

Long-term Energy Scenarios for the Clean Energy Transition Argentina

Rocio Rodriguez

Energy and Climate Change Coordinator
Secretary of Energy

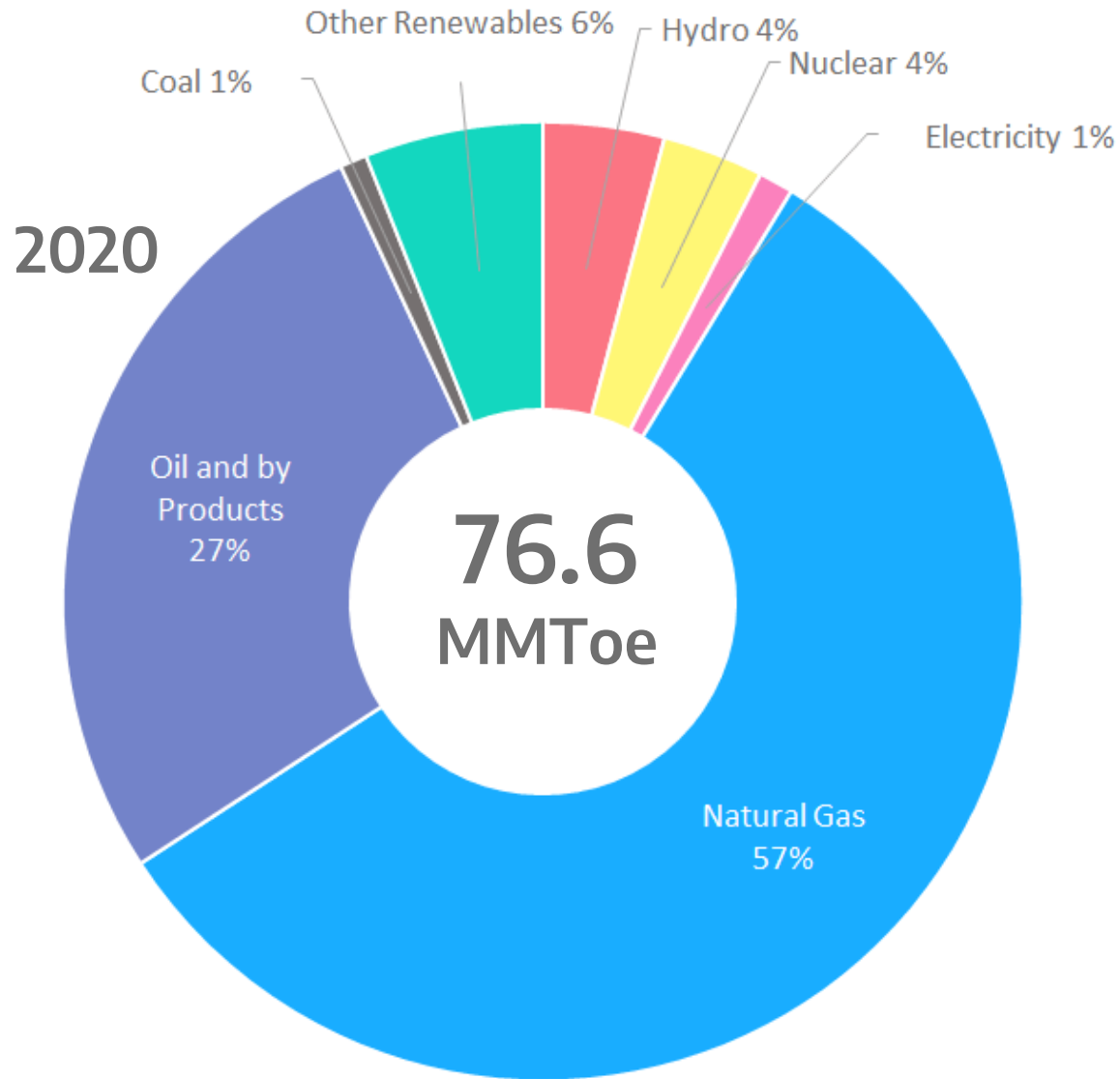
8th June 2021



Ministerio de Economía
Argentina

Secretaría de
Energía

Primary Energy Mix: Context



- Fossil fuels accounted for the largest share of the Total Domestic Supply (TDS) in 2020. Natural gas, the cleanest among them, is the most important primary source with a share of 57 %, while hydropower, nuclear, and the rest of renewable energy sources accounted for the remaining 14.7%.
- The energy sector accounted for 53 % of the total emissions (364 MtCO₂eq) in 2016, of which:
 - 14 % derived from the transport sector, 13 % from power generation, 9% from industrial fuels and 7% from residential fuel use.
- In the last few years, non-conventional renewable electricity generation has increased, mainly due to the wind and solar potentials.

