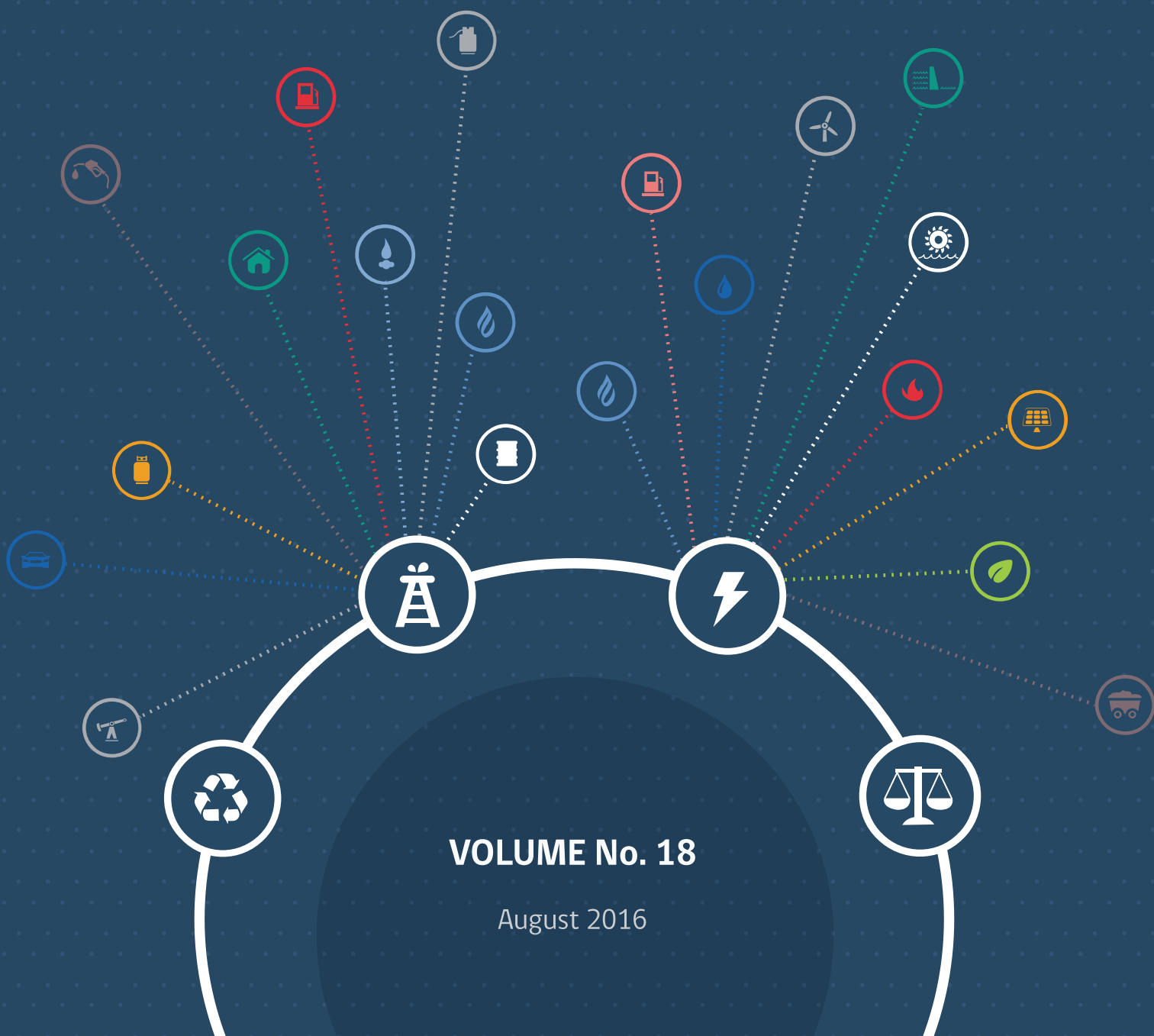


MONTHLY ENERGY SECTOR REPORT

NATIONAL ENERGY COMMISSION



VOLUME No. 18

August 2016

HIGHLIGHTS

During the last month, the energy sector has witnessed a series of milestones that reflect the hard work of both the National Energy Commission and the Ministry of Energy. The following are among the principal achievements:

Government makes historic power supply tender

A total of 84 domestic and foreign generators arrived on Wednesday July 27 to submit their financial and administrative proposals to participate in the bidding process offered 2015/01 Supply 12,430 GWh / year of energy and supply the electricity needs regulated customers Interconnected Systems SIC and SING for 20 years from 2021.

The Minister of Energy, Maximo Pacheco, said that "we are fulfilling our goal to shake up a market that was lethargic and had become accustomed to operating with few actors, like an exclusive club. The State has regained its coordinating role in the energy sector and today is able to harness the private impetus towards greater competition that will benefit families and SMEs with lower prices on account of light".

"With the introduction of these 84 offers have managed to attract a lot of competition and give confidence to investors, and also benefit households with a reduction in electricity bills by 2021," said Andres Romero, Executive Secretary of the Commission national Energy.

Meanwhile, Rodrigo Castillo, Executive Director of the Association of Electric Companies A.G. He stressed that "this is a historical record, is the largest tender we have done in our history".

This process-led by the CNE-considered the tender of 5 blocks supply, equivalent to about one third of current consumption of regulated customers Interconnected Systems SIC and SING.

Closed after the process of submitting corrections to administrative deals, unveiled the reserve price of 94 US \$ / MWh and the reserve margin of 2.5% of each block supply tendered.

Energy Minister launches project "Cuentas Claras"

A ballot electricity much easier to understand by the public, is the aim of the project "Cuentas Claras" developed by the Superintendency of Electricity and Fuels, and launched on July 7 in Puente Alto, by the Minister of Energy, Maximo Pacheco.

Among the most important aspects of the new ballot of light, highlight the increase in the size of the letter and simplifica-

tion of concepts.

During September, the office of the new ballots will begin in the Region of Arica and Parinacota, and is expected during December, the project is operating throughout the country.

Energy Minister launches new venture contest: Impacta

The Minister of Energy, Maximo Pacheco released on July 6th a new version of Impacta Energía; the venture energy program of the Government of Chile, focused on Public Innovation. For this occasion were invited innovators and entrepreneurs to participate with their ideas and build energy solutions for the future.

Impacta Energía -which is sponsored by the Ministry of Energy, the Laboratory of Government, and Ministry of Economy, Development and Tourism- aims to promote the best ideas related to access, saving and promotion of energy as a source for the national economy development.

Nominations will be open until August 23 and for more information on www.impactaenergia.cl.

Special Nominating Committee It is to choose Independent Electricity System Coordinator

On Friday 29 July the Special Nominating Committee, which shall elect the Board of the Independent Coordinator of the National Electric System, complying with the provisions of Law No. 20,936 established a new electricity transmission system was established.

In this first session, the Committee elected the Executive Secretary of the CNE, Andres Romero, as president of this instance.

The resolution also to regulate and allow you to start the tender, and their bases and the schedule was presented, and proceeded to review the profile of the candidates.

Deadline for applications is August 22, until 17 pm in the Office of Parts of the CNE. For more information on www.cne.cl.

SUMMARY

This report was prepared in August 2016 in order to provide energy information and statistics July 2016 .

The report's content has been organized into four chapters to facilitate analysis. These four chapters provide information about the electricity sector, international and domestic markets for oil and gas, the status and progress of environmental approvals for energy projects, and finally the main regulatory aspects affecting the sector during the month of July.

This publication contains official information from external sources as well as from the National Energy Commission (CNE).

To prepare the report, an average exchange rate of 657.57 CLP per USD observed during July 2016.

According to Exempt Resolution No. 600, there were 56 electricity generation projects under construction in the SIC and SING, equivalent to a capacity of 4,176 MW.

The installed capacity of the SIC in July was 16,410 MW and SING it was 4,089 MW, plus the installed capacity in the Aysén (SEA) and Magallanes (SEM) electricity systems. In aggregate, the four systems -including Easter Island and Los Lagos - reach up to an installed capacity of 20,674 MW.

Meanwhile, total electric power generation in the SIC during July was 4,634 GWh, and in the SING it reached 1,604 GWh. Therefore, the total generated was 6,237 GWh, 0.8% higher than in June 2015.

The maximum hourly demand recorded in the SIC and the SING in July were 7,606 MW and 2,392 MW, respectively. The maximum in the SIC was recorded on July 12th while the measurement in the SING corresponds to July 1st, 2016.

Regarding electricity rates, it is important to note that the average marginal cost in July in the SIC was 100.4 USD/MWh, -2.5% lower compared to the previous month, June 2016. In the SING meanwhile, the average marginal cost was 82.1 USD/MWh, -3.5% lower than the previous month.

It is worth to highlight the average market prices recorded in July in the SIC and SING which were 91.7 USD/MWh and 78.9 USD/MWh , respectively.

In terms of international fuel prices, the Brent crude price was 45.0 USD/bbl, -6.8% lower than the previous month. Meanwhile, the average price of WTI crude was 44.9 USD/bbl, and -7.9% lower than the previous month. The Henry Hub price (international natural gas price reference) increase 8.7% compared to June, with an average value of 2.79 USD/MMBtu. The average price of coal was 70.7 USD/ton, increasing about 3.6% over the previous month.

In terms of gasoline prices, those of 93-octane gasoline (unleaded) and diesel should be noted. In July the average domestic price of the former was 714 CLP/liter, while the average price of the latter was 469 CLP/liter. In terms of percentages, these represent a rise of 0.4% and 5.0% respectively in comparison to June 2016.

A total of 17 energy sector projects were submitted to the Environmental Impact Evaluation System (Sistema de Evaluación de Impacto Ambiental, SEIA): 15 were for electricity generation, 1 was for electricity transmission energy project and 1 was for oil and gas energy project. Meanwhile, those projects which are already being evaluated represent a total investment of USD 33,577 million. In addition, 8 projects related to the energy sector obtained favorable environmental qualification resolutions (Resolución de Calificación Ambiental, or RCA) in July, and of those, 5 were for electricity generation and 3 were for high-voltage electricity transmission line projects.

Finally, among the most important policy issues occurred during July, it highlights the publication in the Official Gazette on July 20th, 2016, the Law No. 20,936 which establishes a New Electricity Transmission System and Creates a New and Independent Coordinator for the National Electricity System. This structural change initiative aims to systematize a new regulatory frame suitable to the electricity transmission and which -along its main objectives- seeks to promote a long term strategic vision for its configuration strengthen technical and independent character of the institutions and lower electricity prices.

Also giving official start to the new institutions emanating from the aforementioned Law No. 20,936 and the establishment of the Independent Coordinator of the National Electric System highlights the enactment of Exempt Resolution No. 571 of July 26, 2016, approving Special rules on operation of the Nominating Committee and the procedure for the first election of the members of the Board of the Independent Coordinator of the National Electric System and its President.



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ELECTRICITY SECTOR

1 Electricity Generation Projects Under Construction

As indicated in Article 31 of the Node Price Setting Regulation (0586/2012), "installations under construction" are defined as generation units, transmission lines and electrical substations that have been granted the respective construction permits for civil works or have been granted the order to proceed in the fabrication and/or installation of the corresponding electrical or electromagnetic equipment for electricity generation, transmission or transformation. For more information about NCRE projects, please go to the [APPENDIX 1](#).

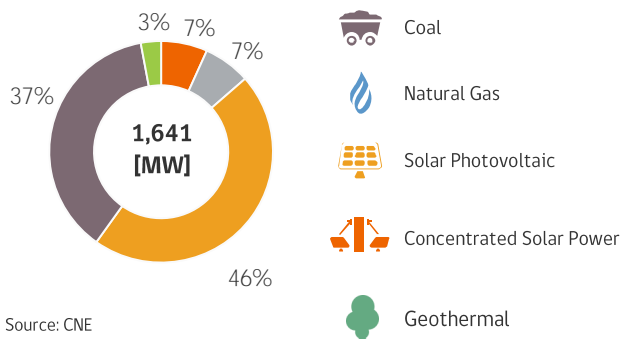
According to Exempt Resolution Num. 600, "Works under Construction Update and Report," as of August 04 th there were 24 power generation projects under construction in the SING. Together they represent capacity of 1,641 MW and are projected to begin operation between August 2016 and June 2018.

