

August  
**2015**

# PROGRESS REPORT

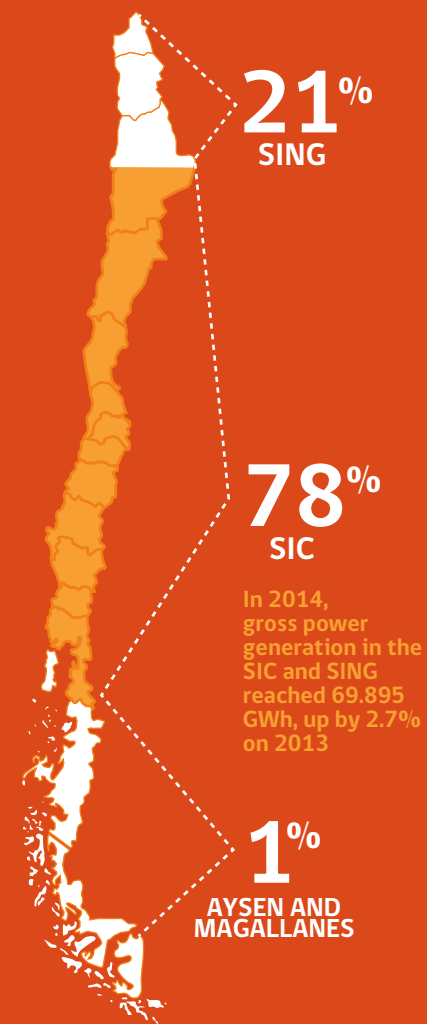
## Energy Agenda



# Energy in Chile

## Main Figures

- **Installed power capacity by system, 2014**
  - SIC: 15,409 MW
  - SING: 3,941 MW
  - Aysen: 52 MW
  - Magallanes: 101.7 MW
- **Installed capacity by technology SIC-SING, 2014**
  - Coal: 21.2%
  - Hydro: 33.2%
  - LNG: 16.6%
  - Non-Conventional Renewable Energy: 9.2%
  - Diesel: 19.8%
- **SIC**
  - Coal: 15.92%
  - Hydro: 41.96%
  - LNG: 17.24%
  - Non-Conventional Renewable Energy: 5.55%
  - Diesel: 19.33%
- **SING**
  - Coal: 51.45%
  - Hydro: 0.37%
  - LNG: 35.99%
  - Non-Conventional Renewable Energy: 2.82%
  - Diesel: 9.37%
- **Gross power generation 2014**
  - SIC: 52,265 GWh
  - SING: 17,674 GWh
  - Aysen: 136 GWh
  - Magallanes: 298 GWh
- **Percentage of power generated by Non-Conventional Renewable Energy (NCRE) sources generated in 2014: 8.66%**
- **Number of projects under construction in August 2015**
  - 45 projects
  - 3,930 MW
- **Average marginal cost of electricity during 2014**
  - SIC: 134.8 USD/MWh
  - SING: 82.1 USD/MWh
- **Average market price during 2014: 97.1 USD/MWh**
- **Electric power consumption: 3,810 KWh per capita**
- **Households with individual or shared access to utility grid: 99.22%**
- **Expected demand growth of electricity: 4.3% annual**
- **Call for tenders for 20 years of supply in April 2016: 13,750 GWh/Year**



Source: National Energy Commission

# 2015 Progress



## REGULATIONS

- For the first half of 2015, the Regulatory Agenda included the submission of 4 regulations to the Office of the Comptroller (OC) related to: Efficient Co-Generation, Medium Sized Systems, Pedestrian Public Lighting, and Other Non-Conventional Renewable Energies. This goal is 100% fulfilled and it can be noted that the first two regulations are already in force.
- In addition, two amendments were sent to the OC: Geothermal Concessions Regulation Amendment and Node Price Regulation Amendment. The first one is already in force.
- The total processing of the Small Scale Distributed Generation Amendment was achieved. This amendment intends to encourage the development of renewable energy projects, promoting the submission of connection requests for this types of energies.

## LEGISLATIVE AGENDA

- As of August 2015, we have submitted and processed two bills. The Energy Ministry's Institutional Enhancement Law and the Electric Supply Tender Bases Law were published.
- In contrast with what has happened in the last tenders, which have been mostly declared null and void, in December 2014 17 bids for 13,000 GWh/year were received with a price of US\$ 107 MWh, 17% lower than the December 2013 records.
- In addition, last July the House of Representatives approved and filed for the Senate's review of the project to renew the tax exemptions for solar thermal panels and the expansion of ENAP's (National Oil Company) business activities.
- This year we submitted to Parliament the Pipeline Gas bill and the bill that enforces equality mechanisms in electric tariffs within the General Electric Services Law.
- Finally, during the month of August the transmission bill will be submitted. This bill modifies substantially the way in which the transmission infrastructure is planned and improves the institutional structure associated with that task.

