



European Hydrogen Bank

Accelerating the Establishment of a Full Hydrogen Value Chain in Europe

Ewelina DANIEL, Policy Officer
DG CLIMA, Innovation Fund team

5 November 2024
Czech Hydrogen Backbone dialogue



IF23 Auction *Results*



INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

Funded by the EU Emissions Trading System



€40 billion* available
between 2020-2030

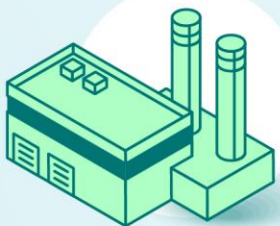


grants awarded through
regular calls and auctions



avoid GHG emissions,
boost competitiveness

supporting innovation in:



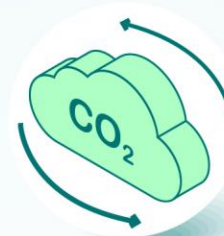
Energy-intensive
industries



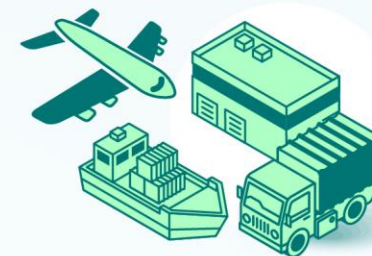
Renewable
energy



Energy
storage



Carbon capture,
use and storage



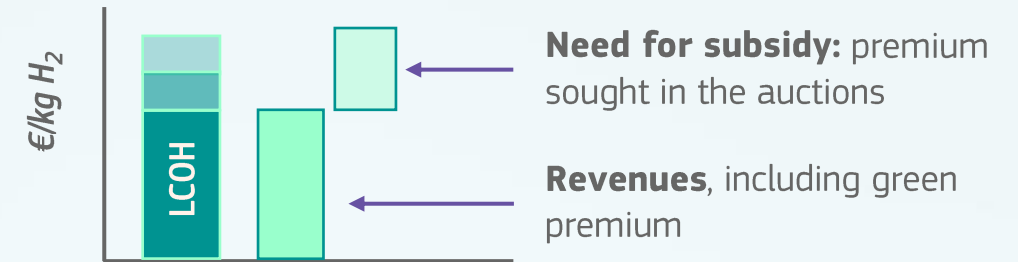
Net-zero mobility
and buildings

**based on a carbon price of €75/tonne*

Overview of the pilot IF23 Auction

- Budget: **EUR 800 M**
- 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.
- **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