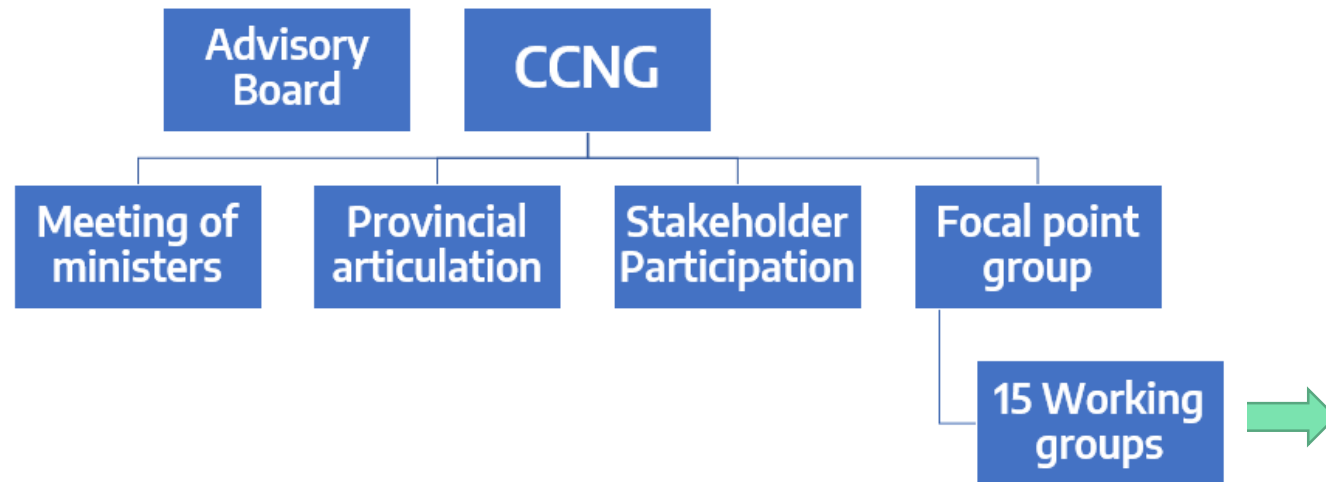
*TDS: Total Domestic Supply is the primary energy produced plus the secondary energy trade balance bottom line.

** Other renewable sources include firewood, bagasse and biomass.

Source: Secretary of Energy, 2021.

