

The Hydrogen Initiative

We, the signatories of this declaration, gathered in Linz, Austria, on the 17th and 18th of September 2018, collectively realise the vast potentials of sustainable hydrogen technology for the decarbonisation of the energy system and the long-term energy security of the EU.

Acknowledging climate change as a common global challenge and focusing on our commitments to the UNFCCC, we especially underline the key role of sustainable energy technologies in the targeted process of decarbonisation. We need to increase our ambition in all sectors to fulfil the targets set by the Paris Agreement, namely to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.

The signatories of this declaration stress that in light of the continuous progress of automation and digitalisation in industry, the energy sector should prepare for new challenges in energy demand, usage, transport and storage.

We highlight the key role of hydrogen as an energy storage solution providing reliable and timely access to a renewable energy source, offering new opportunities to increase energy security and reduce the Energy Union's dependency on fossil imports.

In order to accelerate the growth and integration of renewable energy sources in the internal energy market, we will strive to maximise synergies through regional and multilateral cooperation regarding the exchange of technological expertise, data, results and best practices.

Taking into account the obligations of the UNFCCC, the UN 2030 Agenda for Sustainable Development as well as the energy and climate targets of the European Union for 2030, the signatories underline that renewable hydrogen will significantly contribute to the Union's pathway of decarbonising the economy.

In order to guarantee the supply of efficient and clean energy for all users throughout Europe, research and innovation in the field of hydrogen technology must be further intensified. Simultaneously, we note that the acceleration of early implementation and widespread application of sustainable hydrogen technology strengthens the economic competitiveness of the Energy Union.

Our ambition

Welcoming the significance of sustainable hydrogen technology in ensuring safe, competitive, available and sustainable energy supply for the Energy Union, we want to increase our focus, ambitions and efforts in the following fields:

- **Sector coupling**

We underline the need for a safe and sustainable transformation of the energy sector moving towards an integrated energy approach.

Accordingly, we emphasise the role of hydrogen as a promising link between the electricity, heat and mobility sectors, opening new windows of opportunity in energy flexibility, availability and security.

- **Short- and long-term energy storage**

We strive to deploy storage options for renewable hydrogen, including the use of existing infrastructure.

We highlight the capability of short- and long-term storage of renewable energy with hydrogen as an energy source, hence providing key solutions to ensure energy security.

- **Direct injection into the gas-grid**

We aspire to integrate renewable hydrogen into the gas grids gradually, which could substantially contribute to the reduction of natural gas use.

Additionally, we highlight that injected green hydrogen from electrolysis could improve the efficient use of volatile renewable energy.

- **Conversion of hydrogen to renewable methane**

We dedicate ourselves to promote the technological conversion of renewable hydrogen into methane.

We additionally commit ourselves to intensify research into natural conversion of hydrogen into methane in order to sustainably utilize natural potentials.

- **Transport and mobility**

We commit ourselves to investigate options to support hydrogen application in transport and mobility. Additionally we strive to establish the necessary infrastructure to provide for the increasing hydrogen demand.

- **Industry**

We stress that green hydrogen provides wide application possibilities in conventional industries, possibly replacing carbon intensive processes. Following, we will promote the implementation of renewable hydrogen in industrial processes where applicable.

In addition, we focus our ambitions on setting multilateral frameworks and standards to ensure maximum consistency for implementing hydrogen technology application in diverse sectors.

We are convinced that Europe should be at the forefront of the sustainable transformation of the energy sector as an international leader in clean energy technology development and implementation. Moreover, we strive to raise public awareness for hydrogen technology.

Furthermore, we encourage third countries and industry to join our efforts and obligations set in this declaration to promote a worldwide supporting framework for sustainable hydrogen technologies.

Political character of this initiative:

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