Disposition of Rights in the Business”.

Under this alleged breach, in which an obstruction in the disposition of the rights of Southern Cross in the business is attributed to Endesa Chile, it is requested that the breach of the agreement in the petitory action of the lawsuit by Endesa Chile be declared and therefore be condemned to pay a fine to Southern Cross for an amount of U.S. \$ 10,000,000; to sell to Southern Cross its stake in GasAtacama, i.e. 50% of the companies that compose such group, at a price equal to the book value less 20%; and the payment of a fine to Southern Cross for the equivalent sum of 15% of the value of the forced transaction which claims.

Endesa Chile reported this unusual demand and announced that it will proceed to answer it with full conviction that it has no basis in fact or in law and will counterclaim Southern Cross within the time period which is given in the arbitration procedure. In the above context, we estimate that the demand filed by Southern Cross will have no effect on the Endesa Chile’s financial position.
  - In accordance with articles 9 and 10, paragraph 2 of Law 18,045 and the provisions of General Norm of the SVS, the SVS was informed of the following significant event on October 16, 2012:
 

As of this date, Endesa Chile has called the total bank performance bonds that secure full compliance with the works and their proper and timely execution under the Contract “Proyecto Ampliación Central Térmica Bocamina, contrato ACP-003.06., suministro llave en mano de una planta de generación térmica a carbón” (the “Contract”). The Contract was signed on July 25, 2007 between Empresa Nacional de Electricidad S.A., the owner, and the consortium formed by (i) the Chilean company Ingeniería y Construcción Tecnimont Chile y Compañía Limitada; (ii) the Italian company Tecnimont SpA; (iii) the Brazilian company Tecnimont do Brasil Construção e Administração de Projetos Ltda.; (iv) the Slovak company Slovenske Energeticke Strojarnje a.s.; and (v) the Chilean company Ingeniería y Construcción SES Chile Limitada, the contractors.

The bank performance bonds amount to US\$ 74,795,164.44 and UF 796,594.29 (approximately US\$ 38.2 million).

Endesa Chile has also reserved the right to exercise any other actions granted under this contract and applicable Chilean legislation to fully demand timely compliance with the obligations agreed by the contractors.
  - In accordance with articles 9 and 10, paragraph 2 of Law 18,045 and the provisions of General Norm of the SVS, the SVS was informed of the following significant event on October 17, 2012:
 

With reference to the Significant Event reported on October 16, 2012, in which the calling of all the bank performance bonds was reported that secure full compliance with works and their proper and timely execution under the contract “Proyecto Ampliación Central Térmica Bocamina, contrato ACP-003.06., suministro llave en mano de una planta de generación térmica a carbón” signed on July 25, 2007

between Empresa Nacional de Electricidad S.A., the owner, and the consortium formed by (i) the Chilean company Ingeniería y Construcción Tecnimont Chile y Compañía Limitada; (ii) the Italian company Tecnimont SpA; (iii) the Brazilian company Tecnimont do Brasil Construção e Administração de Projetos Ltda.; (iv) the Slovak company Slovenske Energeticke Strojarne a.s. (SES); and (v) the Chilean company Ingeniería y Construcción SES Chile Limitada, the contractor.

In accordance with articles 9 and 10, paragraph 2 of Law 18,045 and the provisions of General Norm of the Superintendence, I wish to inform you of the following significant event:

Endesa Chile has filed a request for arbitration to enforce its rights conferred under the contract with the International Chamber of Arbitration, Paris.

- In accordance with articles 9 and 10, paragraph 2 of the Securities Market Law 18,045, the provisions of General Rule No.30 of the SVS, the SVS was informed that the Board of Directors of Empresa Nacional de Electricidad S.A., at its meeting held on November 28, 2012, agreed to distribute on January 24, 2013, an interim dividend of Ch\$3.04265 per share attributable to the year 2012, corresponding to 15% of earnings of September 30, 2012, in accordance with the Company's dividend policy.

## 1.2. Pehuenche

### 1.2.1. Final dividend

The ordinary shareholders' meeting of April 25, 2012 agreed to distribute a final dividend per share of Ch\$189.902567. After deducting the three interim dividends paid during 2011 against the earnings for the year, the balance for distribution was Ch \$73.342567 per share.

The final dividend amounting to Ch\$73.342567 per share was therefore paid on May 4, 2012, published in El Mercurio newspaper of Santiago on April 26, 2012.

### 1.2.2. Election of the Board

The ordinary shareholders' meeting of April 25, 2012 elected the new board of directors for a period of three years from the date of that meeting. The members of the board are Eduardo Escaffi Johnson, Humberto Espejo Paluz, Alan Fischer Hill, Alejandro García Chacón and Pedro Gatica Kerr. At the board meeting of the same date, Alan Fischer Hill was appointed as chairman of the board and of the company.

### 1.2.3. Management change

On August 13, it was reported that Claudio Tabilo Berríos has resigned from his positions as assistant commercial manager and interim general manager from August 10. Effective the same date, the board on July 25 appointed Vicente Villaseca Villalobos to both positions in replacement of Mr Tabilo.

### 1.2.4. Independent consultant's report

On September 5, it was reported that the report of the independent appraiser SYSTEP Ingeniería y Diseños S.A. was received, containing the conclusions about the conditions of a Cancellation Agreement of the Electricity Supply Contract signed between Endesa Chile and Empresa Eléctrica Pehuenche S.A. on November 19, 2007, and a new supply contract between the same parties in different conditions, covering a period until December 31, 2021.

The report measures the effects of the operation proposed by Endesa Chile and its potential impact on Empresa Eléctrica Pehuenche.

The report was requested by the board of Pehuenche as a result of a letter received from Endesa dated August 22, 2012 informing the signing of a settlement agreement between Endesa Chile and Inversiones Trichahue S.A. and other minorities of the company, in which Endesa Chile was obliged to propose to the company the cancellation of the current Electricity Supply Contract and the signing of a new one, subject to the approval of our corporate levels.

The board of Pehuenche, conscious that this was an operation between related parties, as referred to in Chapter XVI of the Corporations Law 18.046, decided to appoint Ingeniería y Diseños S.A as an independent appraiser and, at its board meeting of August 28, decided to call an extraordinary shareholders' meeting for October 4, 2012 to approve the proposed operation.

This report was made available to shareholders from September 5 on the web page of the Company <http://pehuenche.endesa.cl>.

### 1.2.5. Opinions of the directors

On September 10, the individual opinions were reported in letters from all the directors of Pehuenche, Humberto Espejo Paluz, Alejandro García Chacón, Eduardo Escaffi Johnson and the chairman, Alan Fischer Hill, concerning the proposal of Endesa to cancel the electricity supply contract provided by Pehuenche S.A., current since November 19, 2007, and replace it with a new contract on different conditions, to cover the period from its date to December 31, 2021.

The directors in these letters indicate their relationships with Endesa, give their opinion on the convenience of the operation for the corporate interests, and pronounce on the conclusions of the independent appraiser, SYSTEP Ingeniería y Diseños S.A., all in accordance with article 147 N° 5 final paragraph and No.6 of the Law 18.046.

Taking into account that this was an operation between related parties, as referred to in Chapter XVI of the Corporations Law 18.046, the board decided to require the general manager, on August 28, to send a Material Information report communicating the receipt of the opinions mentioned and that these were available to shareholders from September 11 on the web site of the company, <http://pehuenche.endesa.cl>

### 1.2.6. Extraordinary shareholders' meeting

An extraordinary shareholders' meeting of Empresa Eléctrica Pehuenche S.A was held on October 4 which approved unanimously the cancellation of the the electricity supply contract between Endesa and Empresa Eléctrica Pehuenche S.A. of November 19, 2007, and approved the signing of a new supply contract between same parties to cover the period until December 31, 2021.

The new approved contract has the following characteristics:

- i) The energy price will be the marginal cost of the grid at Alto Jahuel 220 kV.
- ii) The price of capacity will be that established by the CDEC for transfers of capacity between generators.
- iii) It will take effect from the date of signing and will expire on December 31, 2021.
- iv) It will be the same volume of energy and capacity as in the cancelled contract.

### 1.2.7. Interim dividend

On October 19, the board of Empresa Eléctrica Pehuenche S.A. approved the distribution of an interim dividend for the year 2012 amounting to Ch\$312.185426 per share.

This was paid on November 5, 2012 to shareholders on the shareholders' register five business days beforehand.

The dividend notice was published on October 21 in the El Mercurio newspaper of Santiago.

This board resolution modified the dividend policy for 2012 approved by the board on April 24, 2012, and reported at the time to the ordinary shareholders' meeting.



*identification of subsidiary and associate companies*



**AMPLA ENERGÍA E SERVIÇOS**

## Name

Ampla Energia e Serviços S.A.

## Type of company

Open corporation.

## Address

Praça Leoni Ramos, N° 01, São Domingos, Niterói, Rio de Janeiro, Brazil.

## Corporate objects

Study, plan, design, build and explore systems for the production, transmission, transformation, distribution and trading of electricity, as well as to provide related services that have been or may be granted; perform energy sector research and participate in other companies in the energy sector as shareholder, including in Brazil's privatization programs.

## Business

Electricity distribution.

