



# Renewable Energy in Chile:

*“Where do we stand and where we are headed”*

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Energy Infrastructure Division  
Ministry of Energy  
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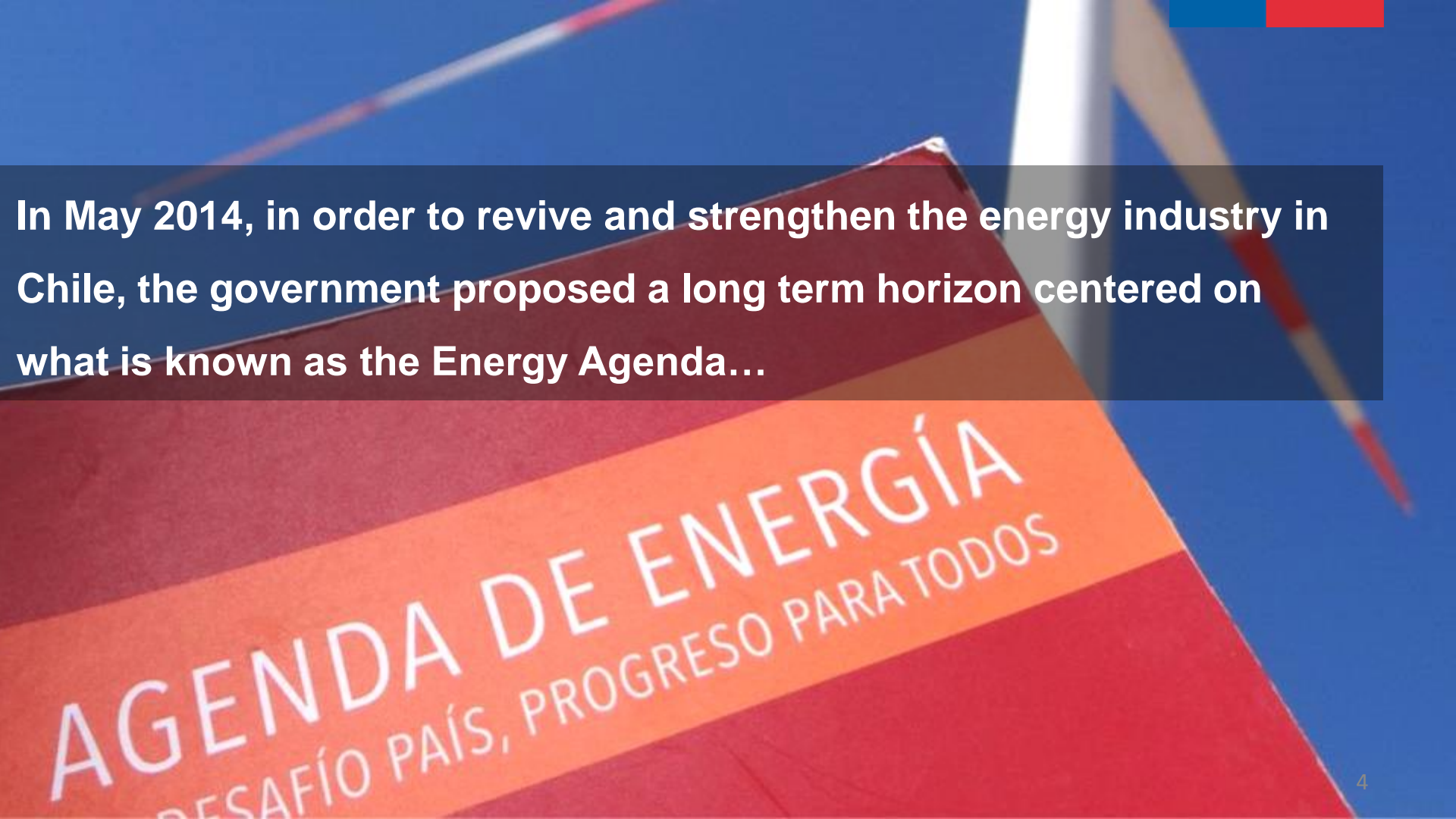
1. What are the current governmental policies in the energy sector?

