

ENERGY-Year 1

# The beginning of the transformation

# Ensure energy supply for a growing country

Reduce the impact on the environment



## Electricity emergency enacted by Decree 134/2015 in December 2015

- Short term measures to improve power generation and distribution.
- Improved quality of service and compliance in the medium term.

## Recovering regulatory agencies

- Res. 142/2016 Initiated nomination of ENARGAS' Board of Directors as defined by law.
- Res. 204/2016 Initiated similar process for ENRE's Board of Directors.

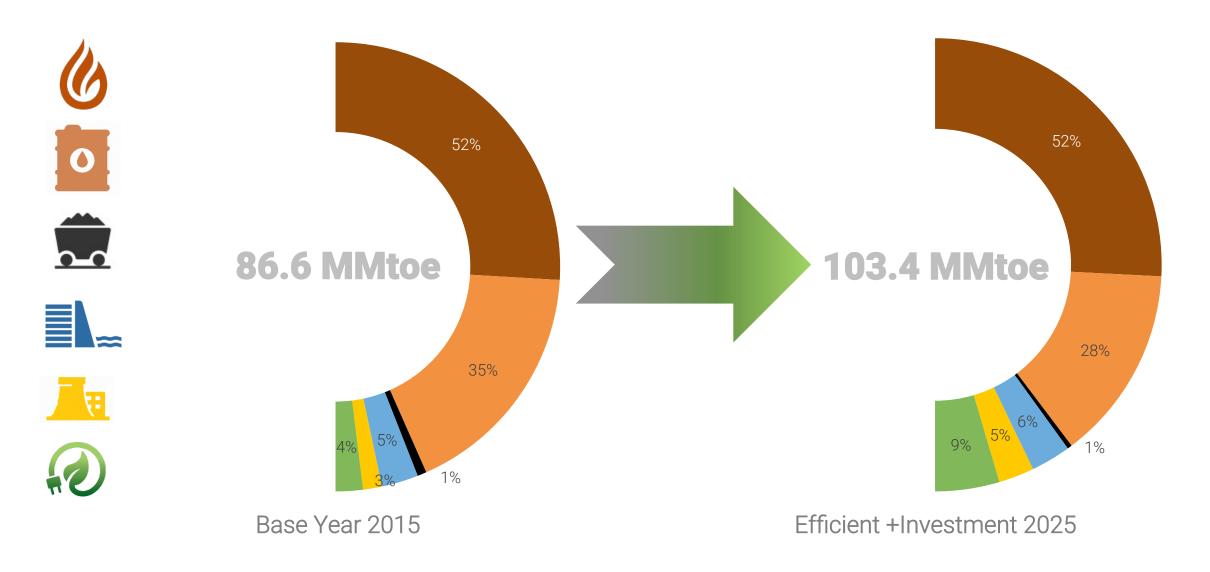
# Comprehensive review of energy prices and tariffs, including public hearings

- Public Hearings to set prices for natural gas wellhead prices (Defined pathways until 2019).
- Public Hearings to set wholesale prices for power generation.
- ENRE: Tariff Review (RTI) for electricity transportation and distribution, 2017-2021.
- ENARGAS: RTI for transportation and distribution of natural gas for 2017.

