



# Innovation Fund

## Luxinnovation - 12 November 2024

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# INNOVATION FUND

Funded by the EU Emissions Trading System

Deploying innovative net-zero technologies for climate neutrality



€40 billion\* available  
between 2020-2030

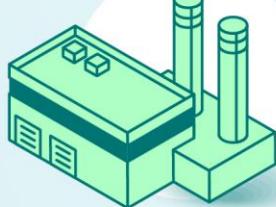


grants awarded through  
regular calls and auctions



avoid GHG emissions,  
boost competitiveness

*supporting innovation in:*



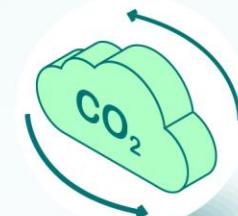
Energy-intensive  
industries



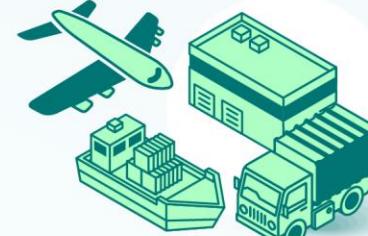
Renewable  
energy



Energy  
storage



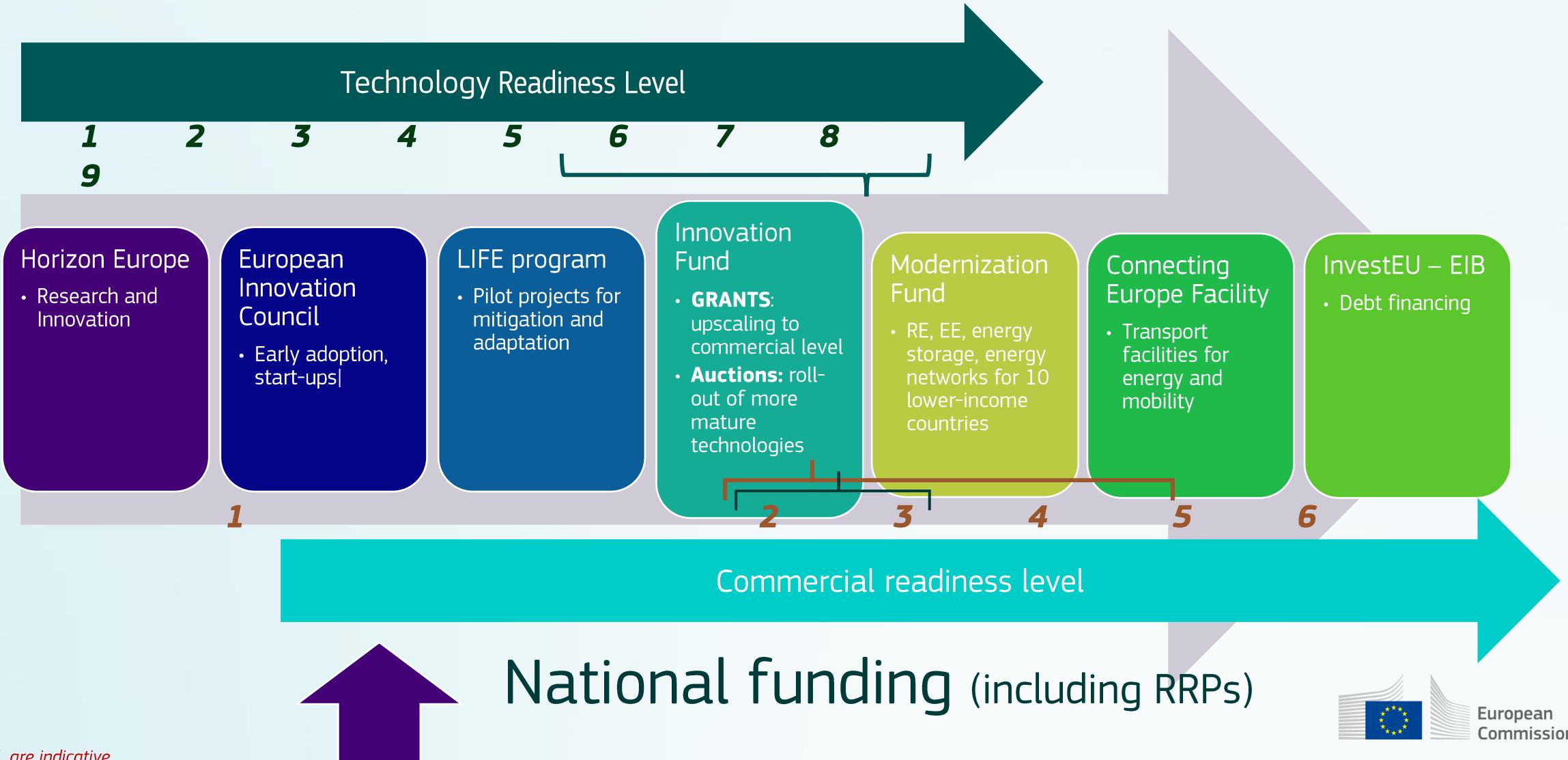
Carbon capture,  
use and storage



Net-zero mobility  
and buildings

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

# Innovation Fund – targeted project portfolio



# Innovation Fund Governance

Public

- Policy and priorities definition
- Call design definition
- Selection Decision
- EIB coordination

**DG CLIMA**



- Evaluation
- Grant Preparation
- Project Implementation
- Program Reporting
- Feedback and policy recommendation to CLIMA

**CINEA**



- MS reps
- Stakeholders
- Advise EC on programme design and operation
- MS consulted on pre-selected proposals

**IFEG**



- Technical support to CLIMA
- GHG methodologies and tools

**ICF /  
Fraunhofer**



- Allowances monetisation
- Asset management
- Project Development Assistance

**EIB**



# The Innovation Fund can support urgent policy priorities, but holds a long-term line of bottom-up support across sectors



- **Net-Zero Industry Act:** clean tech manufacturing topic (€700 million in 2022, €1.4 billion in 2023).
- **European Hydrogen Bank:** domestic auctions for renewable hydrogen under the Innovation Fund.
- **Wind package:** clean tech manufacturing topic and project development assistance.
- **Strategic Technologies for Europe Platform (STEP):** STEP Seal for Innovation Fund projects.
- **Industrial Carbon Management (ICM) Strategy:** support for CCUS deployments since 2020.

# Four main types of support by IF

1. Regular Grants	2. Auctioned grants	3. Advisory Services	4. Blending Finance
