

European Hydrogen Bank

RFNBO Hydrogen Auctions under the EU Innovation Fund

The European Hydrogen Bank

- Announced in the State of the Energy Union 2022
 linked to REPowerEU objectives
- Communication adopted on 16 March 2023
- Pilot auction opened on 23 November 2023
- Auctions-as-a-service





European Hydrogen Bank proposed activities

Domestic market creation

Fixed premium auction(s) under the Innovation Fund (DG CLIMA)

Imports to the EU

Instrument for renewable hydrogen imports TBD (DG ENER)



Transparency and coordination

- Demand assessments
- Hydrogen flows

- Infrastructure needs
- H₂ cost data



Existing European financing instruments

InvestEU
Structural funds
Innovation Fund grants

Existing international financing instruments

Concessional loans
Blending

Guarantees



Innovation Fund

Deploying innovative net-zero technologies for climate neutrality







EUR 40 billion* to invest from 2020-2030 in EU's climate neutral future





Avoid emissions and boost competitiveness

Supporting manufacturing, production and use in:





Renewables



Energy storage



Carbon capture, use and storage



Net-zero mobility and buildings

IF23 Auction objectives

Putting Europe's net-zero industry in the lead:









Reducing the cost gap between renewable and fossil hydrogen in the EU

Allowing for price discovery and renewable hydrogen market formation

De-risking European hydrogen projects

Reducing administrative burdens



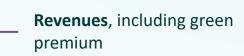
simplicity and implementation speed in mind...

 $\epsilon/kg H_2$

LCOH

- Budget: **€800 million**
- Auctioned good: RFNBO hydrogen
- Support in form of a fixed premium in €/kg of renewable hydrogen produced over 10 years
- Bids ranked on price budget allocated to projects with the lowest specific support requirements
- Other award criteria assessed Pass/Fail
- Pay-as-bid (no indexation to inflation)
- Output based support, upon verified and certified production of RFNBO volumes (no payments before entry into operation)
- Semi-annual payments





sought in the auctions

Bids ranked on price only



Requirements for participating projects

Minimum electrolyser capacity

5MWe per bid

- one location in EEA, no virtual capacity pooling
- new capacity only (no "start of works" prior to application)

Maximum requested grant per project (=price*volume) capped

1/3 of total auction budget (€800m) to avoid "winner takes all"

Maximum bid price ("ceiling price")

4.5 €/kg of RFNBO hydrogen produced

Planned entry into operation

less than 5 years from grant signature

No restriction on off-take sectors or origin of electrolysers

Termination for severe under-production over 3 consecutive years

Below 30% on average of planned yearly average volume

Completion guarantee ("deposit")

4% of maximum grant amount

- To enter the auction, you need to provide an LoI for the guarantee from a financial institution
- To sign GA, you need the financial institution to issue the guarantee

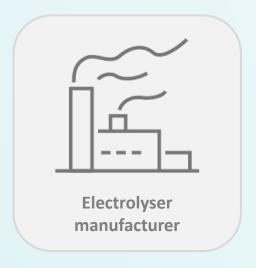
Reporting at the end of the support period

Certification of 70% GHG savings on overall production

• Independent third-party certificate or audited report



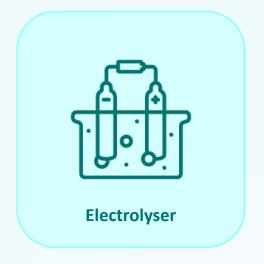
General cumulation rules with other support



V Other public support is allowed



Rules for public support spelled out in RFNBO Delegated Act



X Cumulation is in general not allowed

V Some exceptions to this rule



V For CAPEX or non-dedicated infrastructure other public support is allowed

X For OPEX related to consumption of hydrogen from auction winner other public support is allowed an

