

HYDROGEN - ENERGY TRANSITION - RENEWABLES - CLEAN TECH - MOBILITY - FRANCE - WORLD

PRESS RELEASE

AREVA H₂Gen welcomes the Hydrogen Plan and underlines the need for regulation to develop the sector

Les Ulis, June 6, 2018 - Presented on Friday, June 1, by Nicolas Hulot, Minister of Ecological and Solidary Transition (MTES), the Hydrogen Plan demonstrates the interest for the production of green hydrogen for the energy transition. Two of its main pillars are exclusively centred on the production of green hydrogen by water electrolysis. As much as the deployment timeline is relevant and the subsidies are clear, the regulatory elements still need to be adjusted to allow for the development of projects and to attract investors' interest.

The plan announced by Nicolas Hulot, Minister of State, Minister of Ecological and Solidary Transition, emphasises how hydrogen technologies are a strategic component to reaching the objectives of the energy transition. Moreover, the development of the French sector is also a question of international industrial competitiveness, given that many countries already recognised this strategic role in the energy transition.

French stakeholders now have a plan that organises and aids in the development of infrastructure, and defines a path to achieve it.

Of the three main pillars of the Hydrogen Plan, two relate exclusively to electrolysis: the production of green hydrogen for industrial purposes, as well as the use of electrolysers for the stability of electricity networks.



The aim is to develop, in France, the production of a "green" hydrogen, completely decarbonated, thanks to the electrolysis of water powered by electricity sourced from renewable energies.

This technology is well known to decarbonise certain industrial processes, develop a clean mobility and store intermittent renewable energies.

Regarding the development of mobility, charging stations will be installed around green hydrogen production units as part of development projects within a territory to supply both public and private captive fleets.

The industrial start-up AREVA H_2 Gen is one of the five players in the world - and the only French one - capable of responding to these challenges thanks to its PEM electrolysis technology.

"From a financial point of view, the Hydrogen Plan will support these initiatives through subsidies for charging stations and the purchase of vehicles fleets. However, we worry that subsidies for the purchase of electrolysers might be rather ineffective because these tools will have a very little impact

on the actual cost of the hydrogen produced," estimates Pascal Pewinski, general manager of AREVA H2Gen.

"There are several questions about the traceability of hydrogen, to determine its carbon footprint. Does this mean that there would be a tax on carbonated hydrogen? How will the services provided to the networks by the electrolysers be remunerated? At a Power to Gas level, has a feed-in tariff been planned, in line with the market price for green hydrogen?

"One thing is certain, it is essential to develop a regulation at the French and European level to allow these kinds of projects to emerge while being attractive for investors," continues Pascal Pewinski.

Finally, the CEO of AREVA H₂Gen believes that a possible way would be to adapt electricity pricing rules, especially for the production of green hydrogen by electrolysis of water. This could be done by significantly reducing transport costs and taxes in the price of electric kWh for electrolysers.

This plan has therefore targeted strategic developments for hydrogen in favour of the environment. However, some crucial regulation elements still need to be clarified in order to enable these projects to flourish.

About:

AREVA H_2 Gen is the result of the merging, in May 2014, of an R & D company and AREVA's electrolysis assets. It has received support from the Investments for the Future Programme, operated by ADEME. This is an industrial start-up which reunites ADEME, AREVA and SMART ENERGIES. It is partnered with several French and European development and R & D programmes.

AREVA H₂Gen, the French leader in electrolysis and manufactures proton exchange membrane electrolysers (PEM: Proton Exchange Membrane electrolysis). Hydrogen is produced from water and electricity, preferably generated from renewable energies. The targeted markets are the sectors of electricity grid services, of clean mobility (hydrogen fuel cell vehicles) and industrial uses.

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