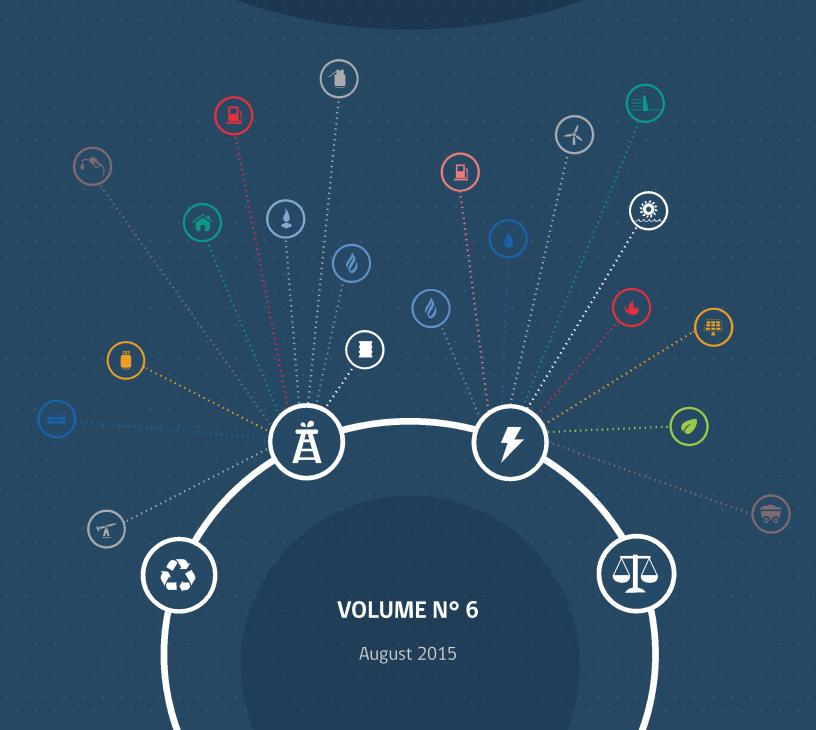
MONTHLY ENERGY SECTOR REPORT

NATIONAL ENERGY COMMISSION



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:

CNE publishes the new trunk transmission technical report

Friday, July 31 saw the publication of the final Linksion of the "Technical report to determine the annual value and expansion of trunk transmission systems for the period 2016-2019". This report is the main input in preparing the decree on trunk tariffs which is issued every four years and estimates the value and remunerates existing facilities.

After receiving the technical report, the participants, users and institutions have ten days to submit any discrepancies regarding this report to the Commission. These discrepancies must be resolved by the Panel of Experts of the electricity law within thirty days. Within fifteen days of receiving the Panel's decision, the Commission must submit the technical report and its history, and, where appropriate, the opinion of the Panel of Experts to the Ministry of Energy.

The Minister of Energy then has a period of fifteen days within which he must establish the trunk system facilities through the corresponding decree.

The US Roadshow on electricity supply tenders comes to an end

Representatives of the National Energy Commission (CNE), the Foreign Investment Committee (CIE Chile) and the Association of Electrical Companies traveled to the United States to meet with major investment banks and energy generation companies.

The aim of this new international Roadshow, which had previously been held in Asia and Europe, is to promote the upcoming tenders to supply electricity to regulated customers. The period for presenting bids for the tender to supply 1,200 GWh / year for a period of 20 years from January 2017 closes on September 23, and the tender to supply13,750 GWh / year for a period of 20 years from January 2021 closes on April 20, 2016.

Along with meeting with a number of major investment banks, including HSBC Securities (USA), Goldman Sachs, JP Morgan, Citibank and BNP Paribas, the delegation met with generators Solar Reserve, NRG and Sempra, who showed significant interest in participating in the upcoming tenders.

Government promotes appropriate use of firewood in southern Chile

The Pichi-Parga firewood collection and drying center in the municipality of Fresia was the setting for the presentation of two of the initiatives through which the Chilean Government seeks to promote the proper use of firewood in the south of the country. These initiatives consist of the public campaign "Calor del Bueno" (Heat from good wood) and the "Más Leña Seca" (more dry firewood) program, a competitive fund to which people can apply to build and implement firewood drying and storage facilities. The "Calor del Bueno" campaign seeks to raise awareness of the advantages of dry firewood and of good practices among those who consume, produce and sell this resource. It focuses on how to use firewood in a sustainable, efficient and environmentally friendly way. For more information and tips, please visit www.calordelbueno.cl.

Likewise, in order to implement firewood collection and drying centers in the regions of La Araucanía, Los Ríos, Los Lagos, Bio Bio, Maule and Aysén, the Ministry of Energy, together with SERCOTEC, made the "Más Leña Seca" competitive fund available for the third time. People were able to apply between July 20 and August 7 for awards of up to \$8 million Chilean pesos (around US\$11,800) for individual projects and up to \$18 million Chilean pesos (around US\$26,500) for community projects. The applicants need to cofinance 10% of the amount of the public contribution.

SUMMARY

This report was prepared in **August 2015** in order to provide energy information and statistics for **July 2015**.

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 May.

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

To prepare the report, an average exchange rate of **650.1** pesos per USD observed in July 2015.

According to Exempt Resolution 312/2015 with date **July 15**, there were **66** electricity generation projects under construction in the SIC and SING, equivalent to a capacity of **5.341 MW**.

The installed capacity of the SIC in may was **15,705 MW** and it was **4,148 MW** in the SING, plus the installed capacity in the Aysén (SEA) and Magallanes (SEM) electricity systems. Together, the four systems with Easter Island and *Los Lagos*; in aggregate represent an installed capacity of **20,015 MW**.

Meanwhile, total electric power generation in the SIC in may was **4,619 GWh**, and in the SING it reached **1,546 GWh**. Therefore, the total generated in **July** was **6,165 GWh**, 4.4% lower than in **June 2015**.

The maximum hourly demand recorded in the SIC and the SING in May were **7,567 MW** and **2,344 MW**, respectively. The maximum in the SIC was recorded on **July 16th** while the measurement in the SING corresponds to **July 26th**, 2015.

