Argentinean Regulatory Framework

Analyst Update Meeting

June 2017

Agenda

Argentina

Country Overview

Estimated Population[1] (2016)

43,590,368

45.62% (19,900,257) in City of Buenos Aires & Buenos Aires Province

Government Authorities

President: Mauricio Macri (Cambiemos) – Since Dec15

Jefe de Gobierno (City of Buenos Aires): Horacio Rodriguez Larreta (Cambiemos) – Since Dec15

Governor of Buenos Aires Province: María Eugenia Vidal (Cambiemos) – Since Dec15

Access to Basic Services & Technology

MODERN ENERGY [2]

- Homes with access to natural gas: **56.2%**
- Homes with access to Electricity: **98%**
- Individuals without electric service : **484,816**

WATER & SANITATION

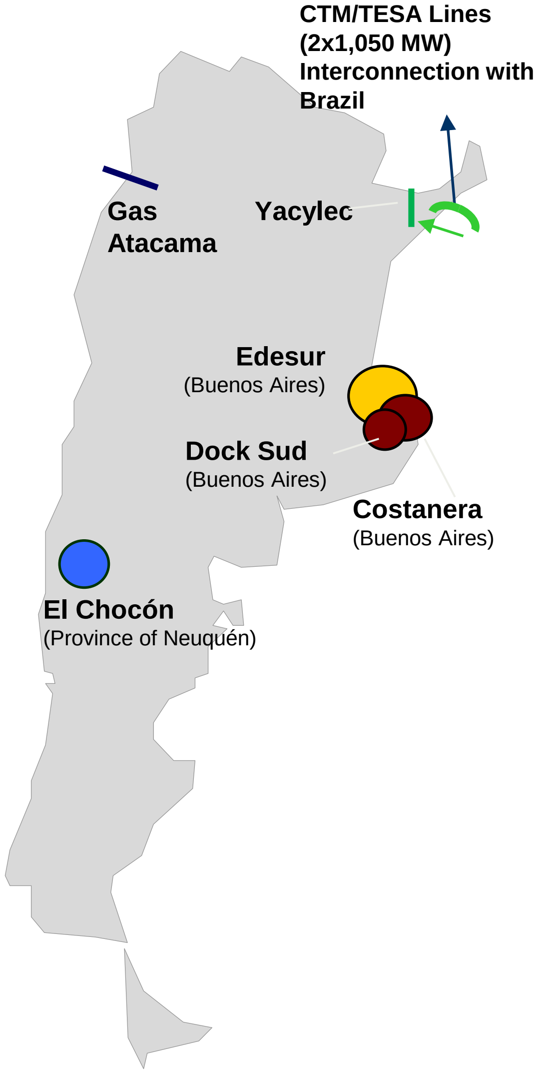
- Drinking Water converage[3]: **96%**
- Sanitation coverage[3]: **91%**
- Access to domestic water network[4] : **84,4%**
- Sewage coverage[4] : **58,4%**

INTERNET [5]

- Individuals with access: **69.40%**
- Homes with access: **55.52%**
- Cellular phone subscriptions (per 100 inhabitants): **143.91**
- Active cellular broadband lines per 100 inhabitants: **67.30**.

[1] Official estimation, INDEC.
[2] Source: RAGA SE4ALL Argentina, Jan 2013.
[3] Fuente: Meeting the MDG drinking water and sanitation target, WHO,2006]
[4] Fuente: Plan Nacional de Agua potable y saneamiento, 2016
[5] Source: ITU 2016 http://www.itu.int/net4/ITU-D/idi/2016/#idi2016countrycard-tab&ARG

The Enel Group in Argentina



*Without including Foninvemem + VOSA (Vuelta de Obligado S.A.)

Generation*
4,558 MW

HIDRO 1,328 MW

El Chocón

Installed power: 1,328 MW
Type: Hydraulic / **Concession:** Until August 2023

THERMAL 3,230 MW

Endesa Costanera

Installed power: 2,360 MW
Type: Combined Cycles (1,186 MW)
Steam-Gas Turbines (1,138 MW)
Engines (36 MW)

Dock Sud

Installed power: 870 MW
Type: Combined Cycle (798 MW)
Gas Turbines (72MW)

Foninvemem

Enel owns 26% of the company that operates the combined cycles San Martin and Belgrano (800MW each).

Vuelta de Obligado S.A.

Combined Cycle Project (800 MW) led by SADESA (56%), Enel (41%) and Duke Energy (3%) pursuant to the Gx 2008-2011 Agreement. Currently in Open Cycle service since 12/3/2014.

Distribution
2.5 million customers

Edesur

Distributed Energy: 18 TWh/year
Concession Area: 3,302 km2

- Higher customer density and higher unit consumption after Chilectra.
- Enersis's largest distributor in LATAM

Trading

Cemsa

- Energy management. Energy and fuels commercialization.
- Country Functions

Transport

ELECTRIC

Yacylec

Link in 500 KV between Yacyretá and ET Resistencia (274 Km)

CTM / TESA

CTM/TESA: Interconnection between Argentina and Brazil (Argentine side), managed by CIEN (Brazil) (135 km each)

