



International Partnership
for Hydrogen and Fuel Cells
in the Economy

European Commission Update

41st IPHE Steering Committee Meeting

19 - 20 March 2024

New Delhi, India

State of Play – Regulatory Framework

The Hydrogen and gas markets decarbonisation package

The legislative proposals aim to create dedicated hydrogen infrastructure and a hydrogen market. The proposals introduce a definition of low-carbon hydrogen (greenhouse gas savings of at least 70%) and a certification system for low-carbon hydrogen including a methodology for determining emission savings to be spelled out in a Delegated Act by the end of 2024.

Adoption in the European Parliament is expected in plenary on 10 or 11 April 2024.

Its regulatory framework for the hydrogen system is based on proven regulatory principles applied to electricity and gas networks: non-discriminatory third-party access to transport infrastructure, regulated network tariffs, a structural separation of energy production from energy transport (unbundling).

To recognize hydrogen as an independent energy carrier, the Package also establishes a dedicated **European association for hydrogen network operators (“ENNOH”)**. This entity will focus exclusively on the development of hydrogen networks thereby responding to the real needs of the hydrogen market.

Demonstration – Deployment - Financing

Hydrogen and Fuel Cell R&D Update – Clean Hydrogen Partnership

- EUR 113.5 million call 2024. Deadline 17 April 2024
- Launching event of the European Hydrogen Academy (17 January 2024)

EUR 5 million. It brings together 17 members from different EU countries, as well as Switzerland and the UK.

- It will focus on formal education, in line with the Net Zero Industry academies framework and complementing the vocational, Erasmus+ funded project GreenSkills4H.

- Lasting for 54 months, it will have the goal to create networks of 100 universities and 500 schools offering recognised qualifications and adapting their curricula to hydrogen technologies. It will develop university-type courses, retraining and reskilling, and focus on 200 occupational projects.

Demonstration – Deployment - Financing

Innovation Fund

On 23 November 2023, launch of the Innovation Fund 2023 Call with a total budget of €4 billion available for innovative low-carbon technologies in various sectors. Project promoters may apply for grants under five topics with distinct budget and capital expenditure (CAPEX) requirements:

- General decarbonisation (large-scale) - €1.7 billion available for projects with CAPEX above €100 million
- General decarbonisation (medium-scale) - €500 million available for projects with CAPEX between €20 million and €100 million
- General decarbonisation (small-scale) - €200 million available for projects with CAPEX between €2.5 million and €20 million
- Cleantech manufacturing - €1.4 billion available for projects with CAPEX above €2.5 million focusing on the manufacturing of components for renewable energy, energy storage, heat pumps and hydrogen production
- Pilot - €200 million available for projects with CAPEX above €2.5 million focusing on deep decarbonisation.

Projects will be assessed based on their potential to reduce greenhouse gas emissions, their degree of innovation, maturity, replicability and cost efficiency. Deadline 9 April 2024.

Demonstration – Deployment - Financing

The European Hydrogen Bank

Launch on 23 November 2023 of a first auction (EUR 800 million) for supporting the production of renewable hydrogen. Winners of this auction will receive a fixed premium (4.5€) for each kg of renewable hydrogen produced over a period of 10 years.

The **1st pilot auction** has attracted 132 bids from projects located in 17 European countries. The total support requested far exceeds the currently available budget of €800 million.