Regarding electricity tariffs, it is important to note that the average marginal cost in **July** in the SIC was **71.6 USD/MWh**, a **-18.7%** lower than **June 2015.** In the SING meanwhile, the average marginal cost was **51.3 USD/MWh**, **-35.2%**higher than the previous month.

It is worth noting the average market prices recorded in **July** in the SIC and SING which were **99.4 USD/MWh** and **88.0 USD/MWh**, respectively.

In terms of international fuel prices, the Brent crude price in **July** was **56.5 USD/bbl**, -**8.4%** lower than the previous month. Meanwhile, the average price of WTI crude was **51.2 USD/bbl**, higher -**14.5%** from the previous month.

The Henry Hub price (international natural gas price reference) decreased **2.1%** compared to **June**, with an average value of **2.83 USD/MBtu**.

The average price of coal was **91.0** USD/ton, down -**0.8%** over the previous month.

In terms of gasoline prices, those of 93-octane gasoline (unleaded) and diesel should be noted. In May the average domestic price of the former was CLP 758/liter, while the average price of the latter was CLP 554/liter. In terms of percentages, these represent falls of 3.2% and 0.2% respectively in comparison to June 2015.

In regard to imports of coal, there was an decrease of $\,$ -2.6% with respect to the previous month, being USA the primary country of origin. In the other hand, Brazil was the primary country of origin for the crude oil, which reached up to 1.3% of increment in the importation.

A total of **10** energy sector projects were submitted to the Environmental Impact Evaluation System (Sistema de Evaluación de Impacto Ambiental, SEIA): 4 in electricity generation, and for electricity transmission. Meanwhile, those already being evaluated represent a total investment of **USD 5,758 million**. In addition, **12** 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 projects, 4 were for energy transmission projects and/or substations and 4 were for oil and/or gas projects.

Finally, among the most important policy issues that emerged during the month were the submission to the Senate of the bill on residential tariff equity and recognition of local generation and the urgent processing of the bill amending Decree-Law No. 323 of 1931 of the Ministry of Interior and other legal dispositions, which was submitted to the Mining and Energy Commission of the Chamber of Deputies. Another milestone was the publication in the Official Bulletin of the Regulations for non-conventional and small methods of generation, corresponding to Supreme Decree No. 244 of 2005.



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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 <u>CIFES Monthly Energy Report</u>

According to Exempt Resolution Num. 385/2015, "Works under Construction Update and Report," as of **July 29th** there were **28** power generation projects under construction in the SING. Together they represent capacity of **2,413 MW** and are projected to begin operation between July 2015 and February 2018.

Projects under Construction in the SING

Category	Date Proyect Name	Region	Technology	Capac. [MW]
	jul-15 Andes Solar	II Region	Solar Photovoltaic	21
	ago-15 Parque Eólico Quillagua I	II Region	Solar Photovoltaic	23
	ago-15 PMGD Pica I	I Region	Solar Photovoltaic	1
	oct-15 Finis Terrae I	II Region	Solar Photovoltaic	80
	dic-15 Atacama I	II Region	Solar Photovoltaic	100
	dic-15 Jama Etapa II	II Region	Solar Photovoltaic	22
	abr-16 Arica Solar 1 (Etapa I)	XV Region	Solar Photovoltaic	18
	abr-16 Arica Solar 1 (Etapa II)	XV Region	Solar Photovoltaic	22
	abr-16 Pular	II Region	Solar Photovoltaic	29
	abr-16 Paruma	II Region	Solar Photovoltaic	21
	may-16 Bolero Etapa I	II Region	Solar Photovoltaic	42
NCRE	jun-16 Bolero Etapa II	II Region	Solar Photovoltaic	42
INCRE	jun-16 Finis Terrae II	II Region	Solar Photovoltaic	80
	jul-16 Uribe Solar	II Region	Solar Photovoltaic	50
	jul-16 Lascar Etapa I	II Region	Solar Photovoltaic	30
	jul-16 Lascar Etapa II	II Region	Solar Photovoltaic	35
	ago-16Bolero Etapa III	II Region	Solar Photovoltaic	21
	oct-16 Blue Sky 1	II Region	Solar Photovoltaic	52
	oct-16 Blue Sky 2	II Region	Solar Photovoltaic	34
	oct-16 Bolero Étapa IV	II Region	Solar Photovoltaic	41
	dic-16 Cerro Dominador	II Region	Cogeneration	110
	dic-16 Parque Eólico Quillagua II	II Region	Solar Photovoltaic	27
	ene-17 Proyecto Fotovoltaico Huatacondo	I Region	Solar Photovoltaic	98
	ago-17 Parque Eólico Quillagua III	II Region	Solar Photovoltaic	50
	dic-15 Cochrane U1	II Region	Coal	236
Thermoelectric	may-16 Cochrane U2	II Region	Coal	236
membetectifc	may-16 Kelar	II Region	NLG	517
	feb-18 Infraestructura Energética Mejillones	II Region	Coal	375

Source: NEC

Total under construction in the SING, by technology



Projected operation start date, SING



Source: NEC

5









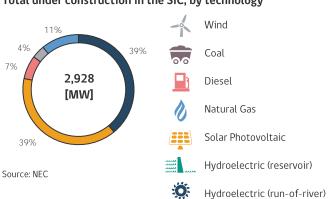
According to Exempt Resolution 385/2015, "Works under Construction Update and Report," as of July 29th there were **38** power generation projects under construction in the SIC. Together they represent capacity of **2,928 MW** and are projected to begin operation between August 2015 and Octobre 2020.