GAS

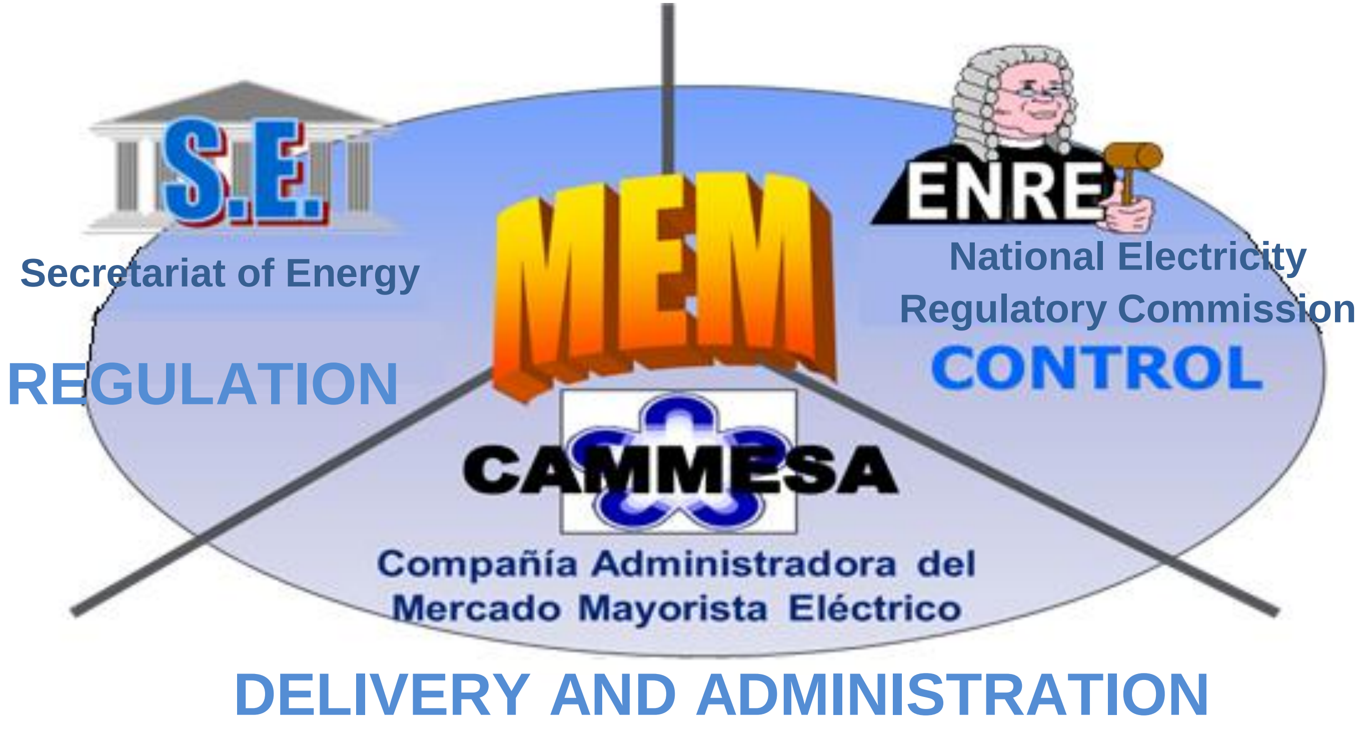
Gas Atacama

Argentina-Chile Gas Pipeline with a 8.5 million m3 per day capacity.

Description of the Legal Framework

Rules that make up the Regulation	Intervening Regulators

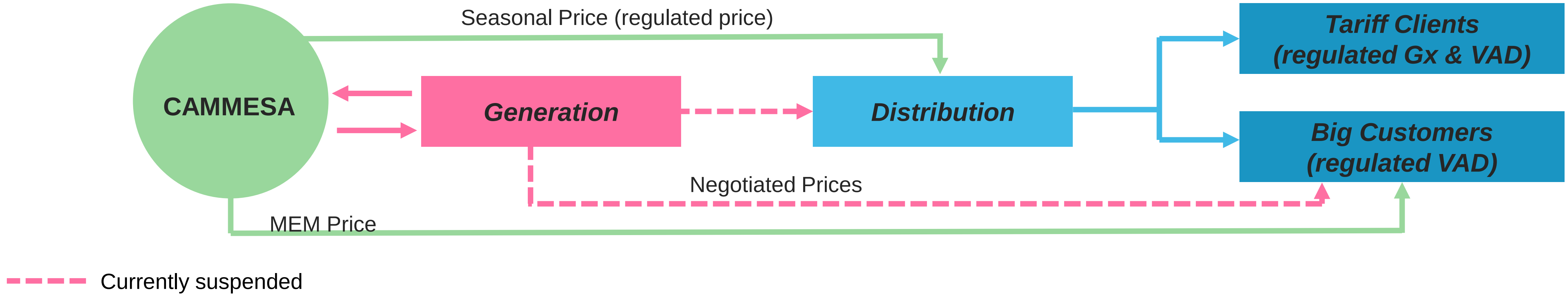
- Legal Framework, Law N ° 24065
- Regulatory Executive Order 1398/92
- Concession Agreement
- Rules of Supply
- SEE resolutions related to the MEM
- ENRE Regulatory Resolutions



Market structure

Vertical separation of the system

Generation (Gx)	Transmission (Tx)	Distribution (Dx)
• Semicompetitive Market • Semicost plus retribution • Market in process of change from a more competive one. • Forward contracts for Energy plus (new energy).	• Natural monopoly • Open access • Regulated busines • No obligation to expand. • Centralized planning (Secretary of Energy)	• Natural monopoly • Regulated busines, VAD is approved for 5 years. • Open acces • Obligation to expand. • Pass-through of Tx and Gx costs. • Gx costs are subsidized for several residencial segments (social tarif and electrodependance)