Projects under Construction in the SING

Category	Date	Project Name	Region	Technology	Capac. [MW]
NCRE	ago-16	Sierra Gorda	II Región	Wind	112
	ago-16	Bolero I	II Región	Solar Photovoltaic	42
	ago-16	Bolero II	II Región	Solar Photovoltaic	42
	ago-16	Bolero III	II Región	Solar Photovoltaic	21
	oct-16	Blue Sky 1	II Región	Solar Photovoltaic	52
	oct-16	Blue Sky 2	II Región	Solar Photovoltaic	34
	oct-16	Uribe Solar	II Región	Solar Photovoltaic	50
	oct-16	PV Cerro Dominador	II Región	Solar Photovoltaic	100
	oct-16	Bolero IV	II Región	Solar Photovoltaic	41
	dic-16	Cerro Pabellón	II Región	Geothermal	48
	ene-17	Arica Solar I	XV Región	Solar Photovoltaic	18
	ene-17	Arica Solar II	XV Región	Solar Photovoltaic	22
	mar-17	Quillagua I	II Región	Solar Photovoltaic	23
	jun-17	Cerro Dominador	II Región	Cogeneration	110
	jun-17	Pular	II Región	Solar Photovoltaic	29
	jun-17	Paruma	II Región	Solar Photovoltaic	21
	jun-17	Lascar I	II Región	Solar Photovoltaic	30
	jun-17	Lascar II	II Región	Solar Photovoltaic	35
	sep-17	Huatacondo	I Región	Solar Photovoltaic	98
	oct-17	Quillagua II	II Región	Solar Photovoltaic	27
	oct-17	Usya	II Región	Solar Photovoltaic	25
	jun-18	Quillagua III	II Región	Solar Photovoltaic	50
Thermoelectric	oct-16	Cochrane U2	II Región	Coal	236
	feb-18	IEM	II Región	Coal	375

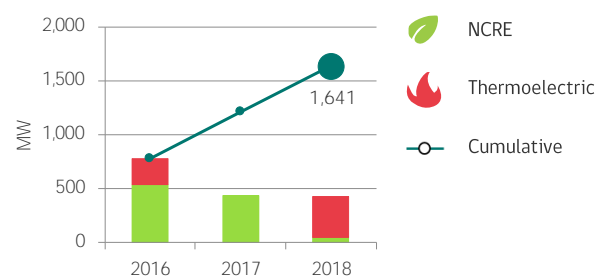
Source: CNE

Total under construction in the SING, by technology



Source: CNE

Projected operation start date, SING



Source: CNE



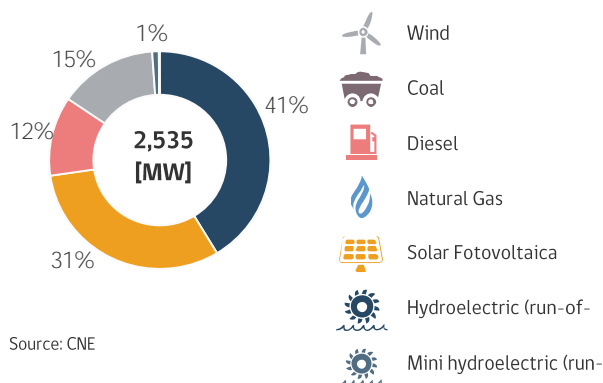
According to Exempt Resolution No. 600 , "Works under Construction Update and Report," as of August 04 there were **32** power generation projects under construction in the SIC. Together they represent capacity of 2,535 MW and are projected to begin operation between August 2016 and October 2020.

Projects under Construction in the SIC

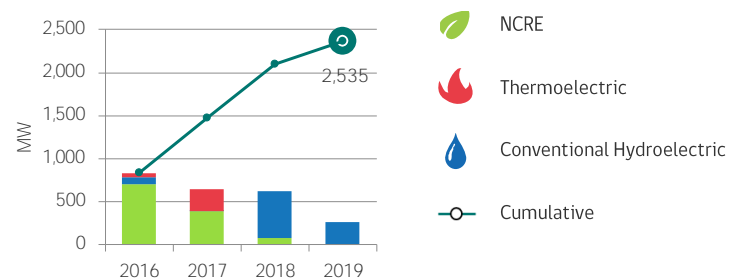
Category	Date	Project Name	Region	Technology	Capac. [MW]
NCRE	ago-16	La Montaña I	VII Región	Mini hydroelectric (run-of-river)	3
	ago-16	Río Colorado	VII Región	Mini hydroelectric (run-of-river)	15
	ago-16	Abasol	III Región	Solar Photovoltaic	62
	ago-16	Quilapilún	RM	Solar Photovoltaic	103
	ago-16	San Pedro II	X Región	Wind	65
	sep-16	El Romero	III Región	Solar Photovoltaic	196
	sep-16	San Juan I	III Región	Wind	33
	oct-16	Chaka I	III Región	Solar Photovoltaic	27
	oct-16	Chaka II	III Región	Solar Photovoltaic	23
	oct-16	San Juan II	III Región	Wind	30
	nov-16	San Juan III	III Región	Wind	30
	dic-16	El Pelicano	III Región	Solar Photovoltaic	100
	dic-16	San Juan IV	III Región	Wind	33
	ene-17	Guanaco Solar	III Región	Solar Photovoltaic	50
	ene-17	Valleland	III Región	Solar Photovoltaic	67
	ene-17	San Juan V	III Región	Wind	26
	ene-17	San Juan VI	III Región	Wind	33
	abr-17	Malgarida	III Región	Solar Photovoltaic	28
	abr-17	Las Nieves	IX Región	Mini hydroelectric (run-of-river)	7
	abr-17	Cabo Leones I	III Región	Wind	116
	ago-17	Divisadero	III Región	Solar Photovoltaic	65
	ago-18	Valle Solar	III Región	Solar Photovoltaic	74
Conventional Hydroelectric	ago-16	Ancoa	VII Región	Hydroelectric (run-of-river)	27
	sep-16	La Mina	VII Región	Hydroelectric (run-of-river)	34
	oct-18	Ñuble	VIII Región	Hydroelectric (run-of-river)	136
	dic-18	Los Cóndores	VII Región	Hydroelectric (run-of-river)	150
	dic-18	Las Lajas	RM	Hydroelectric (run-of-river)	267
	may-19	Alfalfal II	RM	Hydroelectric (run-of-river)	264
Thermoelectric	oct-20	San Pedro	XIV Región	Hydroelectric (run-of-river)	170
	ago-16	HBS GNL	VIII Región	NLG	4
	oct-16	Doña Carmen	V Región	Diesel	48
	jun-17	CTM-3*	II Región	Diesel	251

Source: CNE

Total under construction in the SIC, by technology



Projected operation start date, SIC

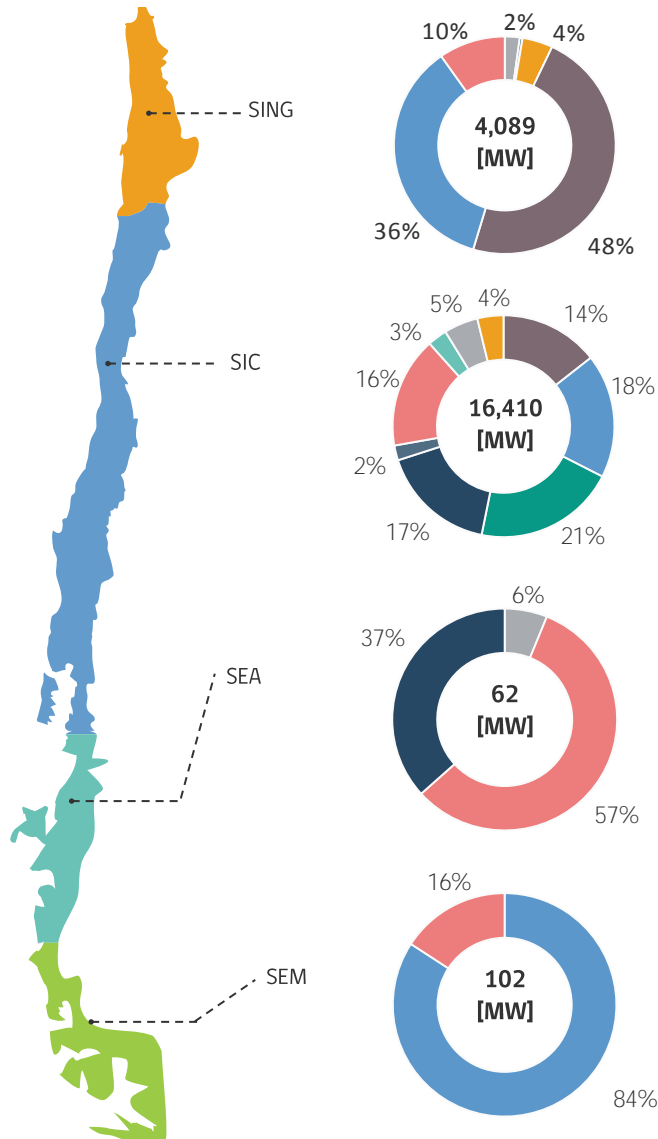




2 Installed Electricity Generation Capacity

The installed electricity generation capacity as of July 2016 was (*)20,674 MW. Of that, 16,410 MW (79.4%) corresponded to the SIC and 4,089 MW (19.8%) to the SING. The remaining 0,8% was distributed among the Aysén and Magallanes electricity systems. As of July, 57.7% the country's total installed capacity is represented by thermoelectric generation, 29.8% is conventional hydroelectric and 12.5% is NCRE. For more information about NCRE projects, please go to the [APPENDIX 1](#).

Installed Capacity by Technology



Source: CDEC-SIC / CDEC-SING and CNE

Installed capacity by system

System	Capacity [MW]	Capacity [%]
SING	4,089	19.8%
SIC	16,410	79.4%
SEA	62	0.3%
SEM	102	0.5%

Source: CDEC-SIC / CDEC-SING and CNE



Power generation plants in testing phase

In addition to the total installed capacity, there are 37 synchronous power generation plants with their respective electricity systems that have not yet been approved for dispatch by the CDEC (in the testing phase). Of these, 31 plants are in the SIC (with a total capacity of 817.0 MW) and 6 are in the SING (with a total capacity of 812.8 MW). Thus, there is a total of 1629.7 MW in the testing phase.

* The total installed capacity also includes Los Lagos (6 MW) and Easter Island (4 MW) systems.

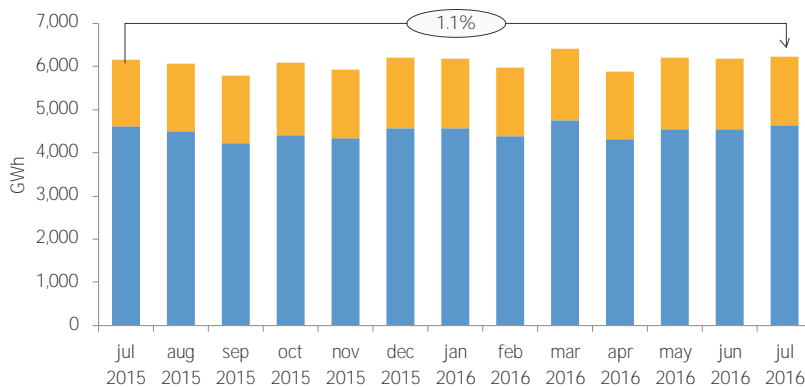
*Is not considered in this total the Natural Gas power plant, located in Salta (Argentina); connected to the SING (380 MW)



3 Electricity Generation

Power generation in the SIC during July 2016 reached a total of 4,634 GWh, which were classified as 61% thermoelectric, 25% conventional hydroelectric and 14% NCRE. In the SING, 1,604 GWh of electric power were generated, 95% from thermoelectric plants and 5% from NCRE. Together the systems reached a total of 6,237 GWh, a increase of 0.8% over the previous month and increase 1.1% in comparison to July 2015. In resume, if we sort by generation category, we distinguish: 12.0% NCRE, 18.6% hydroelectric and 69.5% thermoelectric generation.

Evolution of gross electric power generation, SIC-SING



Source: CDEC-SIC / CDEC-SING

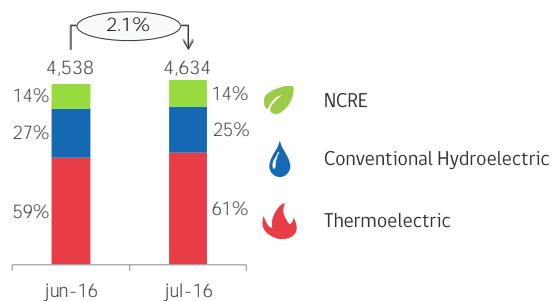
Generation variation, by system

Energy Generation [GWh]		Monthly		Annual	
● Total	6,237	▲ 0.8%	▲ 1.1%		
● SIC	4,634	▲ 2.1%	▲ 0.3%		
● SING	1,604	▼ -2.7%	▲ 3.6%		

Source: CDEC-SIC / CDEC-SING

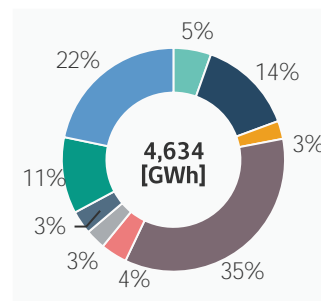
Following is a breakdown of power generation by technology in the SIC and SING.