Projects under Construction in the SIC

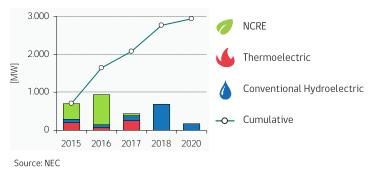
Category	Date	Proyect Name	Region	Technology	Capac. [MW]
		lar Los amarillos	III Region	Solar Photovoltaic	3
		del Norte Etapa I	III Region	Solar Photovoltaic	36
		del Norte Etapa II	III Region		38
	ago-15 Pang			Mini hydroelectric (run-of-river)	0
	sep-15 Itata			Mini hydroelectric (run-of-river)	20
		del Norte Etapa III		Solar Photovoltaic	36
		del Norte Etapa IV	III Region		31
	oct-15 Pam		III Region	Solar Photovoltaic	91
	nov-15 Chal		III Region		23
	nov-15 Chal		III Region	Solar Photovoltaic	27
		recto Solar Conejo (Etapa I)	II Region	Solar Photovoltaic	105
	nov-15 Lagı		IV Region	Solar Photovoltaic	3
NCRE	dic-15 La M			Mini hydroelectric (run-of-river)	3
NCIL		era Pinto Etapa I		Solar Photovoltaic	20
	ene-16 Rena		VIII Region		88
	ene-16 Vall		III Region	Solar Photovoltaic	67
	feb-16 Quil		RM	Solar Photovoltaic	103
		Buenos Aires	VIII Region		24
	mar-16 PFV		V Region	Solar Photovoltaic	144
	jun-16 Río (Mini hydroelectric (run-of-river)	15
		era Pinto Etapa II		Solar Photovoltaic	77
	jul-16 Pelí		III Region	Solar Photovoltaic	100
	sep-16 Cari		IX Region	Mini hydroelectric (run-of-river)	20
	sep-16 Mala		IX Region	Mini hydroelectric (run-of-river)	9
	sep-16 El Ro		III Region	Solar Photovoltaic	196
	ene-17 Gua		III Region		50
	ago-15 El Pa			Hydroelectric (run-of-river)	60
	jun-16 Anc			Hydroelectric (run-of-river)	27
Conventional	jul-17 Ñub			Hydroelectric (run-of-river)	136
Hydroelectric		Maipo - Central Las Lajas	RM	Hydroelectric (run-of-river)	267
119 41 001000110		Maipo - Central Alfalfal II	RM	Hydroelectric (run-of-river)	264
	sep-18 Los			Hydroelectric (run-of-river)	150
	oct-20 CH S			Hydroelectric (run-of-river)	170
	ago-15 Los		VII Region		132
	mar-16 Doñ		V Region	Others	70
Thermoelectric		ta de Cogeneración Papeles Cordillera S.A	RM	Natural Gas	50
	sep-15 CMF		RM	Natural Gas	22
	jun-17 CTN	l-3*	II Region	Cogeneration	251

Source: NEC

Total under construction in the SIC, by technology



Projected operation start date, SIC



Mini hydroelectric (run-of-river)





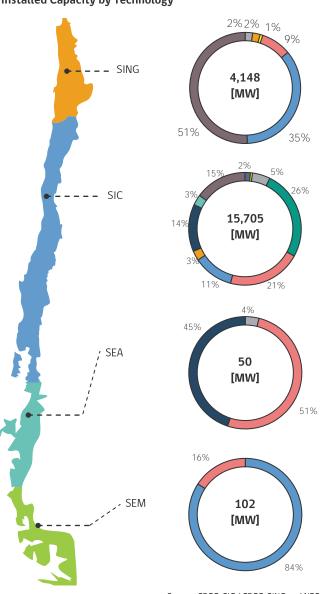




2 Installed Electricity Generation Capacity

The installed electricity generation capacity as of July 2015 was (*)20,015 MW. Of that, 15,705 MW (78.5%) corresponded to the SIC and 4,148 MW (20.7%) to the SING. The remaining 0.8% was distributed among the Aysén and Magallanes electricity systems. As of May, 58.8% of the country's total installed capacity is represented by thermoelectric generation, while 30.9% is hydroelectric and 10.4% is NCRE. For more information about NCRE projects, please go to the CIFES Monthly Energy Report

Installed Capacity by Technology



Source: CDEC-SIC / CDEC-SING and NEC

Installed capacity by system

System	Capacity [MW]	Capacity [%]
• SING	4,148	20.7%
• SIC	15,705	78.5%
• SEA	50	0.3%
• SEM	102	0.5%

Source: CDEC-SIC / CDEC-SING and NEC



Power generation plants in testing phase

In addition to the total installed capacity, there are 15 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, **9** plants are in the SIC (with a total capacity of **195.8 MW**) and **6** are in the SING (with a total capacity of **70.6 MW**). Thus, there is a total of **266.4 MW** in the testing phase.

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





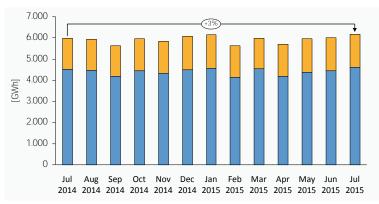




3 Electricity Generation

Power generation in the SIC during **July 2015** reached a total of **4,619 GWh**, which were classified as **52%** thermoelectric, **35%** conventional hydroelectric and **13%** NCRE. In the SING, **1,546 GWh** of electric power were generated, **96%** from thermoelectric plants and **4%** from NCRE. Together the systems reached a total of **6,165 GWh**, an increase of **2.5%** over the previous month and **3.0%** higher than July 2014. In resume, if we sort by generation category, we distinguish: **10.7%** NCRE, **26.1%** hydroelectric and **63.1%** thermoelectric generation.