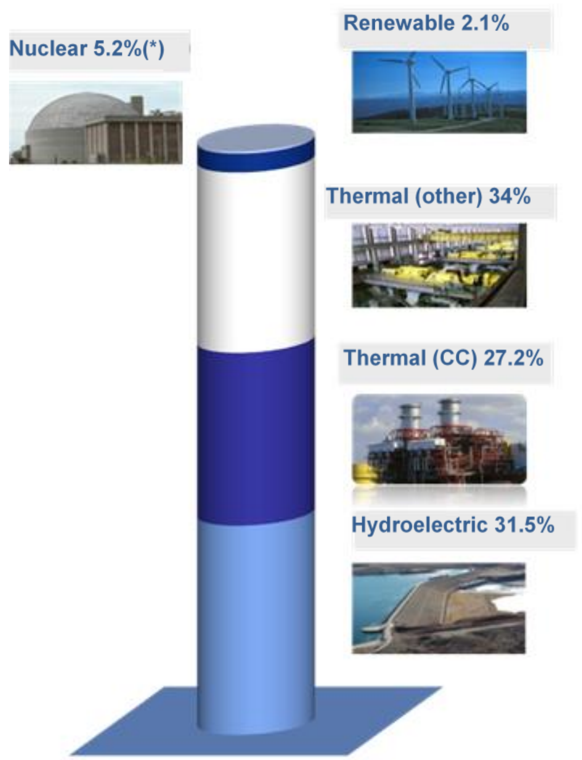


Agenda

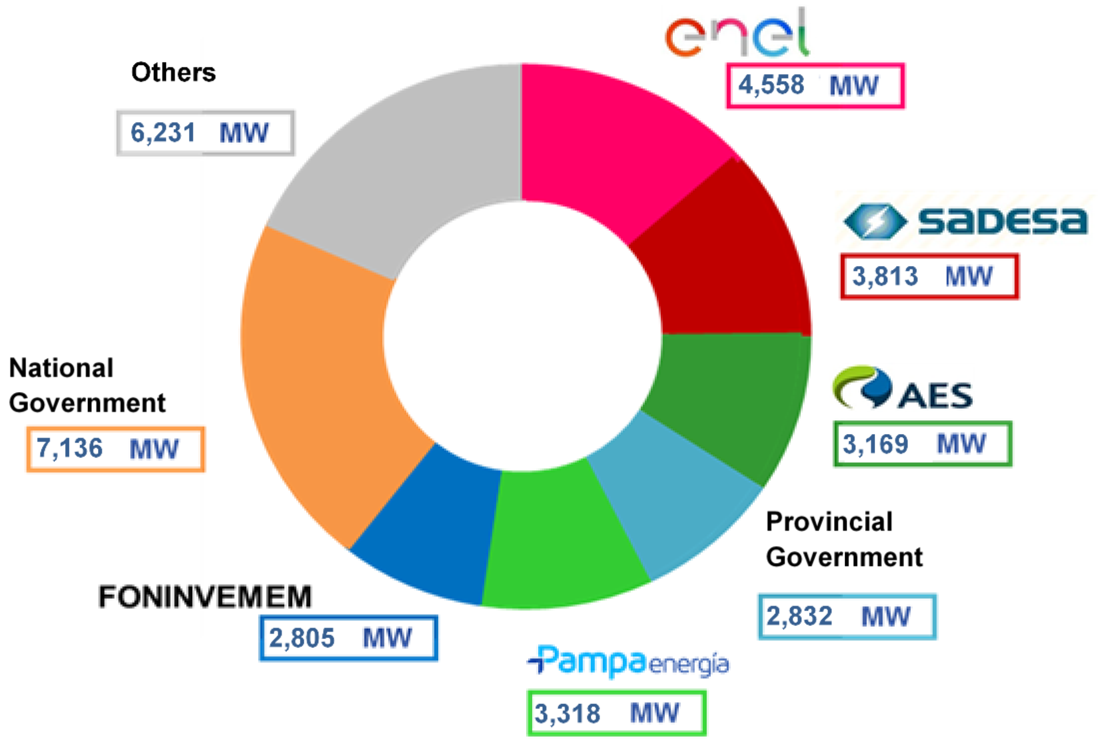
- Argentina – General View
- **Market description**
- Regulatory framework
- Generation
- Distribution

Generation Sector
Argentina Figures

Installed Capacity by Technology



Main participants (MW share%)



