Policy context

Stefanie HIESINGER, Head of Unit

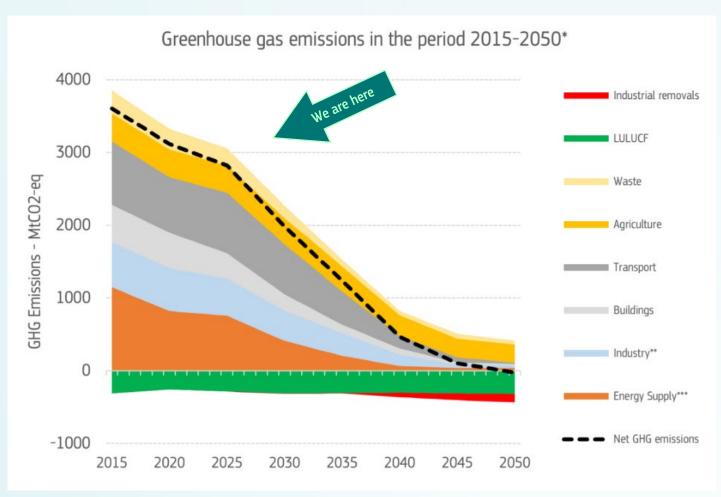
DG CLIMA C2 - Low Carbon Solutions (II):

Research & Low Carbon Technology Deployment





To achieve GHG abatement in line in net-zero objectives, all sectors require investments



*Source:. 2040 climate target - European Commission





INNOVATION FUND

Funded by the EU Emissions Trading System

Deploying innovative net-zero technologies for climate neutrality



€40 billion* available between 2020-2030





grants awarded through regular calls and auctions



avoid GHG emissions, boost competitiveness



supporting innovation in:



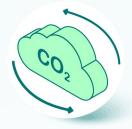
Energy-intensive industries



Renewable energy



Energy storage

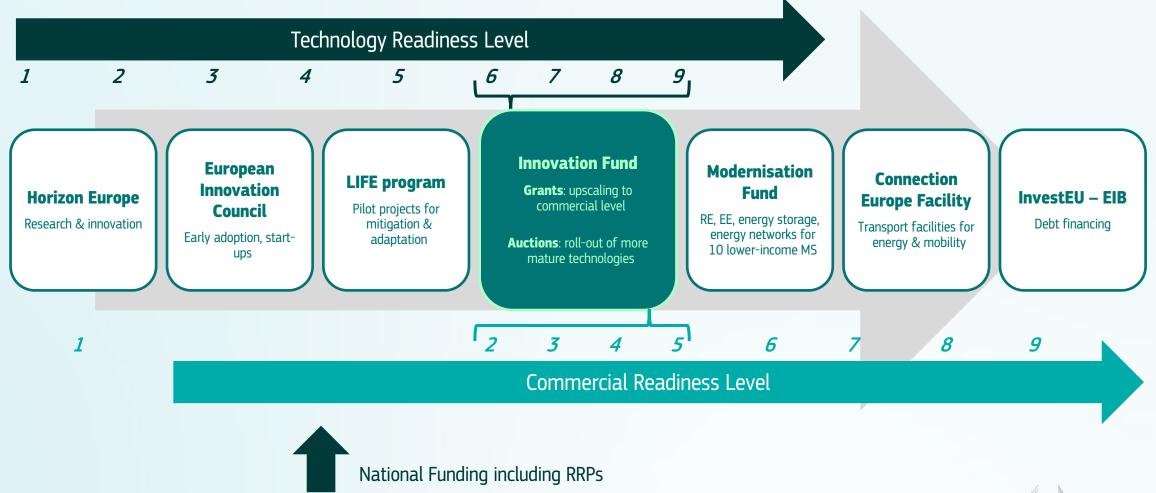


Carbon capture, use and storage



Net-zero mobility and buildings

A targeted projects portfolio



The Innovation Fund supports urgent policy priorities







- Net-Zero Industry Act: clean tech manufacturing (€0.7 billion in 2022, €1.4 billion in 2023, 1.7 billion in 2024) IF24 Call (dedicated topic) + IF24 Battery
- European Hydrogen Bank: domestic auctions for renewable hydrogen under the Innovation Fund
- Wind Package: clean tech manufacturing topic & Project Development Assistance (PDA)
- Strategic Technologies for Europe Platform (STEP): STEP Seal for funded projects
- Industrial Carbon Management (ICM) Strategy: support CCUS deployment since 2020