Evolution of gross electric power generation, SIC-SING



Evolution of gross electric power generation, SIC-SING

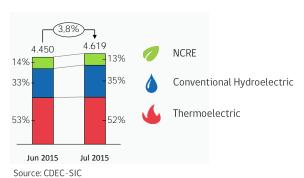
Energy Generation [GWh]		Monthly		Annual
• Total	6,165	_	2.5%	3.0%
• SING	1,546	$\overline{}$	-1.1%	5.8%
• SIC	4,619	_	3.8%	2.0%

Source: CDEC-SIC / CDEC-SING

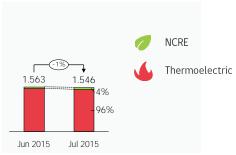
Source: CDEC-SIC / CDEC-SING

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

Monthly Variation in Generation, SIC

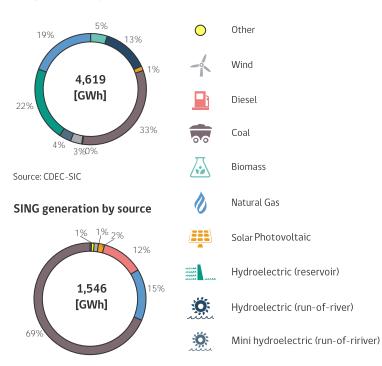


Monthly Variation in Generation, SING



Source: CDEC-SIC

SIC generation by source



Source: CDEC-SIC







0.0%

-1.7%



3.3%

6.7%

4 Maximum Hourly Demand

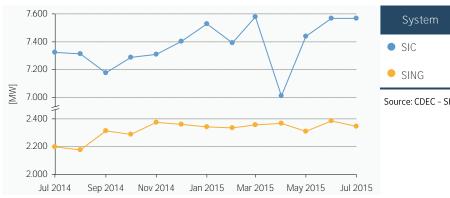
The maximum hourly demand recorded on July 15th in the SIC was 7,567 MW, similar to the demand recorded in the previous month and 3.3% higher than July 2014. In the SING, the maximum hourly demand recorded on July 10th was 2,344MW, which represented a -1.7% decrease over the maximum hourly demand recorded in the previous month and a 6.7% increase over the same month of 2014.

Evolution of maximum hourly demand, SIC - SING

Variation in maximum hourly demand, by system

7,567

2.344



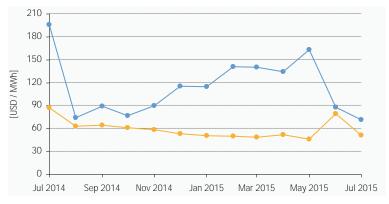
Source: CDEC - SIC / CDEC - SING

Source: CDEC - SIC / CDEC - SING

5 Marginal Costs

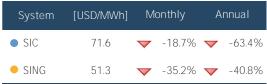
The marginal cost is the variable cost of the most expensive generation unit operating at a specific point in time. In this case, the Quillota 220 kV busbar was used as the reference to obtain the marginal cost in the SIC while the Crucero 220 kV busbar was used as the reference in the SING. The value given for each system corresponds to the monthly average of hourly marginal costs. In July, the average marginal cost in the SIC was 71.6 USD/MWh, -18.7% lower than the previous month and -63.4% lower than July 2014. In the SING, the average marginal cost was 51.3 USD/MWh, -35.2% also lower from the previous month and a declined of -**40.8%** from July 2014.

Evolution of marginal costs, SIC - SING



Source: CDEC - SIC / CDEC - SING

Variation in marginal costs, SIC - SING



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 May for the SIC was **99.4 USD/MWh**, -**3.7%** lower than the previous month and -**11.4%** than July 2014. The AMP in the SING was **88.0 USD/MWh**, -**5.4%** lower tan the previous month and -**23.3%** than the same month in 2014.

Evolution of market prices, SIC - SING



Variation in average market prices, by system

System	[USD/MWh]	Monthly		А	nnual
• SIC	99.4	$\overline{}$	-3.7%	$\overline{}$	-11.4%
SING	88.0	$\overline{}$	-5.4%	$\overline{}$	-23.3%

Source: CDEC - SIC / CDEC - SING

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-yearly decree that sets node prices for electricity supply. The prices are calculated by the National Energy Commission (NEC) 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 **81.4 USD/MWh**, decreased in -**3.6%** compared to the previous month and -**5.3%** to the same month in 2014. In the SING, the node energy price in July was **53.5 USD/MWh**, with a -**3.6%** variation from the previous month and -**30.8%** of decrease compared to last year.

Evolution of node energy prices, SIC - SING

92 88 84 80 72 68 64 60 56 52 Jul 2014 Sep 2014 Nov 2014 Jan 2015 Mar 2015 May 2015 Jul 2015

Variation in node energy prices, by system

System	[USD/MWh]	Mc	onthly	А	nnual
• PNE SIC	81.4	$\overline{}$	-3.6%	abla	-5.3%
PNE SING	53.5	$\overline{}$	-3.6%	$\overline{}$	-30.8%

Source: NEC

Source: NEC 10









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 **8,307 USD/MW**, decreased on -3.6% compared to the previous month and -4.1% lower than the same month in 2014. In the SING, the node power price in July was **8,229 USD/MW**, with -3.6% variation from the previous month and 4.1% of increase compared to last year.

Evolution of node power price, SIC - SING



Variation in node power price

System	[USD/MW]	Mc	onthly	A	nnual
• PNP SIC	8,307	$\overline{}$	-3.6%	$\overline{}$	-4.1%
PNP SING	8,229	$\overline{}$	-3.6%	_	4.1%

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 June 2015. 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		Ar	nnual
Pta Arenas	63	_	0.2%	_	2.6%
Tres Puentes	68		0.2%	_	3.4%
Pto Natales	96		0.3%		3.3%
Porvenir	96		0.3%		5.0%
Pto Williams	370	$\overline{}$	-8.5%		5.0%
Aysén 23	100	$\overline{}$	-8.7%	$\overline{}$	-5.9%
Chacab23	105	$\overline{}$	-8.9%	$\overline{}$	-6.6%
Mañi23	98	$\overline{}$	-8.7%	$\overline{}$	-6.8%
Ñire33	96		1.3%	$\overline{}$	-6.6%
Tehuel23	98	∇	-5.4%		4.9%
Palena	171	_	0.3%	$\overline{}$	-3.2%
G.Carrera	118	_	0.3%		5.0%
Cochamó	193	_	63.2%	$\overline{}$	-4.0%
Hornopirén	166		2.5%	_	70.8%