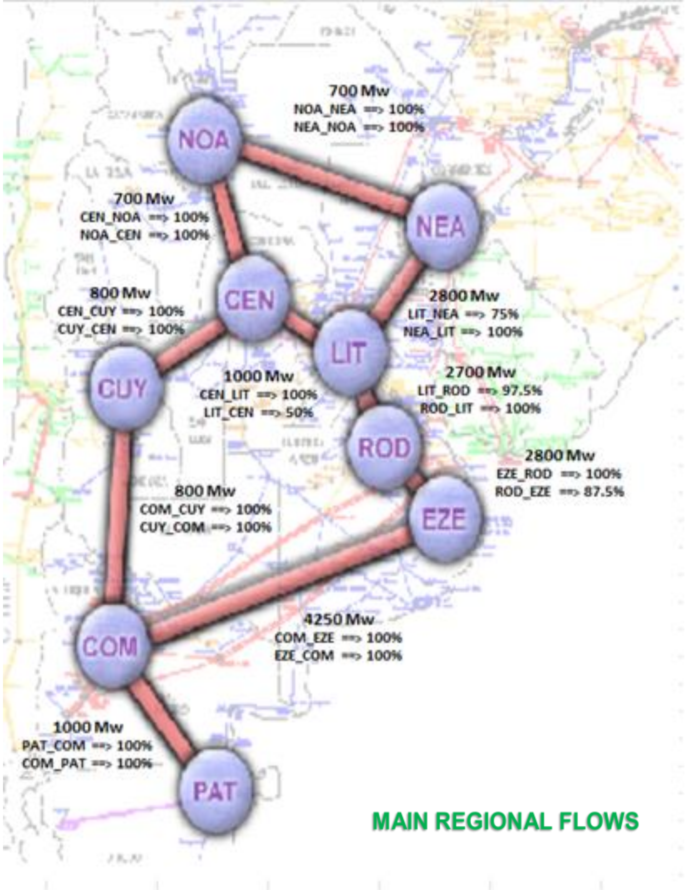
Total installed capacity as at 2016
33,862 MW

(*) Property of the National Government

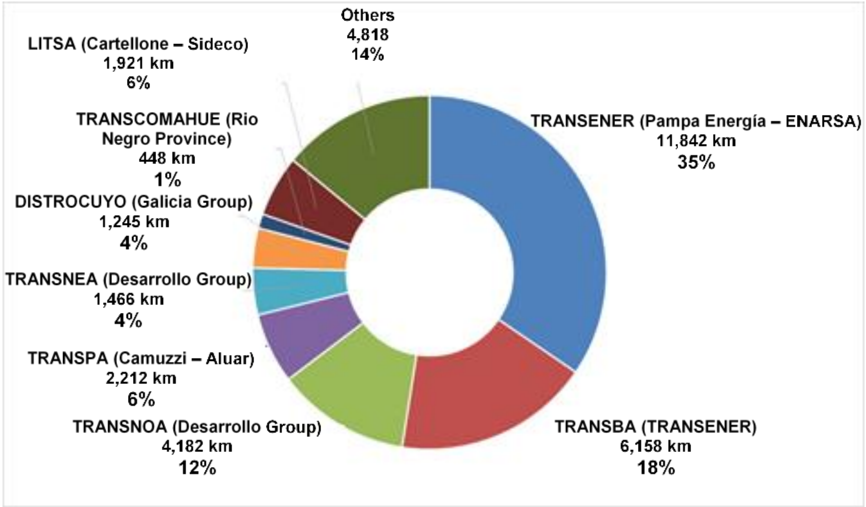
Transmission Sector

Transmission - SADI

Available Transport Capacity and Delivery Point.



Corporate Groups



19,532 km of line Trunk Distribution

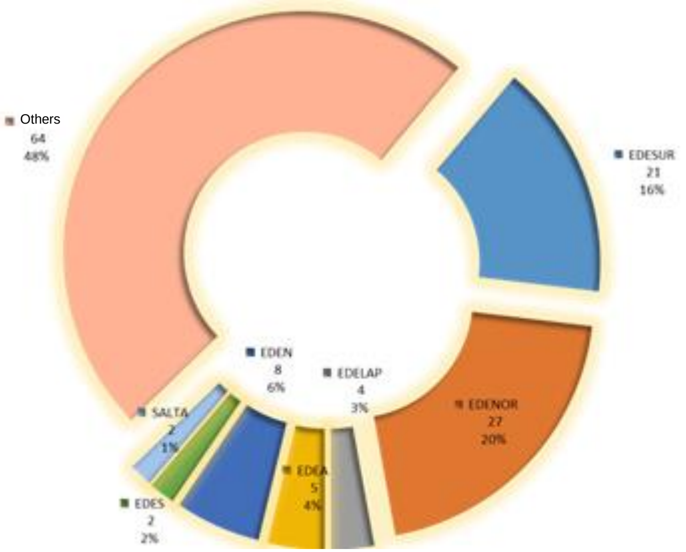
14,192 km in 500 kV

Most of the grids are close to their capacity limits in times of greater demand

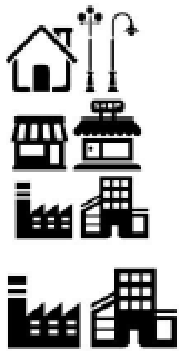
TRANSMISSION SYSTEM	500 kV	330 kV	220 kV	132 kV	66 kV	33 kV	TOTAL
High Voltage	14.192		562	6			14.760
Trunk Distribution		1.116	1.114	16.881	398	24	19.532
- Cuyo Region			642	625			1.267
- Comahue Region				1367			1.367
- Buenos Aires Region			177	5583	398		6.158
- NEA Region			30	2133		24	2.187
- NOA Region				5050			5.050
- PATAGONIA Region		1.116	265	2123			3.504

Distribution Sector

Distributors' Participation - Total Energy Distributed 133 TWh (year 2016)



