



Status-quo of Hydrogen Utilisation in NG COM Member Countries

Roundtable input by *Algeria* Electricity and Gas Regulatory Commission

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> Hydrogen strategy setting

- While Algeria is a natural gas producer, it plans to integrate renewable gases as energy sources in order to diversify energy supply, strengthen energy security, accelerate the energy transition and reduce the country's carbon footprint.
- The Ministry of Energy and Mines is responsible for developing and implementing Algeria's energy policy, including its hydrogen strategy.
- The first elements of the national hydrogen development strategy have been developed by the Ministry of Energy in collaboration with the Electricity and Gas Regulatory Commission (CREG) and Sonatrach (The National gas company in charge of the natural gas and LNG as well as production and export).



> Hydrogen strategy setting

- A hydrogen roadmap has been developed by the Ministry of Energy in collaboration with the Electricity and Gas Regulatory Commission (CREG), Sonatrach, the Ministry of Higher Education and Scientific Research, the Ministry of Start-ups and Sonelgaz (National gas company in charge of the domestic market supply).
- This roadmap has been finalised and approved by the Government in December 2022.



> Hydrogen strategy importance

 Algeria considers hydrogen as a strategic sector for its transition and climate commitments, intending to create sustainable jobs and diversify income sources beyond hydrocarbons.

> Hydrogen phased approach

 The hydrogen development roadmap consists of three phases: initiation and capacity building (2023-2030), expansion and market setting (2030-2040) and production and export (2040-2050)



> Hydrogen startegy target

 Algeria plans to produce and export 30 to 40 million MWh of hydrogen gas, liquid, and derivatives.

> Hydrogen type

 The roadmap provides two types of hydrogen: blue hydrogen (produced from methane conversion) and green hydrogen (produced via water electrolysis using renewable energy sources).

> Hydrogen strategy adaptabilty

• The roadmap, approved by the Algerian government is designed to evolve in response to market dynamics and technological advancements.

Regulatory Level



- As a regulator, CREG has been involved in the development and definition of the hydrogen roadmap.
- Current electricity and gas legislation does not cover hydrogen and does not define a specific regulatory framework. However, unconventional gases are specified in the hydrocarbon law 19-13.
- Furthermore, Algeria has significant potential to develop the hydrogen market and with the adoption of this roadmap, Algeria aims to achieve economic growth, export incomes, industrial decarbonization and energy security.
- For this purpose, Algeria has launched several cooperation projects covering all aspects of the hydrogen value chain.

Industry/Market Level



> R&D framework

- Research institutes such as "The Renewable Energy Development Center (CDER)" focus on the development of renewable energy and energy efficiency technologies, including hydrogen.
- A number of universities in Algeria offer programs related to renewable energy related programs including hydrogen and fuel cells.

Industry/Market Level



> Investment and pilot projects

 A number of pilot projects are underway to test and demonstrate hydrogen technologies and approaches for the production, storage, and distribution of hydrogen. For example one of these projects is to develop a hydrogenpowered fertilizer plant in Arzew (Oran City).





THANK YOU FOR YOUR ATTENTION!