Monthly Variation in Generation, SIC



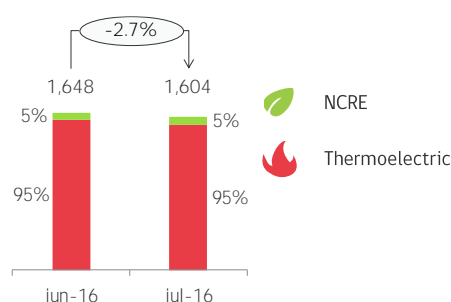
Source: CDEC-SIC

SIC generation by source



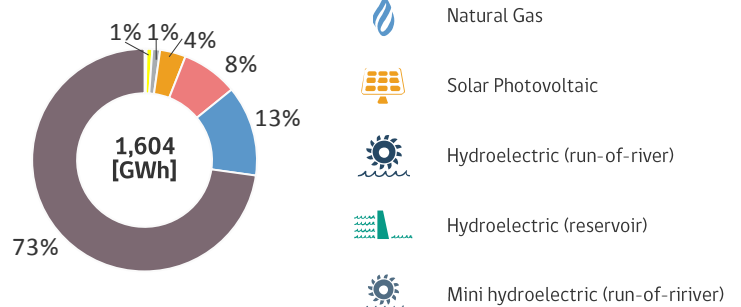
Source: CDEC-SIC

Monthly Variation in Generation, SING



Source: CDEC-SIC

SING generation by source



Source: CDEC-SIC

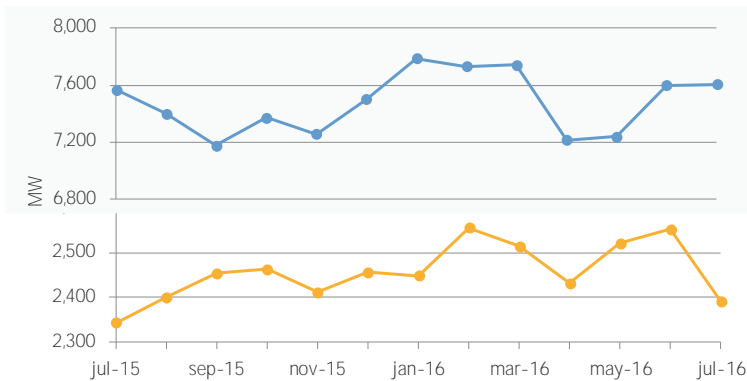
For more information about NCRE projects, please go to the [APPENDIX 1](#).



4 Maximum Hourly Demand

In July 2016, The maximum hourly demand recorded in the SIC was 7,606 MW on July 12th, 0.1% higher than the previous month and 0.5% over the same month of 2015. In the SING, the maximum hourly demand recorded on July 1st was 2,392 MW, which represented a -6.3% lower over the maximum hourly demand recorded in the previous month and 2.0% higher over the same month of 2015.

Evolution of maximum hourly demand, SIC - SING



Source: CDEC - SIC / CDEC - SING

Variation in maximum hourly demand, by system

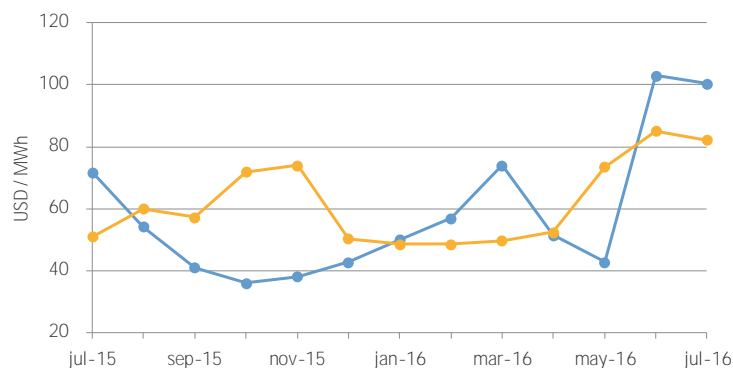
System	[MW]	Monthly	Annual
● SIC	7,606	▲ 0.1%	▲ 0.5%
● SING	2,392	▼ -6.3%	▲ 2.0%

Source: CDEC - SIC / CDEC - SING

5 Marginal Costs

The marginal cost is the variable cost of the most expensive generation unit operating at a specific point in time. In this case, the Quillota 220 kV busbar was used as the reference to obtain the marginal cost in the SIC while the Crucero 220 kV busbar was used as the reference in the SING. The value given for each system corresponds to the monthly average of hourly marginal costs. In July, the average marginal cost in the SIC was 100.4 USD/MWh, -2.5% lower than the previous month and 40.1% higher compared to July 2015. In the SING, the average marginal cost was 82.1 USD/MWh, -3.5% less than the previous month and 61.5% more the same month of 2015.

Evolution of marginal costs, SIC - SING



Source: CDEC - SIC / CDEC - SING

Variation in marginal costs, SIC - SING

System	[USD/MWh]	Monthly	Annual
● Quillota 220	100.4	▼ -2.5%	▲ 40.1%
● Crucero 220 kV	82.1	▼ -3.5%	▲ 61.5%

Source: CDEC - SIC / CDEC - SING

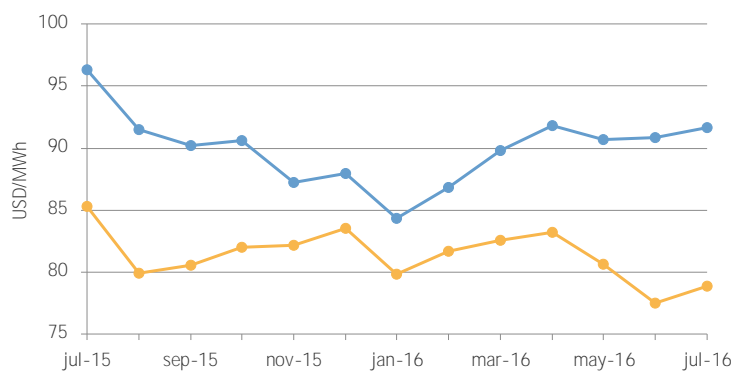


6 Average Market Price

The average market price (AMP) for each system is based on the average price of free customer contracts and long-term supply contracts held by distribution companies as applicable, reported to the National Energy Commission by the distribution companies operating in the Norte Grande Interconnected System and the Central Interconnected System. The AMP calculation takes into consideration a four-month window ending with the third month prior to the AMP publication date.

The AMP recorded in July for the SIC was 91.7 USD/MWh, 0.9% higher than the previous month and -4.8% lower than July 2015. The AMP in the SING was 78.9 USD/MWh, 1.8% more than the previous month and -7.5% less than the same month in 2015.

Evolution of market prices, SIC – SING



Source: CDEC – SIC / CDEC – SING

Variation in average market prices, by system

System	[USD/MWh]*	Monthly	Annual
SIC	91.7	▲ 0.9%	▼ -4.8%
SING	78.9	▲ 1.8%	▼ -7.5%

Source: CDEC – SIC / CDEC – SING

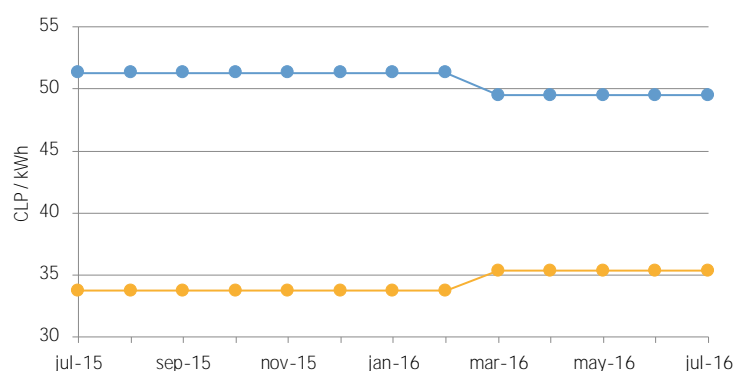
7 Short-term Node Prices

Short-term node prices are set twice each year, in May and October. These prices may be indexed monthly, depending on the conditions established in the twice-a-year decree that sets node prices for electricity supply. The prices are calculated by the National Energy Commission (CNE) which submits a technical report with the results to the Energy Ministry. The ministry then proceeds to set the prices via a decree published in the Official Bulletin.

Node Energy Price

The node energy price is the average over time of the marginal cost of energy in the electricity system operating at the minimum, updated operation and rationing cost. The node energy price in the SIC in July was 49.5 CLP/kWh, -3.5% decrease over the same month of 2015. In the SING, the node energy price in July was 35.3 CLP/kWh, 4.7% up over the same month of 2015.

Evolution of node energy prices, SIC – SING



Source: CNE

Variation in node energy prices, by system

System	CLP/kWh	Monthly	Annual
PNE SIC	49.5	▬ 0.0%	▼ -3.5%
PNE SING	35.3	▬ 0.0%	▲ 4.7%

Source: CNE

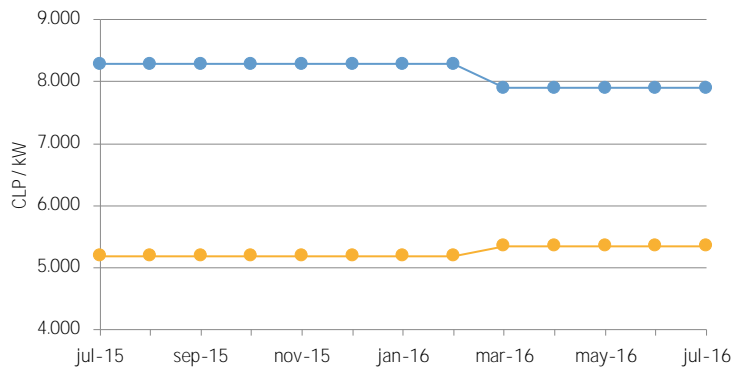
* Real value at the publish date, according to the CPI (consumer price index) of second previous month at the indicated date and the observed dollar of the previous month of the publish report date.



Node Power Price

The node power price is the annual marginal cost of increasing the installed capacity of the electricity system taking into consideration the most economic generation plants, required to supply additional capacity during the annual maximum hourly demand of the electricity system, increased by a percentage equal to the theoretical capacity reserve margin of the system. The node power price in the SIC in July was 7,902 CLP/kW, -4.6% decrease over the same month of 2015. In the SING, the node power price was 5,346 CLP/kW, 3.1% increase over the same month of 2015.

Evolution of node power price, SIC - SING



Source: CNE

Variation in node power price

System	CLP/kW	Monthly	Annual
● PNP SIC	7,902	0.0%	-4.6%
● PNP SING	5,346	0.0%	3.1%

Source: CNE

8 Node Price in Medium-size Systems

Below we present the node energy price and node power price in medium-size systems for July del 2016. These node prices are applied to energy supply at the withdrawal busbars indicated in the following tables:

Variation in node energy price, medium-size systems

Busbar	[USD/MWh]	Index	Annual
Pta Arenas	66	0.0%	5.2%
Tres Puentes	66	0.0%	5.2%
Pto Natales	97	0.0%	5.9%
Porvenir	90	0.0%	5.7%
Pto Williams	265	0.0%	-9.6%
Aysén 23	81	0.0%	-8.8%
Chacab23	81	0.0%	-8.9%
Mañi23	81	0.0%	-8.8%
Ñire33	81	0.0%	-8.8%
Tehuel23	81	0.0%	-8.7%
Palena	90	0.0%	5.8%
G.Carrera	100	0.0%	-15.5%
Cochamó	155	0.0%	-18.7%
Hornopirén	148	0.0%	-9.9%

Source: CNE

Variation in node power price, medium-size systems

Busbar	[USD/MW-mth]	Index	Annual
Pta Arenas	15,955	0.0%	8.4%
Tres Puentes	15,955	0.0%	8.4%
Pto Natales	8,937	0.0%	7.1%
Porvenir	11,244	0.0%	6.3%
Pto Williams	21,263	0.0%	5.2%
Aysén 23	11,705	0.0%	6.5%
Chacab23	11,705	0.0%	6.5%
Mañi23	11,705	0.0%	6.5%
Ñire33	11,705	0.0%	6.5%
Tehuel23	11,705	0.0%	6.5%
Palena	16,550	0.0%	6.1%
G.Carrera	22,595	0.0%	5.2%
Cochamó	22,280	0.0%	5.2%
Hornopirén	14,164	0.0%	6.4%

Source: CNE

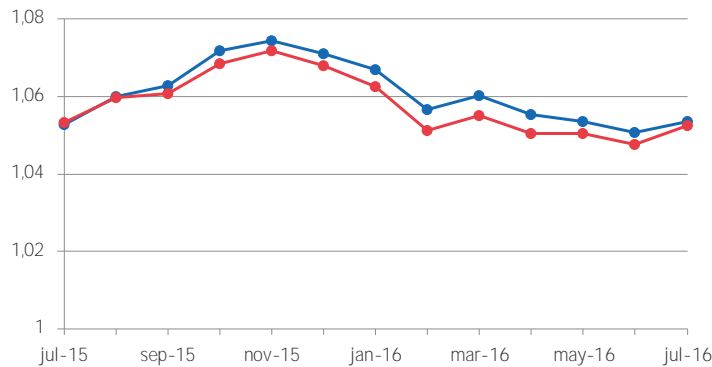


9 Evolution of Variable Distribution Cost Indexes

The distribution added value (DAV)* is set every four years by the Energy Ministry, based on a technical report prepared by the CNE, and corresponds to the average cost of investment, administration, maintenance and operation of electricity distribution networks calculated for an efficient model company operating in Chile. The DAV has a fixed component and a variable component, both of which were established by Article 182 of the General Electrical Services Law and are indexed monthly. Below we provide the evolution of the indexator of the variable component both for high and low voltage for July del 2016.