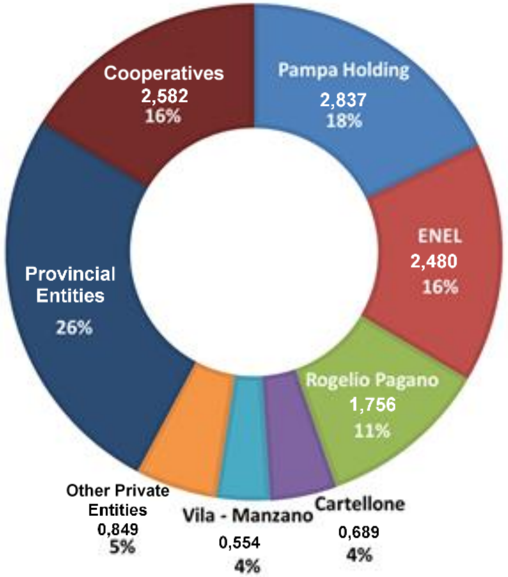
Start of Demand



- **42% Residential customers**
- **13% Comercial customers**
- **15% Small and medium-sized industries**
- **29% Large industries**

Corporate Groups

Pampa Holding	(EDENOR)
ENEL	(EDESUR)
Rogelio Pagano	Buenos Aires province (EDELAP, EDEA, EDEN, EDES) - Salta (EDESA)
Cartellone	Tucumán (EDET) and Jujuy (EJESA)
Vila - Manzano	Mendoza (EDEMSA) and La Rioja (EDELAR)
Other Private Entities	San Luis (EDESAL - Rovella Carranza), Sgo. del Estero (EDESE - ICK), San Juan (ESJSA - CGE), Río Negro (EDERSA - Grupo Neuss)
Provincial Entities	Córdoba, Santa Fe, Entre Ríos, Chaco, Formosa, Corrientes, Misiones, Catamarca, La Pampa, Neuquén, Chubut, Santa Cruz, Tierra del Fuego, Mendoza (eastern region).
Cooperatives	



Agenda

Evolution of regulation in Argentina

enel

Regulatory News

Plan Renovar 1.0 y 1.5

- Offers: 123 for a total of 6.366 MW
- Adjudicated: 2.424 MW (59 projects)
- Weighted price: 57,4 US$/MWh.

RTI of National Distributors

EDESUR Edenor

- First RTI since 1992.
- Definition of WACC , Asset Base and Remuneration Methodology

RTI of Transport

- Second RTI in 25 years
- Pending for independent and international carriers

Existing Generation Remuneration

- New Remuneration that reward of the power availability
- 3-year commitment offers

Energy Projects Bids

Presentation MDI: 196 projejts

- Generacion: 34 GW
- Alternative Fuel
- Ducts and liquid management
- Transportation

Wholesale Price Rebuild

- Start of the reduction of subsidies to the cost of energy
- Spot price increase after 15 years

Auctious of Emergency Thermal Energy

- Offers: 61 for a total of 6.746 MW
- Adjudicated: 3.108 MW

Agenda

Argentina – General View

Market description

Regulatory framework

Generation

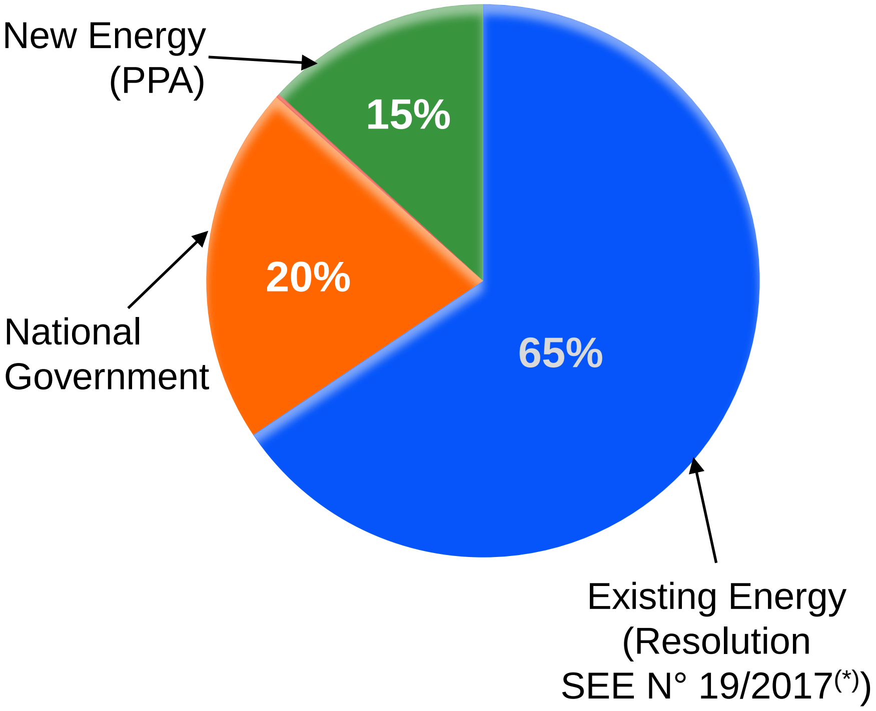
Distribution

Generation Regulation

Key regulatory considerations:

- Remuneration for power and energy based on a cost recognition system pursuant to the technology and scale for the existing Energy (installed before the year 2006).
- Capacity expansion (New Energy) pursuant to Agreements (PPA).
- Government generators have their own remuneration.
- Generators do not manage fuel, it is provided by the System Operator (CAMMESA) at no cost.
- Restricted Forward Market - Free customers are supplied through CAMMESA.