2. Market Overview and Attractiveness: Investment needs for Chile in the coming years.

A vertical column of eight grey icons on the left side of the slide, representing various energy sources: a factory with smoke, a wind turbine, an oil rig, a circular flow diagram, a sun, three spirals, a power transmission tower, and a flame.

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**In May 2014, in order to revive and strengthen the energy industry in Chile, the government proposed a long term horizon centered on what is known as the Energy Agenda...**

**AGENDA DE ENERGÍA**  
DESAFÍO PAÍS, PROGRESO PARA TODOS

# 7 Pillars of the Energy Agenda

1. A new role for the state
2. Reduction of energy prices, with higher competition, efficiency and diversification of the energy market
3. Development of our own energy resources
4. Connectivity for the energy development
5. An efficient sector managing consumption
6. Boost for investment in energy infrastructure
7. Citizen involvement and territorial regulation



# Energy 2050: Long Term Energy Policy

## Pillars



## Long Term Goals

- 2035: 60% of electric generation from RE.
  - 2050: 70% of electric generation from RE.
- ✓First South American country to implement a carbon tax for large power plants.  
✓Voluntary target of cutting GHG emissions 30% from 2007 levels by 2030, up to 45% if there is any international cooperation.

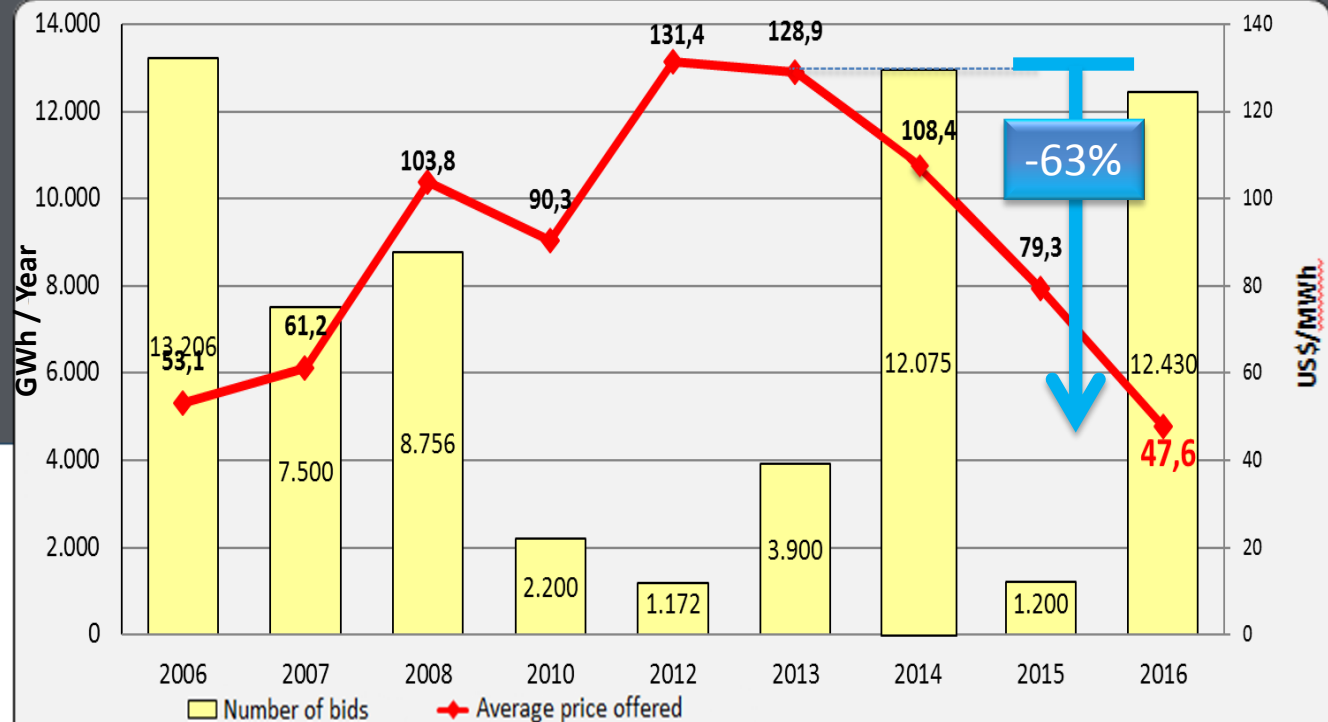
## Other Policies we are currently working on:

- PPA Tender for regulated customers .
- Main transmission system reinforcement (2015-2018).
- Ministry of National Assets` Tender for wind projects.
- Implementation of the Transmission Law (2016).
- Energy Efficiency.
- Communities Engagement Standards.
- 100 Small Hydro Power Plants by 2018 (2014-2018).
- Solar Energy Promotion:
  - PV Self-Supply Strategy → Net Billing
  - Utility-Scale PV Market and CSP.