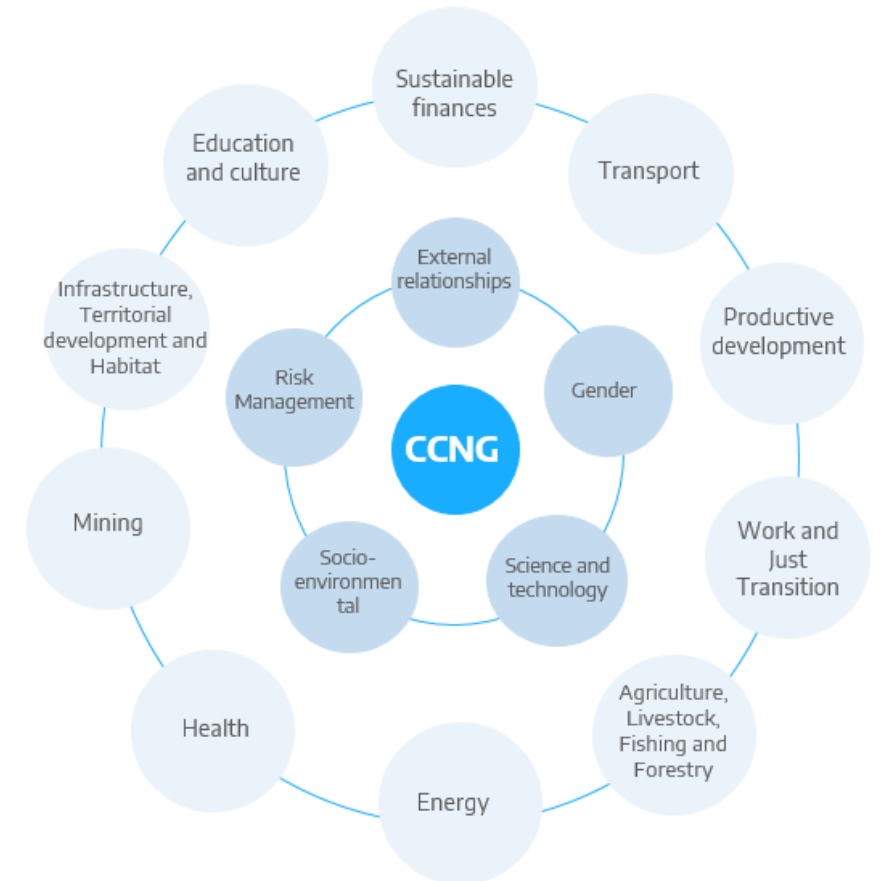
Climate Governance scheme

The Argentine Republic considers climate change as a State policy, so it structure its governance scheme by understanding the severity and urgency of facing it.



The intra and inter-institutional articulation, as well as public participation, were central axes in the process of preparing the second NDC, Climate Action Plan and LTS.

This document is the result of the 15 Working Groups of the National Public Administration



Energy Transition in Argentina

Action Plan for 2030 Outlook

To ensure affordable, clean, reliable and sustainable energy supply, supporting the economic and population growth and including the responsible use of energy by means of the promotion of energy efficiency in the main consumption sectors.

- Use of natural gas as a transition fuel.
- Increase of low-carbon electricity generation and fostering of distributed generation.
- Promotion scheme for Hydrogen deployment as an energy vector.
- Implementation of specific plans for the adaptation to the impacts of climate change.

2020 Nationally Determined Contributions (NDCs)

Goal
year
2030

Not to
exceed

359

MtCO₂e



Energy
Transition



Sustainable
mobility



Cleaner
manufacturing



Ecosystems
preservation



Circular economy and
Urban Integrated Solid
Waste Management



Energy Transition in Argentina by 2050

Executive
committee



Secretaría de Energía

Supported by  **BID**





Process "Towards a shared vision of the Argentine energy transition to 2050"

- Participation of more than 23 institutions: academia, NGOs, business assembly room, CGT, consumer representatives, representatives of the energy industry, former energy secretaries.
- In several meetings along a year, they analyzed, debated and reflected conclusions on the pillars, objectives and goals of Argentina's energy transition to 2050.
- The result of the process is expected to be reviewed periodically, adapting long-term objectives to the progress, challenges and innovations that the sector is going through in the framework of global energy transitions.