Market Segmentation pursuant to Applicable Regulation



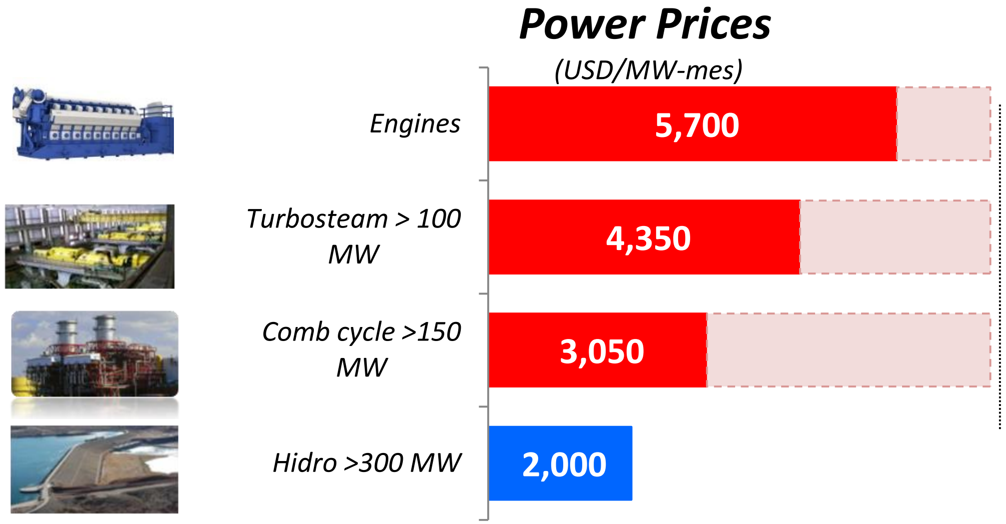
(*) Replaces Resolution SE N ° 22/2016

Regulatory Framework for Generation

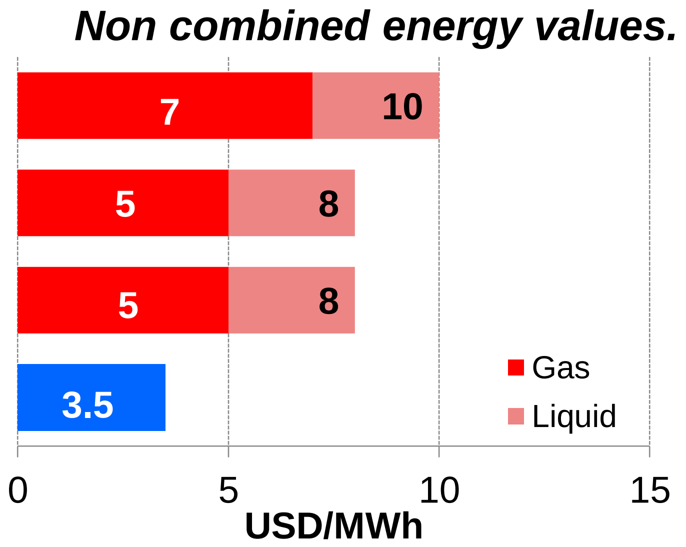
Remuneration for Existing Generation(*) *Resolution SEE N ° 19/2017*

REMUNERATION SCHEME

- Payment according to Capacity (available) pursuant to the technology and size.
- Variable remuneration according to energy generated (non fuel) and operated.
- Possibility to enter into Agreements of Availability of Guaranteed Power with the system operator (CAMMESA) for 3 years *(only for thermal units).*
- Fuel supplied to thermal plants by CAMMESA at no cost.
- Income denominated in dollars.



Figures pursuant to Availability Agreement
Nov-17
7,000 USD / MW-month (**)



It represents a monomic increment of around 50% with respect to the previous regulation

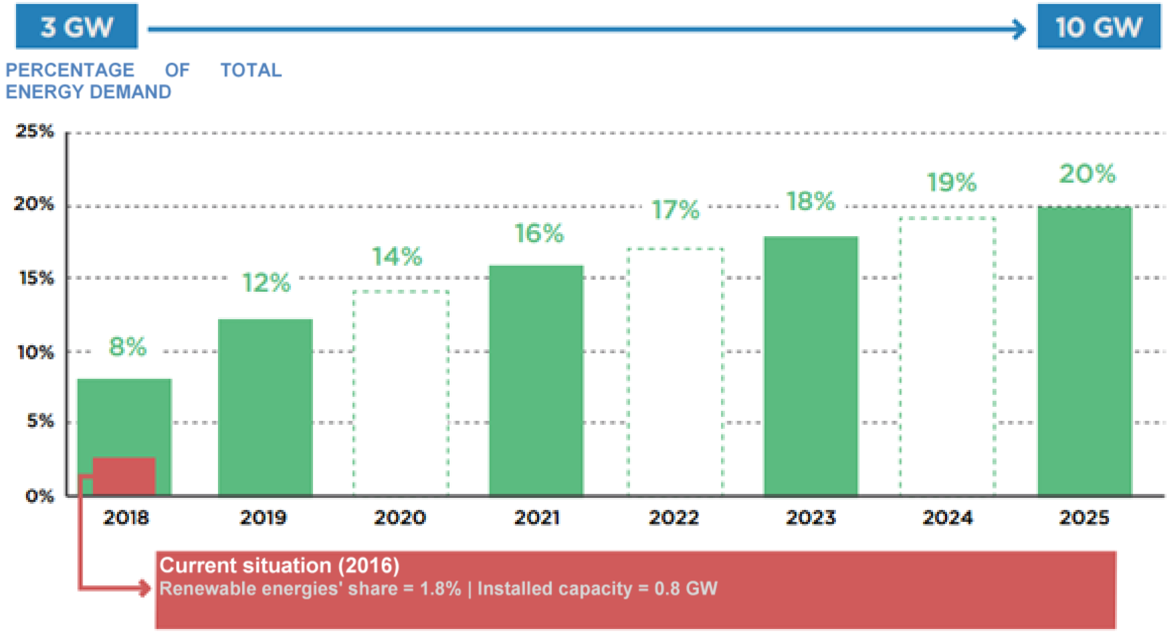
(*) Any company without agreements pursuant to special regulations