Fixed-premium auction

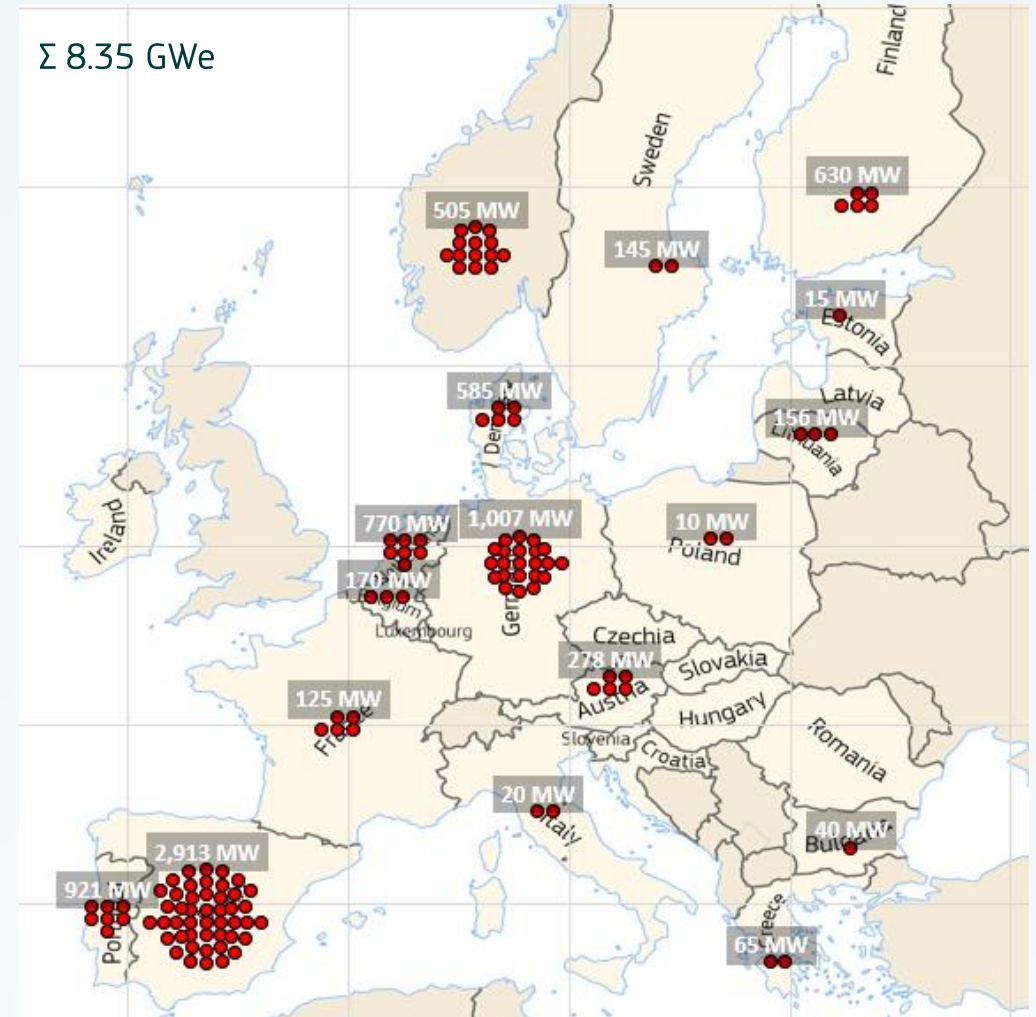


Bids ranked on price only



The first pilot auction was a success, with a high level of participation and competition

- 132* bids from 17 different EEA countries
- 13 projects failing admissibility and eligibility criteria
- Seven selected** bids within the EU 800 million Innovation Fund auction budget...
- ...consuming a budget of EUR 720 million if signed
- Clearing price at EUR 0.48 / kg of H₂



* Graphs and analyses on all following charts refer to data from 130 bids, excluding a bid submitted above the ceiling price of 4.5EUR, and a bid with significant data gaps and incomplete application documents.

** Selected bidders will start the grant agreement process with CINEA and sign upon completion.

Seven bids were selected for grant agreement signature, covering 1.5GWe of electrolyser capacity

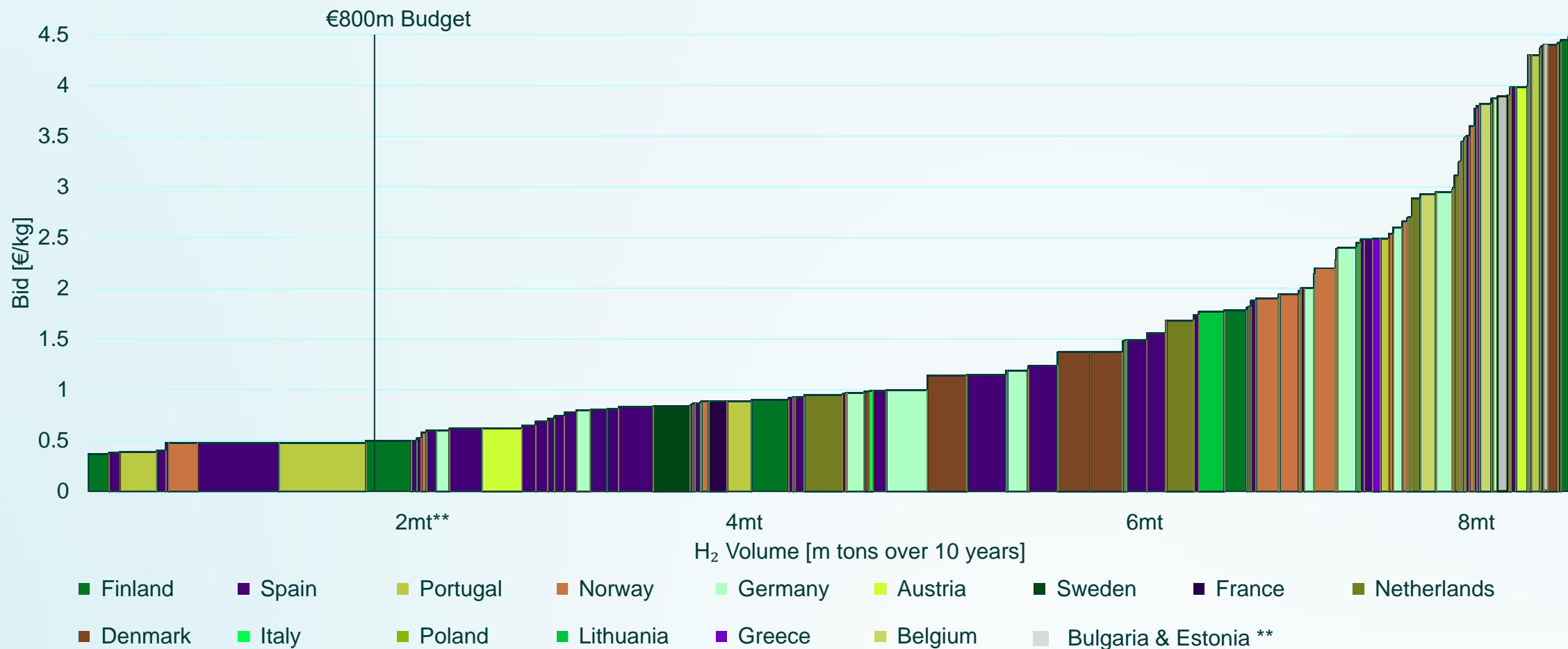
At application stage (MoU/LoI), ~35% of electrolyser capacity of winners intended to be procured from outside the EEA