The European Hydrogen Bank (EHB)

- Announced in the State of the Energy Union 2022 linked to REPowerEU objectives. Communication adopted on 16 March 2023
- Pilot auction (IF23 Auction) launched in November 2023, including "Auctions-as-a-Service" scheme (AaaS)

Domestic market creation

Fixed premium auctions under the Innovation Fund (DG CLIMA)

Imports to the EU

Instrument for renewable hydrogen imports (TBD)

Cooperation with H₂ Global (DG ENER)

Transparency and coordination

- Demand assessments
- Demanu assessment
- Hydrogen flows

- Infrastructure needs
- H₂ cost data

Existing European financing instruments

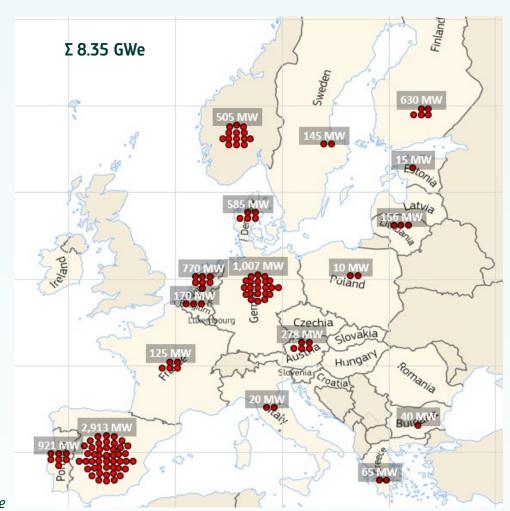
InvestEU
Structural funds
Innovation Fund grants

Existing international financing instruments

Concessional loans
Blending
Guarantees

IF23 Auction, a high-level of participation & competition

- **€800 million** budget (Innovation Fund)
- + **€350 million** (Germany's contribution in the AaaS scheme)
- 132* bids received from 17 different EEA countries
- Only 13 projects failing admissibility and eligibility criteria



Slido #IF24Auction

6 projects awarded for grant agreement signature, covering 1.4 GWe of electrolyser capacity

Project acronym	Project coordinator	Project location	Bid price (€/kg)	Bid volume (kt H ₂ /10years)	Bid capacity (MWe)	Expected GHG abatement* (ktCO ₂ /10years)	Total requested funding**
eNRG Lahti	Nordic Ren-Gas Oy	Finland	0.37	122	90	836	€ 450,228,375
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 €0.45	Σ 1515 kt_H ₂	Σ 1442 MWe	Σ 10 365 kt_CO ₂	Σ € 694,521,237

^{*}Calculated vs. 6.84 t_CO2e/t_H₂ (<u>2021-2025 ETS benchmark</u>) not taking into account additional carbon abatement due to substitution effects in the H₂ end use application (conservative estimate). ** Remaining budget will accrue back to the Innovation Fund.

Objectives fulfilled – IF23 Auction









Reducing the cost gap

between renewable & fossil H₂ in the EU



of up to €0.48 /kg of renewable H₂ Allowing for **price discovery** & renewable **H₂ market formation**



Price information shared on selected bids & anonymised European bid curve

De-risking

European hydrogen projects



€694 million in grant support for 6 renewable H₂ producers

Reducing

administrative burden



Simplified application process & results provided in less than 3 months



IF24 Auction

After the success of the pilot auction, we have opened a second auction (IF24 Auction):

- Total budget: €1.2 billion
 - General topic: €1 billion
 - Maritime topic: €200 million
- Additional €836 million budget (up to) under the AaaS scheme

Open for applications: **3 December 2024**Applications submission deadline: **20 February 2025**

