# ANESCO Chile A.G.

#### Motivating both supply and demand for energy services: the Chilean case







Juan F. Richards President of Anesco Chile A.G.







#### Incorporating Energy Service Companies in Nationally Determined Contributions

The potential of ESCOs for meeting the climate goals in the Paris Agreement



series

MEMBERS



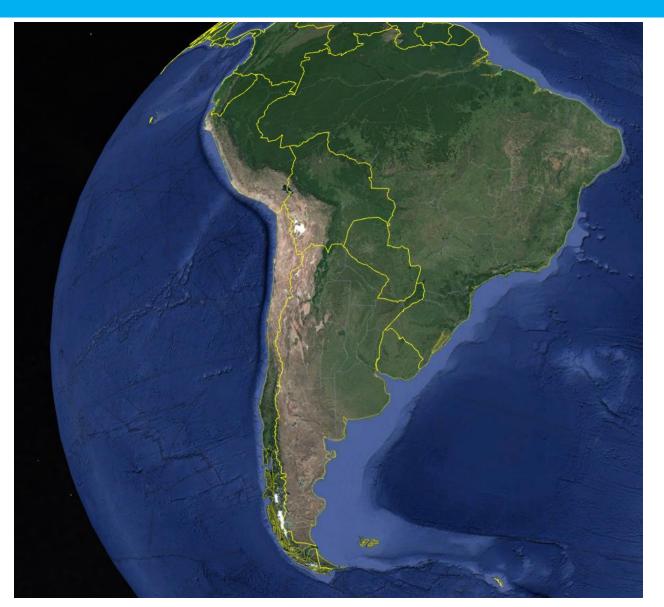


# Energy Context



#### Chile

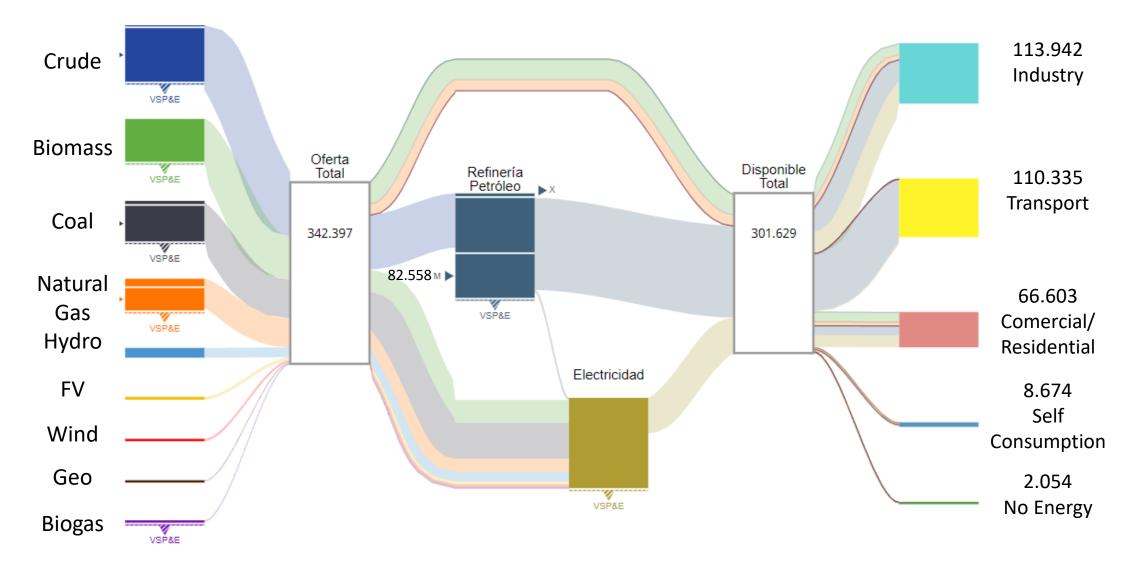
- Continental Chile is 4,270 km from north to south and only averages 177 km east to west.
- Natural borders from the Pacific ocean on the west to Andes Mountains on the east
- Great diversity of climate zones