illustrative

Auctions-as-a-Service

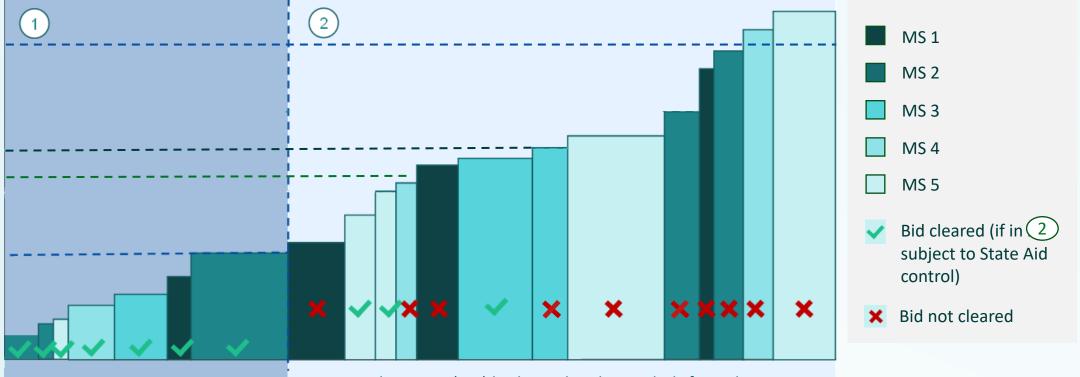
€/kg_H2



Exogenous ceiling price for non-marginal bids

Exogenous ceiling price for the marginal bid

IF clearing price

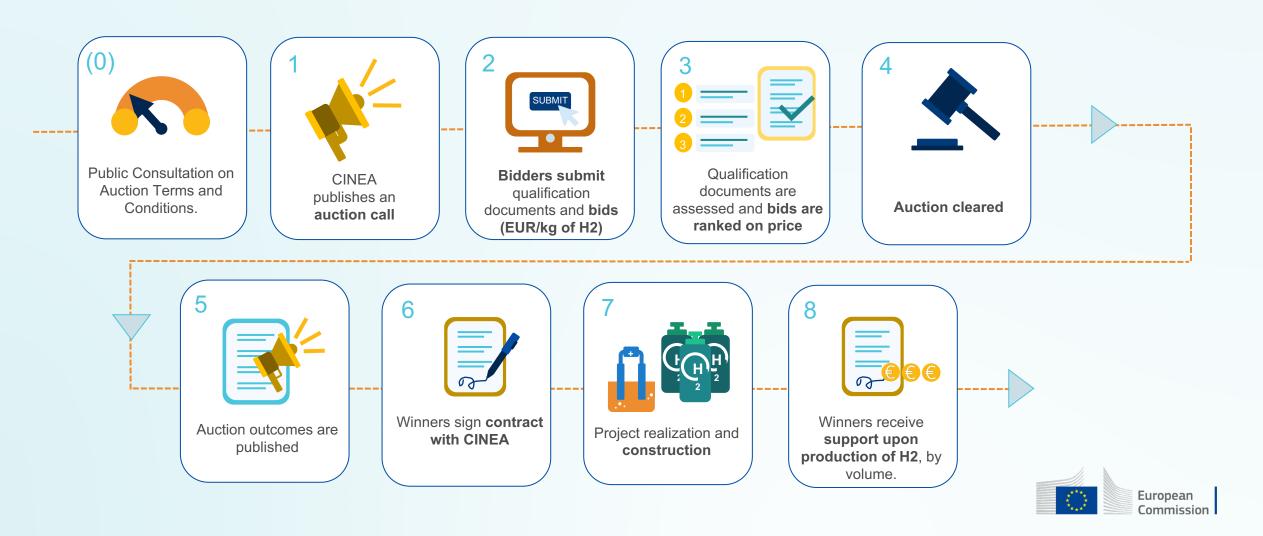


- IF budget clears lowest bids until exhausted, independent of MS of the bids ("best in Europe")
- Member State (MS) budgets clear lowest bids from their own MS only ("best in MS"), until national budget is exhausted. Award subject to State Aid control.
- MS who contribute no own budget cannot award any national bids.

kg_H2



Steps in the application



Key Information

- Auction opened on 23 November and close on 8 February
- Available application information through in <u>EU Funding & Tender</u>
 <u>Portal</u>
- Any questions? Ask us at <u>EU Funding & Tenders InnovFund HelpDesk</u>



More information



All (past) call documents available on the Funding and Tenders Portal including:

- ✓ Guidance and calculation tools on GHG emissions and relevant costs
- ✓ Frequently asked questions

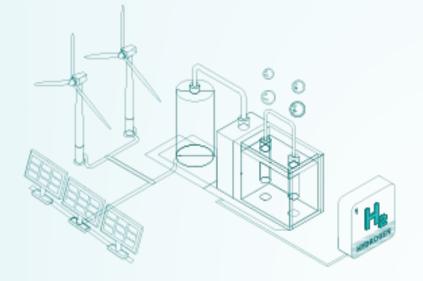
https://europa.eu/!QB67by



Further info, planning of new calls, recorded webinars and videos available on the IF Website:

https://europa.eu/!rx34Dt

And more videos available on YouTube: https://bit.ly/2WxK8w7





Let's keep in touch



climate.ec.europa.eu

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Thank you



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