## Subscribed &amp; paid capital (ThCh\$)

233,242,237

## Directors

Mario Fernando de Melo Santos (Chairman)  
Antonio Basilio Pires e Albuquerque (Vice Chairman)  
Ramón Francisco Castañeda Ponce  
Nelson Ribas Visconti  
Luciano Galasso Samaria  
José Alves de Mello Franco  
José Távora Batista  
Cristián Eduardo Fierro Montes  
Elizabeth Codeço de Almeida Lopes

## Alternate director

Otacilio de Souza Junior

## Senior executives

Marcelo Llévenes Rebolledo  
President  
José Alves de Mello Franco  
Bruno Golebiovsky  
Carlos Ewandro Naegele Moreira  
Claudio Rivera Moya  
Déborah Meirelles Rosa Brasil  
Teobaldo Jose Cavalcante Leal  
Aurélio Bustilho Oliveira

## Commercial relations with Endesa Chile

None

**AMPLA INVESTIMENTOS E SERVIÇOS**

## Name

Ampla Investimentos e Serviços S.A.

## Type of company

Open corporation.

## Address

Praça Leoni Ramos, N° 01 – parte, São Domingos, Niterói, Rio de Janeiro, Brazil.

## Corporate objects

Study, plan, design, build and explore systems for the production, transmission, transformation, distribution and trading of electricity, as well as to provide related services that have been or may be granted; provide services of any nature to concessionaires, permissionaires or authorized electricity service providers and to their customers and to participate in other companies in the energy sector as shareholder.

## Business

Investments.

## Subscribed &amp; paid capital (ThCh\$)

27,827,555

## Directors

Mario Fernando de Melo Santos (Chairman)  
Antonio Basilio Pires e Albuquerque (Vice Chairman)  
Cristián Eduardo Fierro Montes  
Nelson Ribas Visconti  
Luciano Galasso Samaria  
José Alves Mello Franco  
José Távora Batista  
Marcelo Llévenes Rebolledo  
Michelle Rodrigues Nogueira

## Senior executives

Marcelo Llévenes Rebolledo  
Teobaldo Jose Cavalcante Leal  
José Alves de Mello Franco

## Commercial relations with Endesa Chile

None

**ATACAMA FINANCE**

## Name

Atacama Finance Co.

## Type of company

Exempt company constituted in Cayman Islands, BWI.

## Domicile

Caledonian House P.O. Box 265 G, George Town, Grand Cayman, Cayman Islands.

## Corporate objects

The Company's main object includes borrowing in the financial market through loans granted or the issuance of bonds or other securities and money loans to other companies, particularly to those related to the Atacama Project.

## Business

Investments.

## Subscribed &amp; paid capital (ThCh\$)

3,016,360

## Directors

Horacio Reyser  
Ingrid Morales  
Gonzalo Alende  
Vacant

## Commercial relations with Endesa Chile

The company has a loan to Endesa Chile of US\$ 27.5 million maturing in March 2012

**AYSÉN ENERGÍA**

## Name

Aysén Energía S.A.

## Type of company

Closely-held corporation

## Tax No.

76.091.595-5

## Domicile

Miraflores 383, office 1302, Santiago, Chile.

## Corporate objects

Comply with the ruling of the Free Competition Defense Tribunal in the first article of Resolution N° 30 dated May 26, 2009; to fulfill the commitment made by HidroAysén S.A. with the community in Aysén - XI Region, within the framework of the development of the Aysén hydroelectric project, to provide the region with an electricity supply at a cost lower than at present, through the development, funding, ownership and operation of projects for generating and transmitting electricity in that region. In order to comply with the above, the company may develop the following activities, among others: a) generate electricity by any means of generation, and supply and sell it; b) transport electricity; c) provide services related to its objects; d) apply for, obtain or acquire and benefit from concessions, rights and permits that are required.

## Business

Electricity generation and transmission (project).

## Subscribed &amp; paid capital (ThCh\$)

4,900

## Directors

Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research & Development & Innovation, Endesa Chile)  
Ramiro Alfonsín Balza  
Bernardo Larraín Matte  
Luis Felipe Gazitúa Achondo  
Juan Eduardo Vásquez

## Alternate directors

Carlos Martín Vergara (Legal Counsel, Endesa Chile)  
Sebastián Fernández Cox  
(Regional Manager, Energy Planning, Endesa Chile)  
Claudio Iglesias Guillard (Regional Manager, Electricity Production, Endesa Chile)  
Eduardo Lauer Rodríguez  
Cristián Morales Jaureguiberry  
Enrique Donoso Moscoso

Senior executives  
Daniel Fernández Koprach  
General Manager

Commercial relations with Endesa Chile  
None

## AYSÉN TRANSMISIÓN

Name  
Aysén Transmisión S.A.

Type of company  
Closely-held corporation, registered in the Securities Register of the SVS.

Tax No.  
76.041.891-9

Domicile  
Miraflores 383, office 1302, Santiago, Chile.

Corporate objects  
Develop and alternatively or additionally manage, electricity transmission systems required for the hydroelectric generation project that HydroAysén plans to build in the Aysén Region. In order to comply with this object, the following activities form a part of its business: a) the design, development, construction, operation, ownership, maintenance and development of electricity transmission systems; b) the transport of electricity; and c) provide services related to its objects.

Business  
Electricity transmission

Subscribed & paid capital (ThCh\$)  
22,368

Directors  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research & Development & Innovation, Endesa Chile)  
Ramiro Alfonsín Balza  
Bernardo Larraín Matte  
Luis Felipe Gazitúa Achondo  
Juan Eduardo Vásquez

Alternate directors  
Carlos Martín Vergara  
(Legal Counsel, Endesa Chile)  
Sebastián Fernández Cox  
(Regional Manager, Energy Planning, Endesa Chile)  
Claudio Iglesias Guillard  
(Regional Manager, Electricity Production, Endesa Chile)  
Eduardo Lauer Rodríguez  
Cristián Morales Jaureguiberry  
Enrique Donoso Moscoso

Senior executives  
Jorge Andrés Taboada Rodríguez  
General Manager

Commercial relations with Endesa Chile  
None.

## CELTA

Name  
Compañía Eléctrica Tarapacá S.A.

Type of company  
Closely-held corporation.

Tax No.  
96.770.940-9

Domicile  
Santa Rosa 76, Santiago, Chile.

Corporate objects  
Develop the production, transportation, distribution and supply of electricity, both nationally and internationally, and for such purposes obtain, acquire and benefit from the respective concessions and benefits.

Business  
Electricity generation.

Subscribed & paid capital (ThCh\$)  
103,099,643

Directors  
Alejandro García Chacón (Chairman)  
Alan Fischer Hill  
Humberto Espejo Paluz

Senior executives  
Eduardo Soto Trincado  
General Manager

Commercial relations with Endesa Chile  
Celta has an operating, maintenance, management and commercialization agreement with Endesa Chile.

## CENTRAL VUELTA OBLIGADO

Name  
Central Vuelta Obligado S.A.

Type of company  
Closely-held corporation.

Domicile  
Av. Tomás Edison 2701, Buenos Aires, Argentina.

Corporate objects  
Electricity production and block trading and, particularly, equipment procurement, construction, operation and maintenance of a thermal power plant called Vuelta de Obligado, pursuant to the "Agreement for the Management and Operation of Projects, Increased Availability of Thermal Generation and the Adaptation of the 2008-2011 Generation Remuneration", signed on November 25, 2010 between the state and generation companies.

Business  
Construction of a thermal electricity plant called Central Vuelta de Obligado.

Subscribed & paid capital (Th\$arg)  
500

Directors  
José Miguel Granged Bruñen  
Fernando Claudio Antognazza  
José María Vásquez  
Eduardo Nitardi

Alternate directors  
Leonardo Marinaro  
Juan Carlos Blanco  
Roberto José Fagan  
Vacant

Senior executives  
Eduardo Nitardi  
General Manager

Commercial relations with Endesa Chile  
None.

## CHINANGO

Name  
Chinango S.A.C.

Type of company  
Closely-held corporation.

Domicile  
Av. Víctor Andrés Belaúnde N° 147, Edificio Real 4, Floor 7, San Isidro, Lima, Peru.

Corporate objects  
The generation, commercialization and transmission of electricity, and may carry out all actions and sign contracts allowed by Peruvian law for such purposes.

Business  
Electricity generation

Subscribed & paid capital (ThCh\$)  
49,974,755

General Manager  
EDEGEL S.A.A., represented by Julián Cabello Yong.

Commercial relations with Endesa Chile  
None.

## COELCE

Name  
Companhia Energética do Ceará

Type of company  
Open corporation.

Domicile  
Rua Padre Valdevino, 150, Fortaleza, Ceará, Brazil.