## Demand and Supply



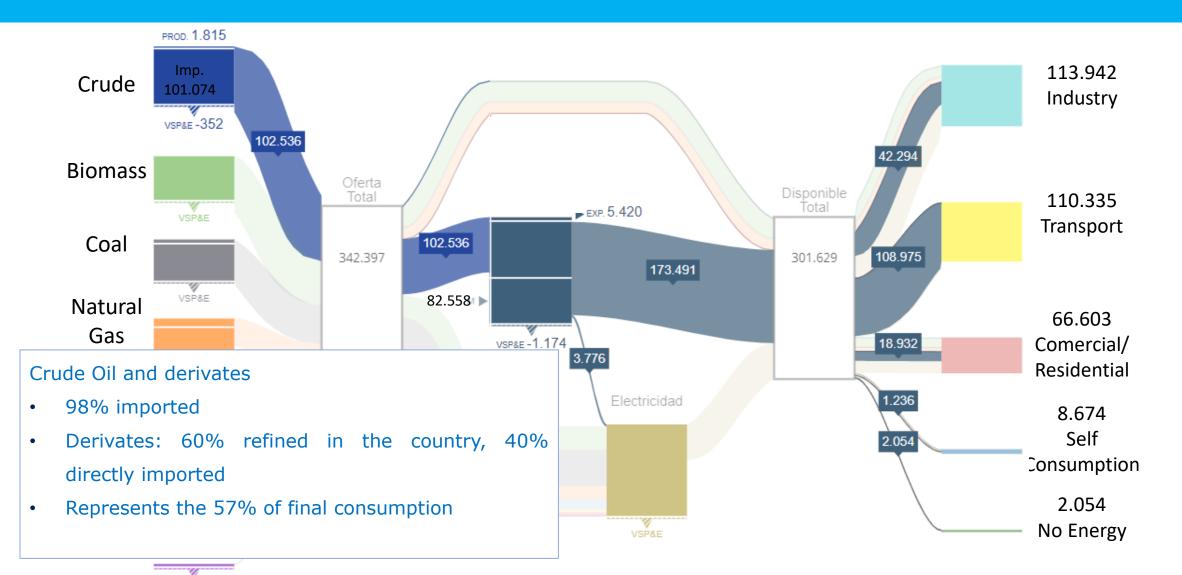




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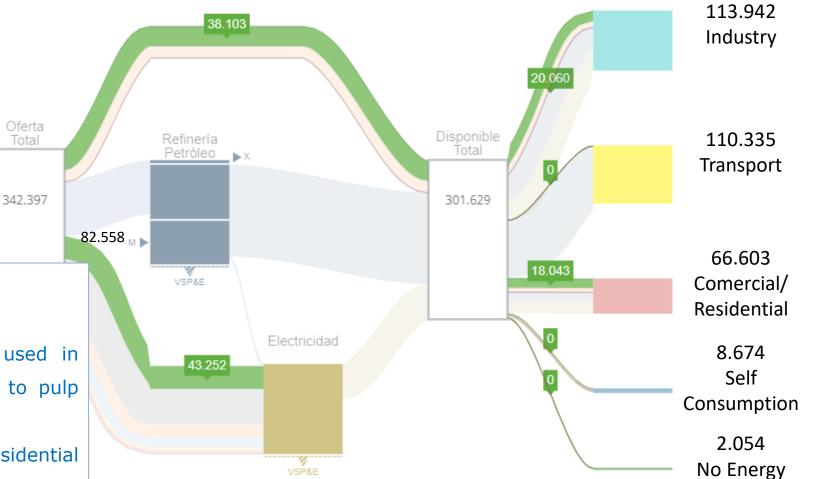
Source: http://energiaabierta.cl/visualizaciones/balance-de-energia/



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Source: http://energiaabierta.cl/visualizaciones/balance-de-energia/



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12% of final consumption ٠

Crude

**Biomass** 

Coal

Natural

**Biomass** 

The 50% of the biomass is used in ٠ electric generation, associated to pulp industry (black liquor)