## STREET LIGHTING REPLACEMENT PROGRAM

- In July, the field works of the Pilot Project in the municipality of San Clemente began to replace 2,104 light fixtures and will be concluded late this year. In addition, in August, the tender bases were published for the first 14 municipalities. This is equivalent to 52,444 light fixtures to be replaced with a total investment of about SCL\$ 19,5 for these first municipalities. It is estimated that the works in the 14 municipalities will be completed during the second half of 2016.

## HOUSEHOLD ELECTRIFICATION

- 1,561 households have been electrified in our country during the first half of 2015. This will improve the quality of life of more than one thousand families, allowing them access to safe and reliable energy. By the end of this year we expect that a total of 3,000 households will now have electricity available.

# Energy Agenda

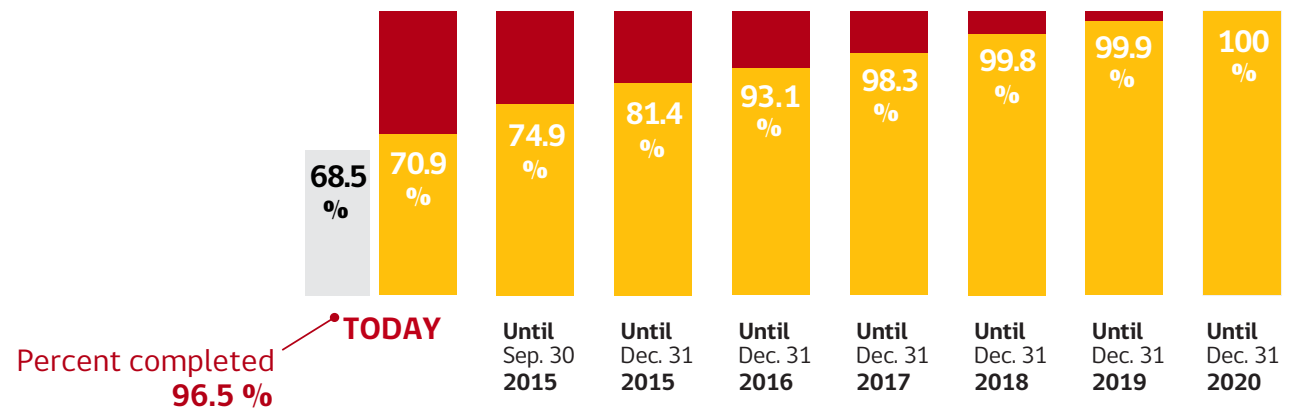
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### STATUS OF INITIATIVES

Total number of initiatives	99
Pending	1
Finished	39
In Action	59



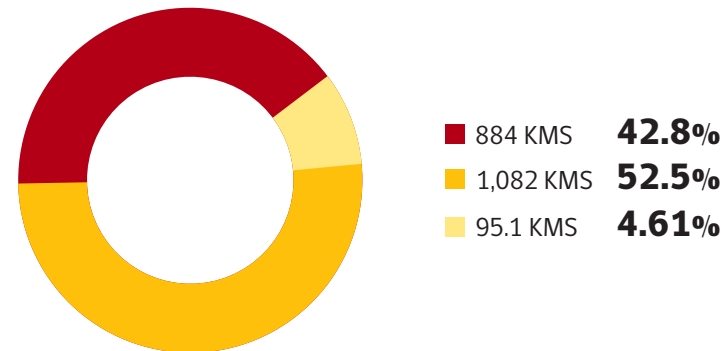
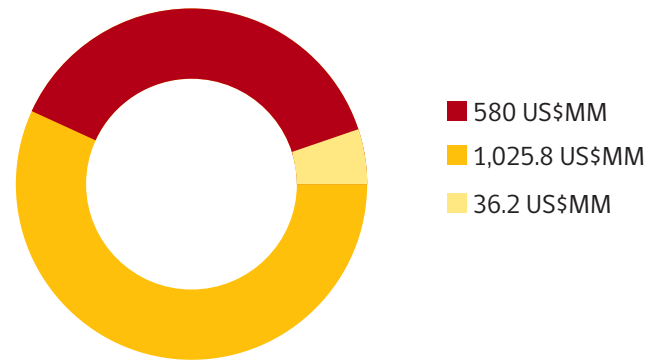
# Transmission



## TRANSMISSION LINES UNDER CONSTRUCTION (SIC+SING) – AUGUST 2015

23 Transmission projects under construction – 2,061 KMS – US\$MM 1.64 Bn.

● TRUNK ● ADDITIONAL ● SUB-TRANSMISSION

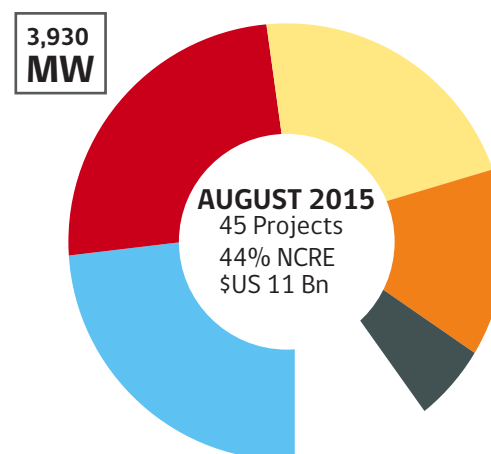
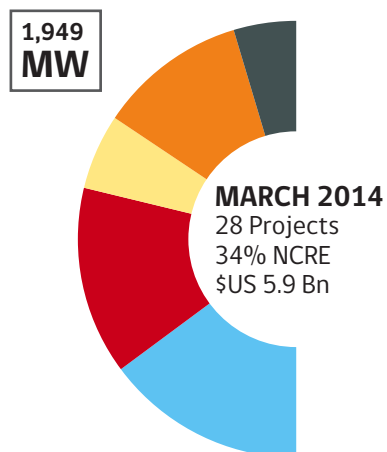