Corporate objects  
The distribution of electricity and related services in the state of Ceará

Business Distribution of electricity.	facilities, industrial or otherwise, trading for itself or for others the goods and services produced.	Alternate directors José Venegas Maluenda Juan Carlos Blanco Roberto José Fagan
Subscribed & paid capital (ThCh\$) 103,497,072	Business Engineering services.	General Manager Arturo Pappalardo
Directors Mario Fernando de Melo Santos (Chairman) Marcelo Llévanes Rebolledo (Vice Chairman) Gonzalo Vial Vial José Alves de Mello Franco Aurelio Ricardo Bustilho Oliveira Jorge Parente Frota Júnior Cristián Eduardo Fierro Montes Fernando Antônio de Moura Avelino Renato Soares Sacramento Francisco Honório Pinheiro Alves Nelson Ribas Visconti	Subscribed & paid capital ThCh\$1,000	Commercial relations with Endesa Chile None.
Alternate directors Antonio Basilio Pires e Albuquerque Luciano Alberto Galasso Samaria Teobaldo José Cavalcante Leal José Caminha Alencar Araripe Júnior José Távora Batista Juarez Ferreira de Paula Vládía Viana Regis José Nunes de Almeida Neto	Representatives Alejandro Santolaya de Pablo Juan Benabarre Benaiges (Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)	<b>DISTRILEC INVERSORA</b>
Senior executives Abel Alves Rochinha President José Nunes de Almeida Neto Olga Jovanna Carranza Salazar Teobaldo José Cavalcante Leal José Távora Batista David Augusto de Abreu Aurélio Ricardo Bustilho de Oliveira Carlos Ewandro Naegele Moreira Cristine de Magalhães Marcondes José Alves de Mello Franco Nelson Ribas Visconti	Alternate representatives Daniel Barria Cristián Araneda Valdivieso Fernando Armijo Scotti Nelson Hernández Pérez	Name Distrilec Inversora S.A.
Commercial relations with Endesa Chile None.	Commercial relations with Endesa Chile None.	Type of company Closely-held corporation
<b>CONSORCIO ARA – INGENDESA</b>	<b>CTM</b>	Domicile San José 140, Buenos Aires, Argentina.
Name Consortio Ara – Ingendesa Limitada	Name Compañía de Transmisión del Mercosur S.A.	Corporate objects The sole object of investing capital in companies already incorporated or to be incorporated whose core activity is the distribution of electricity or that participate directly or indirectly in companies with that core activity, by way of all kind of financial and investment operations, except those covered by the Financial Institutions Law, buying and selling public and private securities, bonds, stocks, negotiable bonds, loan granting and placing of funds in bank deposits of any kind.
Type of company Limited partnership	Type of company Corporation constituted in the city of Buenos Aires, Argentina.	Business Investments.
Tax No. 77.625.850-4	Domicile Bartolomé Mitre 797, Piso 11, Buenos Aires, Argentina.	Subscribed & paid capital (ThCh\$) 49,230,442
Domicile Santa Rosa 76, Santiago, Chile.	Corporate objects Provide high-tension electricity transport services, as much for national power system links as for international ones, consistent with current legislation, for which the company may submit bids in local and international tenders, become a public utilities concessionaire of national or international high-tension electricity transport and carry out all activities that might be required for such purpose, in particular -including but not limited to- by entering construction, operating and maintenance contracts for the initiation and/or expansion of electricity transportation lines, by participating in the funding of projects directly or indirectly related to such ventures as borrower and/or lender and/or guarantor and/or collateral provider, to which effect it may offer guarantees to third parties. All operations covered by the Financial Institutions Act are hereby excluded, as well as any other requiring public savings.	Directors José María Hidalgo Martín Mateos (Chairman) José Carlos Caino Olivera (Vice Chairman) Cristián Fierro Montes María Inés Justo Juan Carlos Blanco Ramiro Alfonsín Balza Daniel Casal Jorge Subijana Rigoberto Mejía Aravena Jorge Ravlich
Corporate objects Provide engineering services, including the projection, planning and execution of engineering studies and projects, advisory services and consultancies, provision of technical information and assistance and the management, inspection and development of projects and works. Also execute all kinds of works, assemble and start-up either for itself or for third parties, all types of	Business Transmission of electricity by international interconnection.	Alternate directors Gonzalo Vial Vial José Miguel Granged Bruñen Roberto José Fagan Fernando Antognazza Daniel Garrido Diego Saralegui Ricardo Monge Claudio Díaz Jean Yatim Morillas José Eduardo Lazary Teixeira
	Subscribed & paid capital (ThCh\$) 1,380597	Senior executives Antonio Jerez
	Directors José María Hidalgo Martín-Mateos Guilherme Gomes Lencastre Arturo Pappalardo	Commercial relations with Endesa Chile None.

**EDEGEL**

Name  
Edegel S.A.A.

Type of company  
Open corporation.

Domicile  
Av. Víctor Andrés Belaúnde N° 147, Edificio Real 4,  
Piso 7, Centro Empresarial Camino Real, San Isidro,  
Lima, Peru.

Corporate objects  
In general, electricity generating activities.  
It may also carry out civil, industrial, and  
commercial acts and operations and of any other  
nature that are related or lead to its core object.

Business  
Electricity generation.

Subscribed & paid capital (ThCh\$)  
423,177,466

## Directors

Ignacio Blanco Fernández (Chairman)  
Alberto Briand Rebaza Torres (Vice Chairman)  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Rafael Fauquié Bernal  
Reynaldo Llosa Barber  
Francisco García Calderón Portugal  
Gerardo Rafael Sepúlveda Quezada

## Alternat directors

Julián Cabello Yong  
Raffaele Enrico Grandi  
Arrate Gorostidi Aguirresarobe  
Claudio Herzka Buchdahl  
Alberto Triulzi Mora  
Claudio Iglesias Guillard (Regional Manager,  
Electricity Production, Endesa Chile)  
Eric Andrés Añorga Müller

## Senior executives

Carlos Alberto Luna Cabrera (General Manager)  
Julián Cabello Yong (Production Manager)  
Carlos Rosas Cedillo (Manager, Energy  
Management and Commercialization)  
Gonzalo Gil Plano (Finance Manger)  
Daniel Abramovich Ackerman (Legal Counsel)

Commercial relations with Endesa Chile  
None.

**ELECTROGAS**

Name  
Electrogas S.A.

Type of company  
Closely-held corporation.

Tax No.  
96.806.130-5

Domicile  
Alonso de Córdova 5900, Office 401, Las Condes,  
Santiago, Chile.

Corporate objects  
Provide transport services for natural gas  
and other fuels, for itself and third parties, for  
which it can build, operate and maintain gas  
pipelines, oil pipelines, multipurpose pipelines  
and complementary facilities.

Business  
Gas transportation

Subscribed & paid capital (ThCh\$)  
10,181,964

Directors  
Claudio Iglesias Guillard (Regional Manager,  
Electricity Production, Endesa Chile)  
Juan Eduardo Vásquez Moya  
Enrique Donoso Moscoso  
Pedro Gatica Kerr  
Fernando Promis Baeza

## Alternate directors

Eduardo Lauer Rodríguez  
Gastón Schofield Lara  
Cristian Morales Jaureguiberry  
Juan Oliva Vásquez  
Ricardo Santibáñez Zamorano

Carlos Andreani Luco  
General Manager

Commercial relations with Endesa Chile.  
Electrogas currently has a contract with  
Compañía Eléctrica San Isidro S.A. for firm  
natural gas transportation and another for the  
transportation of diesel oil. Electrogas also  
has a contract with Endesa Chile for natural  
gas transportation. There is also a diesel oil  
transportation contract in effect between Endesa  
Chile and Electrogas as well as a contract for the  
operation and maintenance of a pipeline for the  
supply of diesel oil to the Quintero thermal plant.

**EMGESA**

Name  
Emgesa S.A. E.S.P.

Type of company  
Corporation, public-utility company.

Domicile  
Carrera 11 N° 82-76, piso 4 Bogotá, D.C.  
Colombia.

Corporate objects  
The company's sole purpose is the generation  
and commercialization of electricity and  
the implementation of all related and  
complementary activities related to its objects.

Business  
Generation and sale of electricity.

Subscribed and paid capital (ThCh\$)  
164,600,582

## Directors

Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Ramiro Alfonsín Balza  
José Antonio Vargas Lleras  
Mónica De Greiff Lindo  
Catalina Velasco Campuzano  
Ricardo Bonilla González  
Luisa Fernanda Lafaurie

## Alternate directors

Omar Serrano Rueda  
Fernando Gutiérrez Medina  
Gustavo Gómez Cerón  
Henry Navarro Sánchez  
Ernesto Moreno Restrepo  
José Alejandro Herrera Lozano  
Andrés López Valderrama

## Senior executives

Lucio Rubio Díaz  
Andrés Caldas Rico  
Juan Manuel Pardo Gómez  
Fernando Gutiérrez Medina  
Gustavo Gómez Cerón  
María Celina Restrepo  
Leonardo López Vergara  
Rafael Carbonell Blanco  
Omar Serrano Rueda  
Mauricio Carvajal García  
Raúl Puentes  
Ana Patricia Delgado Meza  
Ana Lucía Moreno Moreno  
Javier Blanco Fernández

**EMGESA PANAMÁ, S.A.**

Name  
Emgesa Panamá, S.A.

Type of company  
Corporation not quoted on an exchange nor  
issuer of securities.

Domicile  
Panama City, Panama

Corporate objects  
Purchase, sale, import and export of electricity. It  
may also dedicate itself to industry and commerce  
in general, being able to enter into all transactions,  
operations, business, acts and activities permitted  
by Panamanian law to corporations although not  
expressly stated in the bylaws.

Business  
Purchase, sale, import and export of electricity.

Subscribed & paid capital (ThCh\$)  
4,788

Directors  
Lucio Rubio Díaz  
Andrés Caldas Rico  
Omar Serrano Rueda

Senior executives  
Fernando Gutiérrez Medina  
Andrés Caldas Rico  
Elizabeth Laverde Enciso

Commercial relations with Endesa Chile  
None.

## EN-BRASIL COMÉRCIO E SERVIÇOS

Name  
En-Brasil Comércio e Serviços S.A.

Type of company  
Closely-held corporation constituted under the federal laws of Brazil.

Domicile  
Praça Leoni Ramos Nº 01 – parte, São Domingos, Niterói, Rio de Janeiro, Brazil.

Corporate objects  
Participate in the capital of other companies, in Brazil or abroad, commerce in general including import and export, retail and wholesale, of various products, and the provision of services in general for the electricity sector and others.

Business  
Provision of services in general for the electricity sector and others.

Subscribed & paid capital (ThCh\$)  
233,655

Administration  
Ricardo da Silva Correa  
Gerente General  
Joaquim Caldas Rolim de Oliveira

Commercial relations with Endesa Chile  
None.