VSP&E PROD. 80.748

VSP&E 607

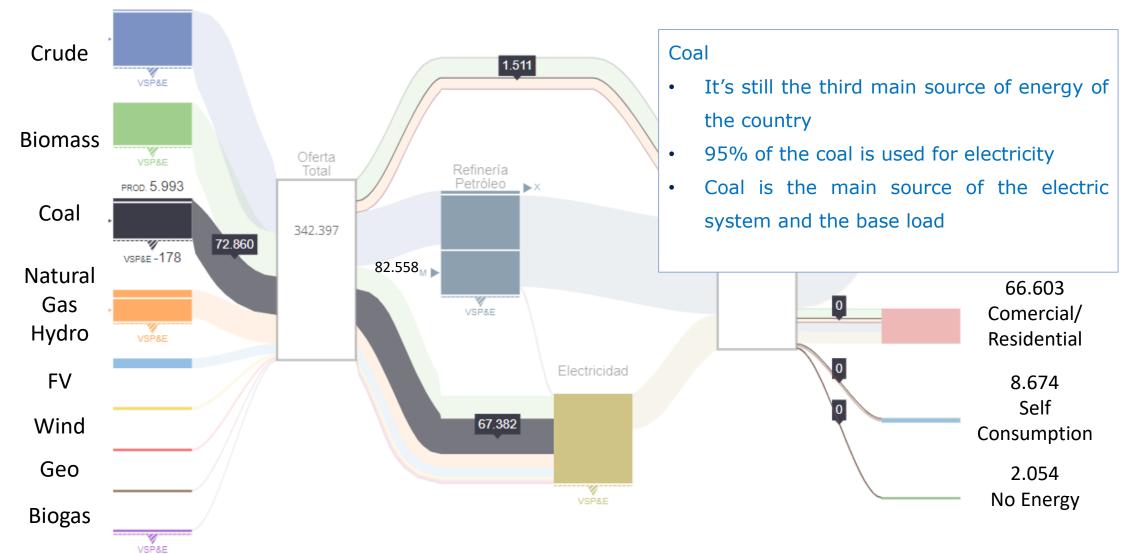
VSP&E

81.355

the Comercial/Residential 30% of ٠ sector, mainly for heating

Oferta

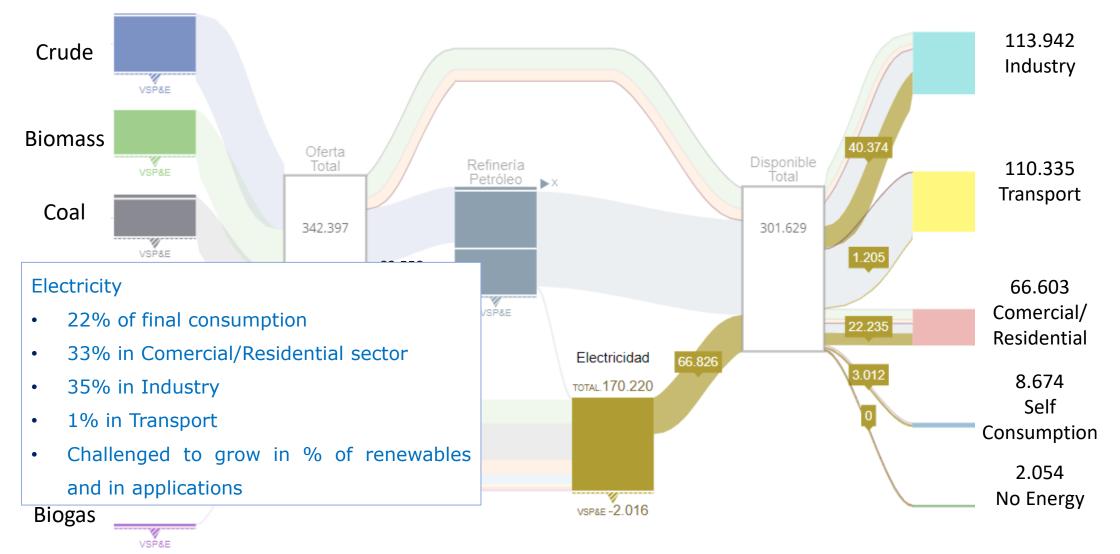
Total



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Source: http://energiaabierta.cl/visualizaciones/balance-de-energia/



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Source: http://energiaabierta.cl/visualizaciones/balance-de-energia/

# Energy Challenges



#### POLLUTION

- 7 out of 10 Chileans live below the contaminations standards
- Mainly associated to use of energy and low efficiency





### Energy Challenges



#### ENERGY TRANSITION



Source: https://climateactiontracker.org/countries/chile/

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- Energy Efficiency has been and it is today the best first approach to our Energy problems
- Nevertheless, Efficiency has not been a main focus in public policy or industrial management
  - The Focus was produce more
- The first step was in 2007 Clean Energies Program, developed by the Interamerican Development Bank and Fundación Chile
  - This set out the need to develop a supply of EE solutions and of how to finance their implementation
  - ESCO Business model
  - 10 companies participated in this program

- 2012, ANESCO is formed as an association
- The development of new projects of EE that can be shown as an example

#### 21/11/2012

#### Convenio de cooperación impulsa la asociatividad entre ANESCO y CER





A fines de octubre se firmó el documento de cooperación entre el Centro de Energías Renovables (CER) y la Asociación de Empresas de Eficiencia Energética (ANESCO Chile).