<ul style="list-style-type: none"><li>• 7 Calls for proposals since 2020</li><li>• Organised by size of CAPEX and, since 2023, also directed to manufacturing and pilot projects</li><li>• EUR 12 billion awarded so far</li></ul>	<ul style="list-style-type: none"><li>• First auction in 2023, second in 2024</li><li>• Directed to RFNBO hydrogen producers located in Europe</li><li>• European Hydrogen Bank</li><li>• Almost EUR 700 million awarded so far</li></ul>	<ul style="list-style-type: none"><li>• Project Development Assistance</li><li>• Technical Assistance to countries</li><li>• NCP network</li></ul>	<ul style="list-style-type: none"><li>• Blending with InvestEU guarantees: “EU Catalyst Partnership.”</li><li>• EUR 220 million contribution from IF</li></ul>

# Evolution of the Innovation Fund



For the close Calls, the figures represent the budget allocated to the innovation fund for projects after the selection phase  
\* Budget made available

# Calls for proposals

## Regular grants

- Coverage **of up to 60% of relevant cost (funding gap), possibility of cumulation with State aid**
- Reliance on **relevant cost calculation** / financial model to determine funding gap
- **Payments before entry into operation possible against milestones.** Some construction risk taken by the IF
- Due diligence fully covered through **application & evaluation process**
- **Non-price** award criteria
- Possibility to support **wide variety of innovations** in a single call.
- **Large scale demos, first-of-a-kind projects, large pilots**

## Auctions

- Coverage **of up to 100% of relevant cost, no cumulation**
- **Reliance on strong competition to reveal funding gap & avoid overcompensation.**
- **No payments before entry into operation.** Construction/tech risk remains with private sector. Output-based payments of certified and verified production.
- Due diligence can be partially rolled onto **completion guarantee**
- **Price-based award criterion**, possibility for non-price criteria
- Need to focus on one **uniform auctioned good**
- **Higher TRL/CRL**

## Common features

- Key milestones: financial close, entry into operation, annual production/GHG emission avoidance
- Both cover OPEX and CAPEX costs
- Possibility of topics
- Both are result-based, rely on LUMP-SUM payments or UNIT COST contributions rather than cost declarations
- Both require advanced project maturity