## ENDESA ARGENTINA

Name  
Endesa Argentina S.A.

Type of company  
Corporation.

Domicile  
Suipacha 268, piso 12, Buenos Aires, Argentina.

Corporate objects  
Invest in companies involved in the production, transportation and distribution of electricity and its sale, as well as financial activities, except those that by law are restricted exclusively to banks.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
52,105,667

Directors  
José María Hidalgo Martín Mateos

Jose Miguel Granged Bruñen  
Maria Inés Justo

Alternate directors  
Rodrigo Quesada  
Mariana Cecilia Mariné  
Maria Julia Nosetti

Commercial relations with Endesa Chile  
None.

## ENDESA BRASIL

Name  
Endesa Brasil S.A.

Type of company  
Closely-held corporation.

Domicile  
Praça Leoni Ramos, Nº 1, 7º andar, bloco 2, Niterói, RJ, Brazil.

Corporate objects  
Participation in the capital of other companies in any segment of the electrical sector, including companies providing services to others operating in this sector, in Brazil or abroad; the provision of electricity transmission, distribution, generation and commercial services and related operations, and involvement, independently or by means of joint ventures, companies, consortia or other similar forms of association, in tenders, projects and ventures for the implementation of the above mentioned services and activities.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
188,292,374

Directors  
Mario Fernando de Melo Santos  
Ignacio Antoñanzas Alvear  
Massimo Tambosco  
Antonio Basilio Pires de Carvalho e Albuquerque  
Ramiro Alfonsín Balza  
Cristián Fierro Montes  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)

Senior executives  
Marcelo Llévénos Rebolledo  
General Manager  
Aurelio de Oliveira  
Antonio Basilio Pires de Carvalho e Albuquerque  
José Alves de Mello Franco  
Carlos Ewandro Naegle Moreira  
Livia de Sá Baião  
Teobaldo José Cavalcante Leal

Commercial relations with Endesa Chile  
None.

## ENDESA CACHOEIRA

Name  
Centrais Elétricas Cachoeira Dourada S.A.

Type of company  
Closely-held corporation.

Domicile  
Rodovia GO 206, Km 0, Cachoeira Dourada, Goiás, Brazil.

Corporate objects  
Studies, planning, construction, installation, operation and development of electricity generation plants and the trade related to these activities. It may also promote or participate in other companies incorporated to produce electricity, inside or outside of the State of Goiás.

Business  
Electricity generation.

Subscribed & paid capital  
R\$ 289,339,835.85

Directors  
Marcelo Llévénos Rebolledo  
Luis Larumbe Aragón  
(Manager, Planning and Control, Endesa Chile)  
Ana Cláudia Gonçalves Rebello

Senior executives  
Guilherme Lencastre  
General Manager  
Manuel Herrera Vargas  
José Ignácio Pires Medeiros  
Carlos Ewandro Naegle Moreira  
Teobaldo José Cavalcante Leal  
José Alves de Mello Franco  
Ana Cláudia Gonçalves Rebello  
Aurélio Ricardo Bustilho de Oliveira

Commercial relations with Endesa Chile  
None.

## ENDESA CEMSA

Name  
Endesa Cemsa S.A.

Type of company  
Corporation

Domicile  
Pasaje Ing. E. Butty 220, Piso 16, Buenos Aires, Argentina.

Corporate objects  
Wholesale buying and selling of capacity and energy produced by third parties and/or consumed by third parties, including imports and exports of electricity and energy, trading of royalties as well as the provision and/or implementation of both locally and abroad of related data processing and/or operational control and/or telecommunications services. Likewise, it may perform purchase or sale transactions of natural gas and/or its transportation, including import and/or export of natural gas and/or trading of royalties, as well as the provision and/or implementation of related services. Carry out business operations and purchase or sale transactions of liquid fuels and crude oil and/or lubricants and/or transportation for these elements, including the import/export of liquid fuels and the

trading of royalties as well as the provision and/or implementation of related services.

Business  
Trading in electricity and gas.

Subscribed & paid capital  
\$14,012,000

Directors  
José María Hidalgo Martín-Mateos  
José Venegas Maluenda  
Fernando Claudio Antognazza

Alternate directors  
Arturo Pappalardo  
Roberto José Fagan  
Pedro Cruz Viné

Senior executives  
Juan Carlos Blanco  
General Manager

Commercial relations with Endesa Chile  
The company has an agreement with Endesa Chile to provide a daily operative report on gas from Argentina, for a monthly fee of US\$ 1,500.

## ENDESA CIEN

Name  
CIEN - Companhia de Interconexão Energética

Type of company  
Closely-held corporation.

Domicile  
Praça Leoni Ramos, N° 1, piso 6, Bloco 2 - parte, São Domingos, Niterói, Rio de Janeiro, Brazil.

Corporate objects  
To act in the production, manufacture, distribution and trading of electricity, including import and export operations. For this, the company will promote the research, planning and construction of facilities related to the production, transmission, conversion and distribution systems of electricity, making and capturing the investments needed for the development of the facilities they intend to build and the services they provide. The company may also promote the implementation of associated projects, such as inherent, accessory and complementary activities to the services and works it may provide. To achieve its goals, the company may participate in other companies.

Business  
Electricity transmission.

Subscribed & paid capital  
R\$ 285,044,682

Directors  
Marcelo Llévenes Rebolledo  
Ana Claudia Gonçalves Rebello  
José Venegas Maluenda  
(Regional Manager, Energy Management & Commercialization, Endesa Chile)

Senior executives  
Guilherme Lencastre  
General Manager  
Manuel Herrera Vargas  
José Ignacio Pires Medeiros  
Carlos Ewandro Naegele Moreira  
Teobaldo José Cavalcante Leal  
José Alves de Mello Franco  
Ana Cláudia Gonçalves Rebello  
Aurélio Ricardo Bustilho de Oliveira

Commercial relations with Endesa Chile  
None.

## ENDESA COSTANERA

Name  
Endesa Costanera Sociedad Anónima

Type of company  
Corporation

Domicile  
Av. España 3301, Buenos Aires, Argentina.

Corporate objects  
Electricity production and sale by block.

Business  
Electricity generation

Subscribed & paid capital  
\$146,988,378

Directors  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Máximo Luis Bomchil  
José María Hidalgo Martín Mateos  
Vacante  
César Fernando Amuchástegui  
Matías María Brea  
Patricia Charvay  
Carlos Martín Vergara (Legal Counsel, Endesa Chile)

Alternate directors  
Roberto José Fagan  
Damián Camacho  
Francisco Domingo Monteleone  
Fernando Carlos Boggini  
Maria Inés Justo  
Jorge Raúl Burlando Bonino  
Rodrigo Quesada  
Fernando Claudio Antognazza

Senior executives  
Jose Miguel Granged Bruñen  
General Manager  
Fernando Carlos Luis Boggini  
Finance Manager  
Rodolfo Silvio Bettinsoli  
Manager, Human Resources  
Francisco Domingo Monteleone  
Production Manager  
Rodrigo Quesada  
Manager, Legal Affairs  
Commercial relations with Endesa Chile  
The company has a loan of US\$ 7.1 million with Endesa Costanera.

## ENDESA ECO

Name  
Endesa Eco S.A.

Type of company  
Closely-held corporation.

Tax No.  
76.313.310-9

Domicile  
Santa Rosa 76, Santiago, Chile.

Corporate objects

Production, transport, distribution and supply of electricity, for which it may obtain, acquire and benefit from concessions. It may also promote and develop renewable energy projects, identify and develop clean development mechanism (CDM) projects, and act as receiver and trader of the emissions reduction certificates obtained for such projects. The company will make or participate in all kinds of investments, especially those related to the electricity business. It may especially make, maintain and manage investments in energy projects related to the companies Gasoducto Atacama Compañía Limitada, Gasoducto Cuenca Noroeste Limitada and Nor Oeste Pacifico Generación de Energía Limitada, and also Administradora Proyecto Atacama S.A. or their legal successors. It may also lease, acquire, sell, manage and produce for its own or third-parties' account all kinds of movable and immovable assets, securities and other commercial paper, perform studies and consultancies, provide all kinds of services including engineering, works inspection, inspection and reception of materials and equipment, laboratory, appraisal and management of companies in their various fields, environmental advice, including environmental impact studies and in general consultancy services in all specializations.

Business  
Electricity generation.

Subscribed & paid capital (ThCh\$)  
98,664,033

Directors  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)  
Sebastián Fernández Cox  
(Regional Manager, Energy Planning, Endesa Chile)  
Bernardo Canales Fuenzalida

Senior executives  
Wilfredo Jara Tirapegui  
General Manager

Commercial relations with Endesa Chile  
On May 23, 2008 a sale agreement was signed with Endesa Chile to sell to it all the firm energy and capacity from the Ojos de Agua plant to be recognized by the CDEC-SIC and delivered at the SIC injection point. The company has a loan to its subsidiary Eólica Canela for US\$ 176.6 million.

**ENDESA FORTALEZA**

Name  
Central Geradora Termelétrica Fortaleza S.A.

Type of company  
Closely-held corporation.

Domicile  
Rodovia CE 422, Km 1, Complexo Industrial e Portuário de Pecém, Caucaia – Ceará, Brazil

Corporate objects  
Study, project, build and explore the electricity production, transmission, distribution and trading systems that may be granted, licensed or authorized under any title, as well as other activities related to those mentioned above; the acquisition and exploration of any right, concession and privilege related to the above activities, as well as the execution of all other acts and transactions necessary for achieving its objects; and participation in the capital of other companies as shareholder, partner or participant, regardless of their objects.