For more information about this, please go to the [Decreto N°1T/2012 Proceso de Fijación de Tarifas de Distribución 2012-2016](#).

Evolution of Indexes



Source: CNE

Variation in Indexes

System	Index	Monthly	Annual
CDAT	1.054	0.3%	0.1%
CDBT	1.052	0.5%	-0.1%

Source: CNE

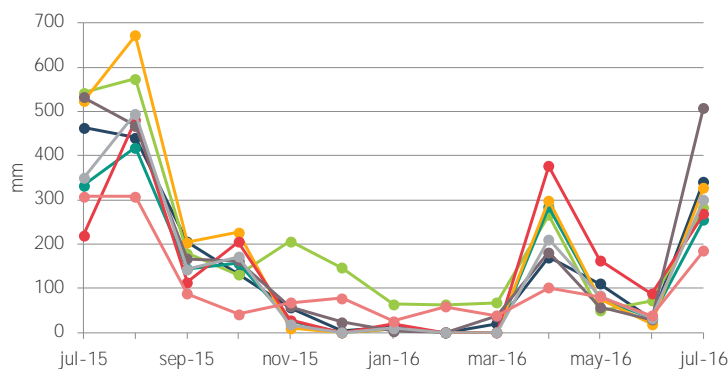
10 Hydrological Statistics

Because of the hydro-thermal nature of the Central Interconnected System, which features large hydroelectric (reservoir) plants with for regulation in different periods of time and thermal plants (as well as other technologies), the use of reservoir water must be optimized in order to minimize the total cost of supplying the system. For this reason, we provide information below from monitoring and recording the important variables associated with hydrology, such as rainfall, and the operational status of infrastructure of the hydroelectric plants in relation to the respective reservoir levels and volumes.

Rainfall Statistics

The monthly rainfall statistics published by CDEC-SIC and updated as of July 2016 are shown below for the main measurement locations.

Evolution of Annual Rainfall



Source: CDEC-SIC

Variation in Annual Rainfall

Reservoir	[mm]	Monthly	Annual
Abanico	342	>100%	-26%
Canutillar	281	>100%	-48%
Cipreses	255	>100%	-23%
Colbún	327	>100%	-37%
Otros (**)	269	>100%	22%
Pangue	509	>100%	-4%
Pehuenche	300	>100%	-14%
Pilmaiquén	185	>100%	-40%
Overall total	2,467	>100%	-25%

(*) The relative weight in a type BT1a account with a monthly consumption of 150kWh is 26.97% in the SIC and SING 22.95%.

(**) Other: Sauzal, Cypress, Molles, Rapel.

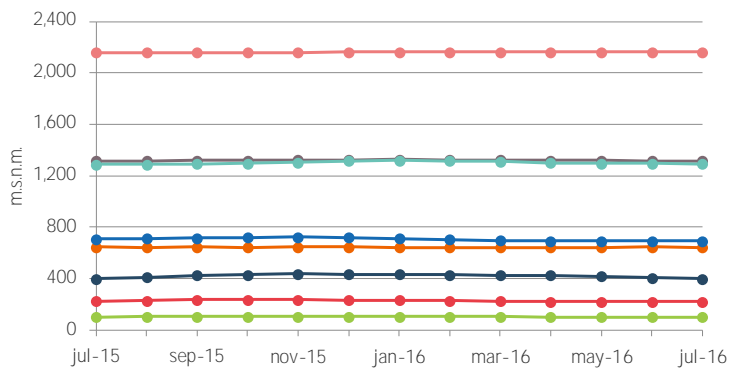
n/a : Not available



Reservoir, Lake and Lagoon Levels

According to information submitted by the CDEC-SIC, in July the final levels were found for the following reservoirs, lakes and lagoons:

Evolution of Reservoir Levels



Source: CDEC-SIC

Variation in Reservoir Levels

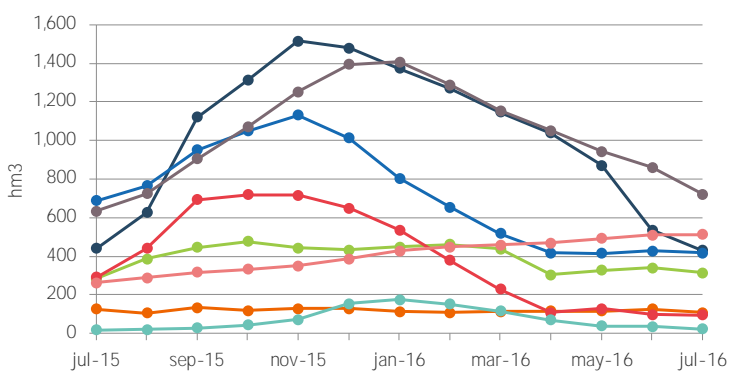
Reservoir	[m.s.n.m.]	Monthly	Annual
Embalse Colbún	400	▼ -1.4%	▼ -0.2%
Embalse El Melado	641	▼ -0.7%	▼ -0.7%
Embalse Ralco	692	▼ -0.1%	▼ -2.1%
Embalse Rapel	102	▼ -0.4%	▲ 0.5%
Lago Chapo	222	▬ 0.0%	▼ -1.9%
Lago Laja	1,315	▼ -0.2%	▲ 0.1%
Laguna El Maule	2,163	▬ 0.0%	▲ 0.2%
Laguna La Invernada	1,290	▼ -0.3%	▲ 0.1%

Source: CDEC-SIC

Reservoir, Lake and Lagoon Volumes

Based on levels reported by the CDEC-SIC for volumes of water stored in the largest reservoirs, lakes and lagoons, considering the characteristics of each one as of July 2016.

Evolution of Reservoir Volume



Source: CDEC-SIC

Variation in Reservoir Volume

Reservoir	[hm3]	Monthly	Annual
Embalse Colbún	535	▼ -19.8%	▼ -2.8%
Embalse El Melado	126	▼ -14.5%	▼ -13.8%
Embalse Ralco	426	▼ -2.3%	▼ -39.4%
Embalse Rapel	340	▼ -7.9%	▲ 10.9%
Lago Chapo	97	▼ -1.9%	▼ -67.2%
Lago Laja	862	▼ -16.1%	▲ 13.9%
Laguna El Maule	511	▲ 0.1%	▲ 95.3%
Laguna La Invernada	36	▼ -35.5%	▲ 23.9%

Source: CDEC-SIC

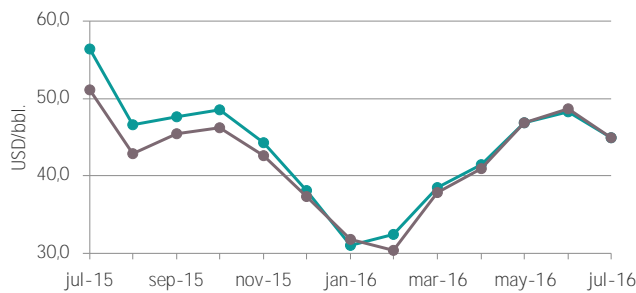


OIL AND GAS SECTOR

1 International Fuel Market Prices

The following information details the moving year evolution of the West Texas Intermediate (WTI) crude oil price index, which is used as a reference in the U.S. market, along with the BRENT oil price index which reflects oil prices for European markets. In July 2016 WTI oil prices was 44.9 USD/bbl., -7.9% decrease from the previous month and -12.2% decrease from the same month of 2015. Meanwhile, the average BRENT oil prices was 45.0 USD/bbl., -6.8% lower than previous month and -20.3% lower from the same month of 2015.

Evolution of BRENT and WTI Oil Prices



Source: CNE, based on data from Argus Media Inc.

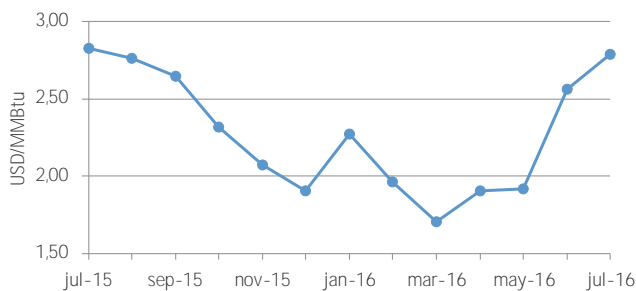
Crude Oil Variation (USD/bbl.)

Index	USD/bbl.	Monthly	Annual
BRENT DTD	45.0	-6.8%	-20.3%
WTI	44.9	-7.9%	-12.2%

Source: CNE, based on data from Argus Media Inc.

The following information details the evolution of the Henry Hub (Louisiana) price index, which serves as a reference for liquefied natural gas (LNG) imports to Chile. In July 2016, Henry Hub averaged 2.79 USD/MMBtu, 8.7% increase from previous month and -1.3% decrease from the same month of 2015.

Evolution of Natural Gas Price (Henry)



Source: CNE, based on data from the Daily Gas Price Index, NGI Intelligence

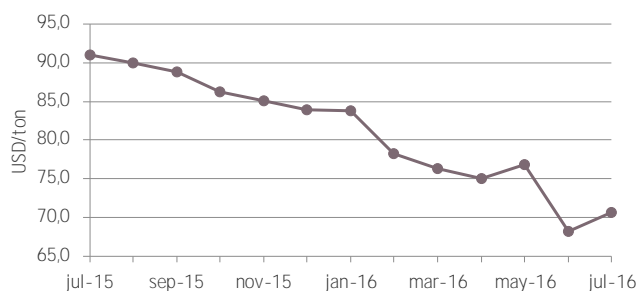
Natural Gas Variation (Henry Hub)

Index	USD/MMBtu	Monthly	Annual
HENRY HUB SPOT	2.79	8.7%	-1.3%

Source: CNE, based on data from the Daily Gas Price Index, NGI Intelligence

The following information details the evolution of the price of EQ 7000 steam coal kCal/kg which in July 2016 averaged a price of 70.7 USD/ton, representing 3.6% decrease over the previous month and -22.3% from the same month of 2015.

Evolution of EQ 7000 Steam Coal kCal/kg



Source: CNE, based on data from Platts Coal Trader International

Variation in EQ 7000 Steam Coal kCal/kg

Index	USD/ton	Monthly	Annual
THERMAL COAL EQ. 7.000 kCal/kg	70.7	3.6%	-22.3%

Source: CNE, based on data from Platts Coal Trader International

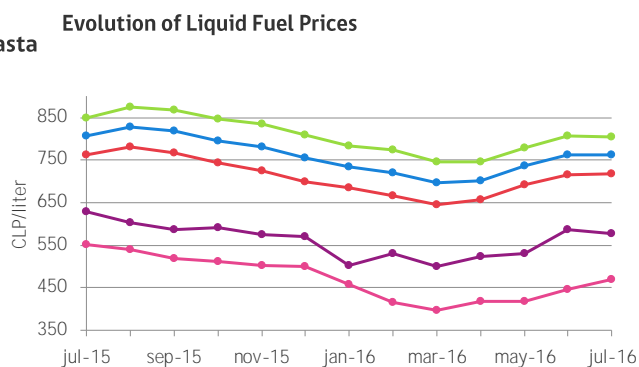


2 Domestic Liquid Fuel Prices

The following information details the evolution of different types of petroleum-derived liquid fuels sold or commercialized at gas stations (93-, 95-, and 97-octane unleaded gas, diesel, household kerosene and diesel oil) during the last 12 months, along with the average monthly price in last month for the cities of Antofagasta, Concepción, Puerto Montt and the Santiago Metropolitan Region.