(**) May-Oct 17 6000 USD/MW-month

Renewable Energy Tender Offers

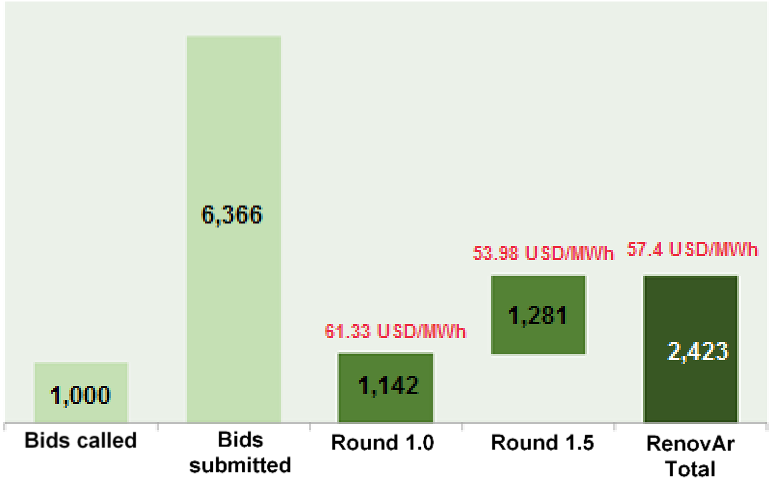
GOALS

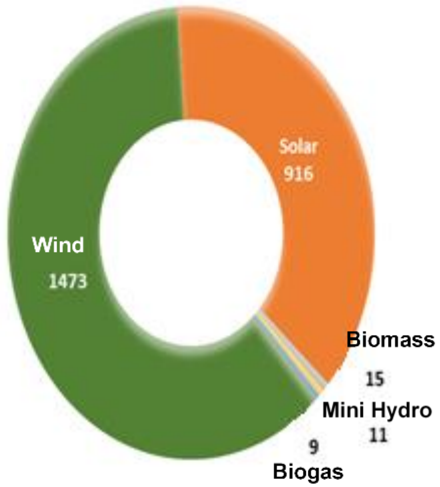
- Law 27191 sets forth a phased target for non-conventional renewable energy to reach 20% of demand in 2025.



PROGRESS

- The Government launched the RenovAr Program in stages to boost the renewable energy sector and reach the first target of 8% (2018).





Does not consider former GENREN projects that are begin negotiated (Res. MEYM N ° 149/17)

Source: Ministry of Energy and Mining

Energy Projects Tender Offers
(Thermal generation and electric and fuels transport)

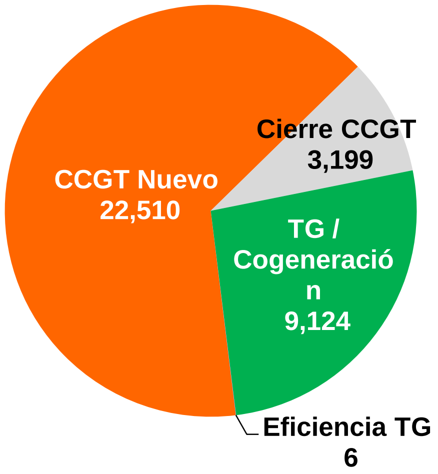
Resolution MEYM N ° 420/2016

Expressions of Interest

Expressions of Interest for **196 projects,** divided into categories:

- *New Generation (combined cycle, TG and co-generation): **34 GW***
- *Alternative Fuel Supply*
- *Pipeline Construction and Liquid Management*
- *Expansion of Electric Transportation*

Presented power (MW)



Total: 34.84 GW

1st stage Tender offers for Combination Cycle and Cogeneration Closure

Res. SEE 287/2017 - Tender Offer Specifications:

- *Execution of a PPA (in USD and for 15 years)*
- *Remuneration: Payment for Capacity and for energy (non fuel)*
- *Fuel: Supplied free of charge for cycle closures. For Cogeneration projects, it is provided by the offeror.*
- *Maximum period of entry into service: 30 months*
- *A Guarantee Fund is established for the payment of the PPA*
- *Submission of tender offers □ July 19th - Awarding □ September 1st*

Agenda

Argentina – General View

Market description

Regulatory framework

Generation

Distribution

EDESUR

Executive Summary Res. ENRE 64/2017

Previous Situation

- Concession Agreement and Tariff Scheme of year 1992.
- Changed by ACTA ACUERDO (Agreement renegotiation)
- Rates with Arbitrary Updates that DO NOT reflect Costs
- Ad hoc regulations

R T I

Current Situation

Definition of business variables

- Capital base → VNR depreciado técnico
- Rate of return → +WACC real fijada por el ENRE
- Remuneration Methodology → PRICE CAP

- **Definition of Rates Criteria and Calculations**
  - Rates Based on Efficient Costs
  - Update Formula
  - Efficiency Factor
  - Investment Incentive Factor
- **Quality system oriented to customer service**
- **Regulation Restatement**