# PPA Tender for regulated customers: A successful tender process (2016)

Supply for distribution companies' regulated customers must be contracted from generators as a result of public and open tenders, conducted by the CNE (National Energy Commission).

## MORE PARTICIPANTS & LOWER PRICES:

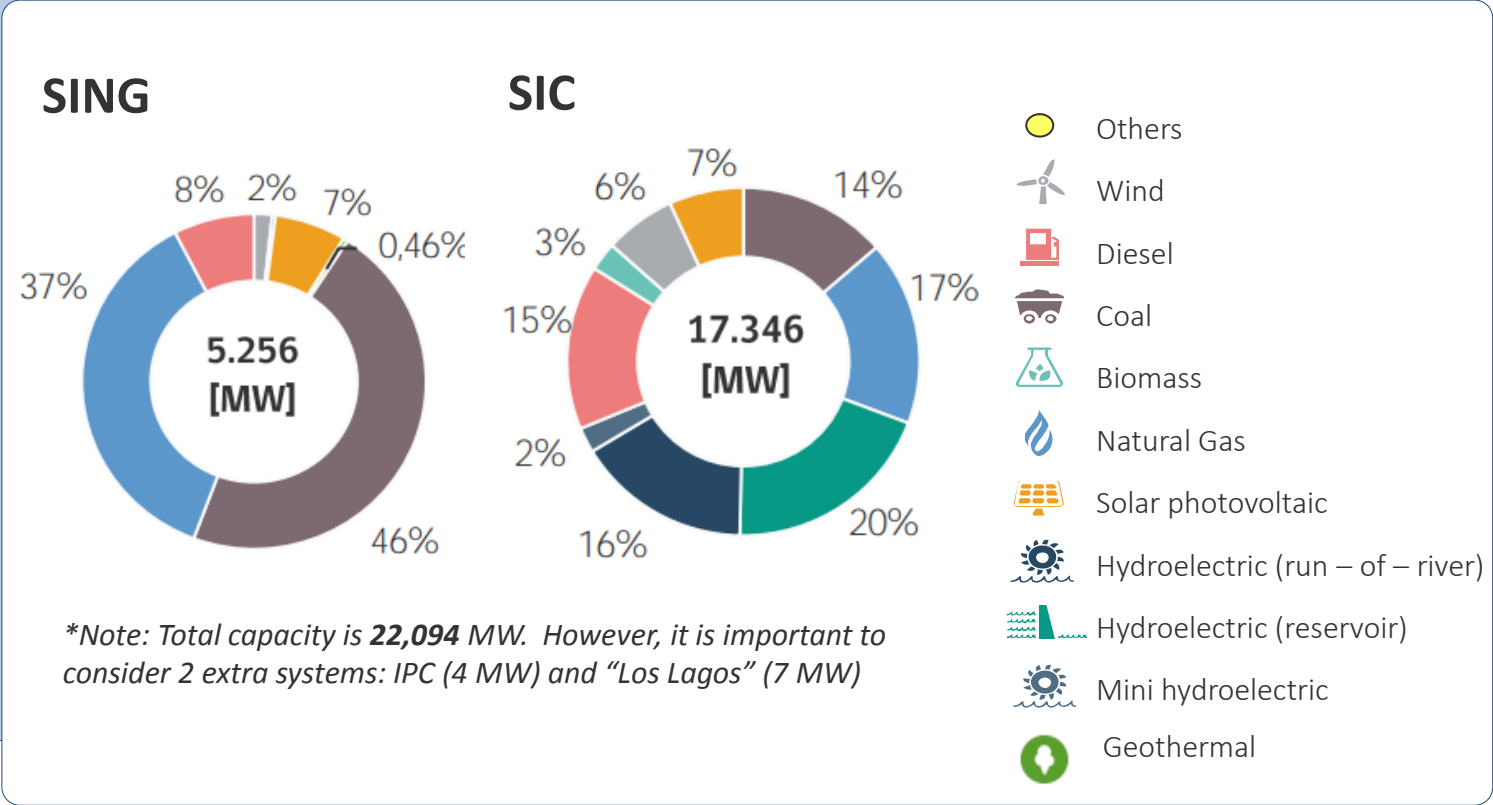
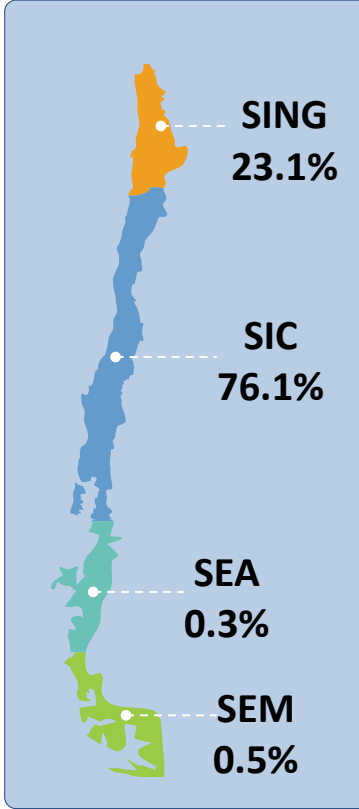