The information presented is prepared by the National Energy Commission which, as part of its legal functions and powers, developed the Online Information System of Gas Station Fuel Prices, www.bencinaenlinea.cl

Antofagasta



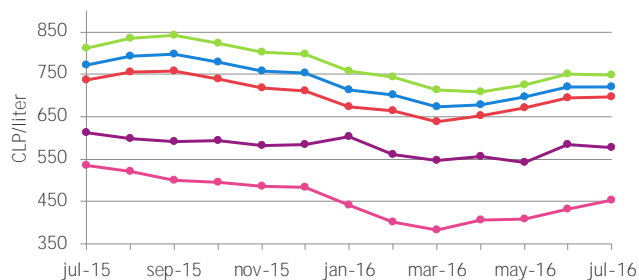
Source: CNE — Online Information System of Gas Station Fuel Prices

Variation of Liquid Fuel Prices

Fuel Type	CLP/liter	Monthly	Annual
Gasoline 93 SP	719	0.4%	-5.7%
Gasoline 95 SP	762	0.0%	-5.5%
Gasoline 97 SP	804	-0.3%	-5.3%
Kerosene	577	-1.5%	-8.3%
Diesel	469	5.1%	-15.2%

Source: CNE — Online Information System of Gas Station Fuel Prices

Santiago Metropolitan

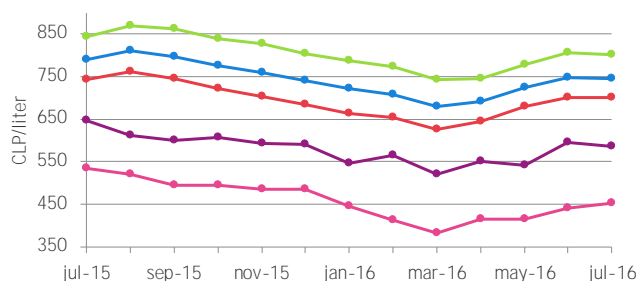


Source: CNE — Online Information System of Gas Station Fuel Prices

Fuel Type	CLP/liter	Monthly	Annual
Gasoline 93 SP	698	0.5%	-5.1%
Gasoline 95 SP	720	0.0%	-6.7%
Gasoline 97 SP	747	-0.5%	-8.0%
Kerosene	578	-0.9%	-5.8%
Diesel	454	5.3%	-15.3%

Source: CNE — Online Information System of Gas Station Fuel Prices

Valparaíso



Source: CNE — Online Information System of Gas Station Fuel Prices

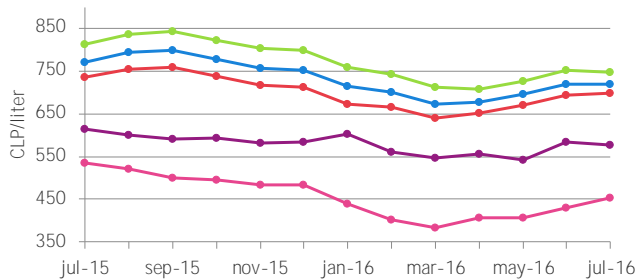
Fuel Type	CLP/liter	Monthly	Annual
Gasoline 93 SP	700	-0.2%	-5.9%
Gasoline 95 SP	746	-0.3%	-5.4%
Gasoline 97 SP	801	-0.5%	-5.0%
Kerosene	585	-1.6%	-9.5%
Diesel	452	2.8%	-15.4%

Source: CNE — Online Information System of Gas Station Fuel Prices



Evolution of Liquid Fuel Prices

Concepción



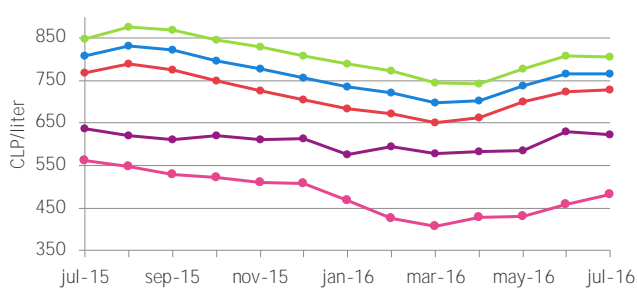
Source: CNE — Online Information System of Gas Station Fuel Prices

Variation of Liquid Fuel Prices

Fuel Type	CLP/liter	Monthly	Annual
Gasoline 93 SP	714	0.5%	-5.3%
Gasoline 95 SP	754	0.1%	-5.8%
Gasoline 97 SP	796	-0.2%	-4.6%
Kerosene	587	-0.8%	-5.0%
Diesel	468	5.3%	-16.2%

Source: CNE — Online Information System of Gas Station Fuel Prices

Puerto Montt



Source: CNE — Online Information System of Gas Station Fuel Prices

Fuel Type	CLP/liter	Monthly	Annual
Gasoline 93 SP	727	0.4%	-5.3%
Gasoline 95 SP	766	0.1%	-5.1%
Gasoline 97 SP	805	-0.2%	-5.0%
Kerosene	622	-1.1%	-2.4%
Diesel	482	5.2%	-14.2%

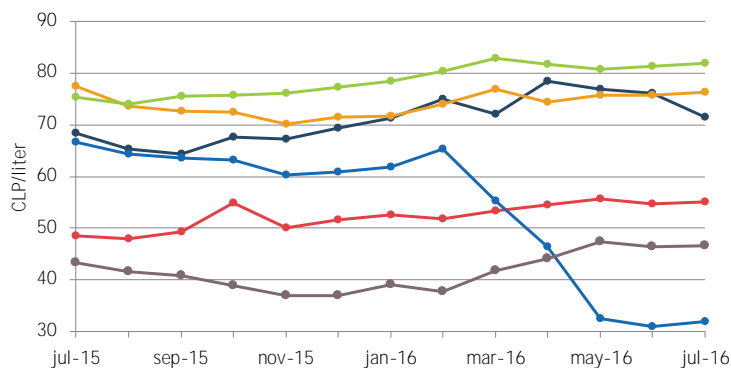
Source: CNE — Online Information System of Gas Station Fuel Prices

3 Fuel Gross Margins

The retail sales price of fuels is structured as follows: sales price at the refinery, sales margin and taxes (VAT and specific tax). The following information shows the evolution of the sales margin for 93-octane gas and diesel in the 5th, 6th, 7th, 8th, 12th and Santiago Metropolitan regions.

93-Octane Gasoline

Evolution of Gross Sales Margin



Source: CNE

Variation in Gross Sales Margin

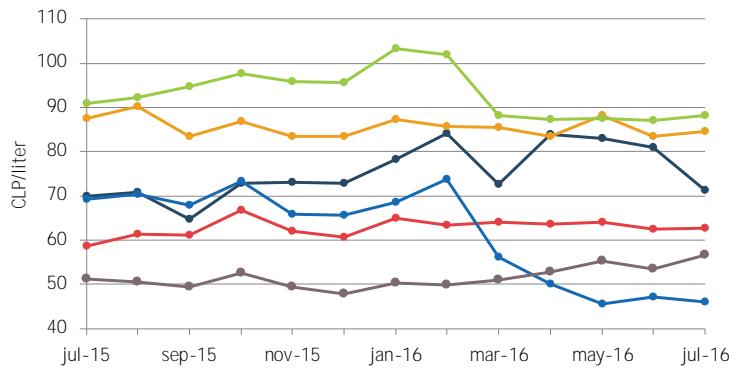
93-Octane Gas	CLP/liter	Monthly	Annual
5th Region	72	-6.0%	4.7%
6th Region	76	0.9%	-1.5%
7th Region	32	3.0%	-52.4%
8th Region	82	0.7%	8.7%
Santiago Metropolitana	55	0.7%	13.6%
12th Region	47	0.7%	7.7%

Source: CNE



Diesel

Evolution of Gross Sales Margin



Source: CNE

Variation in Gross Sales Margin

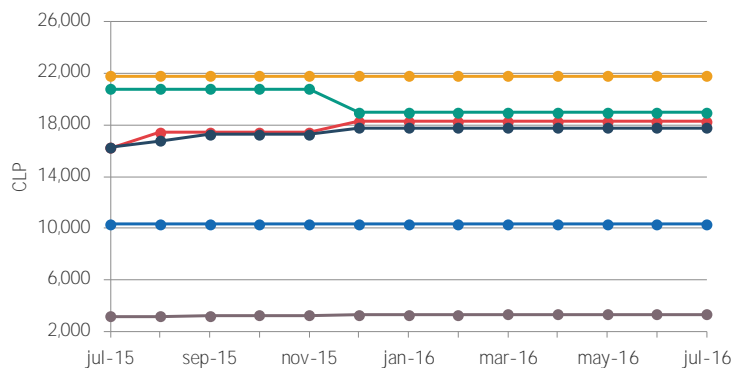
Diesel Oil	CLP/liter	Monthly	Annual
5th Region	71	-11.8%	2.2%
6th Region	85	1.4%	-3.5%
7th Region	46	-2.4%	-33.5%
8th Region	88	1.3%	-3.0%
Santiago Metropolitana	63	0.4%	6.9%
12th Region	57	6.1%	10.6%

Source: CNE

4 Domestic Prices of Network Gas Supplied through Concessions

The following information shows the price based on the energy equivalence of natural gas, city gas or propane air, whichever is applicable, distributed to the end consumer as network gas under concession equivalent to 15-kg cylinders of liquefied petroleum gas. This price also includes fixed costs and meter rental, charged by the network gas distribution companies when applicable.

Evolution of Network Gas Prices



Source: CNE — Online Gas Price System

Variation in Network Gas Prices

Company (Region)	CLP	Monthly	Annual
Lipigas (2th)	10.312	0.0%	0.0%
Gasvalpo (5th)	18.289	0.0%	12.6%
Metrogas (Metropolitana)	17.787	0.0%	9.3%
Gassur (8th)	18.979	0.0%	-8.7%
Intergas (8th)	21.792	0.0%	0.0%
Gasco Magallanes (9th)	3.301	-0.1%	5.0%

Source: CNE — Online Gas Price System

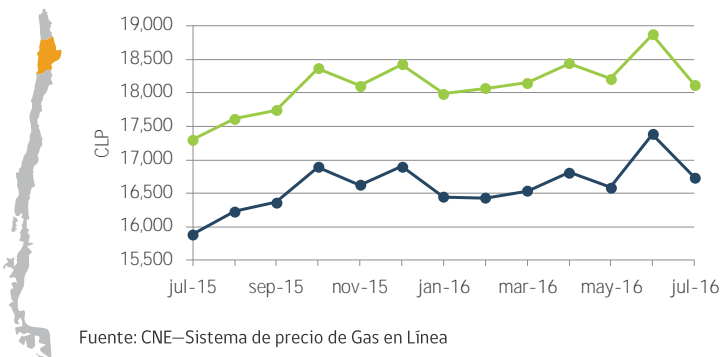


5 Domestic Prices of Bottled Liquefied Petroleum Gas

Bottled LPG is liquefied gas fuel, i.e., propane and butane and their blends (with a maximum 30% of butane). The fuel is compressed for bottling in cylinders of varying sizes that are sold to end users for use in heaters, stoves and water heaters/boilers. The cylinders on the local market have a capacity of 2 kg, 5 kg, 11 kg, 15 kg and 45 kg. They are also sold according to quality; one is sold as normal or regular and the other as catalytic, a category required by some heating appliances that only use a fuel with a low content of olefins, diolefins and sulfur. The information below shows the evolution of the average price of bottled LPG in 15-kg cylinders for the cities of Antofagasta, Concepción, Puerto Montt and the Santiago Metropolitan Region.

Evolution of Bottled LPG Prices

Antofagasta

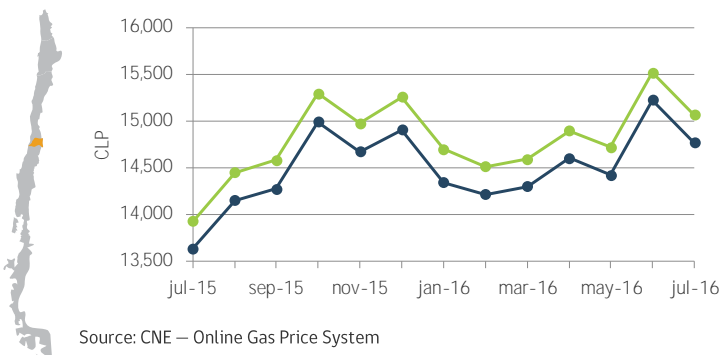


Variation in Bottled LPG Prices

Type	CLP	Monthly	Yearly
Catalytic	18,125	▼ -4.0%	▲ 4.7%
Regular	16,733	▼ -3.7%	▲ 5.3%

Fuente: CNE—Sistema de precio de Gas en Línea

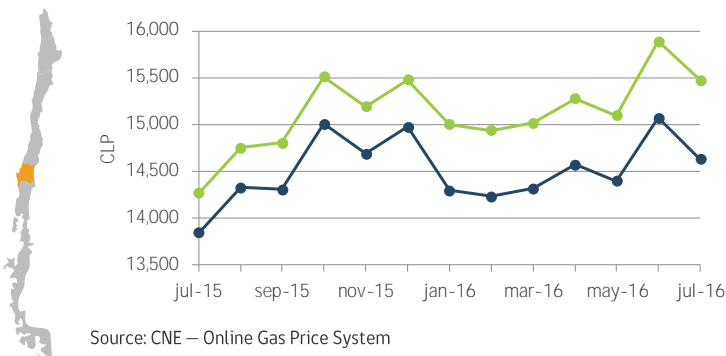
Santiago Metropolitan



Type	CLP	Monthly	Yearly
Catalytic	15,069	▼ -2.9%	▲ 8.2%
Regular	14,774	▼ -3.0%	▲ 8.3%

Source: CNE — Online Gas Price System

Concepción



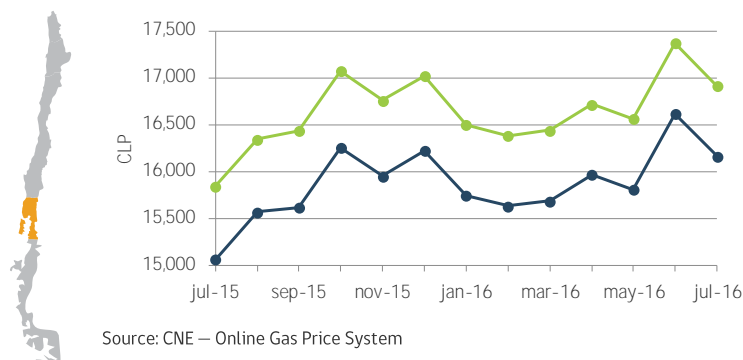
Type	CLP	Monthly	Yearly
Catalytic	15,480	▼ -2.6%	▲ 8.5%
Regular	14,633	▼ -2.9%	▲ 5.7%

Source: CNE — Online Gas Price System



Evolution of Bottled LPG Prices

Puerto Montt



Variation in Bottled LPG Prices

Type	CLP	Monthly	Yearly
Catalytic	16,917	▼ -2.6%	▲ 6.8%
Regular	16,163	▼ -2.7%	▲ 7.3%

Source: CNE — Online Gas Price System

6 Fuel imports and exports

Information on imports and exports of primary and secondary fuels corresponds to June 2015 given that the official information source has a two-month time lag. The information on imports mainly applies to coal, crude oil, diesel and natural gas, equivalent to more than 80.0% of total national imports (in tons).