Business  
Electricity generation.

Subscribed & paid capital (ThCh\$)  
35,500,663

Directors  
Marcelo Llêvenes Rebollo  
Ana Claudia Gonçalves Rebello  
Luis Larumbe Aragón (Manager, Planning and Control, Endesa Chile)

Senior executives  
Manuel Herrera Vargas  
Gerente General  
Raimundo Câmara Filho  
Teobaldo José Cavalcante Leal  
José Ignacio Pires Medeiros  
Aurelio de Oliveira  
José Alves de Mello Franco  
Ana Cláudia Gonçalves Rebello  
Manuel Herrera Vargas

Commercial relations with Endesa Chile  
None.

**ENEL GREEN POWER MODELO I EÓLICA S.A.**

Name  
Enel Green Power Modelo I Eólica S.A

Type of company  
Closely-held corporation

Domicile  
Praça Leoni Ramos, N° 1, 5° andar, bloco 2, Niterói, RJ, Brazil.

Corporate objects  
Wind-powered generation of electricity.

Business  
Electricity generation.

Subscribed & paid capital  
R\$5.125,000.

Administration  
Pedro Alberto Costa Braga de Oliveira  
Newton Souza de Moraes  
Enrique de las Morenas Moneo  
Orlando Lopez

Commercial relations with Endesa Chile  
None.

**ENEL GREEN POWER MODELO II EÓLICA S.A.**

Name  
Enel Green Power Modelo II Eólica S.A

Type of company  
Closely-held corporation.

Domicile  
Praça Leoni Ramos, N° 1, 5° andar, bloco 2, Niterói, RJ, Brazil.

Corporate objects  
Wind-powered generation of electricity.

Business  
Electricity generation.

Subscribed & paid capital  
R\$5,125,000.

Administration  
Pedro Alberto Costa Braga de Oliveira  
Newton Souza de Moraes  
Enrique de las Morenas Moneo  
Orlando Lopez

Commercial relations with Endesa Chile  
None.

**ENERGEX**

Name  
Energex Co.

Type of company  
Exempt company constituted in Cayman Islands, BWI.

Domicile  
Walker House, 87 Mary Street, George Town, Grand Cayman, Cayman Islands.

Corporate objects  
The company's purpose is to conduct all its business or operations pursuant to the Cayman Islands' laws. In the case of business transactions or operations relating to the financial area, exception is made of those that the law restricts solely to banks. Furthermore, it is barred from doing business with firms or persons residing in the Cayman Islands.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
4,788

Directors  
Horacio Reyser  
Gonzalo Alende  
Ingrid Morales  
Vacant

Commercial relations with Endesa Chile  
None.

**EÓLICA CANELA**

Name  
Central Eólica Canela S.A.

Type of company  
Closely-held corporation

Tax No.  
76.003.204-2

Domicile  
Santa Rosa 76, Santiago, Chile

Corporate objects  
Promote and develop renewable energy projects, mainly of aeolic energy, identify and develop clean development mechanism (CDM) projects and act as depositary and trader of the emission reduction certificates resulting from such projects. It may also generate, transport, distribute, supply and trade electricity and therefore acquire and benefit from the corresponding concessions and favors.

Business  
Electricity generation.

Subscribed & paid capital  
ThCh\$12,284,743

Directors  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)  
Claudio Iglesias Guillard (Regional Manager, Electricity Production, Endesa Chile)  
Sebastián Fernández Cox  
(Regional Manager, Energy Planning, Endesa Chile)  
Cristóbal García-Huidobro Ramírez  
Bernardo Canales Fuenzalida

Alternate directors  
Alan Fisher Hill  
Claudio Betti Pruzzo  
Juan Cristóbal Pavéz Recart  
Marcelo Álvarez Ríos  
Alejandro García Chacón

Senior executives  
Wilfredo Jara Tirapegui  
General Manager

Commercial relations with Endesa Chile  
On January 1, 2010 a sale agreement was signed with Endesa Chile for the sale to it of all the firm energy and capacity of its wind farm to be recognized by the CDEC-SIC. Eólica Canela

has a debt with Endesa Eco, an Endesa Chile subsidiary, for US\$ 176.6 million.

### **EÓLICA FAZENDA NOVA - GERAÇÃO E COMERCIALIZAÇÃO DE ENERGIA**

**Name**  
Eólica Fazenda Nova - Geração e Comercialização de Energia S.A.

**Type of company**  
Closely-held corporation.

**Domicile**  
Rua Felipe Camarão, N° 507, sala 104, Ciudad de Natal, Rio Grande do Norte, Brazil.

**Corporate objects**  
The generation, transmission, distribution and trading of energy; participation in other companies as partner, shareholder, or quota holder, the import of machinery and equipment for the generation, transmission, distribution and trading of electricity powered by the wind.

**Business**  
Generation of electricity

**Subscribed & paid capital (R\$)**  
429,692

**Administration**  
Marcelo Llévanes Rebollo  
Chairman  
Guilherme Gomes Lencastre  
Livia de Sá Baião

**Commercial relations with Endesa Chile**  
None.

### **GASATACAMA**

**Name**  
GasAtacama S.A.

**Type of company**  
Closely-held corporation.

**Tax No.**  
96.830.980-3

**Domicile**  
Isidora Goyenechea 3365, piso 8, Las Condes, Santiago, Chile.

**Corporate objects**  
a) Administration and management of Gasoducto Atacama Chile Limitada, Gasoducto Atacama Argentina Limitada, GasAtacama Generación Limitada and other companies to be agreed by the partners; b) Investment of its resources, for its own or third parties's account, in all kinds of personal and real property, tangible or intangible, securities, stock and commercial instruments.

**Business**  
Investments.

**Subscribed & paid capital (ThCh\$)**  
139,558,874

**Directors**  
Raúl Sotomayor Valenzuela (Chairman)  
**Directores Titulares**  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Gonzalo Dulanto Letelier  
Claudio Iglesias Guillard (Regional Manager, Energy Production, Endesa Chile)

**Alternate directors**  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)  
Eduardo Ojea Quintana  
Fernando Gardeweg Ried  
(Manager, Administration and Finance, Endesa Chile)  
Vacant

**Senior executive**  
Rudolf Araneda Kauert  
General Manager

**Commercial relations with Endesa Chile**  
None.

### **GASATACAMA CHILE**

**Name**  
GasAtacama Chile S.A.

**Type of company**  
Closely-held corporation.

**Tax No.**  
78.932.860-9

**Domicile**  
Isidora Goyenechea 3365, piso 8, Las Condes, Santiago, Chile.

**Corporate objects**  
a) Develop the generation, transmission, purchase, distribution and sale of electricity or of any other nature; b) purchase, extract, operate, process, distribute, market and sell solid, liquid and gaseous fuels; c) sell and provide engineering services; d) acquire, purchase, transfer, lease, charge and develop, in any form, the concessions referred to in the General Law on Electricity Services, maritime concessions and water-usage rights of any nature; e) transport natural gas, by its own means or jointly with third parties within the territory of Chile or third countries, including the construction, location and operation of gas pipelines and others directly or indirectly related to such operations; f) invest in all types of assets, tangible or intangible, movable or immovable; g) organize and create all kinds of companies whose objects are related or linked to the energy industry in whatever form or that use electricity as their main input, or that relate to any of the above activities.

**Business**  
Electricity generation and gas transportation.

**Subscribed & paid capital (ThCh\$)**  
88,587,706

**Directors**  
Raúl Sotomayor Valenzuela  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Gonzalo Dulanto Letelier  
Claudio Iglesias Guillard (Regional Manager, Energy Production, Endesa Chile)

**Alternate directors**  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)  
Fernando Gardeweg Ried  
(Manager, Administration and Finance, Endesa Chile)  
Vacant

**Senior executive**  
Rudolf Araneda Kauert  
General Manager

**Commercial relations with Endesa Chile**  
The company has signed 2 contracts with Endesa Chile for the transportation of natural gas for its Taltal Plant, located in Chile's 2nd Region.

### **GASODUCTO ATACAMA ARGENTINA**

**Name**  
Gasoducto Atacama Argentina S.A.

**Type of company**  
Closely-held corporation.

**Tax No.**  
78.952.420-3

**Domicile**  
Isidora Goyenechea 3365, piso 8, Las Condes, Santiago, Chile.

**Corporate objects**  
The transport of natural gas, by own or third party means or jointly with third parties, within the Chilean territory or in other countries, including the construction, location and operation of gas pipelines and other operations directly or indirectly related to these objects. The company has incorporated an agency in Argentina under the name of Gasoducto Cuenca Noroeste Limitada Sucursal Argentina, whose purpose is the construction of a gas pipeline between the locality of Cornejo, province of Salta and the Argentina-Chile border in the vicinity of Paso de Jama, 2nd Region.

**Business**  
Transportation of gas.

**Subscribed & paid capital (ThCh\$)**  
99,670,644

Directors  
Rafael Zamorano Chaparro  
Gustavo Venegas Castro  
Pedro de la Sotta

Alternate directors  
Luis Cerda Ahumada  
Mario Guevara Esturillo  
Alejandro Sáez Carreño

Senior executive  
Rudolf Araneda Kauert  
General Manager

Commercial relations with Endesa Chile  
None

**GASODUCTO TALTAL**

Name  
Gasoducto Tal Tal S.A.

Type of company  
Closely-held corporation.

Tax No.  
77.032.280-4

Domicile  
Isidora Goyenechea 3365, piso 8, Las Condes, Santiago, Chile.