Project acronym	Project Coordinator	Project location	Bid price (EUR/kg)	Bid volume (kt H2/10years)	Bid capacity (MWe)	Expected GHG abatement (ktCO2/10years) *	Total requested funding (EUR) **
eNRG Lahti	Nordic Ren-Gas Oy	Finland	0.37	122	90	836	€ 45,228,375
El Alamillo H2	Benbros Energy S.L.	Spain	0.38	65	60	443	€ 24,605,819
Grey2Green-II	Petrogal S.A.	Portugal	0.39	216	200	1477	€ 84,227,910
HYSENCIA	Angus	Spain	0.48	17	35	115	€ 8,104,918
SKIGA	Skiga	Norway	0.48	169	117	1159	€ 81,317,443
Catalina	Renato Ptx Holdco	Spain	0.48	480	500	3284	€ 230,463,819
MP2X	Madoquapower 2x	Portugal	0.48	511	500	3494	€ 245,178,772
			Ø 0.44 €	Σ 1580 kt_H2	Σ 1502 MWe	Σ 10 808 kt_CO2	Σ 719,127,056 €

* Calculated vs. the [2021-2025 ETS benchmark](#) of 6.84 t_CO2e/t_H2. Not taking into account additional carbon abatement due to substitution effects in the H2 end use application (i.e. conservative estimate).