La reunión contó con la presencia de la Directora Ejecutiva del CER, María Paz De La Cruz, y el Presidente del Directorio de la asociación gremial, Fernando Araya Rigazzi, quienes firmaron la propuesta, en un ameno desayuno.

La relevancia de esta alianza radica, principalmente, en la cooperación entre estas

#### entidades

para el levantamiento de proyectos de energías renovables. Además, se orientan los esfuerzos a estudiar la factibilidad de proyectos e iniciativas en materia del aumento de la eficiencia energética en los procesos y aplicaciones de ERNC, a lo largo del país, que impliquen actividades enfocadas al fortalecimiento de ambas organizaciones.



- 2013, Public-Private Round Table:
- Testing that EE and the ESCO model were administratively and legally possible to be developed in Chile without altering or influencing the national budget

#### Gobierno de Chile



#### Inicio » Capital Humano »

Mesa público-privada fomentará modelo ESCO en Chile

25 de marzo de 2013



Fuente » A+ | A-



Siete instituciones firmaron la Mesa público-privada de Fomento ESCO con el objeto de promover el desarrollo y consolidación del modelo "Energy Service Companies". El grupo tendrá como tarea analizar y proponer cambios regulatorios relevantes y necesarios para el desarrollo de estas empresas y mejorar el diseño, implementación y éxito de programas y/o proyectos que desarrollen entidades públicas y privadas en beneficio del modelo.

Para Mónica Gazmuri, Gerente General de ANESCO CHILE, la mesa representa una oportunidad para el desarrollo del modelo ESCO y una gran ocasión para la industria y el comercio. "Esta mesa representa una integración de esfuerzos que en el mediano y largo plazo va a beneficiar directamente a las empresas demandantes de energia", sostuvo Gazmuri.





#### 1 Agosto, 2013

U. Andrés Bello se convierte en la mayor planta generadora de energía solar de la zona central Synthesis of the Project: "ESCO in Universidad Nacional Andrés Bello".

The 80 kWp photovoltaic solar project implemented in Universidad Andrés Bello, was a milestone in the Chilean market. It was implemented in 2014 and was the largest project in the Metropolitan Region until 2016. It was conceived under the ESCO model with a specially designed contract to attend the client's needs and shorten payback time to a period of no more than 10 years.

Considered as one of the first ESCO photovoltaic solar system contracts, it allowed breaking down myths and preparing the path to develop technology in Chile, still positioning the University as a benchmark in terms of sustainability.

The project's total investment was 50% co-financed by Corfo and the other 50% was provided by a private contribution by the company, Punto Solar.

The solar system cost \$80 million pesos, it generates emissions reduction of 57.5  $tCO_2/year$  and provides 139.5 MWh/year of energy.





#### EFICIENCIA ENERGÉTICA EN HOSPITAL BASE VALDIVIA

Hospital Base Valdivia es uno de los 10 recintos hospitalarios de alta complejidad a nivel nacional, favorecido con el proyecto de Eficiencia Energética.

- Las medidas que se contemplan en esta propuesta son:
  - $\sqrt{11}$  Calderas de Condensación de alta eficiencia (320 kW cada una).

 $\sqrt{2}$  Calderas eficientes de generación de vapor destinadas a cubrir las necesidades del Hospital: Lavandería, Alimentación, Esterilización y Subestación 2.