Corporate objects  
The transportation, marketing and distribution of natural gas, by own means, by third parties or jointly with third parties, within Chile's territory, especially between the localities of Mejillones and Paposo in the 2nd Region, including the construction, location and operation of gas pipelines and other operations related directly or indirectly to such object.

Business  
Transportation of gas.

Subscribed & paid capital (ThCh\$)  
18,638,522

Directors  
Rafael Zamorano Chaparro  
Gustavo Venegas Castro  
Pedro de la Sotta

Alternate directors  
Luis Cerda Ahumada  
Mario Guevara Esturillo  
Alejandro Sáez Carreño

Senior executive  
Rudolf Araneda Kauert  
General Manager

Commercial relations with Endesa Chile  
None.

**GENERANDES PERÚ**

Name  
Generandes Perú S.A.

Type of company  
Corporation.

Domicile  
Av. Víctor Andrés Belaúnde N° 147, Edificio Real 4, Piso 7, San Isidro, Lima, Peru.

Corporate objects  
Perform activities related to the generation of electricity, directly and/or through companies created for that purpose.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
186,073,314

Directors  
Ignacio Blanco Fernández  
Alberto Briand Rebaza Torres  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Raffaele Enrico Grandi  
José Venegas Maluenda  
(Regional Manager, Energy Management and Commercialization, Endesa Chile)  
Rafael Fauquie Bernal  
Gerardo Rafael Sepúlveda Quezada  
Alberto Triulzi Mora

Alternate directors  
Guillermo Lozada Pozo  
Rafael Alcázar Uzátegui  
Julian Cabello Yong  
Carlos Rosas Cedillo  
José María Hidalgo Martín-Mateos  
Gonzalo Adolfo de las Casas Salinas  
Claudio Iglesias Guillard (Regional Manager, Electricity Production, Endesa Chile)  
Eric Andrés Añorga Müller

Senior executives  
Carlos Luna Cabrera (General Manager)  
Gonzalo Gil Plano (Finance Manager)

Commercial relations with Endesa Chile  
None.

**GNL CHILE**

Name  
GNL Chile S.A.

Type of company  
Closely-held corporation

Tax No.  
76.418.940-K

Domicile  
Rosario Norte 532, oficina 1303, Las Condes, Santiago.

Corporate objects  
To a) engage the services of the liquefied natural gas ("LNG") regasification company, GNL Quintero S.A., and use all the storage, processing, re-gasification capacity and delivery of natural gas and LNG available at its regasification

terminal, including its expansions, if any, and any other matter specified in such contracts as the company might sign to this effect for the use of the regasification terminal; b) import LNG under the modality of on-board delivery (DES) from LNG suppliers pursuant to LNG sales contracts; c) sell and deliver natural gas and LNG consistent with the natural gas and LNG sales contracts signed by the company with its customers; d) manage and coordinate the schedules and nominations of LNG cargoes, as well as the delivery of natural gas and LNG among various customers; and e) meet all its obligations and require the enforcement of all its rights under the previously identified contracts, coordinate all operations under these contracts and, in general, carry out any type of action or enter into any contract that might be necessary, useful or convenient in order to accomplish the above objects.

Business  
Import and sale of natural gas.

Subscribed & paid capital (ThCh\$)  
1,448,886

Directors  
José Venegas Maluenda  
(Regional Manager, Energy Management and Commercialization, Endesa Chile)  
Julio Bertrand Planella  
Klaus Lührmann Poblete

Alternate directors  
Juan Oliva Vásquez  
Fernando Promis Baeza  
Gonzalo Palacios Vásquez

Senior executives  
Alejandro Palma Rioseco  
General Manager

Commercial relations with Endesa Chile  
The company has business relationships with GNL Chile S.A., by way of contracts for the supply of gas from the regasification of liquefied natural gas. GNL Chile S.A.'s shareholders have granted loans to the company. GNL Chile S.A.'s debt with Endesa Chile totals THUS\$ 1,931

**GNL QUINTERO**

Name  
GNL QUINTERO S.A.

Type of company  
Closely-held corporation.

Tax No.  
76.788.080-4

Domicile  
Rosario Norte 532, oficina 1604, Las Condes, Santiago, Chile

Corporate objects  
The development, funding, design, engineering, supply, construction, commissioning, operation and maintenance of a storage and regasification liquefied natural gas (LNG) plant and its corresponding shipping terminal for loading

and unloading LNG as well as its expansions, if any, including the facilities and connections needed for delivering LNG through a freight yard in trucks and/or one or more LNG delivery points through pipelines, the regasification terminal; and any other activity conducive or related to this object, including but not limited to the administration and management of all commercial agreements needed for the reception of LNG or its delivery to customers, the regasification of LNG, the delivery of natural gas and the sale of its service and storage capacity, processing, regasification, loading and unloading of the Regasification Terminal and the LNG delivery and its expansions, if any; and b) the provision of management services and overall administrative assistance, necessary for the Company's correct operation, to the commercial company, as the above term is defined in section 13.4 of Article 13 of the bylaws, which is currently known as GNL Chile S.A. The company shall have the authority to perform any act or enter into any contract that may be necessary, useful or convenient to accomplish the mentioned objects.

#### Business

The unloading, storage, regasification and delivery of liquefied natural gas and natural gas

Subscribed & paid capital (ThCh\$)  
54,609,413

#### Directors

Claudio Iglesias Guillard (Regional Manager, Electricity Production, Endesa Chile)  
Diego Hollweck  
Julio Bertrand Planella  
Francisco Gazmuri Schleyer  
Jesús Saldaña

#### Alternate directors

Juan Oliva Vásquez  
Carlos Quintana  
Fernando Promis Baeza  
Víctor Turpaud Fernández  
Rafael González

#### Senior executive

Antonio Bacigalupo Gittins  
General Manager

#### Commercial relations with Endesa Chile

- There is an electricity supply contract between GNL Quintero S.A. and Endesa Chile dated August 20, 2008, amended on May 3, 2011. There are also current contracts between these companies for the design, supply, construction, operation and maintenance of the 220 kV line for the electricity connection for supplying energy to the GNL Quintero, and for the provision of construction, operation, maintenance, transformation and transmission services through the 220/110 kV transformer, cable line connection in 110 kV for supplying energy to the GNL Quintero plant, dated July 31, 2009. There is also a contract covering the use of the transmission grid signed between Endesa Chile and GNL Quintero S.A. on May 3, 2011.

## HIDROAYSÉN

#### Name

Centrales Hidroeléctricas de Aysén S.A.

#### Type of company

Closely-held corporation constituted in Santiago, Chile, and registered in the Securities Register of the SVS.

#### Tax No.

76.652.400-1.

#### Domicile

In Santiago, Miraflores 383, office 1302.  
In Coyhaique, Chile, Baquedano 260.  
In Cochrane, Chile, Teniente Merino 324.

#### Corporate objects

To develop, finance, own and operate a hydroelectric project in Aysén, 9th Region, with an estimated capacity of 2,750 MW by way of 5 hydroelectric power plants known jointly as the Aysén Project. For this, the following are included in its business activities: a) the production and transportation of electricity; b) the supply and trading of electricity to its shareholders; and c) the management, operation and maintenance of hydroelectric plants, electricity grids and hydroelectric energy generation plants.

#### Business

Electricity generation (project).

#### Subscribed & paid capital

ThCh\$161,645,665,182

#### Directors

Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)  
Ramiro Alfonsín Balza  
Bernardo Larraín Matte  
Luis Felipe Gazitúa Achondo  
Juan Eduardo Vásquez

#### Alternate directors

Carlos Martín Vergara (Legal Counsel, Endesa Chile)  
Sebastián Fernández Cox  
(Regional Manager, Energy Planning, Endesa Chile)  
Claudio Iglesias Guillard (Regional Manager, Electricity Production, Endesa Chile)  
Eduardo Lauer Rodríguez  
Cristián Morales Jaureguiberry  
Enrique Donoso Moscoso

#### Senior executives

Daniel Fernández Koprach  
Executive Vice President

#### Commercial relations with Endesa Chile

Hidroaysén S.A. will sell energy and capacity from its own generation to Endesa Chile, by means of 30-year power purchase agreements. It also has service contracts with Ingendesa (today Endesa Eco)

## HIDROELÉCTRICA EL CHOCÓN

#### Name

Hidroeléctrica El Chocón Sociedad Anónima

#### Type of company

Corporation

#### Domicile

Av. España 3301, Buenos Aires, Argentina.

#### Corporate objects

Electricity production and block sale.

#### Business

Electricity generation.

#### Subscribed & paid capital

\$298,584,050.

#### Directors

Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
José Miguel Granged Bruñen  
José María Hidalgo Martín Mateos  
Eduardo Escaffi Johnson  
Carlos Martín Vergara (Legal Counsel, Endesa Chile)  
Alex Daniel Horacio Valdez  
Juan Carlos Nayar  
Sergio Maschio

#### Alternate directors

Jorge Raúl Burlando Bonino  
Francisco Domingo Monteleone  
Juan Carlos Blanco  
Roberto José Fagan  
Fernando Carlos Boggini  
Héctor Osvaldo Mendiberry  
Alejandro Nagel  
Gustavo Brockerhof

#### Seniors executives

Fernando Claudio Antognazza  
General Manager  
Fernando Carlos Luis Boggini  
Finance Manager  
Néstor Srebernic  
Production Manager  
Cristian Vargas  
Commercial Manager  
Rodolfo Silvio Bettinsoli  
Manager, Human Resources

#### Commercial relations with Endesa Chile

There is a current contract by which Endesa Chile is responsible for the operation of Hidroeléctrica El Chocón S.A. and the provision of related services in areas of supervision and technical assistance, operations, sales, administration, management, personnel management, procurement, environment and internal audit.