Hacia una
Visión Compartida de la
Transición Energética
Argentina al 2050

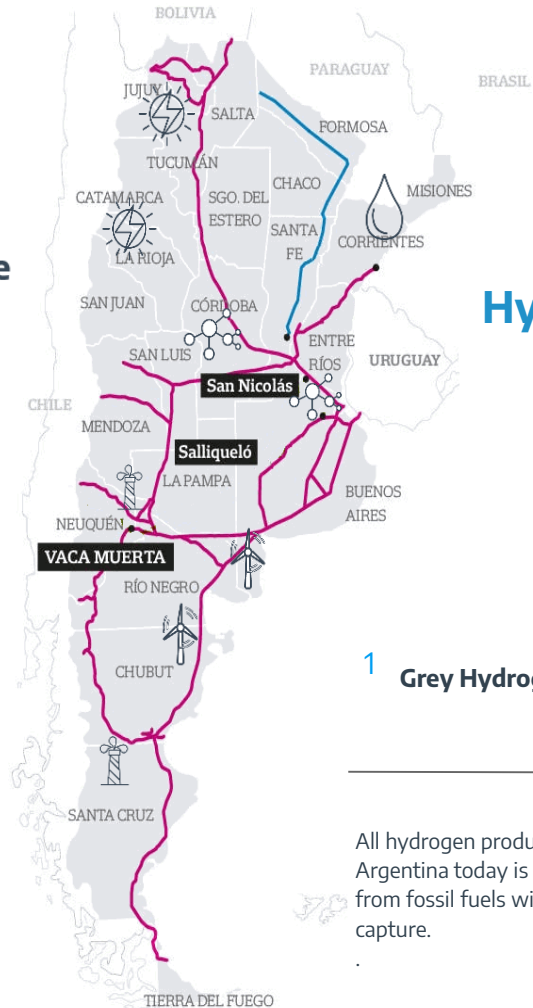
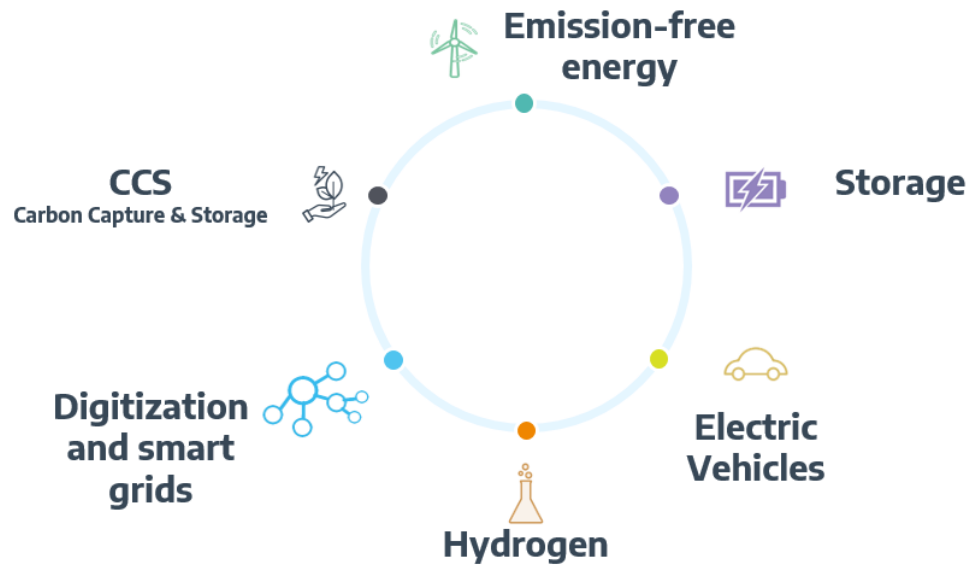


Ongoing and planned activities

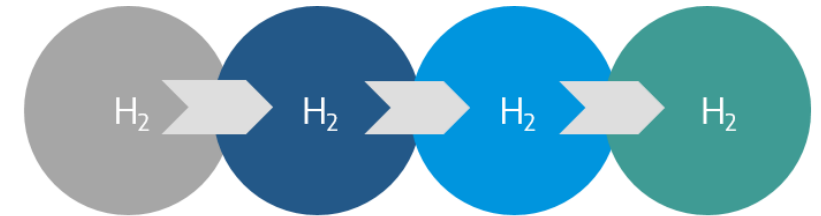
-  **#1 International Technical Assistance: Understanding the Macroeconomic - Energy - Climate Change links.** Conducting a study that provides evidence to facilitate decision making in critical policy areas linking together energy matrix evolution, climate change and macroeconomics.
-  **#2 International Technical Assistance: Policy Scenarios and Tools Towards a Just Energy Transition in Argentina.** Understanding the impacts of energy policies based on a bottom – up mesostructural scenarios approach that reflect the interactions among the energy sector to support the design of energy policy decision making and capacity building.
-  **Energy Partnerships with strategic foreign partners** aimed at creating synergies and complementarities
-  **Hydrogen future prospects.** An exhaustive set of studies is being carried out on the future global H₂ market development opportunities, the most efficient incentive mechanisms to be considered, and the regulatory gaps that must be overcome.

Energy Transition in Argentina by 2050 - New technologies

Long term strategy - The study and develop of new technologies is key in the decarbonization process of our energy matrix.



Hydrogen Development Stages in Argentina



1 **Grey Hydrogen**

2 **Blue and Turquoise Hydrogen**

3 **Green Hydrogen**

All hydrogen produced in Argentina today is produced from fossil fuels without carbon capture.

Considering Argentina's hydrocarbon potential and the role of natural gas as a transition fuel, we can consider the development of blue and turquoise hydrogen in the short- to mid- term.

As long as our energy matrix includes a greater share of renewable energy for power generation, and the renewable energy costs decrease, green hydrogen deployment will be carried out.

Argentina **unida**



Ministerio de Economía
Argentina

Secretaría de
Energía