The total variation of imports registered a increase of 5.0% over the previous month and decrease of -11.4% compared to June, 2015. Meanwhile, the total change in exports recorded a decrease of -44.3% over the previous month. While, the main fuel exported during the month of June was Coal, which represented about 72.7% of total exports in tons.

Imports of the main primary fuels during the month of June were: coal from Colombia, United States, Australia and Canada; crude oil from Brazil, Ecuador and Colombia; diesel from the United States and Japan; and liquefied natural gas bought from Trinidad and Tobago, France and United States.

In the other hand, during June, the exports of diesel and gasoline recorded as country of destination Bolivia and Argentina; and the main fuel exported was Coal, mainly sent to India.

Here are the details for each of the fuels with percentage changes and countries of origin / destination.

Variation in Imports During the Period

Fuel	[Thous-Tons]	Monthly	Annual
Coal	968	▲ 10.9%	▼ -14.5%
Crude Oil	588	▼ -25.4%	▼ -33.9%
Diesel Oil	528	▲ 31.9%	▲ 26.1%
Natural Gas	378	▲ 33.2%	▲ 11.3%
Gasoline	31	▲ >100%	▲ >100%
LPG	81	▼ -28.6%	▼ -42.2%
Household Kerosene	30.4	▲ 60.3%	▲ 37.0%
Overall total	2,605	▲ 5.0%	▼ -11.4%

Source: Aduana by COMEX (www.comexplusccs.cl)

Variation in Exports During the Period

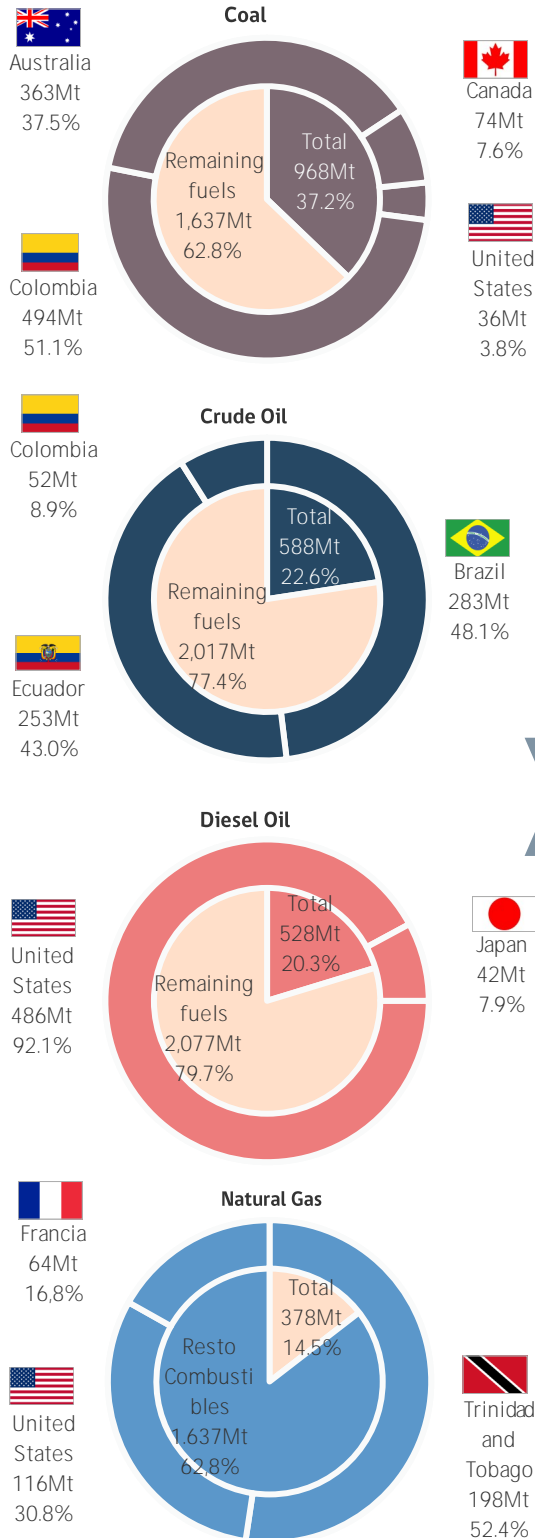
Fuel	[Thous-Tons]	Monthly	Annual
Coal	141	▲ >100%	▲ 1%
Diesel Oil	7	▲ >100%	▲ >100%
Fuel Oil	0	(**)	(*)
Natural Gas	22	(*)	(*)
GLP	0	(**)	(**)
IFO	24	(*)	(**)
Overall total	194	▼ -44%	(*)

Source: Aduana by COMEX (www.comexplusccs.cl)

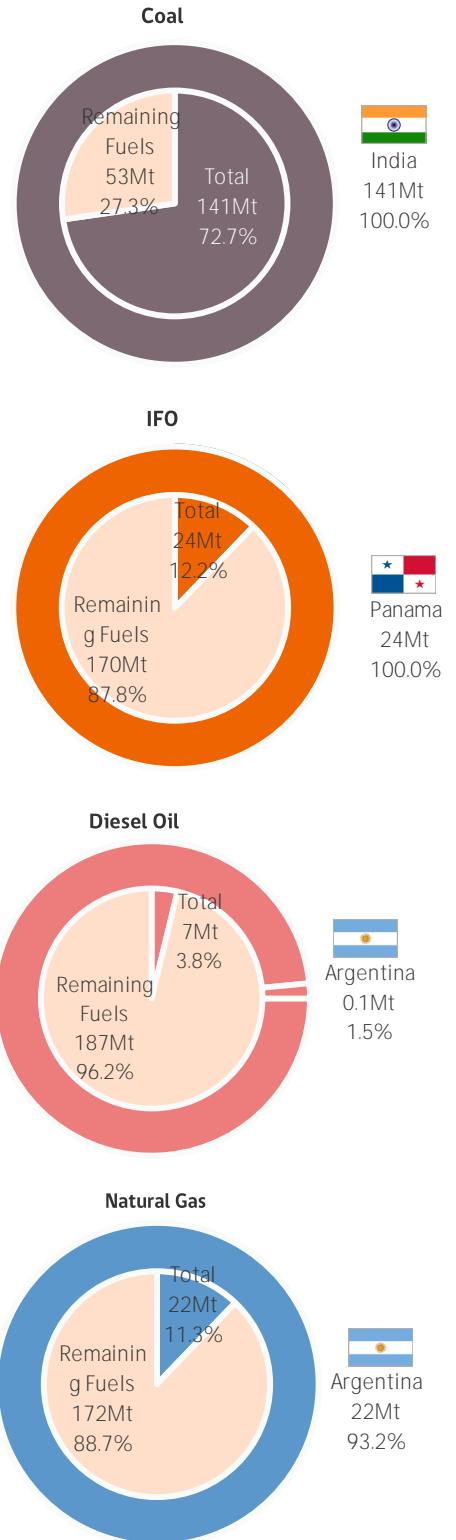
(*) No transactions recorded during the period under review
 (**) Not recorded during the reference month transactions



Imports by Country of Origin



Exports by Country of Origin



Source: Customs, provided by Comex Service, Santiago Chamber of Commerce.

Mt: Thousands of tons.

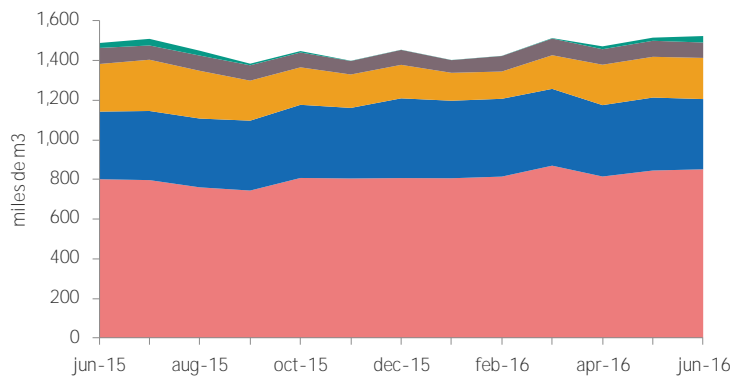
Others: Difference between the total of importations or exportations and the hydrocarbon analyzed in each chart.



7 Fuel Sales

The following information details the evolution and the variation in the sales of the principal oil-based fuels. The information available is presented with a one-month time lag. The fuels analyzed are: domestic kerosene, fuel oils, liquefied gas, diesel oil and unleaded 93-, 95- and 97-octane gas.

Fuel Sales Evolution, by Type



Source: CNE, based on ENAP data

Fuel Sales Variation, by Type

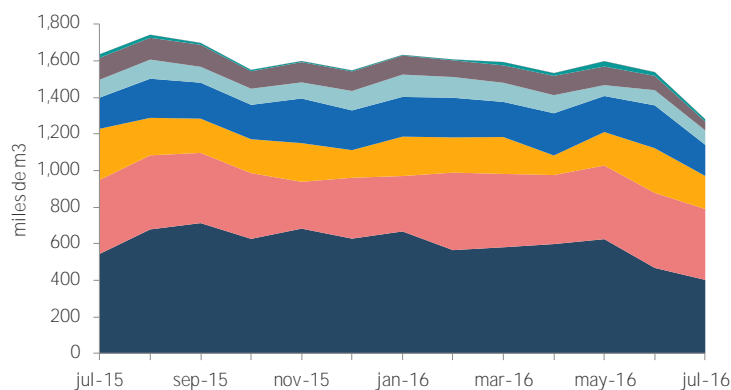
Type	[Thous - m3]	Monthly	Annual
Household kerosene	33	>100%	31.4%
Fuel Oils	78	-3.9%	-4.2%
Liquefied Gas	208	1.1%	-13.5%
Gasoline	354	-3.8%	3.9%
Diesel Oil	851	0.7%	6.2%
Overall total	1,524	0.5%	2.4%

Source: CNE, based on ENAP data

8 Fuel Inventory

The following information presents monthly fuel inventory levels (aviation fuel, household kerosene, fuel oils, aviation kerosene, automotive gas, liquefied gas, diesel oil and crude oil) in thousands of m3 for the entire country. This value corresponds to the last business day of the respective month.

Fuel Inventory Evolution, by Type



Source: CNE

Fuel Inventory Evolution, by Type

Type	[Thous - m3]	Monthly	Annual
Aviation gas	1	-13.5%	25.3%
Household K	12	-37.6%	-36.6%
Fuel Oils	48	-38.5%	-59.7%
Kerosene Av.	79	-5.4%	-19.6%
Automotive gas	170	-27.3%	-0.1%
Liquefied gas	181	-26.0%	-35.2%
Diesel oil	387	-5.5%	-4.3%
Crude oil	403	-14.0%	-26.1%
Overall total	1,281	-16.7%	-21.7%

Source: CNE



ENERGY PROJECTS UNDERGOING ENVIRONMENTAL EVALUATION

1 Projects Submitted for Environmental Evaluation

In July 2016, 17 energy projects were submitted to the Environmental Impact Evaluation System (SEIA), representing an investment of USD 7,251 million. Of these, 15 projects are for electric power generation, 1 project is for electrical transmission¹ and 1 project is for oil and gas energy.

