

40th IPHE Steering Committee Meeting 4 - 5 October 2023 Washington DC, United States



State of Play – Regulatory Framework



RED conclusion and Hydrogen Targets

Share of renewable energy in the EU's overall energy consumption to 42.5% by 2030 with an additional 2.5% indicative top up that would allow to reach 45%. Each member state will contribute to this common target.

Industry agreed that 42% of the hydrogen used in industry should come from renewable fuels of non-biological origin (RFNBOs) by 2030 and 60% by 2035.

Publication on 20 June 2023 of two Delegated Acts required under the Renewable Energy Directive.

Outlining detailed rules on the **EU definition of renewable hydrogen** and providing **a methodology for calculating life-cycle** greenhouse gas emissions for RFNBOs. The final texts are unchanged from the draft acts adopted by the Commission on 13 February 2023.

Adoption of the alternative fuel infrastructure regulation (AFIR) on 20 July 2023

Hydrogen refuelling stations serving both cars and lorries must be deployed from 2030 onwards in all urban nodes and every 200 km along the TEN-T core network.

The stations will have a daily supply capacity of **one ton/day of hydrogen at a pressure of 700 bars** for all modes of road transport.

Alternative Fuels Infrastructure Facility (AFIF): €189 million in EU funding for projects supporting **greener mobility** - some 63 hydrogen refuelling stations

















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Adoption on 25 July 2023 of the FuelEU maritime initiative

The new law to decarbonise the maritime sector. It contains the following main provisions:

- Measures to ensure that the **greenhouse gas intensity** of fuels used by the shipping sector will gradually decrease over time, by **2% in 2025**, 6% from 2030, 14.5% from 2035, 31 % from 2040, 62% from 2045 and to 80% from 2050.

ReFuelEU Aviation

The legislative proposal aims to ensure a level playing field for sustainable air transport by **periodically increasing the share of sustainable aviation fuel (SAF) to supply at Union airports**. The proposal fully relies on the Renewable Energy Directive (RED) to define and certify SAF and, from 2030, **a minimum share of synthetic fuels**, with both shares increasing progressively until 2050. **SAFs would make up 70% of all fuels supplied to operators at EU airports by 2050 (tbc)**. It has been voted positively by the European Parliament and the Council vote should take place in October.

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.

Demonstration – Deployment - Financing



Hydrogen and Fuel Cell R&D Update

EUR 195 million call 2023.

Innovation Fund

• The Innovation Fund's third call for large-scale projects: 8 projects directly targeting the hydrogen sector, plus an additional 11 projects indirectly related with the production and use of hydrogen. EUR 700 million.

The European Hydrogen Bank

• The Domestic side of the bank implemented through **auctions** under the Innovation Fund. The Commission will launch on 23 November 2023 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.

Relaunch of the European Hydrogen Valleys Platform (8 May 2023)

• The platform now features 55 hydrogen valleys identified in the EU, at different stages of development from the concept to pre-FID to operational.

This work will lead to the publication of the European Roadmap for Hydrogen Valleys, to be published on the last quarter of 2023.



















Industrial Alliances



European Clean Hydrogen Alliance





Renewable and Low-Carbon Fuels Value Chain Industrial Alliance

The Renewable and Low-Carbon Fuels Value Chain Industrial Alliance is a new initiative that focuses on boosting production and supply of renewable and low-carbon fuels in the aviation and waterborne sectors.

It is a key flanking measure to the FuelEU Maritime and RefuelEU Aviation initiatives.

The objective to prepare the aviation ecosystem to the entry into commercial service of hydrogen-powered and electric aircraft. These novel propulsion technologies will contribute to decarbonise intra-EU flights and enable new climate-friendly mobility offers.



European Commission – Profile October 2023



For the EC - Top three priorities for the IPHE to focus on in the next five years and accelerate global progress.

IPHE: The platform for exchanges among government officials.

- Allow hydrogen and hydrogen based alternatives to become traded commodities creation of a global market.
- Develop standardisation and certification at global level (the latter conducive of trade).
- Address the issue of education, skills and training the need for a workforce.

Clean hydrogen project deployment: does ambition match the reality Next EHF – 20 November 2023 during the Hydrogen Week (20-24/11/23)



Relaunch on 29 September of the **European Hydrogen Observatory**

Homepage | European Hydrogen Observatory (europa.eu)











Thank you



International Partnership for Hydrogen and Fuel Cells in the Economy