 $m \sqrt{2}$  Sistemas de Termorregulación Climática para la optimización de consumos en el sistema de ACC/ACS en la sala

- More than 30 projects in public buildings and hospitals between 2010 and 2017
- The Public-Private Agency for Sustainable Energy manage the program
- 80% of them developed by ANESCO's members









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## Energy Efficiency Law

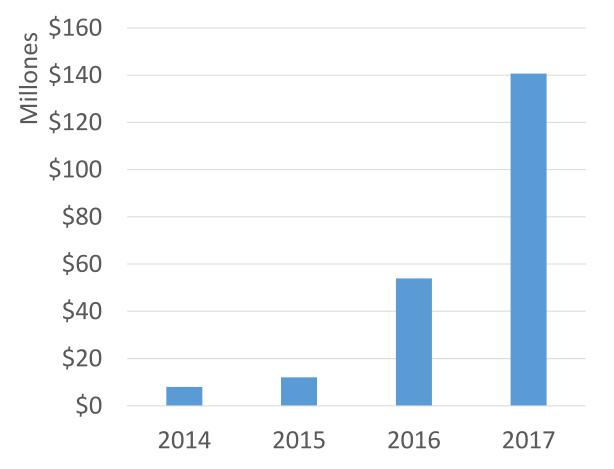


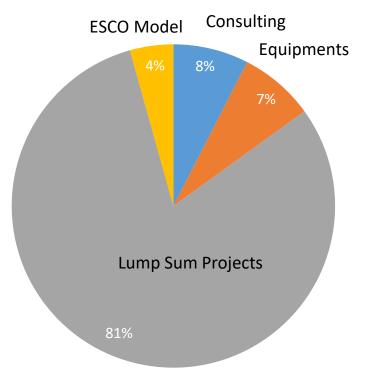
• LEY N° 21.305 promulgated in 2021



#### Energy Efficiency- Private Sector





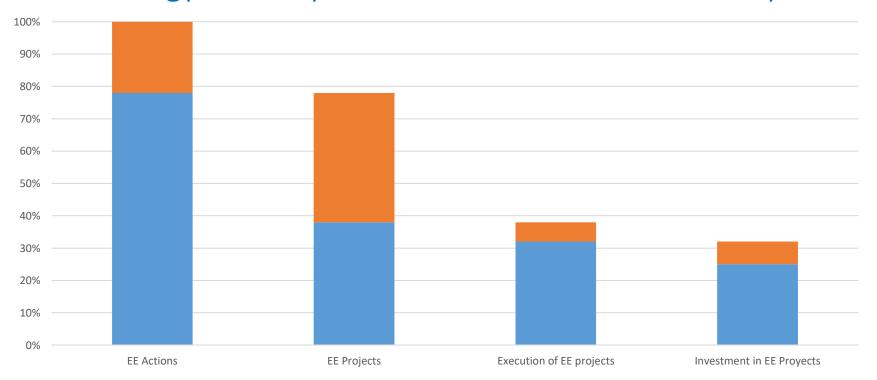




#### Energy Efficiency- Private Sector



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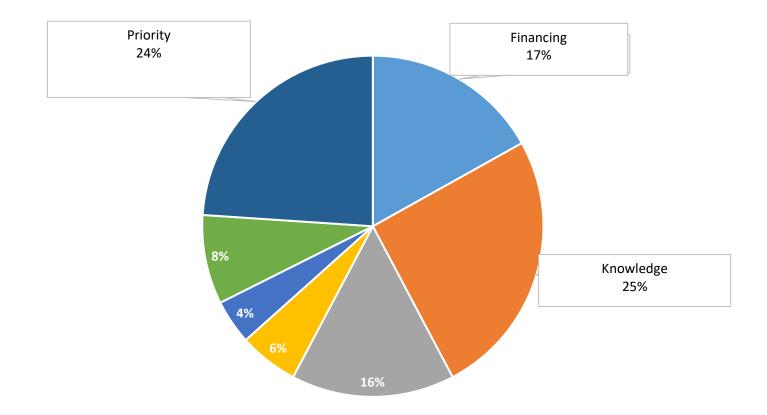


🛛 Yes 📕 No

Source: Universidad de Chile

#### Energy Efficiency- Private Sector

Main Barriers for ESCO model



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#### Conclusions



- Public and Private sectors has barriers and myths against EE in the
- State facilities, a public-private round table was needed to show that the adoption of ESCO model was compatible.
- Companies that provide EE services, the disseminations of its benefits and visible achievements has been essential for the EE market in the private sector.
- All this effort has been accompanied with public policies, the inclusion of EE as a main issue in long term energy policy and the creation of the public-private Energy Efficiency Agency (now the Sustainable Energy Agency)
- Chile has an EE legal framework and EE is seen as essential for the fulfillment of the National Determined Contribution (Carbon Neutrality in 2050) and the sustainable recovery after Covid-19
- Development of Green financing and banking, will play an essential role in these goals.

# Thank you!

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