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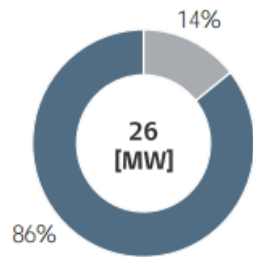
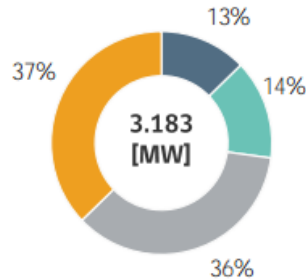
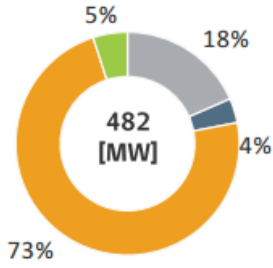
2. Market Overview and Attractiveness: Investment needs for Chile in the coming years.

# Current Installed Electricity Capacity – 22,769 MW



# Current status of NCRE\*

Capacidad Instalada ERNC

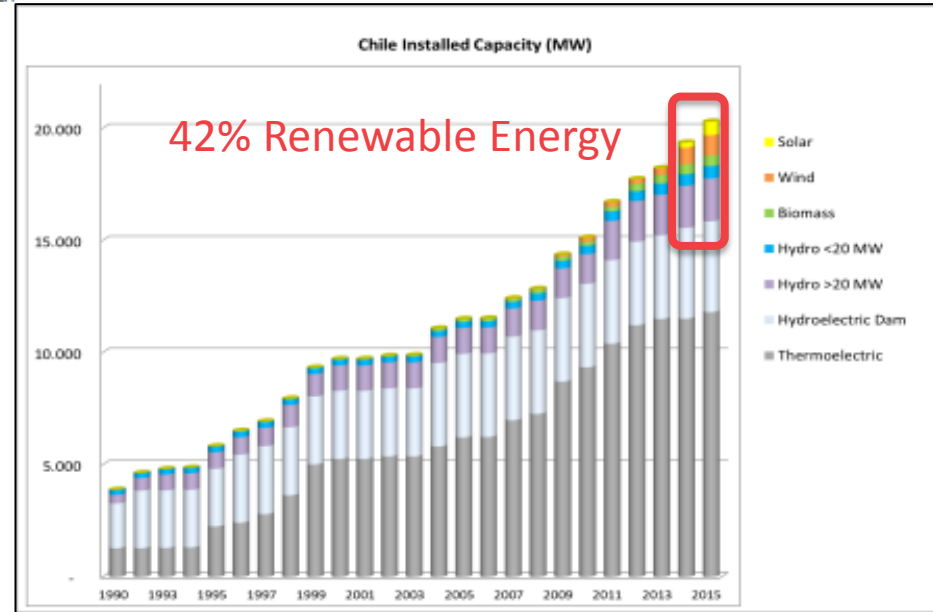


-  Wind
-  Bioenergy
-  Solar PV
-  Small Hydro
-  Geothermal

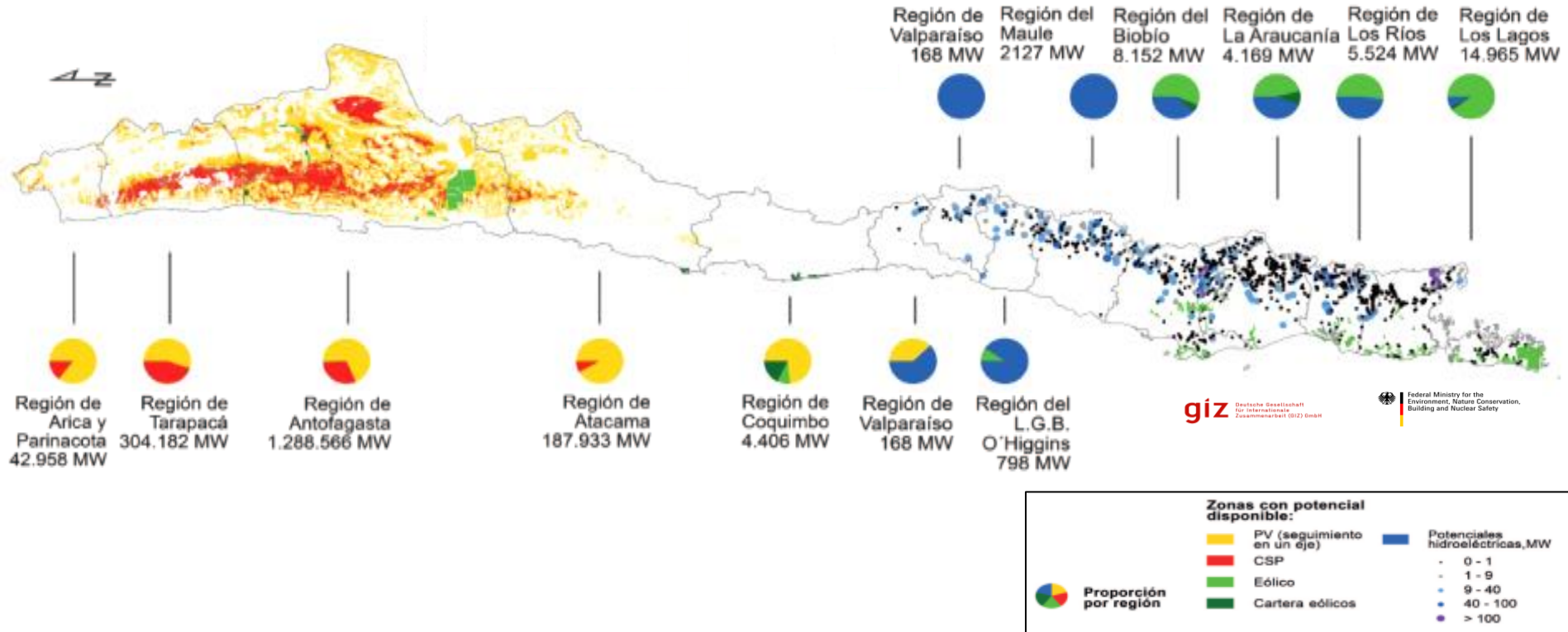
As of June 2017, nearly 3,700 MW installed of NCRE, which accounts for 16% of total installed capacity

Fuente: Coordinador Eléctrico Nacional.  
Source: NEC - May 2017

\*NCRE: Non Conventional Renewable Energy concept includes Small Hydro (less than 20 MW).