# Generation



## GENERATION PROJECTS UNDER CONSTRUCTION (SIC + SING) - AUGUST 2015

● HYDRO ● THERMAL ● SOLAR ● WIND ● OTHER NCRE



### MAIN PROJECTS

■	<b>Cerro Pabellón:</b> 40 MW
■	<b>San Juan:</b> 186 MW
■	<b>Laberinto:</b> 146 MW
■	<b>Luz del Norte:</b> 141 MW
■	<b>IEM U1:</b> 375 MW
■	<b>Kelar:</b> 517 MW
■	<b>Cochrane:</b> 472 MW
■	<b>Los Cóndores:</b> 150 MW
■	<b>Alto Maipo:</b> 531 MW

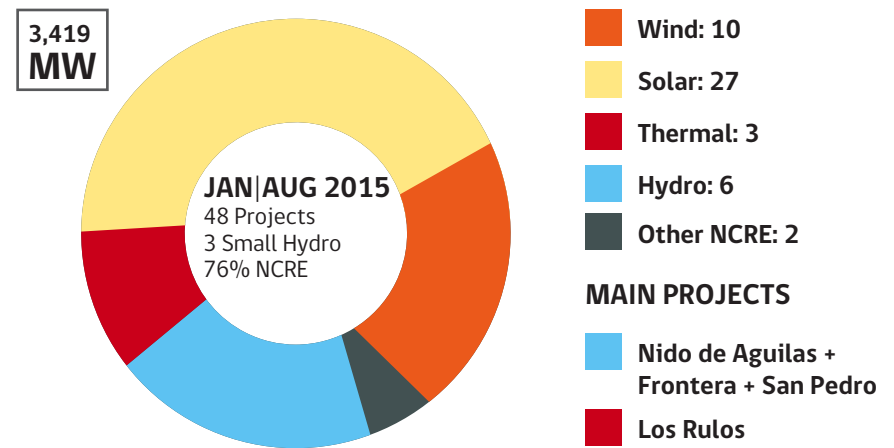
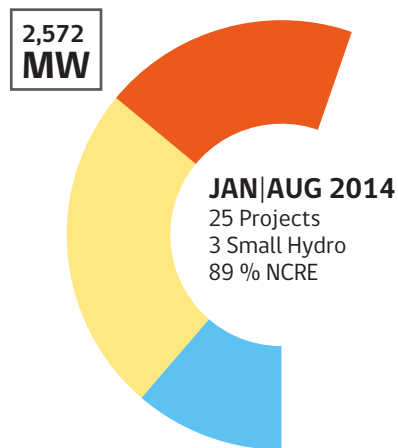
	<b>MARCH 2014</b> 28 Projects 34% NCRE \$US 5.9 Bn	<b>AUGUST 2015</b> 45 Projects 44% NCRE \$US 11 Bn
<b>Hydro</b>	653	1,011
<b>Thermal</b>	632	1,364
<b>Solar</b>	223	1,162
<b>Wind</b>	350	298
<b>Other NCRE</b>	91	96
<b>TOTAL</b>	<b>1,949</b>	<b>3,930</b>

- As of August 2015, there are 45 projects being built (US\$ 11 billion), which represent an increase of 102% in generation capacity, 61% in number of projects and 86% in value compared to March 2014.
- Only 6 projects that were under construction in March 2014 are in construction today.
- The main 6 new generation projects add up to 1,579 MW: Kelar (517 MW), "Unidad 1 Infraestructura Energética Mejillones" (375 MW), "Planta de Concentración Solar Cerro Dominador" (210 MW), "Parque Eólico San Juan de Chañaral" (186 MW), "CH Los Cóndores" (150 MW), and "Solar Luz del Norte" (141 MW).
- The main increase in value comes from NCRE projects (+134%; +892MW), followed by thermoelectric (+116%; +732MW) and hydroelectric (+55%; +358MW).
- As of August 2015, investment in projects under construction was US\$ 5,100 million higher than March 2014.
- These figures show a greater investment activity in generation infrastructure in the last 15 months.

# Projects Submitted to Environmental Assessment



WIND SOLAR THERMAL HYDRO OTHER NCRE



- From January 1st 2015 until August 24th the number of generation projects submitted to environmental assessment has doubled compared to the same period of 2014 (48 vs 25).
- The latter represents a 72% increase in MWs: 4,419 vs 2,572.
- In August 2014 the first pump-storage project in Chile was submitted to environmental assessment.



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