Detail of energy projects submitted for environmental evaluation

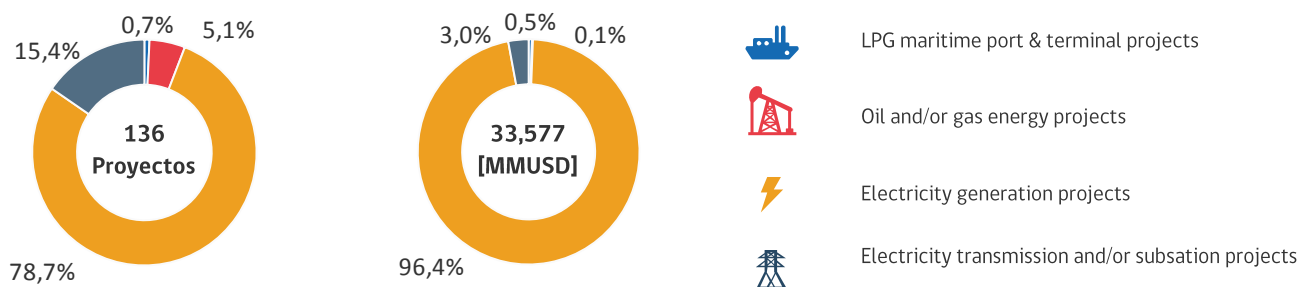
Project Type	Project Owner	Project Name	Presentation Date	Investment [MMUSD]	WEB
Generation	Ibereolica Cabo Leones III	Parque Eólico Cabo Leones III	08/jul/2016	177,4	Link
Generation	GR CHAQUIHUE SpA	Planta Fotovoltaica Santa Rosa	13/jul/2016	18,0	Link
Generation	Amunche Solar SpA.	Parque Solar Fotovoltaico La Constitución	14/jul/2016	100,0	Link
Generation	PV Lilen SpA	PROYECTO PV LILEN	22/jul/2016	140,0	Link
Generation	Sol de Vallenar SPA	Parque Fotovoltaico Sol de Vallenar	25/jul/2016	620,0	Link
Generation	Geotérmica del Norte S.A.	Ampliación Proyecto Central Geotérmica Cerro Pabellón	25/jul/2016	260,0	Link
Generation	Celeo Energía Chile SpA	Parque Solar Fotovoltaico ALWA	22/jul/2016	200,0	Link
Generation	Maria Elena Solar S.A	Parque fotovoltaico Granja Solar	21/jul/2016	200,0	Link
Generation	ANDES S.A	ANDES LNG	21/jul/2016	650,0	Link
Generation	Hidroeléctrica Las Flores S.A.	Ampliación Minicentral Hidroeléctrica Las Flores	20/jul/2016	2,6	Link
Generation	Exploraciones Lonquimay S.A.	Proyecto Hidroeléctrico Alazán	19/jul/2016	30,0	Link
Generation	Avenir La Silla SpA	Parque Solar Fotovoltaico Nuevo Futuro	06/jul/2016	200,0	Link
Generation	Los Guindos Generación Spa	Ampliación Central Térmica Los Guindos	05/jul/2016	180,0	Link
Generation	AM Eólica Puelche Sur SpA	Parque Eólico Puelche Sur	04/jul/2016	260,0	Link
Generation	CONCESIONARIA LUZ DE ATACAMA SPA	Luz de Atacama	04/jul/2016	4.200,0	Link
Substation	Colbún Transmisión SA	Subestación Puente Negro	19/jul/2016	12,1	Link
Oil and/or gas energy projects	Empresa Nacional del Petróleo - Magallanes	LÍNEAS DE FLUJO POZOS PAD CARANCHO ZGA, CABAÑA OESTE ZGE Y CABAÑA ESTE ZGB	18/jul/2016	1,2	Link

Source: SEIA

2 Energy Projects Currently Being Evaluated

In July 2016, **136** energy projects awaiting approval of their environmental qualification resolutions (RCA). Of these, **79%** are projects related to electric power generation, and the remaining are mixed projects. Together they represent a total investment of **33,577 MMUSD**.

Distribution of Projects and their Investment [millions of USD]



Source: SEIA



3 Projects with Approved Environmental Qualification Resolution

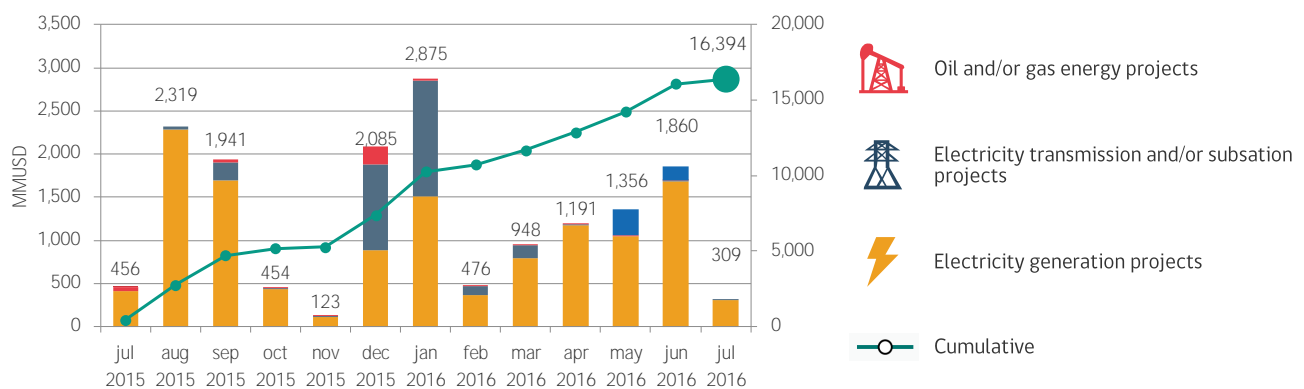
In July 2016, the environmental qualification resolutions (RCA) of 8 energy projects were approved. Of these, 5 projects are for electric power generation with total capacity of 462 MW and 3 projects are for electricity transmission¹. Together they represent a total investment of USD 384 million.

Presentation Date	Project Type	Region	Project Owner	Investment [MMUSD]	Web
01/jul/2016	Generation	RM	Santiago Solar S.A.	165,0	Link
04/jul/2016	Generation	III	Llano Victoria SPA	44,1	Link
14/jul/2016	Subestation	III	TRANSELEC S.A.	5,7	Link
15/jul/2016	High-voltage electricity transmission line	III	Transmisora Eléctrica del Norte S.A.	0,3	Link
22/jul/2016	Self - Generation	II	Sociedad GNL Mejillones S.A.	40,0	Link
29/jul/2016	Generation	XIV	Empresa Eléctrica Florín S.P.A.	53,7	Link
01/ago/2016	Generation	X	Power Train Technologies Chile S.A	5,3	Link
02/ago/2016	High-voltage electricity transmission line	III	Empresa Eléctrica Guacolda S.A.	70,00	Link

Source: SEIA

In line with the above table, the evolution is presented for the last mobile year of investment associated to energy projects have received a favorable RCA. The total investment to date totaled USD 16,394 million. In particular, energy power generation projects have a total investment of USD 13,322 million (81.3%), equivalent to 5,467 MW approved.

Investment evolution—Approved projects with RCA in the last 12 months



Source: SEIA

¹ The high-voltage electricity transmission line and substation projects are included in the electricity transmission projects.



SECTORIAL REGULATIONS

1 Proposed Legislations in Process

Bulletin Number	Subject of the Proposed Legislation	Initiative and Urgency	Current Status	Bill Submittal Date	WEB
9890-08	Amends Decree-Law No. 323 of 1931 of the Ministry of Interior and other laws.	Simple Urgency	Second Constitutional Procedure (Senate). Discussed by the Mining and Energy Committee.	29/01/2015	Link

2 Sectorial Regulations Published in the Official Bulletin

Law No. 20,936 which establishes a New Electric Transmission System and creates an independent Coordinator Organism for the National Electric System, published in the Official Gazette on July 20, 2016. [Link](#)

Decree No. 5T, of April 29th, 2016, which sets node prices of the electricity supply, published in the Official Gazette on July 2, 2016. [Link](#)

Exempt Resolution No. 8, of July 12th, 2016, Ministry of Energy, which appoints the Members and Lawyer Secretary of Expert Panel establishes in Title VI of the General Electricity Services Law, published in the Official Gazette on July 14, 2016. [Link](#)

Decree No. 15, of February 3rd, 2016, which creates Regional Ministerial Advisory Committee denominated "Regional Energy Development Commission of Tarapacá", published in the Official Gazette on July 18, 2016. [Link](#)

Decree No. 14, of February 3rd, 2016, which creates Regional Ministerial Advisory Committee denominated "Regional Energy Development Commission of Arica y Parinacota", published in the Official Gazette on July 18, 2016. [Link](#)

Exempt Resolution No. 537, of July 11th, 2016, National Energy Commission that modifies the Technical Standard for Connection and Operation of Small Distributed Generation Media in Medium Voltage Installations, published in the Official Gazette on July 18, 2016. [Link](#)



3 Sectorial Regulations Not Published in the Official Bulletin

Exempt Resolution No. 526, of July 5th, 2016, that updates and reports generation and transmission projects under construction. [Link](#)

Exempt Resolution No. 527, of July 5th, 2016, that modifies Exempt Resolution No. 268/2015, which approves the basis of national and international public tender for the supply of electric power and energy to supply electricity consumption of customers subject to price regulation, Supply Tender 2015/01, modified by Exempt Resolution No. 652/2015, Exempt Resolution No. 286/2016 and Exempt Resolution No. 459/2016. [Link](#)

Exempt Resolution No. 536, of July 5th, 2016, that modifies Exempt Resolution No. 268/2015, which approves the basis of national and international public tender for the supply of electric power and energy to supply electricity consumption of customers subject to price regulation, Supply Tender 2015/01, modified by Exempt Resolution No. 652/2015, Exempt Resolution No. 286/2016 and Exempt Resolution No. 459/2016. [Link](#)

Exempt Resolution No. 545, of July 14th, 2016, that complements the request for information communicated in the Second Article of the resolutions No. 389 and No. 495, both 2016, National Energy Commission. [Link](#)

Exempt Resolution No. 558, of July 15th, 2016, that approves the clarification Circular No. 4, of the process named "Supply Tender 2015/01". [Link](#)

Exempt Resolution No. 549, of July 14th, 2016, which calls for public tender and approves administrative bases and technical annexes for hiring the study entitled " Technical and economic study of development alternatives in transmission ". [Link](#)

Exempt Resolution No. 567, of July 22th, 2016, which approves tender rules for new projects under the Exempt Decree No. 373/2016, Ministry of Energy, which sets the expansion plan of the trunk transmission system, period 2015-2016. [Link](#)

Exempt Resolution No. 570, of July 26th, 2016, which communicates value of the indices contained in the tariff formulas for supplies subject to pricing. [Link](#)

Exempt Resolution No. 571, of July 26th, 2016, that approves rules for operation of the special nominating committee and procedure for the first election of board members of independent coordinator of the national electricity system and its president. [Link](#)

4 Expert Panel Rulings

During the period the Panel of Experts did not issue any ruling.



APPENDIX 1: RENEWABLE ENERGY

1. SUMMARY

July ended with 44 renewable energy projects declared under construction according to Exempt Resolution N° 600/2016, released by the National Energy Commission (CNE), specifying that the operation dates for the projects is foreseen between August 2016 and August 2018.

The installed capacity of renewable energy is now 12.5% (2,577 MW), with SIC concentrating almost 90% of the projects.

The output of NCRE power plants to the grid during last month reached 747 GWh, which represents 11.98% of the total generation. Regarding the legal requirements, that forces conventional generators to certify that a percentage of their generation comes from NCRE sources, the obligation of 267 GWh, was almost doubled by the 525 GWh declared by the generators. The technology analysis indicates that 172 GWh were wind energy injection, 141 GWh were bioenergy, 123 GWh from solar pv and 89 GWh from small hydro.

Finally, during July, the Environmental Evaluation Service (SEA) started evaluating twelve new NCRE projects (1,067 MW, 2,208 MMUSD investment) and gave an approved RCA to three projects (621 MW, 1,161 MMUSD investment).

Summary – NCRE Project Status

Technology	Operation [MW] (*)	Under Construction [MW]	RCA Approved [MW]	Under Evaluation [MW]
Biomass	417	0	112	67
Biogas	53	0	8	0
Wind	1	477	6,500	2,239
Geothermal	0	48	120	0
Small Hydro	449	25	455	109
Solar - PV	1,392	1,555	12,661	5,519
Solar CSP	0	110	1,085	1,270
Total	3,539	2,214	20,941	9,204

Source: CNE, SEIA, CDEC-SIC / CDEC-SING, August 2016.

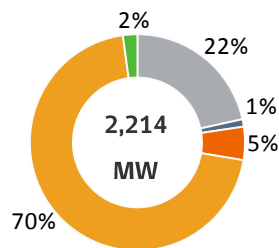
(*) It takes into account projects ready for commercial operation and those connected on trial phase.

2. STATUS OF RENEWABLE ENERGY PROJECTS

A. Electricity Generation Projects Under Construction

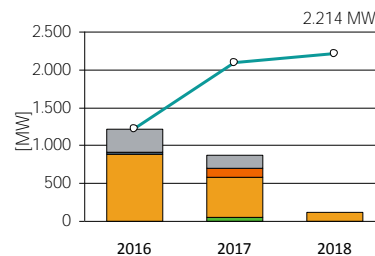
According to Exempt Resolution N° 600/2016, released by the National Energy Commission (CNE), that "Updates and Communicates Construction Projects", there are 44 renewable energy projects under construction by August 5th, 2016, corresponding to a power of 2,214 MW. These projects should be operating between July 2016 and August 2018.

NCRE Projects Under Construction

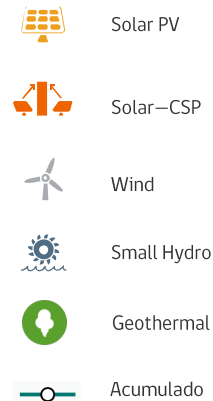


Source: CNE, August 2016.

Starting Operation Date Forecast



Source: CNE, August 2016.