Source: CNE

Variation in node power price, medium-size systems

Busbar	[USD/MW-mth]		ndex	Annual
Pta Arenas	12.570	_	0.3% _	5.0%
Tres Puentes	11.869		0.3% 🛓	5.0%
Pto Natales	11.095		0.3% 🛓	5.0%
Porvenir	13.512		0.3% 🛓	5.0%
Pto Williams	12.879		0.3% 🛓	5.0%
Aysén 23	12.852	_	0.3% _	5.0%
Chacab23	12.852	_	0.3% _	5.0%
Mañi23	12.852	_	0.3% _	5.0%
Ñire33	12.852		0.3% 🛓	5.0%
Tehuel23	12.852		0.3% 🛓	5.0%
Palena	12.852		0.3% 🛓	5.0%
G.Carrera	12.852		0.3% 🛓	5.0%
Cochamó	21.421		63.2%	^ 70.8%
Hornopirén	13.461	_	2.5% _	7.3%

Source: CNE







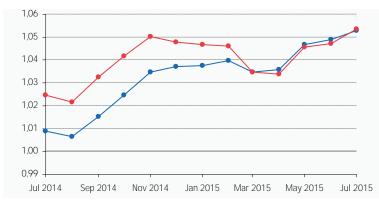


9 Evolution of Variable Distribution Cost Indexes

The distribution added value (DAV)* is set every four years by the Energy Ministry, based on a technical report prepared by the NEC, 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 evoluation of the indexator of the variable component both for high and low voltage for June 2015.

For more information, visit Decreto Nº1T/2012 Proceso de Fijación de Tarifas de Distribución 2012-2016.

Evolution of Indexes



Variation in Indexes

System	Index	Monthly		Annual	
• CDAT	1.053		0.4%	<u> </u>	4.4%
CDBT	1.053	_	0.6%		2.8%

Source: CNE

Source: CNE

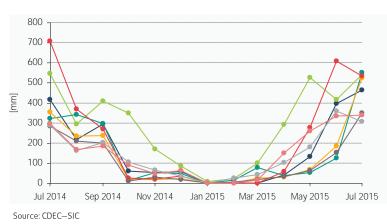
10 Hydrological Statistics

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 31, 2015 are shown below for the main measurement locations.

Evolution of Annual Rainfall



Variation in Annual Rainfall

Rese	Reservoir		Monthly		Annual	
***	Abanico	463		17%		11%
***	Canutillar	542		31%	$\overline{}$	-1%
***	Others (**)	552		345%		72%
***	Colbún	524		186%		48%
***	Pangue	532	$\overline{}$	-13%	$\overline{}$	-25%
***	Pehuenche	350		130%		23%
***	Pilmaiquén	307	$\overline{}$	-14%		6%
***	Pullinque	339	_	1%		14%







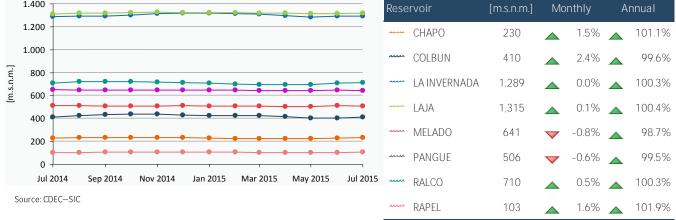


Reservoir, Lake and Lagoon Levels

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

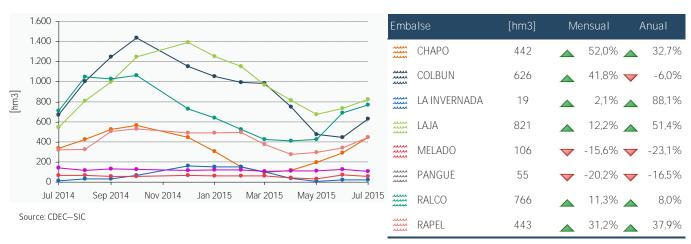
Reservoir, Lake and Lagoon Volumes

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 2015.

Evolution of Reservoir Volume

Variation in Reservoir Volume

Variation in Reservoir Levels



Source: CDEC-SIC



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 2015**, BRENT oil prices averaged **56.5 USD/bbl.**, which represents an **-8.4%** decrease from the previous month and a **-47.0%** decrease from July 2014. Meanwhile, the average WTI oil prices was **51.2 USD/bbl.**, a **-14.5%** decrease from the previous month and a **-50.3%** decrease from the same month the previous year.

Evolution of BRENT and WTI Oil Prices



Crude Oil Variation (USD/bbl.)

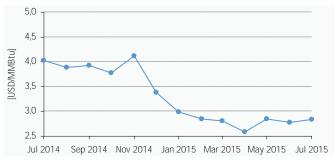
Index	USD/bbl.	Monthly	Annual
BRENT DTD	56.5	-8.4%	-47.0%
₩TI	51.2	- 14.5%	-50.3%

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

Source: NEC, 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**, Henry Hub averaged **2.83 USD/MMBtu**, an **2.1%** increase from the previous month and a **-29.7%** decrease compared to **July 2014**.

Evolution of Natural Gas Price (Henry Hub)



Natural Gas Variation (Henry Hub)

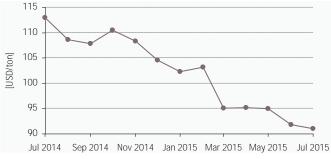
Index	USD/MMBtu	Monthly	Annual
♦ HENRY HUB SPOT	2.83	2.1%	▼ -29.7%

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

Source: NEC, 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 averaged a price of **91.0 USD/ton**, representing an **-0.8%** decrease over the previous month and a **-19.4%** decrease from the same month in **2014**.