EDESUR

EXECUTIVE SUMMARY Res. ENRE 64/2017

- **Methodology → PRICE CAP**
- **Wacc → REAL RATE +12.46% (before taxes)**
- **Currency unit→ Angentinian pesos**
- **Adjustment formula Dec 15 to Feb 17 → IPC**
- **Theoretical VAD resulting → 14.540 MMar$ (≈ 910 MMU$D)**
  - Increase in 3 installments with financial recovery in 48 monthly installments as of February 2018
- **Adjustment → VAD update (Salaries, IPIM (wholesale price index), IPC (retail price index))**
- **Stimulus Factor → Efficiency X Factor and Q Investments**
- **Penalties → Quality Path with increasing the exigency**

Exchange rate = 17.60 $/€

EDESUR

New Quality Scheme

FOCUS

In reducing the duration of outages (SAIDI)

- **Scheme of Increasing Sanctions with an Improvement Path**
- **Average Replacement Time from almost 5 hours to less than 2 hours**

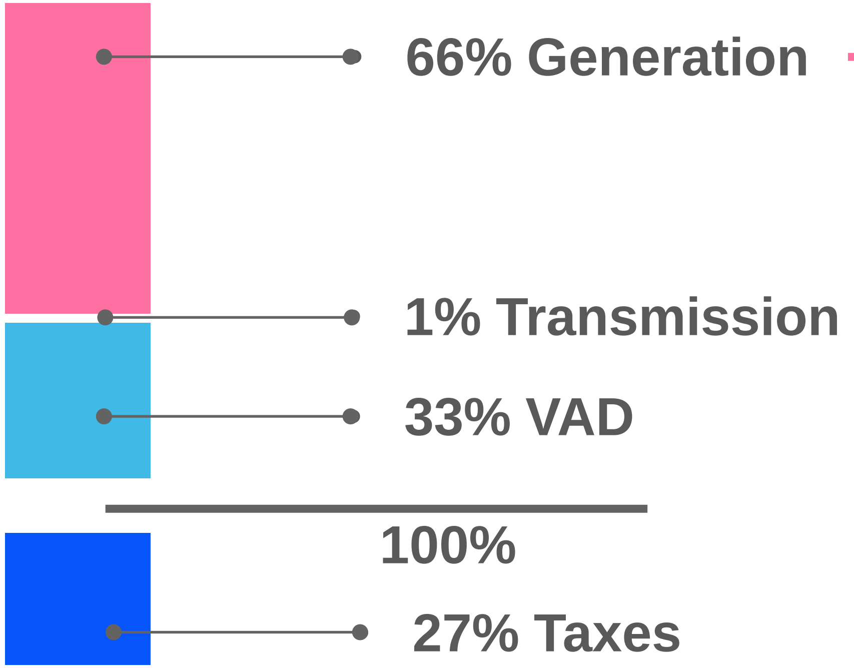
FOCUS

In Customer Service

- **New Obligations for Commercial Service and New Supplies**
- **Time of Commercial Service** Less than 30 minutes
- **Compliance with Information requirements and Others**

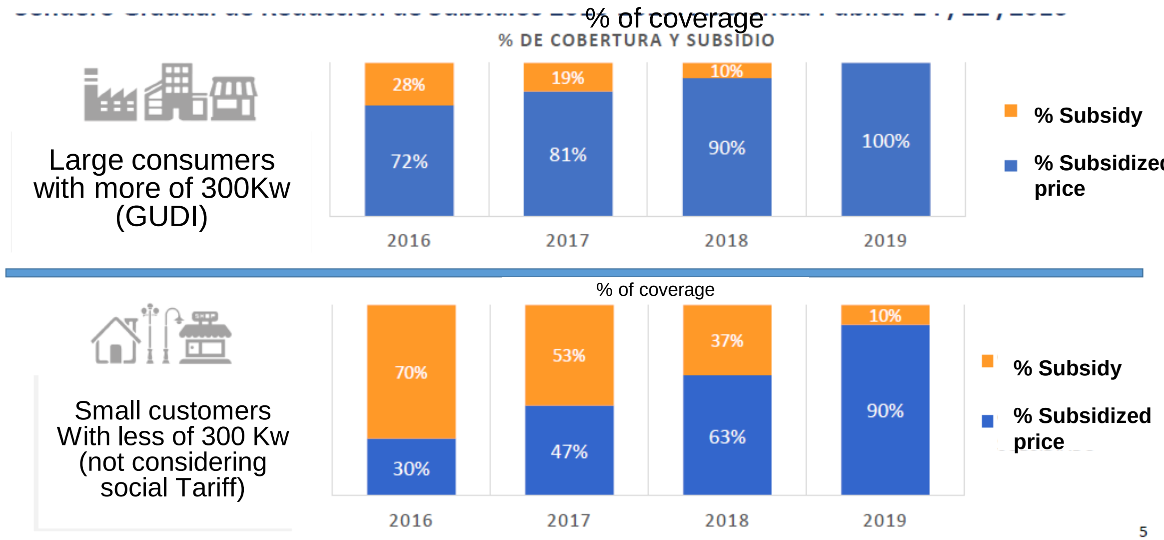
Tariff structure

Residential tariff (jun 2017): **88** u$s/MWh for a 200 kWh/month customer (with taxes)



- 6,383% Canón Municipal
- 21% IVA

Gradual Path in reduction of subsidies: Public hearing 12/14/2016



Increases are expected not related with EDESUR remuneration

TC: 16,00 $/u$s

Thank you