



**YPF**

5th Latinamerican Energy Conference

September 29<sup>th</sup>, 2017



## Value chain of Efficiency:

- ✓ An ever increasing consuming market with limited resources generates the need of:
  - ✓ Reduction of unnecessary consumption.
  - ✓ Increase of more economical offer.
  - ✓ Better use of existing resources (cogeneration).

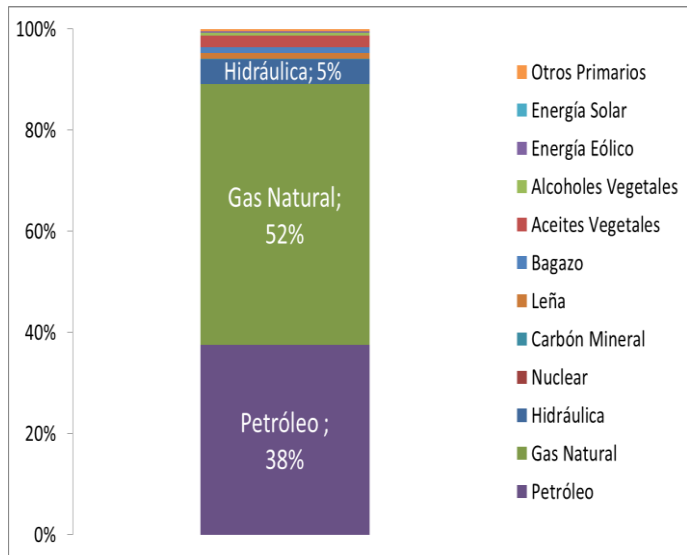


YPF is present in the whole value chain: Producing, Transporting and Consuming.

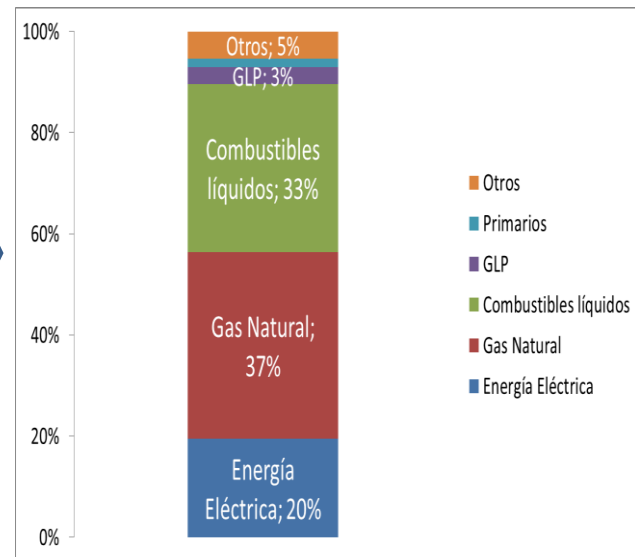


Besides efficiency in the energy use, there are losses in the process of conversion and transportation of that energy.