Evolution of EQ 7000 Steam Coal kCal/kg



Source: NEC, 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	91.0	-0.8%	▼ -19.4%

Source: NEC, 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

Evolution of Liquid Fuel Prices Antofagasta



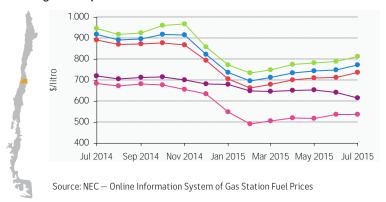
Source: NEC — Online Information System of Gas Station Fuel Prices

Variation of Liquid Fuel Prices

Fuel Type	\$/liter	Monthly	Annual
Gasolina 93 SP	762	3.4%	-16.4%
🚨 Gasolina 95 SP	806	3 .9%	-13.5%
📔 Gasolina 97 SP	849	4.3%	-11.1%
■ Kerosene	629	△ 0.8% ¬	-15.0%
Petróleo Diesel	553	<u> </u>	-21.1%

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

Santiago Metropolitan





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

Valparaíso



Source: NEC - Online Information System of Gas Station Fuel Prices

Fuel Type	\$/liter	Monthly	Annual
Gasolina 93 SP	743	<u> </u>	-16.2%
🕒 Gasolina 95 SP	789	3.7%	-13.4%
Gasolina 97 SP	844	4.1%	-10.7%
L Kerosene	646	0.4%	-11.3%
Petróleo Diesel	535	<u> </u>	-21.2%

 ${\tt Source: NEC-Online\ Information\ System\ of\ Gas\ Station\ Fuel\ Prices}$









Evolution of Liquid Fuel Prices

Concepción



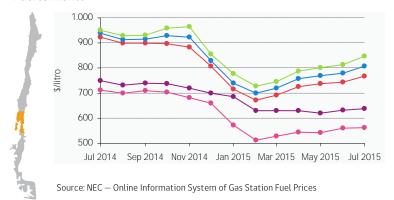
Source: NEC — Online Information System of Gas Station Fuel Prices

Variation of Liquid Fuel Prices



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

Puerto Montt





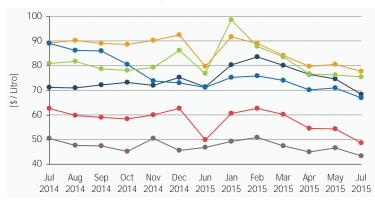
Source: NEC — Online Information System of Gas Station Fuel Prices

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



Source: CNE



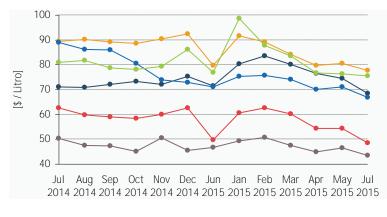






Diesel

Evolution of Gross Sales Margin



Variation in Gross Sales Margin

Diesel Oil	\$/liter	Mor	nthly	Aı	nnual
\$ ☐ 5th Region	68	$\overline{}$	-8.3%	$\overline{}$	-3.8%
\$ <u>■</u> 6th Region	78	ightharpoons	-3.7%	$\overline{}$	-13.1%
\$1 7th Region	67	$\overline{}$	-5.9%	$\overline{}$	-24.9%
\$ <u>■</u> 8th Region	75	$\overline{}$	-1.1%	$\overline{}$	-6.9%
\$\blue{\textbf{\textit{L}}} \text{Santiago} \\ Metropolitana	48	$\overline{}$	-10.7%	$\overline{}$	-22.6%
\$ <u>■</u> 12th Region	43	ightharpoons	-6.8%	$\overline{}$	-13.9%

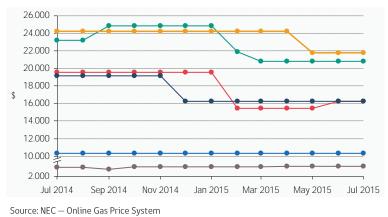
Source: CNE

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 liquified 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



Variation in Network Gas Prices



Source: NEC — Online Gas Price System







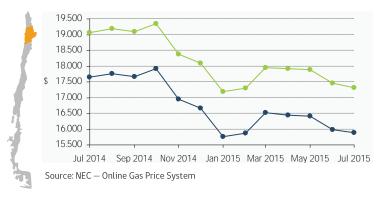


5 Domestic Prices of Bottled Liquefied Petroleum Gas

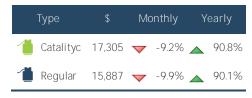
Bottled LPG is liquefied gas fuel, i.e., propane and butane and their blends (with a maximum 30% of butane). The fuel is compressed for bottling in cylinders of varying sizes that are sold to end users for use in heaters, stoves and water heaters/boilers. The cylinders on the local market have a capacity 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

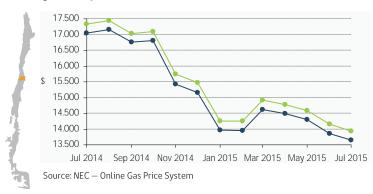


Variation in Bottled LPG Prices



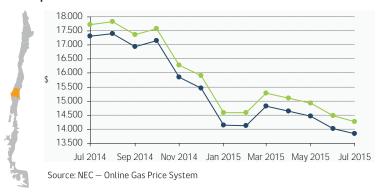
Source: NEC — Online Gas Price System

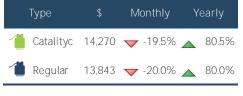
Santiago Metropolitan





Concepción





 ${\tt Source: NEC-Online\ Gas\ Price\ System}$



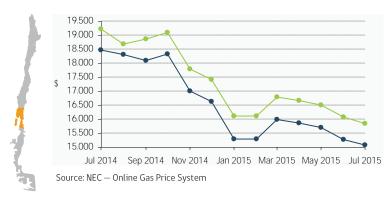






Evolution of Bottled LPG Prices

Puerto Montt



Variation in Bottled LPG Prices



6 Importaciones y Exportaciones de Combustibles

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 90% of total national imports (in tons) for June 2015.

The main fuels exported during the month of June was coal representing 97% of total exports measured in tons.

The total variation of imports registered an increase of 27.8% over the previous month and 38.4% compared to June 2014. Meanwhile, the total change in exports recorded a considerable increase compared to the previous month and an a decrase of -8.3% in reference to June 2014.