** Remaining budget will accrue back to the Innovation Fund.

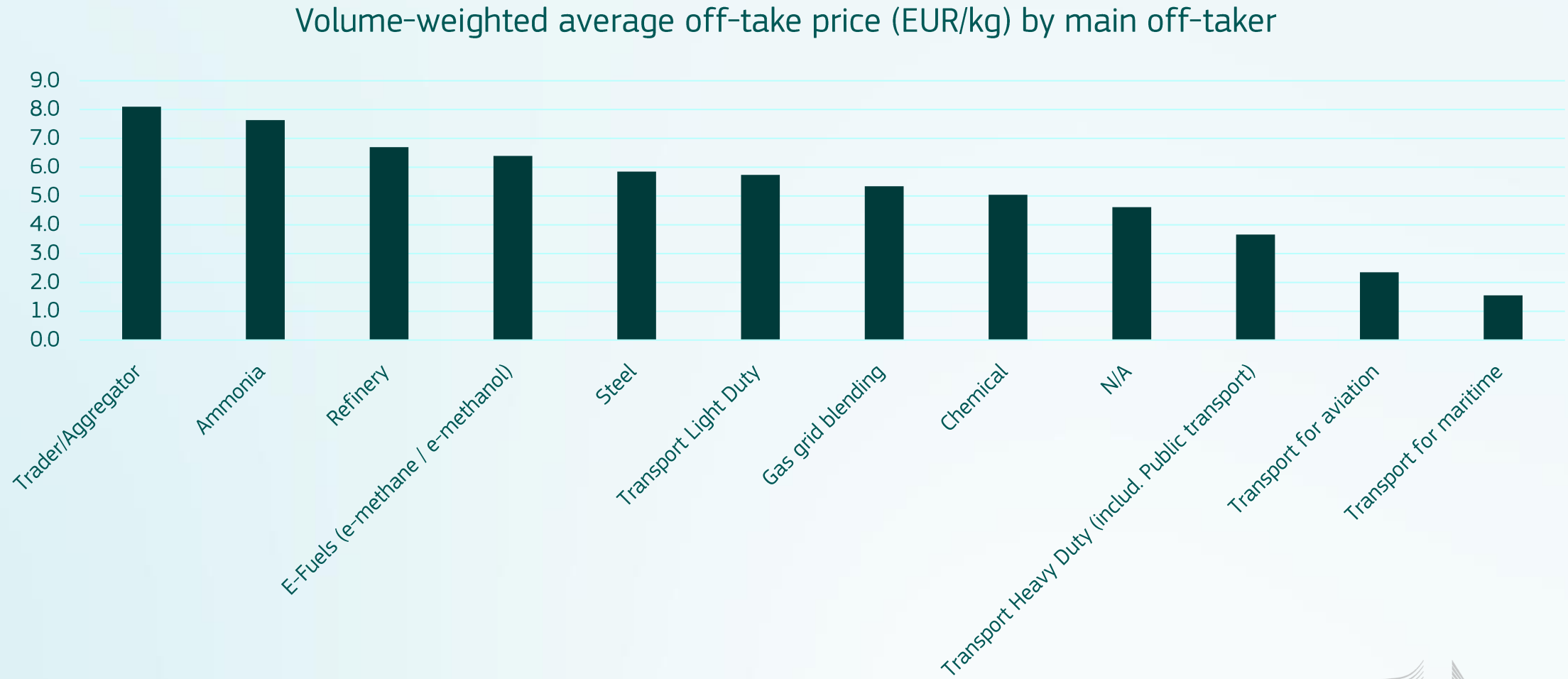
Budget oversubscribed 15x. Bids are well distributed in size and price, resulting in a continuous bid curve



* Bid curve includes 130 bids (i.e. including 13 bids found inadmissible or ineligible, as well as bids not passing or not being evaluated on qualification criteria due to cascade approach – see call text).