**Primary production 73,2 MMTOE (851,6 TWh)**



**Final consumption 57,2 MMTOE (664,7 TWh)**

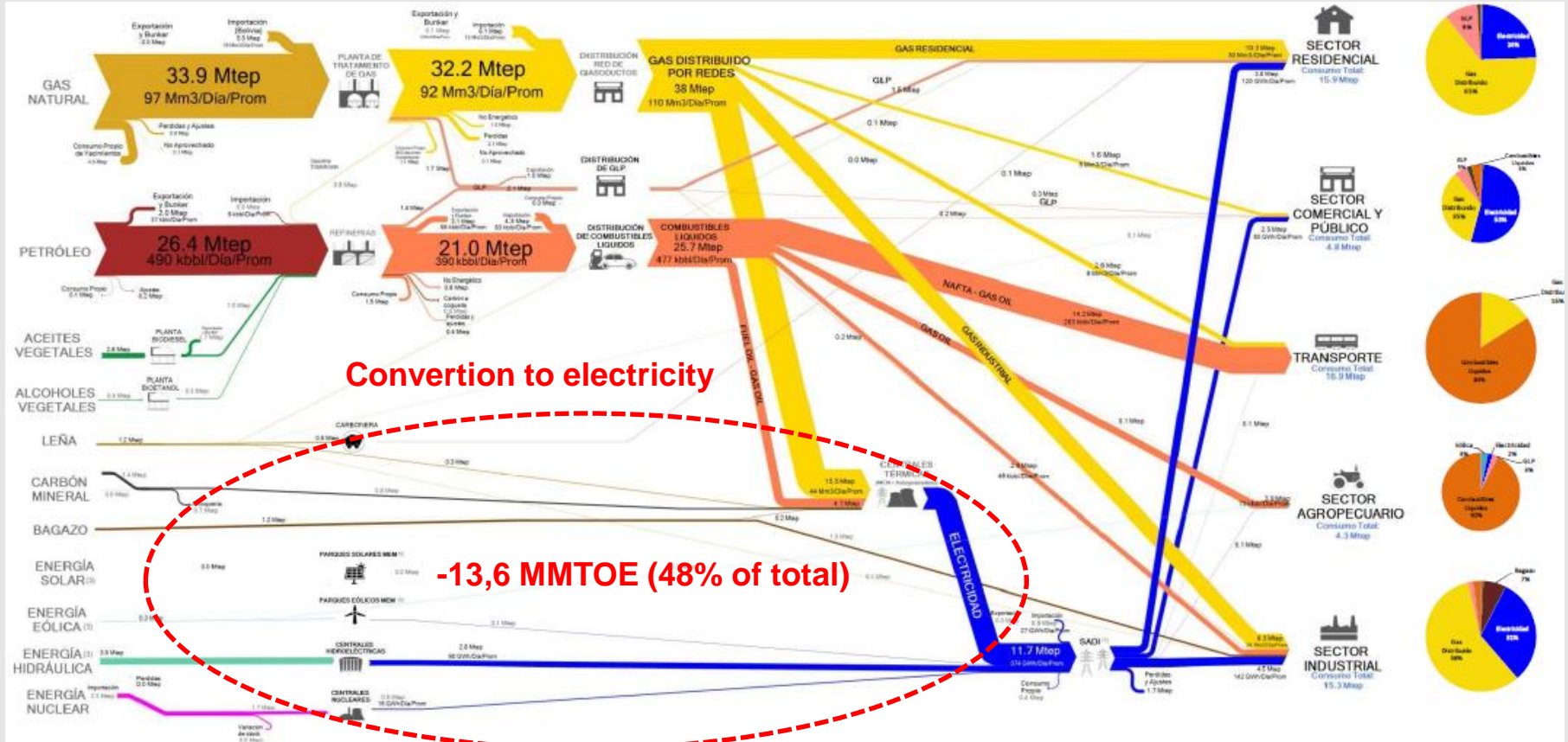


**Transformation and Losses 27,8 MMTOE (323,8 TWh) 21,9%**

**Net Import 11,8 MMTOE (136,9 TWh)**  
**Natural Gas: 8,5 MMTOE**  
**Fuel Oil / Gas Oil: 2,4 MMTOE**

In the process of conversion to electricity, energy is lost. Part due to technical limits, part due to manageable inefficiencies.

### Sankey's diagram





Technical convergency of energy transformation impacts on the long term equilibrium prices of fuels, putting pressure downwards



Origin



Production



Transportation



Product

54 USD  
Per barrel



Equivalent Energy

33 USD  
MWh



Product

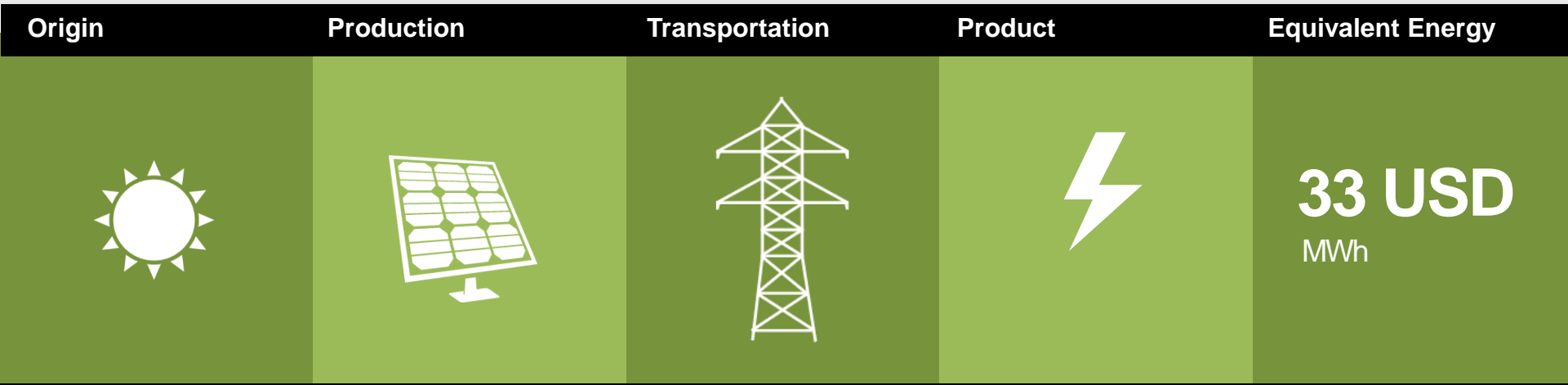


Equivalent Energy

33 USD  
MWh



# Renewable energies put pressure over hidrocarbons demanding competitiveness: Natural Gas is the better positioned hidrocarbon to stay competitive



## Netback Value of Oil and Natural Gas



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