Imports of the main primary fuels during the month of June are coal from the Colombia and United States; crude oil from Brazil and Ecuador; and diesel oil and liquefied natural gas brought from the United States, Japan and Trinidad and Tobago respectively.

During June the exports of diesel and gasoline recorded as country of destination Bolivia.

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	1,132	37.6%	71.9%
🛣 Crude Oil	889	36.7%	15.3%
Diesel Oil	419	0.6%	38.4%
Natural Gas	340	22.2%	47.0%
⇔ Gasoline	0	-100.0%	-100.0%
LPG	139	84.5%	27.6%
── IFO	0.0	(*)	(**)
Household Kerosene	22	-45.3%	576.9%
Overall total	2,942	27.8%	38.4%

Variation in Exports During the Period

Fuel	[Thous-Tons]	Monthly	Annual
So Coal	140	(*)	-2.4%
Diesel Oil	2	-44.0%	√ -76.8%
⇔ Gasoline	1	-82.8%	61.1% →
GLP	0	(*)	(*)
₩ IFO	0	(*)	(*)
TOTAL	144	1 127.9%	6 ▼ -8.3%

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

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

^(*) No transactions recorded during the period under review

^(**) Not recorded during the reference month transactions



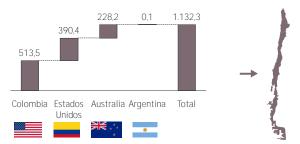






Imports by Country of Origin (thousands of tons)

Coal (*)



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

Diesel Oil



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

Exports by Country of Origin (thousands of tons)

Gasoline



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

Coal (**)

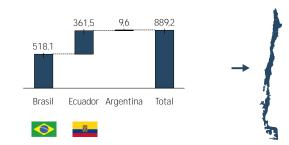


Source: Customs, provided by Comex Service, Santiago Chamber of Commerce

(*) Imported coal is mostly bituminous coal.

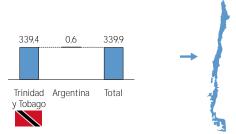
(**) Exported coal is mostly sub-bituminous coal

Crude Oil



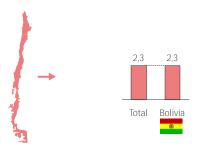
Source: Customs, provided by Comex Service, Santiago Chamber of Commerce

Natural Gas



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

Diesel Oil



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





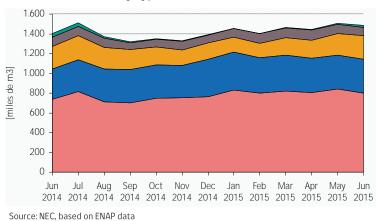




7 Fuel Sales

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



Fuel Sales Variation, by Type

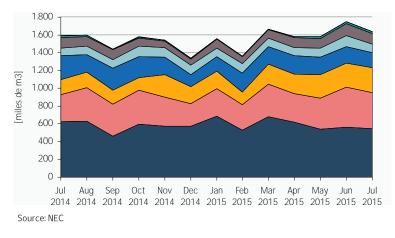
	Туре	[Thous - m3]	Mc	onthly	А	nnual
ô	Household kerosene	25	_	78.6%	~	-26.5%
	Fuel Oils	81		-9.0%	$\overline{}$	-11.0%
	Liquefied Gas	240	_	10.1%	_	3.4%
	Gasoline	341	$\overline{}$	-1.7%	_	11.1%
	Diesel Oil	801	$\overline{}$	-4.6%	_	8.8%
Over	all total	1,488	$\overline{}$	-1.3%	_	6.3%

Source: NEC, 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



Fuel Inventory Evolution, by Type

Туре	[Thous - m3]	Monthly	Annual
X Aviation gas	1	-20.0%	-5.2%
	20	-21.2%	-0.1%
Fuel Oils	119	- 11.1%	-1.4%
Kerosene Av.	98	-18.9%	2 1.2%
Automotive gas	170	-10.0%	-36.8%
Liquefied gas	279	4.3%	6 5.3%
Diesel oil	405	-10.0%	32.3%
Crudo oil	545	-3.3%	-12.6%
Overall total	1,637	-6.5%	3.0%

Source: NEC



ENERGY PROJECTS UNDERGOING ENVIRONMENTAL EVALUATION

1 Projects Submitted for Environmental Evaluation

In July 2015, **10 energy projects** were submitted to the Environmental Impact Evaluation System (SEIA), representing an investment of **USD 808 million**. Of these, **8** projects are for electric power generation, **3** projects are for oil and/or gas generation to be developed by the mining industry and **3** projects are for electrical transmission growth.

Detail of energy projects submitted for environmental evaluation

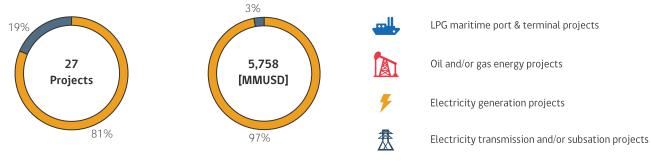
Project Type	Project Owner	Project Name	Presentation Date	Investment [MMUSD]	WEB
Generation	Parque Eólico Los Trigales SpA.	Parque Eólico Los Trigales	31-jul-2015	300,0	<u>Link</u>
Generation	PV Atacama Uno S.A.	Planta PV Cerro Dominador	17-jul-2015	200,0	<u>Link</u>
Generation	Hidroeléctrica Las Juntas S.A.	Mini centrales Hidroeléctricas de pasada Aillín y Las Juntas	02-jul-2015	43,0	<u>Link</u>
Generation	CMPC CELULOSA S.A.	Incremento de generación de vapor en planta Santa Fe	02-jul-2015	120,0	<u>Link</u>
High-voltage electricity transmission line	MINERA ESCONDIDA LIMITA- DA	Trazado de Línea de Alta Tensión y Subestación, Área Faena Mina	17-jul-2015	13,2	<u>Link</u>
High-voltage electricity transmission line	CENTRAL ILLAPA S.A.	DIA Modificación de la Línea de Transmisión Central Illapa	17-jul-2015	4,5	<u>Link</u>
Subbsation	TRANSNET S.A.	"Nuevo Transformador 154/66 kV S/E San Fernando"	20-jul-2015	1,7	<u>Link</u>
Subbsation	TRANSNET S.A.	Subestación Seccionadora Lota	21-jul-2015	1,9	<u>Link</u>
Subbsation	Domeyko Oeste Cinco SpA	Proyecto Subestación Hades y Línea de Seccionamiento en Alta Tensión 2x220 kV	17-jul-2015	20,2	<u>Link</u>
Subbsation	Inversiones y Servicios SunEdison Chile Limitada	Parque Fotovoltaico Santa Sofía	01-jul-2015	104,0	<u>Link</u>