## HIDROINVEST

#### Name

Hidroinvest S.A.

Type of company  
Corporation incorporated in Buenos Aires, Argentina.

Domicile  
Av. España 3301, Buenos Aires, Argentina.

Corporate objects  
Acquire and maintain a majority shareholding in Hidroeléctrica Alicura S.A., and/or Hidroeléctrica El Chocón S.A., and/or Hidroeléctrica Cerros Colorados S.A. (the concession-holding companies) created by National Executive Decree 287/93 and to manage such investments.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
35,137,643

Directors  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
José Miguel Granged Bruñen  
José María Hidalgo Martín Mateos  
Fernando Claudio Antognazza  
Eduardo Escaffi Johnson  
Juan Carlos Blanco  
Roberto José Fagan  
Carlos Martín Vergara (Legal Counsel, Endesa Chile)

Alternate directors  
Francisco Monteleone  
Jorge Raúl Burlando Bonino  
Daniel Garrido  
Rodolfo Bettinsoli  
Fernando Boggini  
Rodrigo Quesada  
Sergio Camps  
Oscar Rigueiro

Commercial relations with Endesa Chile  
None.

## INGENDESA DO BRASIL

Name  
Ingendesa do Brasil Ltda.

Type of company  
Limited partnership.

Domicile  
Praça Leoni Ramos, Nº 1, parte, São Domingos, Niterói - RJ, Brazil.

Corporate objects  
The provision of engineering services, studies, projects, technical assessment, management, site certification and supervision, inspection and receipt of materials and equipment, laboratory services, expertise, commercial representation of local and foreign engineering companies, as well as other services they are legally empowered to provide in the practice of professions such as engineering, architecture, agronomy, geology and meteorology, in all their specialties.

Business  
Engineering services.

Subscribed & paid capital  
ThCh\$48,203

Representative  
Sergio Ribeiro Campos

Commercial relations with Endesa Chile  
None.

## INVERSIONES GASATACAMA HOLDING

Name  
Inversiones GasAtacama Holding Limitada.

Type of company  
Limited partnership.

Tax No.  
76.014.570-K

Domicile  
Isidora Goyenechea 3365, piso 8, Las Condes, Santiago, Chile.

Corporate objects  
a) The direct or indirect participation in any type of association, in companies whose purpose includes one or more of the following activities: i) the transportation of natural gas in any form; ii) the generation, transmission, purchase, distribution and sale of electricity; iii) the funding of the operations mentioned in i) and, ii) developed by related third parties, and b) the receipt and investment of assets for investment, including the related gainful activities already mentioned.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
159,684,942

Directors  
Raúl Sotomayor Valenzuela  
Joaquín Galindo Vélez  
(Chairman)(Chief Executive of Endesa Chile)  
Fernando Gardeweg Ried  
(Manager, Administration and Finance, Endesa Chile)  
Gonzalo Dulanto Letelier

Alternate directors  
Juan Benabarre Benaiges  
(Manager, Engineering, Projects and Research and Development & Innovation, Endesa Chile)  
Claudio Iglesias Guillard (Regional Manager, Electricity Production, Endesa Chile)  
Eduardo Ojea Quintana  
Vacant

Senior executive  
Rudolf Aranedá Kauert  
General Manager

Commercial relations with Endesa Chile  
None.

## INVESTLUZ

Name  
Investluz S.A.

Type of company  
Closely-held corporation.

Domicile  
Rua Padre Valdevino, Nº 150 – Parte Fortaleza, Ceará, Brazil.

Corporate objects  
Participate as partner or shareholder in the capital of Companhia Energética do Ceará and other companies in Brazil and abroad.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
223,052,176

Administration  
Abel Alves Rochinha  
Chairman  
Olga Jovana Carranza Salazar  
Carlos Ewandro Naegele Moreira  
Cristine de Magalhães Marcondes

Commercial relations with Endesa Chile  
None.

## PEHUENCHE

Name  
Empresa Eléctrica Pehuenche S.A.

Type of company  
Open corporation.

Tax No.  
96.504.980-0

Domicile  
Santa Rosa 76, Santiago, Chile.

Corporate objects  
Generate, transport, distribute and supply electricity for which it may obtain, acquire and benefit from the respective concessions, permits, rights and favors.

Business  
Electricity generation.

Subscribed & paid capital (ThCh\$)  
200,319,020

Directors  
Alan Fischer Hill  
Alejandro García Chacón  
Humberto Espejo Paluz  
Fernando Gardeweg Ried  
(Manager, Administration and Finance, Endesa Chile)  
Vacant

Senior executive  
Lucio Castro Márquez  
General Manager

Commercial relations with Endesa Chile  
Pehuenche has signed a contract with Endesa Chile for the operation and maintenance of its plant and its financial and business management. The company also has contracts with Endesa Chile for the sale of energy and capacity.

## PROGAS

Name  
Progas S.A.

Type of company  
Closely-held corporation.

Domicile  
Isidora Goyenechea 3356, 8° piso, Santiago, Chile.

Corporate objects  
In Regions I, II and III, the acquisition, production, storage, transport, distribution, transformation and trading of natural gas and other oil and fuel derivatives in general; provide services in manufacturing, sale of equipment and materials and the execution of works related to the above objects or required for their implementation and development; all other activities necessary or conducive to meeting the above objects.

Business  
Supply of gas.

Subscribed & paid capital (ThCh\$)  
1,526

Directors  
Rudolf Araneda Kauert  
Luis Cerda Ahumada  
Pedro De la Sotta Sánchez

Senior executive  
Alejandro Sáez Carreño  
General Manager

Commercial relations with Endesa Chile  
None.

## SAN ISIDRO

Name  
Compañía Eléctrica San Isidro S.A.

Type of company  
Closely-held corporation

Tax No.  
96.783.220-0

Domicile  
Santa Rosa 76, Santiago, Chile.

Corporate objects  
Generate, transport, distribute and supply electricity for which it may procure, acquire and benefit from the respective concessions, favors and rights.

Business  
Electricity generation.

Subscribed & paid capital (ThCh\$)  
130,047,401

Directors  
Alan Fischer Hill  
Alejandro García Chacón  
Pedro Gatica Kerr  
Humberto Espejo Paluz  
Ricardo Santibáñez Zamorano

Alternate directors  
Osvaldo Muñoz Díaz  
Carlo Carvallo Artigas  
Claudio Betti Pruzzo  
Rodrigo Naranjo Martorell  
Enrique Lozán Jiménez

Senior executives  
Claudio Iglesias Guillard  
General Manager  
(Regional Manager, Electricity Production, Endesa Chile)

Commercial relations with Endesa Chile  
San Isidro has a contract with Endesa Chile for the operation and maintenance of its plant and management and commercial services, and an energy and capacity sale contract

## SOCIEDAD PORTUARIA CENTRAL CARTAGENA S.A.

Name  
Sociedad Portuaria Central Cartagena S.A.

Type of company  
Corporation

Domicile  
Carrera 13 A N° 93-.66, piso 2 Bogotá, D.C. Colombia.

Corporate objects  
The company's main objects are 1. The investment, construction and maintenance of docks and public and private ports, their administration and operation, the development and operation of multipurpose ports consistent with the law; 2. Act as port operator in loading and unloading operations, mooring and casting off, permanence of docked ships or naval vessels in port, storage on docks or in ports and other services that are directly related to port activity, and allow the provision of services by other port operators. 3. Form partnerships with other port companies or holders of special permits as referred to in Article 4 of the 1991 Law 01, temporarily or permanently, aimed at enhancing the usage of commonly-used marine areas adjacent to the port through

works such as: clearing, dredging, landfill and oceanic engineering works, and provide the necessary common good services. 4. Promote the incorporation of other companies with any objects whatsoever, by a single act or subsequent subscription to operate anywhere in the country or abroad, participating in its capital or receiving in exchange the benefits of the incorporation process as a promoting entity. 5. Buy, sell or establish companies, subsidiaries or agents in Colombia or abroad, with any objects, participating in the capital by way of capital contributions or by receiving shares in exchange for technological input. 6. Buy, sell and lease personal goods and real estate. Buy, sell, import, export, acquire or procure for any reason whatsoever and use all types of goods and services. 8. Enter into purchasing, exchange, leasing, usufruct, and gratuitous loans and antichresis contracts over real estate property. 9. Give or receive from its parent shareholders, subsidiaries and third parties cash loans; enter into insurance, transportation, participation accounts, contracts with banking entities and/or financial institutions. 10. Direct participation, or as a partner, in the manufacturing, production, distribution, marketing and sales business of metal products, fuels, oils, lubricants, hydrocarbons and their derivatives, plastic, paper, cardboard, glass, rubber, or combinations thereof. 11. The management of receivables, securities, assets or liability loans, money, bonds, securities, stocks and quotas or shares in companies owned by this company's partners or by individual or legal-entity third parties. 12. Progress the studies and formalities needed for all of the above. 13. Develop brands, trade names, patents, inventions or any other intangible asset, provided they are akin to the main objects. 14. Transfer, accept, endorse, collect and pay all kinds of securities, negotiable instruments, shares, enforceable documents and others. 15. Participate in private and public tenders. 16. In the course of its business, the company may perform all acts and enter into all contracts that are considered desirable or necessary for the proper performance of its objects and are directly related to the object mentioned.

Business  
Port services.

Subscribed & paid capital (ThCh\$)  
1,571

Directors  
Fernando Gutiérrez Medina  
Juan Manuel Pardo  
Leonardo López Vergara

Alternate directors  
Gustavo Gómez Cerón  
Alba Lucía Salcedo  
Luís Fernando Salamanca

Senior executive  
Fernando Gutiérrez Medina  
General Manager

Commercial relations with Endesa Chile  
None.

