European hydrogen bank

Hydrogen has an important role in helping the EU achieve its target of climate neutrality by 2050. In March 2023, the Commission announced the European hydrogen bank, to facilitate investment in the hydrogen value chain. This initiative aims to support production and imports of hydrogen in the EU. In November, the Committee on Industry, Research and Energy adopted an own-initiative report, suggesting key improvements. The text is due to be voted by the Parliament during the December plenary session. Once adopted, the Commission will have three months to respond.

Background

Hydrogen can play a key role in a future climate-neutral EU economy, and the European hydrogen strategy identifies key actions to develop the EU hydrogen sector. Under the REPowerEU plan, the EU should produce 10 million tonnes (Mt) of renewable hydrogen and import the same amount by 2030. Just to achieve the domestic production target, the EU would need 150-210 GW of additional renewable capacity to generate electricity at low cost, and total investment of €335-471 billion. Private capital should provide the majority of funding, but public funding can unlock and leverage it. The development of the EU hydrogen value chain is extremely important, also considering that the updated Renewable Energy Directive (RED III) includes binding targets for renewable hydrogen consumption in industry and transport. Around 8 Mt of hydrogen per year is currently consumed in the EU, mainly produced from natural gas. Renewable hydrogen is defined by the criteria set in a delegated act adopted in June 2023.

Commission initiative

In her State of the Union speech in September 2022, Commission President Ursula von der Leyen announced the European hydrogen bank (EHB) initiative, in order to scale up Europe’s hydrogen market. On 16 March 2023, the Commission published a communication on the EHB, with scope to accelerate investment in the hydrogen value chain. The Commission intends to structure the EHB operations around four pillars: 1) creating an EU domestic market; 2) international imports to the EU; 3) transparency and coordination; 4) streamlining financing instruments. With a budget of €3 billion, financed by the EU ETS Innovation Fund, the EHB aims to support both renewable hydrogen production in the EU and its import from third countries. A centralised EU auction platform will award a subsidy to hydrogen producers in the form of a premium per kilogram of hydrogen produced for a maximum of 10 years of operation. Member States could further support hydrogen projects through their own budgets via the platform. The EHB is expected to increase transparency regarding hydrogen flows, transactions and prices, and to support the coordination of both Member States’ and companies’ memoranda of understanding with third countries. In addition, the EHB is tasked with coordinating and streamlining several financing instruments available at EU and Member State level to support hydrogen projects. A first round of pilot auctions was opened in November 2023 with a budget of €800 million. Another round of auctions will follow in 2024.

The European Economic and Social Committee (EESC), in its opinion on the EHB, stresses that fossil fuels must not be subsidised with EU funds. The EHB should apply the ‘do no harm’ principle, and provide funding that respects the Taxonomy Regulation. The EESC stresses the need to expand renewable energy resources, and believes that funding allocation should consider environmental and social sustainability standards.

The European Committee of the Regions (CoR), in its opinion, stresses the importance of geographical balance for EHB activities, and proposes macro-regional auctions. The CoR underlines that only renewable hydrogen is compatible with the Green Deal ambitions, and that cities and regions with lower renewable energy production capacity, or which have difficulties in accessing renewable hydrogen imports, would need particular support, including to further boost the development of hydrogen valleys.
Parliament position

In the Parliament, the Commission communication on the EHB was referred to the Committee on Industry, Research and Energy (ITRE), which decided to produce an own-initiative report (INI). Robert Hajšel (S&D, Slovakia) has been appointed as rapporteur, and the Committee on Budgets (BUDG) has provided an opinion. On 28 November 2023, the ITRE committee adopted the INI report by 45 votes to four, with six abstentions. The committee welcomes the Commission communication and suggests key improvements.

Budget increase: Members express strong concerns about the overall budget of the EHB compared to the subsidies, incentives and more attractive investment framework in other regions of the world, in particular China, and the US under the Inflation Reduction Act; they believe that the current envelope of €800 million for the first pilot auction is too limited. The report calls on the Commission to propose an appropriate budget for the EHB by significantly increasing it over the coming years with fresh resources, and asks the Commission to clarify the yearly budget available for the next five years under each pillar of the EHB and prepare a roadmap of planned auctions. Members also stress the need for dedicated staff to pursue the operations of the EHB.

Domestic production: The report considers that the initial implementation of the EHB should strongly prioritise ramping-up domestic production, while subsequent phases could be extended to enable the ramping-up of competitive imports of renewable hydrogen. That should secure the EU’s industrial sovereignty in a context of open strategic autonomy.

One-stop shop: Members express concern that industries are currently dealing with a patchwork of financial support instruments for the production of hydrogen. The report calls on the Commission to make the EHB a one-stop shop for the coordination of activities and financing in support of projects along the entire hydrogen supply chain.

Hard-to-decarbonise sectors: The report stresses that the design of future auctions should strongly prioritise the sale of renewable hydrogen to hard-to-abate industries (steel, fertilisers, etc.) and heavy transport, in particular aviation and shipping. Members believe, in that respect, that certain restrictions should be included in the eligibility criteria for the auctions.

Regional auctions: Members reiterate the importance of geographical balance in the production of renewable hydrogen, to avoid further deepening of regional divergences in the development of the hydrogen market. The report urges the Commission to develop regional auctions and to define regions that would be sufficiently large to secure adequate competition while ensuring fair distribution. Meanwhile, Members asked for clarification of the rules on cumulating between the EHB and State aid, and insisted on the need to safeguard fair competition between all applicants. They also rejected the idea of cumulating for the same costs.

Sustainability and social criteria: Members call for the incorporation of robust environmental and social sustainability criteria when considering imports and the allocation of funding for domestic production. On the latter, the report asks the Commission not only to consider price, but also to include a system of bonus points to reward bids that deliver the highest level of sustainability and quality jobs.

Renewable hydrogen: The report underlines that renewable hydrogen is the only viable option in the long run, while recognising that low-carbon hydrogen may serve as a bridge during the transition to a net-zero economy and the ramping-up of the hydrogen market. Members recognise the urgent need to scale up the production of electrolysers in the EU, and that increasing production would require a significant expansion of renewable electricity capacity and an upgrade of the power grid.

Review mechanism: Members insist on the need to avoid over-compensation and urge the Commission to reassess the fixed premium awarded to winning projects at the end of each contractual arrangement between producers and consumers, or at least every five years The report also stresses the need for an annual report by the Commission assessing progress in the development of the renewable and low-carbon hydrogen markets and evaluating the activities of the EHB; the Commission should submit a comprehensive evaluation of the EHB before its proposal for a new multiannual financial framework (MFF).