Source: SEIA

2 Energy Projects Currently Being Evaluated

In July 2015, there were **27** energy projects awaiting approval of their environmental qualification resolutions (RCA). Of these, 81% are projects related to electric power generation, and the remaining 19% to electrical transmission and/or substations, . Together they represent a total investment of **5,758 MMUSD**.

Distribution of Projects and their Investment [millions of USD]



Source: SEIA









3 Projects with Approved Environmental Qualification Resolution

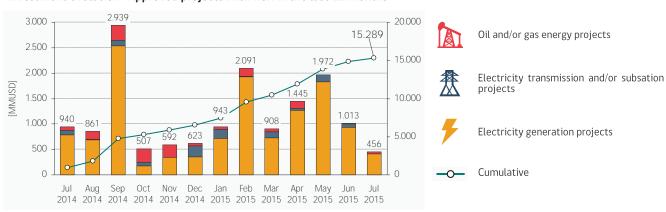
In **July 2015**, the environmental qualification resolutions (RCA) of **12** energy projects were approved. Of these, **5** projects are for electric power generation with total capacity of **327 MW**, while **4** other projects are for electricity transmission and/or substations and **4** other projects are for oil and/or gas for mining development. Together they represent a total investment of **466** MMUSD.

Project Type	Region	Project Owner	Investment [MMUSD]	RCA Date	Capability	Web
Fuel Storage	XII	ENERGIA DEL SUR LIMITADA LTDA.	0,6	28-jul-2015		<u>Link</u>
Mining Development Oil and gas	XII	Empresa Nacional del Petróleo - Magallanes	39,6	21-jul-2015		<u>Link</u>
Mining Development Oil and gas	XII	Empresa Nacional del Petróleo - Magallanes	0,6	21-jul-2015		<u>Link</u>
Mining Development Oil and gas	XII	Empresa Nacional del Petróleo - Magallanes	0,9	21-jul-2015		<u>Link</u>
Mining Development Oil and gas	XII	PETROMAGALLANES OPERACIONES LTDA.	0,5	07-jul-2015		<u>Link</u>
Generation	IX	SCHWAGER ENERGY S.A.	17,0	15-jul-2015	5,4	<u>Link</u>
Generation	IX	GTD Negocios S.A.	22,0	20-jul-2015	9	<u>Link</u>
Generation	1	Pleiades S.A.	240,0	08-jul-2015	120	<u>Link</u>
Generation	1	Compañía Eléctrica Tarapacá S.A.	110,0	14-jul-2015		<u>Link</u>
Generation	VIII	Eólica La Esperanza S.A.	25,0	27-jul-2015	12,5	<u>Link</u>
High-voltage electricity trans- mission line	П	EOSOL NEW ENERGY S.A.	1,7	04-ago-2015		<u>Link</u>
High-voltage electricity trans- mission line	XIV	Sistema de Transmisión del Sur S.A.	8,0	07-ago-2015		<u>Link</u>

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 **15,289 MMUSD**. In particular, energy power generation projects have a total investment of **12,709 MMUSD** (83.1%), equivalent to **4,820 MW** approved.

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



Source: SEIA



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	Amending Decree-Law No. 323 of 1931, Gas Services Act, the Ministry of Interior and other laws.	Very Urgent	First reading. In discussion in the Committee on min ing and Energy of the Chamber of Deputies. First report of Commission of Mi- nes and Energy	29/01/2015	<u>Link</u>
10.61-08	Modifies the General Electricity Services Law to introduce mechanisms for fairness in electricity rates.	Not Urgent	First constitutional procedure (the Senate). First report of Committee of Mining and Energy	01/07/2015	<u>Link</u>

2 Sectorial Regulations Published in the Official Bulletin

Thursday, July 2, 2015, saw the publication of the Ministry of Energy Decree No. 101 of August 22, 2014, amending Supreme Decree No. 244 of 2005 issued by the Ministry of Economy, Development and Reconstruction, which approves the regulation of non-conventional and small methods of generation established in the General Law on Electrical Services. Link

On Friday, July 3, Ministry of Energy Decree No. 46, of May 7, 2015 was published, the, amending Ministry of Energy Supreme Decree No. 114 of 2012, approving new rules for implementing law No. 19,657 on geothermal energy concessions and repealing Ministry of Mining Decree No. 32 of 2004. Link

Saturday July 4, 2015, saw the publication of Ministry of Energy Decree No. 14T, of April 30, 2015, , which sets node prices for electricity supply. $\underline{\text{Link}}$

On Wednesday, July 22, Ministry of Energy Decree No. 52 of May 29, 2015, was published, granting to Sociedad Austral de Electricidad SA (Saesa) the definitive concession of the public service of electricity distribution in the Region of Antofagasta. Link

Thursday, July 30, saw the publication of Ministry of Energy Decree No. 59 of June 4, 2015, granting to Empresa Electrica de La Frontera SA the definitive concession of the public service of electricity distribution in the Municipality of Lonquimay, Malleco Province in La Araucanía Region. Link

3 Sectorial Regulations Not Published in the Official Bulletin

CNE Exempt Resolution No. 385 was issued on July 29, 2015, which updates and communicates the generation and transmission works in progress. Link

4 Expert Panel Rulings

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

Comisión Nacional de Energía

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www.cne.cl

Santiago - Chile