# Renewable potential by technology



# State-owned land tender for NCRE projects



38% of total NCRE is on state-owned land

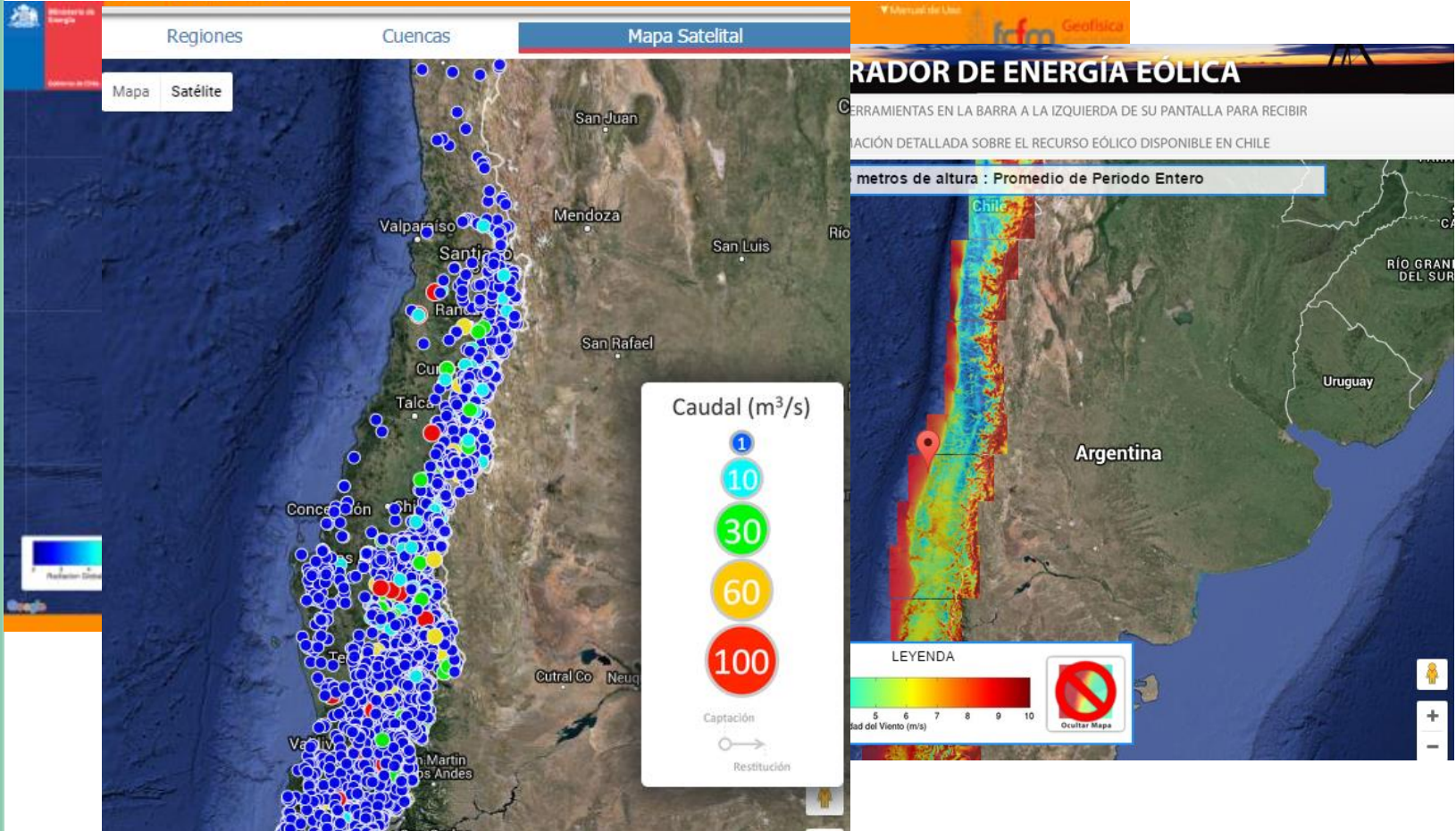


77% Solar projects

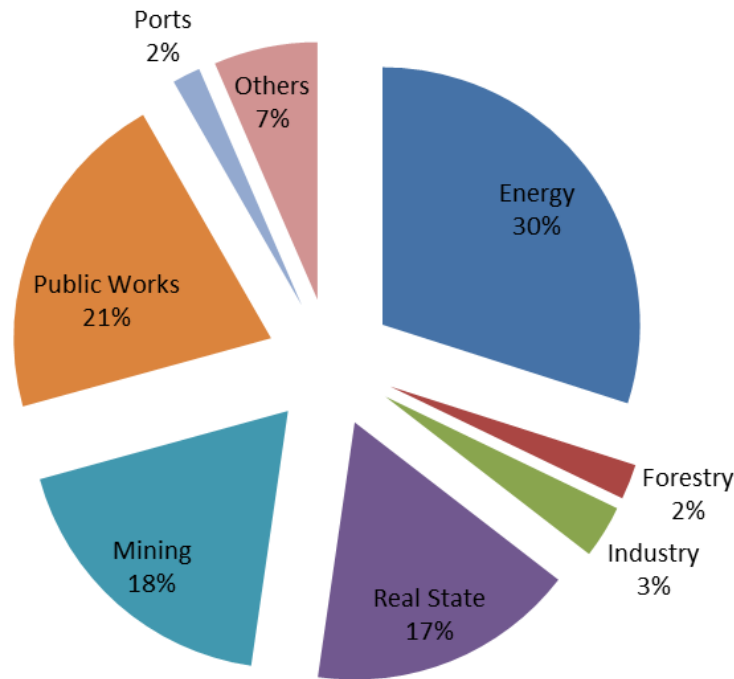


23% Wind projects

# RENEWABLES ENERGY TOOLS



## Investment by Economy Sector 2016



### Executed Investment – Year 2016

By economic sector (% of total investment). Projects with committed schedule according to the Corporación de Bienes de Capital (“CBC”).

