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European Hydrogen Bank Launches Pilot Auction on Domestic Hydrogen Production

On August 29, 2023, the European Commission published the Terms and Conditions (T&Cs) of an €800 million pilot auction under the European Hydrogen Bank's (EHB)[1] Innovation Fund.[2] Partially funded by revenues from the EU Emission Trading System (EU ETS), the auction will grant support in the form of a subsidy to hydrogen projects located in the European Economic Area (EEA) of a fixed premium in €/kg of renewable hydrogen produced over 10 years. Support from the Innovation Fund is provided as semi-annual payments based on projects' output, measured per unit of verified and certified renewable fuel of non-biological origin (RFNBO) hydrogen production. The auction forms part of the EHB's first proposal to create a domestic market for hydrogen by reducing the cost gap between renewable and fossil fuel hydrogen production, facilitating price discovery, leveraging private capital to de-risk hydrogen projects, and mitigating administrative burdens. The results of the auction will inform future EHB initiatives, including potential support for non-EEA projects that would export clean hydrogen to the EEA. EU President von der Leyen has announced a total budget of €3 billion for the EHB.[3]

The granting authority, the European Climate, Infrastructure and Environment Executive Agency (CINEA) intends to open the auction on November 23, 2023.

Key Features

Project developers, hydrogen off-takers, infrastructure investors, and institutional lenders of hydrogen projects should take note of the following key aspects of the EHB pilot auction T&Cs:

- **Projects must be located in the EEA and meet certain eligibility requirements.** Only projects located in the EEA are eligible for support. However, there is no geographical limitation on the origin of members of the bidding consortium, so bids are also open to non-EEA developers. Additionally, electrolyser capacity must be installed in a single location, and applicants must pass a financial capacity check. There is no minimum amount of support that applicants can bid for, but the ceiling bid price is 4.50 €/kg of hydrogen produced. Applications are assessed on a pass/fail basis.
- **Hydrogen produced must be renewable.** The auction is for RFNBO hydrogen within the meaning of the Renewable Energy Directive and its Delegated Acts.[4] This means beneficiaries must certify

that the overall total volume of hydrogen produced by supported capacity achieves at least 70% GHG savings compared to a fossil fuel comparator on average during the support period of the scheme as certified by an independent third party. The object of this requirement is to avoid any cross-subsidization of 'grey' hydrogen produced from fossil fuels. Renewable hydrogen produced with carbon capture and storage from biomass sources such as natural gas ('blue' hydrogen) is not considered to be an RFNBO.[5]

- **Electrolyser capacity applied for must be new.** RFNBO hydrogen must be produced by at least 5MWe of new electrolyser capacity, meaning capacity for which, at the time of application, the 'start of works' had not taken place. 'Start of works' is defined as "the first firm commitment (e.g. ordering equipment or starting construction) making an investment irreversible".[6] Buying land and preparatory works such as obtaining permits and conducting preliminary feasibility studies are not considered 'start of works'.
- **Projects will have five years to enter into operation.** The maximum time to 'entry into operation' is five years from signing of the grant agreement between the applicant and CINEA. 'Entry into operation' is the point at which "all elements and systems required for operation of the project have been tested and the capacity stated in the bid has been certified as operational". This must be demonstrated by certain deliverables, including: (i) completion certificate issued by the main contractor(s); (ii) a plant handover report; and (iii) proof of connection to the grid.
- **Bids must be backed by a completion guarantee.** Applications submitted in the auction must be supported by a letter of intent from a bank or financial institution (minimum credit rating BBB-/Baa3) to issue a completion guarantee against successful 'entry into operation' covering 4% of the maximum grant amount.[7] The completion guarantee must be valid until six months after the maximum time for 'entry into operation' (see above). The completion guarantee could be called by CINEA (the beneficiary) if the maximum time for 'entry into operation' is exceeded.
- **Projects may benefit from certain forms of additional State aid and other sources of public funding.** To ensure that a level playing field is maintained within the EU single market, the T&Cs specify which forms of public support may be aggregated with support provided by the auction to the same project. For instance, aggregation with previous aid for early project development (e.g. research) or capacity development is allowed. On the other hand, RFNBO hydrogen projects entering into operation after January 1, 2028 cannot source power from renewable electricity installations that receive State aid.[8]

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ENDNOTES

[1] For more information about the objectives and activities of the European Hydrogen Bank, please see the S&C Energy Transition Insights memo: European Hydrogen Bank: Key Aspects for Producers of Green Hydrogen.

[2] European Commission, Innovation Fund Auction Terms & Conditions (August 29, 2023)

[3] See '2022 State of the Union Address by President von der Leyen' (September 14, 2022) here. According to a Position Paper published by Hydrogen Europe, a €3 billion budget would only be sufficient to support annual production of 66.6kt of hydrogen, representing less than 1% of the EU's target of 10 million tonnes of domestic renewable production by 2030.

[4] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast); First Delegated Regulation; and Second Delegated Regulation.

[5] For details on the definition of RFNBO hydrogen, see the First Delegated Regulation to the Renewable Energy Directive, as amended (RED). For details on the methodology for calculating GHG savings, see the Second Delegated Regulation to the RED, and its supporting Annex. See also the S&C Energy Transition Insights memo: Exporting Green Hydrogen to the EU: Key Considerations for Producers under New EU Rules.

[6] Paragraph (82), European Commission Communication, Guidelines on State Aid for Climate, Environmental Protection and Energy (2022), C/2022/481.

[7] The maximum grant amount is calculated as the bid price (€/kg) x expected average yearly volume (kg/year) x 10 years. The maximum grant amount for each proposal is 1/3 of the total available Innovation Fund budget (i.e. €266.7 million). The maximum size of the completion guarantee would therefore be €10.67 million.

[8] This is in order to comply with the 'additionality principle' stemming from the Renewable Energy Directive and its Delegated Regulations.

Questions regarding the matters discussed in this publication may be directed to Max Birke, Craig Jones, Jon Hannah or Sam Saunders, or to any Sullivan & Cromwell LLP lawyer with whom you have consulted in the past on similar matters. Additional S&C resources about energy transition matters may be found here.