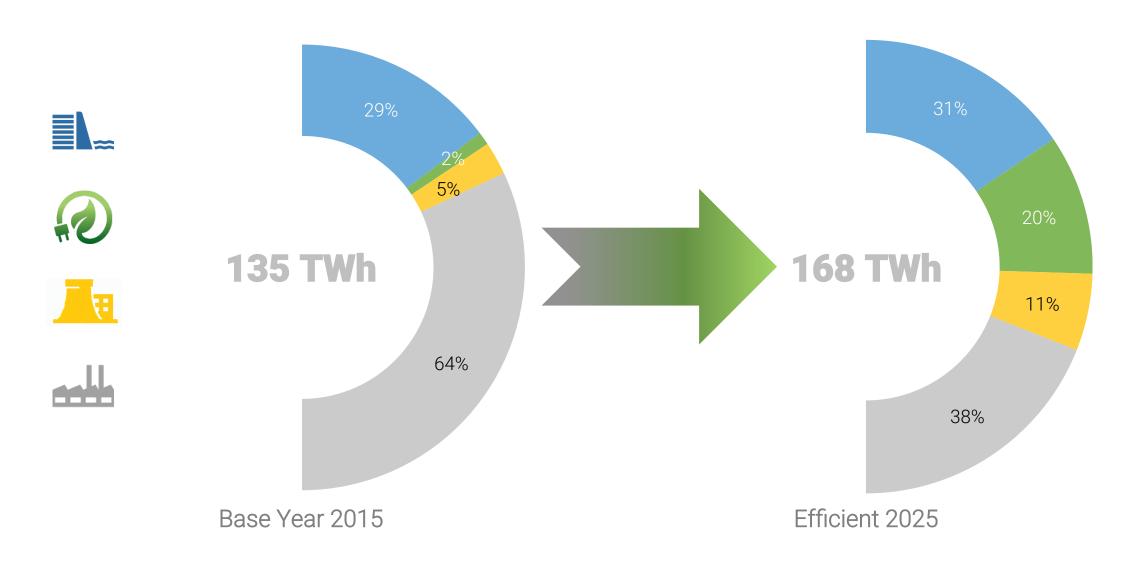
# Energy statistics, policies and plans made public without restrictions

- All previous and current data is reviewed and made public through new energy data portal—Open Data.
- Enforced quality and consistency checks, and adequacy to international standards.

# Pathway towards transformation: Total internal energy supply



The growth of renewable energies diversifies the energy mix, despite the dominance of hydrocarbons



- Reach 20% of electricity generation from unconventional renewable energy in all cases.
- The share of thermal generation is reduced. However, it continues to be significant.



Requested offers to add 1.000 MW of new thermal capacity within 24 months to cover seasonal shortages

- Received 61 offers for 6,600 MW, equivalent to around 7.0 MM USD.
- Initially awarded PPA contracts to 20 projects for a total of 1,917 MW.
- Requested offer improvements to remainders and awarded additional 1,193
  MW to other 9 projects.
- Some projects already generating, and most to be operational before December 2018.

61

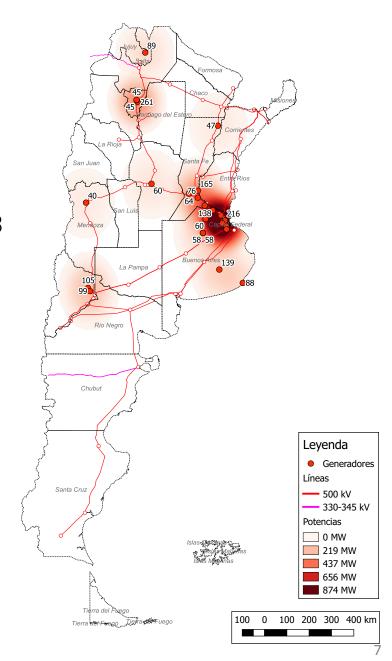
Offers received

29

Projects awarded and under construction

3,138

MW of new capacity available by end of 2018





### Call for expression of interest to

- Build power generation projects to expand capacity and/or reduce costs.
- Install facilities to optimize fuel supply to existing and/or new power generation units.
- Improve transmission/distribution system reliability.

#### Response exceeded expectations... again!

- Received 196 proposals.
- Total additional generation capacity offered was 34,800 MW, exceeding current installed capacity.
  - Examples: Combined cycle units, including LNG import terminal, new fuels storage tanks, natural gas pipelines, electric power transmission lines, among others.
- Proposals now under evaluation by SEE and CAMMESA.
- Selected projects will be tendered during 2017 and 2018.

196

34,800 MW

proposals

power



### Decrees 531/16 and 882/10 to regulate Law 27.191.

- Set the foundations for "Programa RenovAr".
- Creation of FODER trust to guarantee investments.

#### Launch of RenovAr Round 1.0.

- Objective: Diversify energy matrix and achieve 8% of electricity consumption covered by RE I by end of 2018.
- Called for bids to install 1,000 MW of new renewable capacity including different technologies.
- 20 year PPAs with prices denominated in USD.