Fuente: CBC

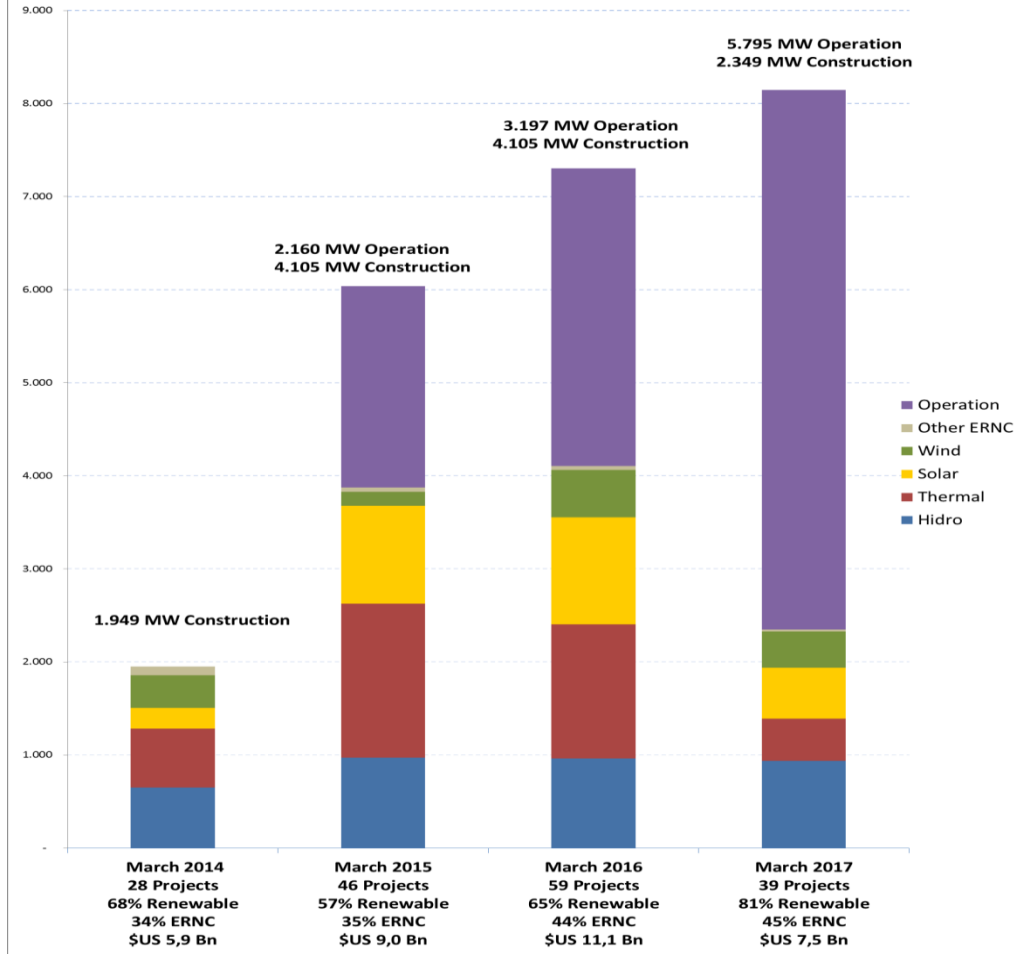
## Investment Overview Current Status

*“Energy [...] remains the most dynamic sector in Investment Intensity, for seven consecutive quarters [...]” (CBC, 4Q 2016 Report)*

**30% of the total executed investment, in private and public sector, is from the energy sector.**



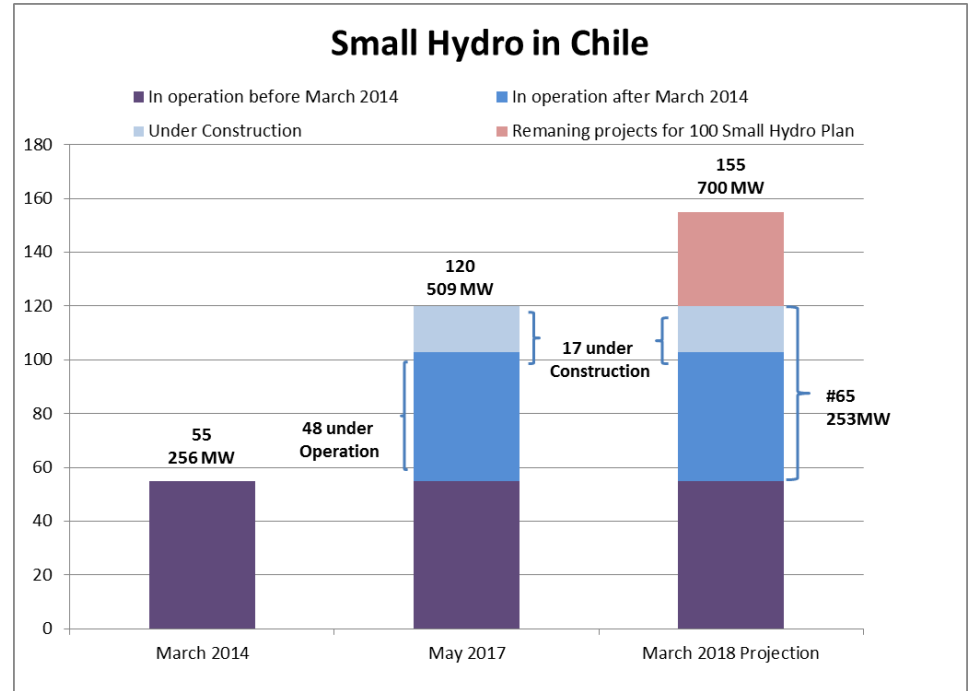
## Stock of Projects under Constrution & Added to the System



**Increase of  
6.600 MW  
March 14 - Feb  
2018 (est)**

# Small Hydro Current Status

Up to date, **48 Small Hydro** (less than 20MW) have **started operations since March 2014** and **17 Small Hydro projects** are currently **under construction**.



An aerial night view of a city, likely Santiago, Chile, showing a dense urban area with numerous lights, a large green park in the foreground, and mountains in the background. The text "THANKS FOR YOUR ATENTION" is overlaid in white, bold, uppercase letters across the top center of the image. A small blue and red rectangular graphic is visible in the top right corner.

**THANKS FOR YOUR ATENTION**



## Additional information:

Wind Energy Explorer: <http://walker.dgf.uchile.cl/Explorador/Eolico2/>

Wind campaigns: <http://walker.dgf.uchile.cl/Mediciones/>

Renewable Energy Potential:

<http://www.minenergia.cl/documentos/estudios/2014.html>

Energía abierta: <http://energiaabierta.cne.cl/>

Ministry of Energy: <http://www.energia.gob.cl/>

Ministry of Land Properties: <http://www.bienesnacionales.cl/>

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