** Estonia and Bulgaria aggregated for anonymisation reasons, as only 1 bid per country was received.

Volume weighted average off-take price by subsector of the main off-taker



IF24 Auction

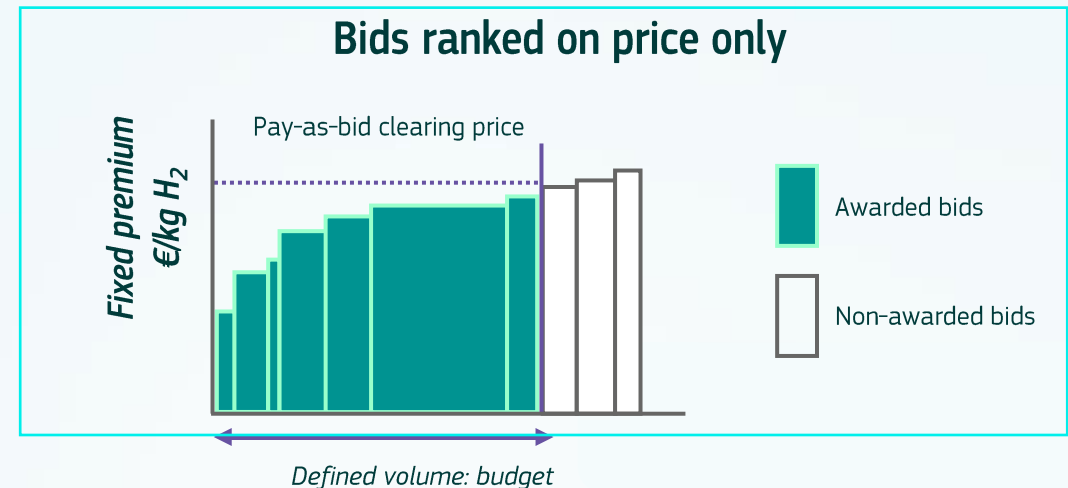
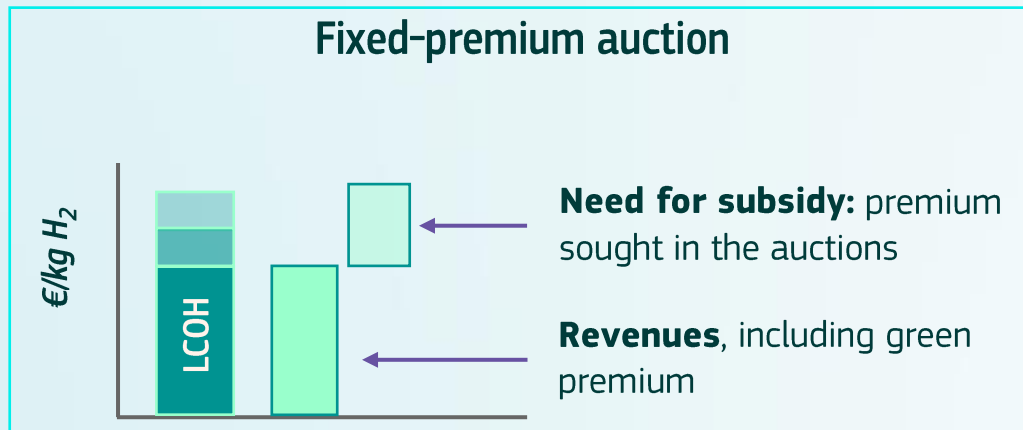
Final Terms and Conditions

Overview timeline for IF24 Auction

1. From April to 6 June – **written consultation** with Stakeholders. Consultation Event held on 12 June.
2. Publication of **Final Terms and Conditions** for the Auction in the Innovation Fund's website (27 September)
3. **Opening of the auction** for receiving bid (3 December 2024)
4. **InfoDay** (10 December 2024)
5. **Closing** of the auction (February 2024)
6. **Selection** of bids (spring 2025)

Objective of the IF24 Auction

- Support **production of Renewable Fuel of Non-Biological Origin (RFNBO) Hydrogen** as defined in the RED and its Delegated Acts. NEW: Contribution to achieving **security of supply of essential goods** and contribution to **Europe's industrial leadership and competitiveness**.
- **Fixed-Premium auction**, single stage, pay-as-bid. Bidders are free to decide their bidding strategy.
- **Pass/Fail qualification** criteria and **ranking based on price** only.



In summary: IF24 Auction compared with the IF23 Auction

- Budget: Increased budget to an estimated **EUR 1.2 billion**.
- Budget divided in two topics:
 - **General topic:** EUR 1 billion – no off-taker restrictions
 - **Maritime sector topic:** EUR 200 million – projects need to have off-takers belonging to the maritime sector covering at least 60% of their planned RFNBO H2 production (as stated in the bid).
- **Increased maturity requirements for bidding projects** (mandatory time to reach financial close, higher completion guarantee) and **lower ceiling price**
- **Resilience related criteria:** “Achieving security of supply of essential goods and contribution to Europe’s industrial leadership and competitiveness” sub-criterion assessed under relevance + safety and cyber security requirements + monitoring

Auction-as-a-Service – What is it?

- EEA countries can use the IF competition to **allocate *additional, national funds to national projects***
 - Germany contributed an additional budget of EUR 350 million in the 2023 Pilot Auction
 - Austria is passing a budget law for an up-to EUR 400 million 2024 contribution
- The scheme is by design ‘State aid’ CEEAG compatible:
 - Notification facilitated with the help of Commission templates
 - *Note: no adjustments for fast State aid clearance*
- **Avoid unnecessary administrative burden** of developing and running new support schemes
- **Streamline renewable hydrogen funding across the EEA.**
- For the second round of Auctions (IF24 2024), **MS interested in participating in the scheme should inform the Commission as soon as possible, ideally before the end of July 2024.**

Thank you



© **European Union 2023**

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.,