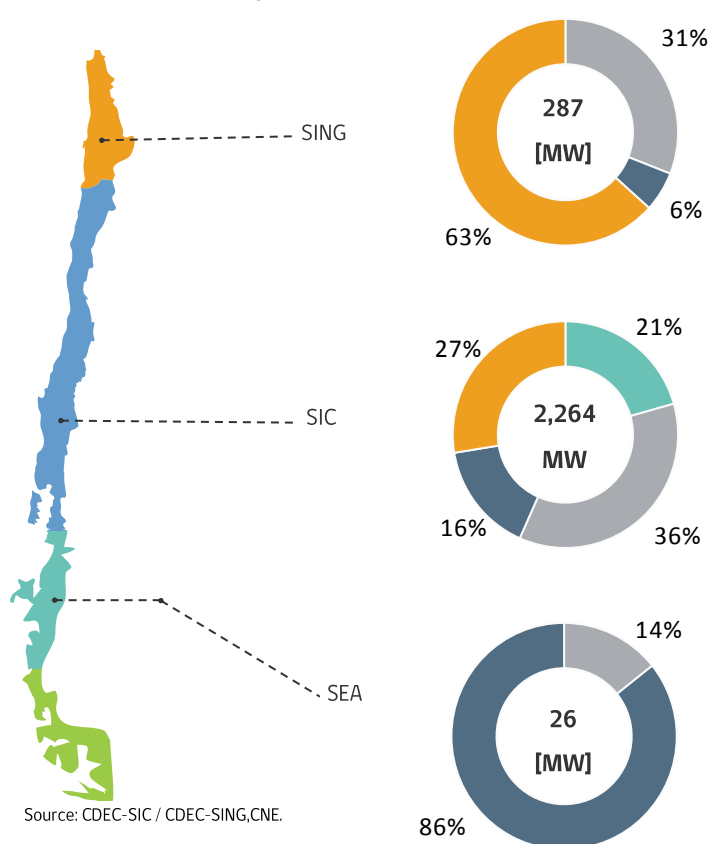


B. Installed Capacity for Electricity Generation

The installed capacity of projects based on renewable energy, recognized as such by Chilean regulations (NCRE), on July 31th, 2016, reached 2,577 MW (*). 87.8% (2,264 MW) is located on SIC (Central Interconnected System), 11.1% (287 MW) is connected to the SING (Northern Interconnected System) and the 1.0% (26 MW) left, belongs to the Electrical System of Aysén.

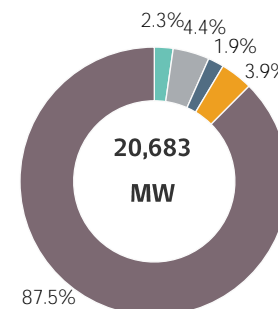
The NCRE installed capacity represents an 12.5% of the total electrical capacity of the Chilean distribution systems.

NCRE Installed Capacity



Source: CDEC-SIC / CDEC-SING, CNE.

Conventional Technologies and NCRE into the Chilean Grids

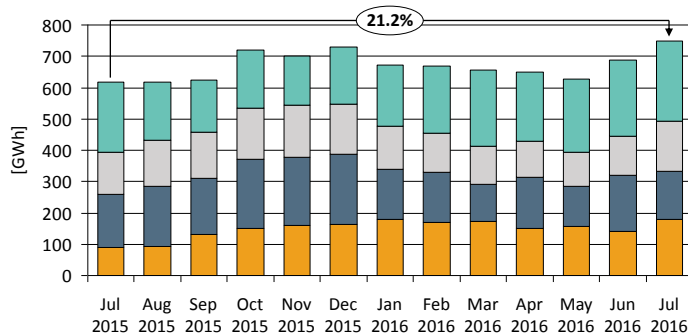


C. Electricity Generation

Electricity generation for the major electrical distribution systems reached 6,237 GWh during July 2016. 747 GWh of them come from ERNC sources.

Separated by technology we get that 33.9% (253 GWh) was generated by biomass, followed by a 24.1% (180 GWh) by solar power, in third place was small hydro, with 21.6% (161 GWh), then wind farms with 20.4% (153 GWh).

NRCE Electricity Generation Evolution



Source: CDEC-SIC / CDEC-SING, CNE, August 2016.

Electricity Generation Variation

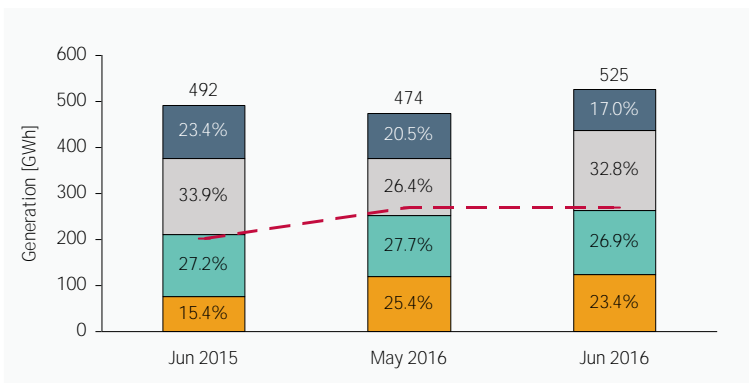
	Generation [GWh]	Monthly	Annual
NCRE	747	↑ 8.6%	↑ 21.2%
Conventional	5,490	↓ -0.1%	↓ -1.0%
Total	6,237	↑ 0.8%	↑ 1.2%

(*) Electricity Generation includes all the power plants considered into the Law 20.257

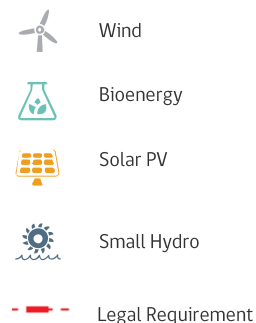
D. Compliance with Laws 20,257 and 20,698

According to the ERNC balance released by the Independent System Operators, corresponding to June 2016, the obligation defined by Laws 20,257 and 20,698 was of 266.69 GWh of electricity generation from a NCRE source. During that period the recognized NCRE energy put into the system reached 525.26 GWh (197% of the requirement), with a shared of 171.7 GWh from wind, 141.00 GWh from bioenergy, 123.2 GWh from solar photovoltaic and 89.4 GWh from small hydro.

Technology NCRE Laws Compliance



Source: CDEC-SIC / CDEC-SING, CNE, July 2016.



3. PROJECTS UNDER ENVIRONMENTAL EVALUATION

A. New Projects on Environmental Evaluation

During July, the Environmental Evaluation Service (SEA) started evaluating twelve new NCRE projects totaling 1,067 MW and 2,208 MMUSD of investment. Seven of the projects are solar PV technology, two are a wind farm, two is small hydro project, and the last one is geothermal.

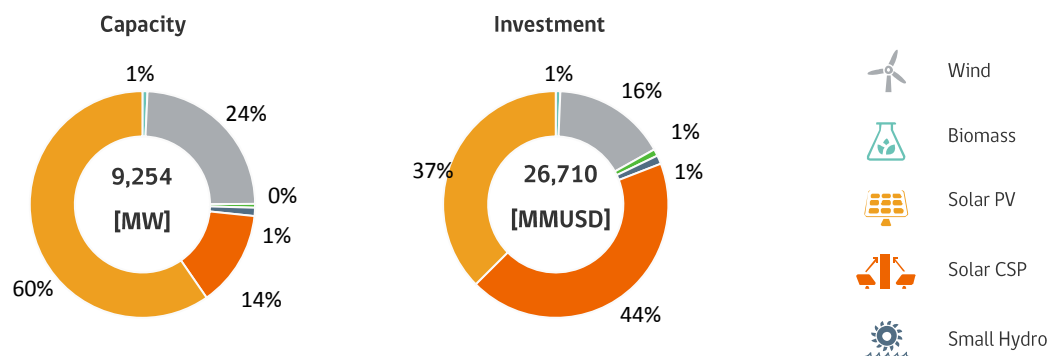
Technology	Region	Company	Project Name	Capacity [MW]	Investment	Date	Link
Wind	X	AM Eólica Puelche Sur SpA	Parque Eólico Puelche Sur	153,0	260,0	04-jul-2016	Link
Solar - PV	III	Avenir La Silla SpA	Parque Solar Fotovoltaico Nuevo Futuro	144,0	200,0	06-jul-2016	Link
Wind	III	Ibereolica Cabo Leones III	Parque Eólico Cabo Leones III	136,5	177,4	08-jul-2016	Link
Solar - PV	RM	GR CHAQUIHUE SpA	Planta Fotovoltaica Santa Rosa	9,0	18,0	13-jul-2016	Link
Solar - PV	RM	Amunche Solar SpA.	Parque Solar Fotovoltaico La Constitución	48,0	100,0	14-jul-2016	Link
Small Hydro	VI	Exploraciones Lonquimay S.A.	Proyecto Hidroeléctrico Alazán	11,5	30,0	19-jul-2016	Link
Small Hydro	XIV	Hidroeléctrica Las Flores S.A.	Ampliación Minicentral Hidroeléctrica Las Flores	2,1	2,6	20-jul-2016	Link
Solar - PV	I	Maria Elena Solar S.A	Parque fotovoltaico Granja Solar	100	200	21-jul-2016	Link
Solar - PV	IV	PV Lilén SpA	PROYECTO PV LILEN	70,0	140,0	22-jul-2016	Link
Solar - PV	XV	Celeo Energía Chile SpA	Parque Solar Fotovoltaico ALWA	93,2	200,0	22-jul-2016	Link
Geothermal	II	Geotérmica del Norte S.A.	Ampliación Proyecto Central Geotérmica Cerro Pabellón	50,0	260,0	25-jul-2016	Link
Solar - PV	III	Sol de Vallenar SPA	Parque Fotovoltaico Sol de Vallenar	250	620	25-jul-2016	Link

Source: SEIA, CNE, August 2016.

B. Projects undergoing Environmental Evaluation

On July 2016, there were 99 NCRE projects undergoing qualification by the SEIA. From this total, 3 are biomass power plants, 23 wind farms, 1 is a geothermal project, 10 small hydro, 4 solar CSP, and 58 solar PV. All the projects added 9,254 MW and 26,710 MMUSD of investment.

NCRE Projects Distribution



Source: SEIA, CNE, August 2016.

C. Project with Environmental Qualification Resolution

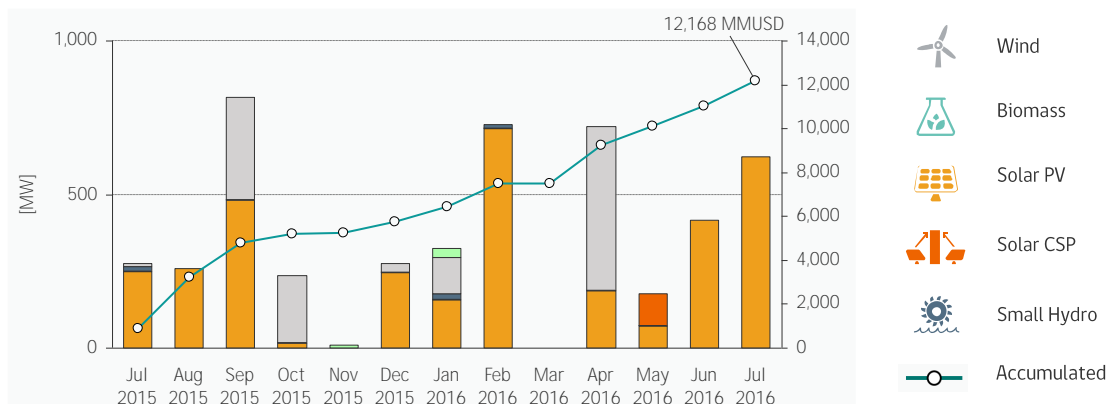
During July, the Environmental Evaluation Service (SEA), gave three Environmental Qualification Resolutions (RCA) to NCRE projects, totalling 621 MW and an investment of 1,161 MMUSD. All of them are solar photovoltaic plants.

Technology	Region	Company	Project Name	Capacity [MW]	Investment	Date	Link
Solar PV	III	Parque Solar Fotovoltaico Luz del Oro SpA.	Parque Solar Fotovoltaico Luz del Oro	475	952	01-jul-2016	Link
Solar PV	RM	Santiago Solar S.A.	Parque Fotovoltaico Santiago Solar	120	165	04-jul-2016	Link
Solar PV	III	Llano Victoria SPA	Parque Solar Llano Victoria	25,5	44	05-jul-2016	Link

Source: SEIA, CNE, August 2016.

The following graph, presents the 12 months evolution of approved projects by the SEIA. The total investment during that period was 12,168 MMUSD, and the total power was 4,866 MW.

Evolution of NCRE Projects with approved RCA



Source: SEIA, CNE, August 2016.

Comisión Nacional de Energía

Avenida Libertador Bernardo O'Higgins , 1449
Edificio Santiago DownTown, Torre 4, Piso 13

Tel. (2) 2797 2600

Fax. (2) 2797 2627

www.cne.cl

www.energiaabierta.cne.cl

Santiago - Chile