### Results exceeded expectations.

- Received 123 offers for a total of 6,300 MW.
- Initially awarded contracts to 29 projects amounting to 1,142 MW at an average price of 61.33 USD/MWh.
- Round 1.5 for improved offers resulted in add. 1,282 MW in 30 projects with avg. price at 53.98 USD/MWh.
- PPA contracts during Q1 2017.
- RenovAR Round 2.0 planned for later this year.



projects awarded

2,423

MW of additional capacity

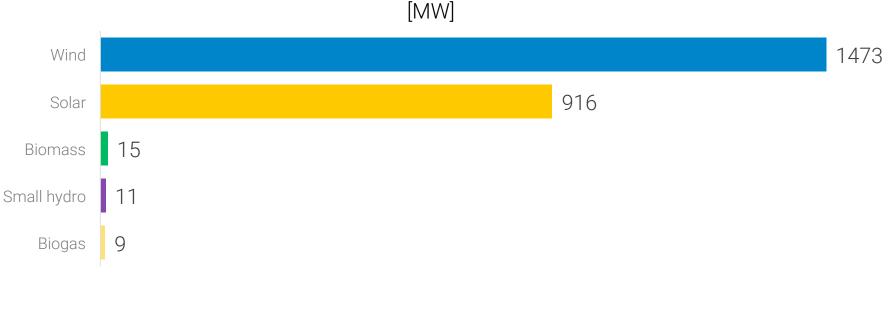
57.44

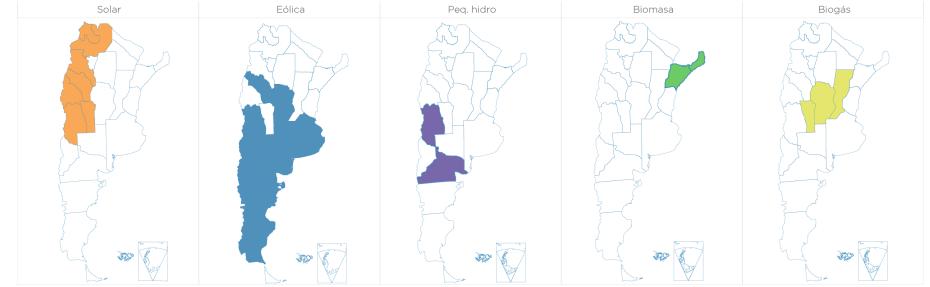
USD/MWh Average

20,000

New jobs

4,000







#### Managed transition of domestic oil & gas prices towards international level

- Reduction of oil prices from 77 USD/bbl via industry agreements. Now closer to import parity level.
- Natural gas prices increased and path toward import parity defined.
- New program to promote development of Vaca Muerta gas fields via government supported price.

#### Optimization of oil and Natural Gas imports

- Started LNG imports via Chile to compensate for lower supply from Bolivia during the winter months.
- Less LNG cargoes and lower price compared with the past.
- Management of imports directly by ENARSA (instead of contracted YPF).

#### Introduced changes into domestic fuels market

- New specs for mogas and diesel to improve quality (Res. 5/2016).
- Ethanol in mogas increased to 12% (Res. 37/2016).
- Biodiesel with higher capacity utilization in 2016.

#### Trilateral agreement to jump start development of Vaca Muerta unconventional resources

- Union agreed to modify old labor contract to reduce operational cost.
- Oil companies committed investment to develop new fields of unconventional resources in Vaca Muerta.
- Neuquén Province and Federal Government to support natural gas prices and reduce taxes.



- Most of Res. 21 power generation projects come on stream.
- Energy prices and transportation/distribution tariffs set at more appropriate levels and by processes defined by laws and regulatory agencies.
- Tender to build gas pipelines in order to expand regional capacity.
- Signing of Federal Energy Agreement among all provinces and federal government establishing principles and guidelines for long term energy policies.
- RenovAr Round 2 for the addition of more renewable capacity.
- Completion of Environmental Impact Study and Public Hearing for Santa Cruz River hydro projects and beginning of construction.
- Launch of new energy efficiency programs including public lightning.
- First tender for selected Res. 420 proposals.
- Launch of new offshore oil & gas exploration plan.



# i Muchas Gracias!

www.minem.gob.ar

dredondo@minem.gob.ar 54-11-4349-7581