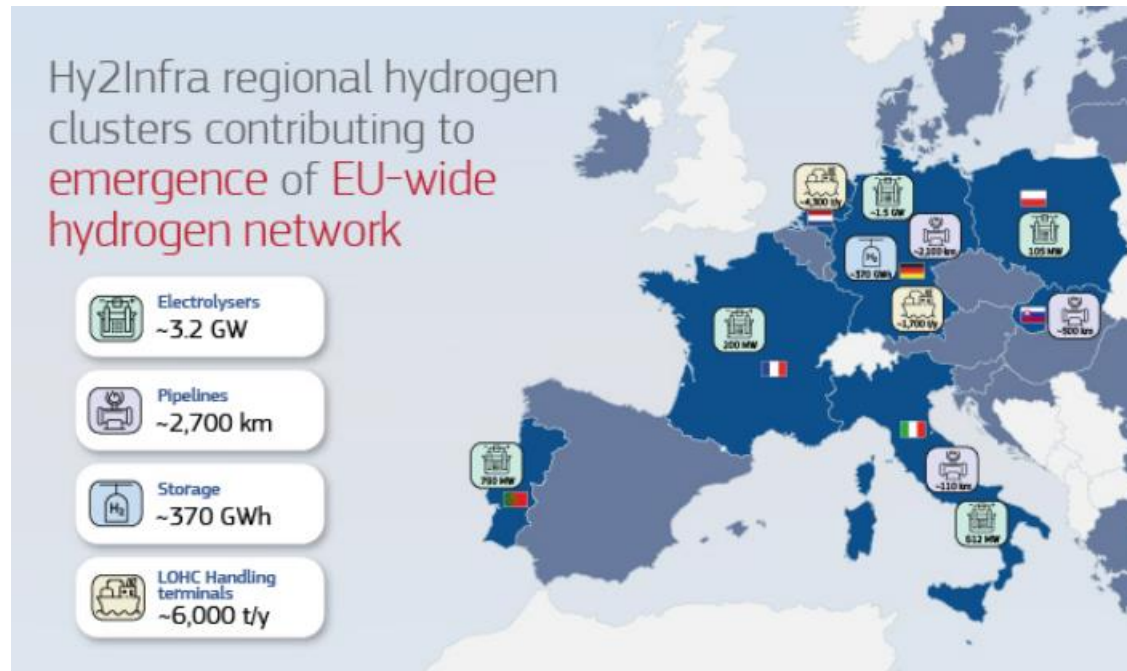
All bids taken together provide for a total planned electrolyser capacity of 8.5 gigawatts (GWe). Over the span of ten years, this would lead to a total production volume of 8.8 million tonnes of renewable hydrogen. On a yearly basis, this would cover close to 10% of the EU's REPowerEU ambition for domestic renewable hydrogen production in 2030.

The Commission is also offering a new “Auctions-as-a-service” mechanism to enable Member States to benefit from the EU-level platform and award national funding to additional projects, in full respect of State aid rules. Germany is the first EU country to make use of the “Auctions-as-a-service” feature, putting up €350 million from its national budget for renewable hydrogen production projects located in Germany.

The 2nd auction with a much larger financing of €2.2bn is announced for the end of 2024.

Deployment – IPCEI Hy2Infra

Approval on 15 February 2024 of a third Important Project of Common European Interest ('IPCEI') to support hydrogen infrastructure. Up to €6.9 billion in public funding, which is expected to unlock €5.4 billion in private investments. 32 companies, including SMEs will participate in 33 projects.



IPCEI Hy2Infra workstreams

Electrolysers	Pipelines	Storage	LOHC Handling terminals	Cross-workstream collaboration
<ul style="list-style-type: none"> AIR LIQUIDE Energie Salentine ENERTRAG EWE HYDROGEN Fusion Fuel GHS HGH HydroHub Fenne Lhyfe Linde Lingen Polenergia Rostock EnergyPort RWE SAIPEM Winpower 	<ul style="list-style-type: none"> AquaDuctus Creos Eustream EWE NETZ Gasnetz Hamburg Gasunie Nowega OGE Ontras SNAM Thyssengas 	<ul style="list-style-type: none"> EWE GASSPEICHER RWE Gas Storage VNG 	<ul style="list-style-type: none"> Hydrogenious Vopak 	<p>Facilitating future interconnections</p> <ul style="list-style-type: none"> Common agreement on interoperability Joint recommendations on operational rules Contribution to standardisation



Thank you



International Partnership
for Hydrogen and Fuel Cells
in the Economy