**SOUTHERN CONE POWER ARGENTINA**

Name  
Southern Cone Power Argentina S.A.

Type of company  
Corporation.

Domicile  
Av. España 3301, Buenos Aires, Argentina.

Corporate objects  
Wholesale buying and selling of electricity produced by third parties and to be consumed by others. The company may also have shareholdings in companies engaged in electricity generation.

Business  
Investments.

Subscribed & paid capital (ThCh\$)  
2,086,965

Directors  
José María Hidalgo Martín Mateos  
José Miguel Granged Bruñen  
Roberto José Fagan

Alternate director  
Fernando Claudio Antognazza

Commercial relations with Endesa Chile  
None.

Subscribed & paid capital (ThCh\$)  
48,690

Directors  
Jorge Aníbal Rauber  
Milton Gustavo Tomás Pérez  
José Miguel Granged Bruñen  
Fernando Claudio Antognazza  
Adrián Salvatore  
José María Vásquez  
Gerardo Carlos Paz  
Mariana Schoua  
Jorge Ravlich

Alternate directors  
Gabriel Omar Ures  
Omar Ramiro Algacibur  
Juan Carlos Blanco  
Roberto José Fagan  
Leonardo Marinaro  
Leonardo Pablo Katz  
Patricio Testorelli  
Luis Agustín León Longobardo  
Sergio Raúl Sánchez  
Rigoberto Mejía Aravena

Senior executives  
Daniel Garrido  
General Manager  
Gustavo Manifiesto  
Óscar Zapiola  
Sergio Schmois

Commercial relations with Endesa Chile  
None.

Subscribed & paid capital (ThCh\$)  
48,695

Directors  
José María Vásquez  
Claudio O. Majul  
José Miguel Granged Bruñen  
Fernando Claudio Antognazza  
Omar Ramiro Algacibur  
Jorge Aníbal Rauber  
Gerardo Carlos Paz  
Mariana Patricia Schoua  
Jorge Ravlich

Alternate directors  
Juan Carlos Blanco  
Roberto José Fagan  
Adrián Gustavo Salvatore  
Leonardo Pablo Katz  
Milton Gustavo Tomás Pérez  
Luis Agustín León Longobardo  
Sergio Raúl Sánchez  
Rigoberto Orlando Mejía Aravena

Senior executives  
Claudio Omar Majul  
General Manager – Manager, Administration and Finance  
Fernando Rabita - Plant Operating Manager  
Guillermo Paillet - Commercial Manager

Commercial relations with Endesa Chile  
None.

**TESA**

Name  
Transportadora de Energía S.A.

Type of company  
Corporation.

Domicile  
Bartolomé Mitre N° 797, Piso 11, Buenos Aires, Argentina.

Corporate objects  
Provide transport service for high-voltage electricity, linked to both local and international electricity grids, consistent with current legislation, for which the company may participate in local and international tenders, become a licensee of local or international, high-voltage electricity transport public utilities, and perform all the operations required to fulfill these objects, including expressly, but not limited to, being a party to construction, operation and maintenance contracts for the initiation and/or expansion of electricity transmission lines, participate in the funding of projects directly or indirectly related

**TERMOELÉCTRICA BELGRANO**

Name  
Termoeléctrica Manuel Belgrano S.A.

Type of company  
Corporation.

Domicile  
Suipacha 268, Piso 12, Buenos Aires, Argentina.

Corporate objects  
The production of electricity and its block trading and, in particular, the management of equipment, construction, operation and maintenance of a thermal plant in compliance with the “Definitive Agreement for the Management and Operation of Projects toward the Re-adaptation of the Wholesale Electric Market (MEM) within the framework of SE Resolution N° 1427/2004”, approved by Resolution SE N° 1193/2005.

Business  
Electricity generation.

**TERMOELÉCTRICA SAN MARTÍN**

Name  
Termoeléctrica José de San Martín S.A.

Type of company  
Corporation.

Domicile  
Elvira Rawson de Dellepiane 150, piso 9, Buenos Aires, Argentina.

Corporate objects  
The production of electricity and its block trading and, in particular, the management of equipment, construction, operation and maintenance of a thermal plant in compliance with the “Definitive Agreement for the Management and Operation of Projects toward the Re-adaptation of the Wholesale Electric Market (MEM) within the framework of SE Resolution N° 1427/2004”, approved by virtue of Resolution SE N° 1193/2005.

Business  
Electricity generation.

to such ventures as a borrower and/or lender and/or guarantor and/or collateral provider, for which it can grant guarantees in favor of third parties. Expressly excluded are all those operations covered by the Financial Institutions Act or any other that resorts to public savings.

Business  
Electricity transmission.

Subscribed & paid capital (ThCh\$)  
3,967,132

Directors  
José María Hidalgo Martín-Mateos  
Guilherme Gomes Lencastre  
Arturo Pappalardo

Alternate directors  
José Venegas Maluenda  
(Regional Manager, Energy Management and Commercialization, Endesa Chile)  
Juan Carlos Blanco  
Roberto José Fagan

General Manager  
Arturo Pappalardo

Commercial relations with Endesa Chile  
None.

## TRANSQUILLOTA

Name  
Transmisora Eléctrica de Quillota Ltda.

Type of company  
Limited partnership

Tax No.  
77.017.930-0

Domicile  
Ruta 60, km 25, Lo Venecia, Quillota, 5th Region of Valparaiso.

Corporate objects  
Transportation, distribution and supply of electricity, for its own or third parties' account

Business  
Electricity transmission

Subscribed & paid capital  
Ch\$4,404,446

Representatives  
Juan Eduardo Vásquez Moya  
Gabriel Carvajal Menégoles  
Ricardo Santibañez Zamorano

Alternate representatives  
Eduardo Calderón Avilés  
Carlos Ferruz Bunster  
Ricardo Sáez Sánchez

Commercial relations with Endesa Chile.  
The company has contracts with Endesa Chile and San Isidro covering the use of transmissions systems, which allows them to transmit energy to the Central Interconnected Grid (SIC).

## TÚNEL EL MELÓN

Name  
Sociedad Concesionaria Túnel El Melón S.A.

Type of company  
Closely-held corporation.

Tax No.  
96.671.360-7

Domicile  
Santa Rosa 76, Santiago, Chile.

Corporate objects  
Execute, construct, preserve and operate the public works known as the Túnel El Melón and provide complementary services authorized by the Ministry of Public Works.

Business  
Public-works concession holder.

Subscribed & paid capital (ThCh\$)  
19,028,480

Directors  
Eduardo Escaffi Johnson  
Luis Larumbe Aragón  
(Mnager, Planning and Control, Endesa Chile)  
Sebastián Fernández Cox  
(Regional Manager, Energy Planning, Endesa Chile)

Senior executive  
Maximiliano Ruiz Ortíz  
General Manager

Commercial relations with Endesa Chile  
Túnel El Melón has a contract with Endesa Chile for the provision of services to the former on matters such as accounting, treasury, management, information technology, money desk, insurance, personnel, training, welfare, risk prevention and controller/audit services, among others.

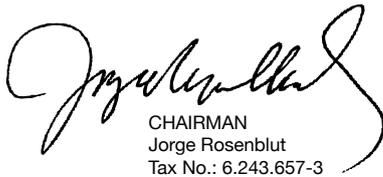
21

*declaration of responsibility*

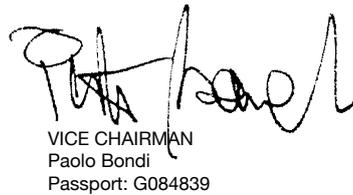


## Declaration of Responsibility

The Directors of Empresa Nacional de Electricidad S.A. and its chief executive, signatories of this statement, are responsible under oath for the veracity of all the information provided in this annual report, in accordance with General Rule N° 30 dated November 10, 1989 issued by the Superintendence for Securities & Insurance Companies (SVS)



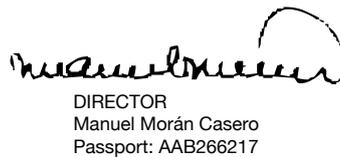
CHAIRMAN  
Jorge Rosenblut  
Tax No.: 6.243.657-3



VICE CHAIRMAN  
Paolo Bondi  
Passport: G084839



DIRECTOR  
Francesco Buresti  
Passport: F685628



DIRECTOR  
Manuel Morán Casero  
Passport: AAB266217



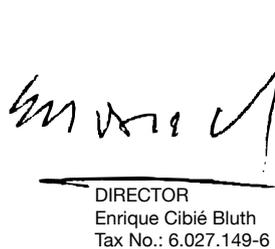
DIRECTOR  
Alfredo Arahuetes García  
Tax No.: 48.115.220 - 8



DIRECTOR  
Jaime Bauzá Bauzá  
Tax No.: 4.455.704-5



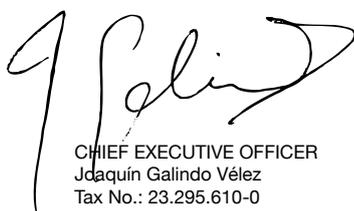
DIRECTOR  
Vittorio Corbo Lioi  
Tax No.: 4.965.604-1



DIRECTOR  
Enrique Cibié Bluth  
Tax No.: 6.027.149-6



DIRECTOR  
Felipe Lamarca Claro  
Tax No.: 4.779.125-1



CHIEF EXECUTIVE OFFICER  
Jaquín Galindo Vélez  
Tax No.: 23.295.610-0