# The Innovation Fund in a nutshell



**208 projects:**  
123 ongoing +  
85 under GAP\*



**€ 12.04 Billion**  
EU granted +  
under GAP\*

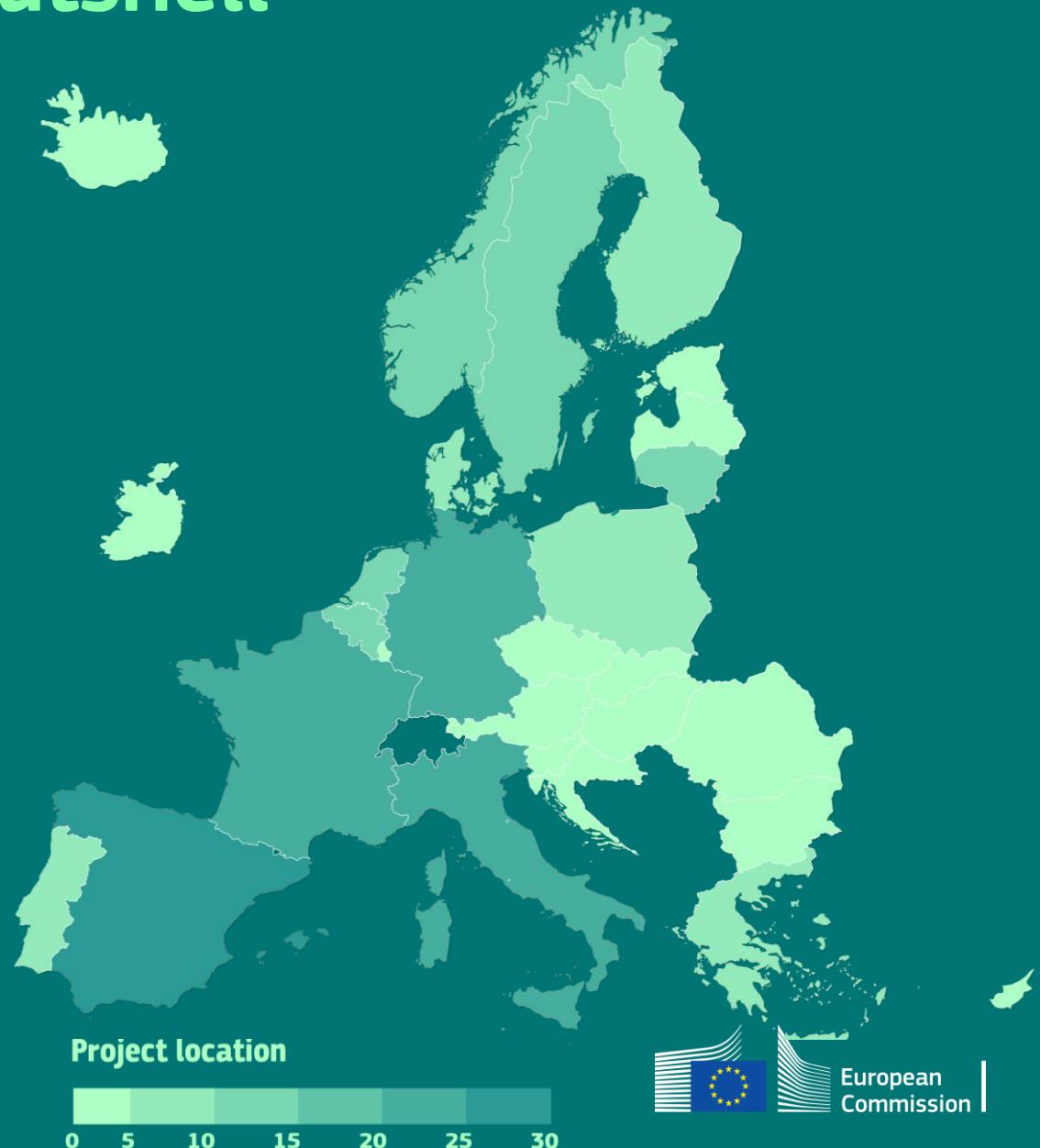


**~929 Mt CO<sub>2</sub> eq  
to be avoided\*\***



**26  
Countries**

**Two new countries added: Estonia and Slovakia**

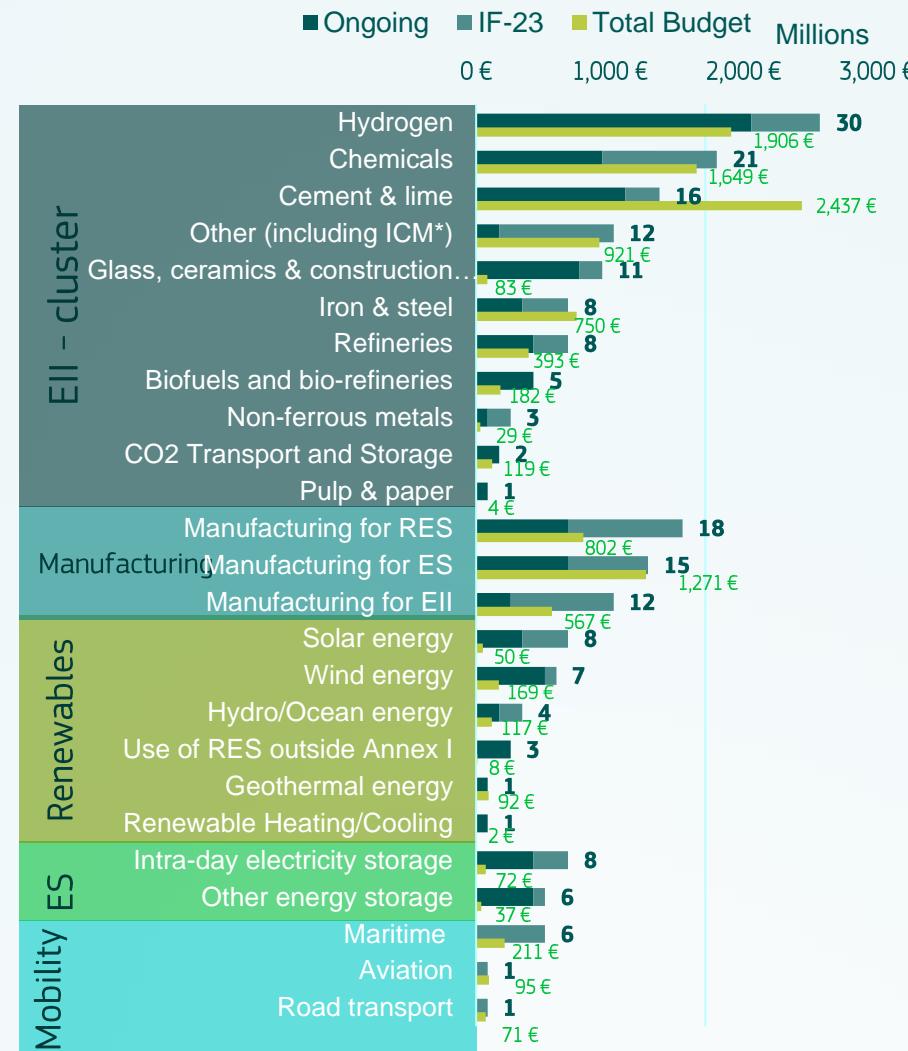
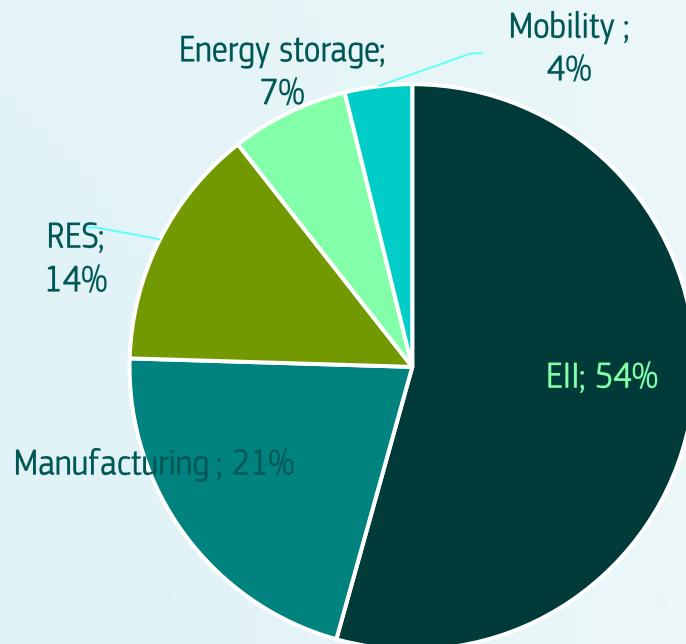


\*GAP: Grant Agreement Preparation

\*\* estimated based on 10 years operations

# IF Portfolio

Share of projects by cluster  
(by number of projects)



\* Statistics include: 123 ongoing + 85 IF23 projects. Projects are allocated to their main country of implementation

# Innovation Fund 2024 funding opportunities



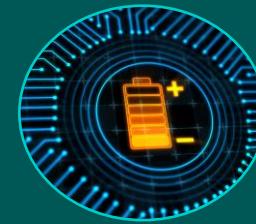
## IF24 Auction

- RFNBO Hydrogen
- Expected launch: 3 December 2024
- Budget EUR 1.2 bn



## IF24 Call

- General, Cleantech, Pilots
- Date and the budget to be announced beginning of November 2024



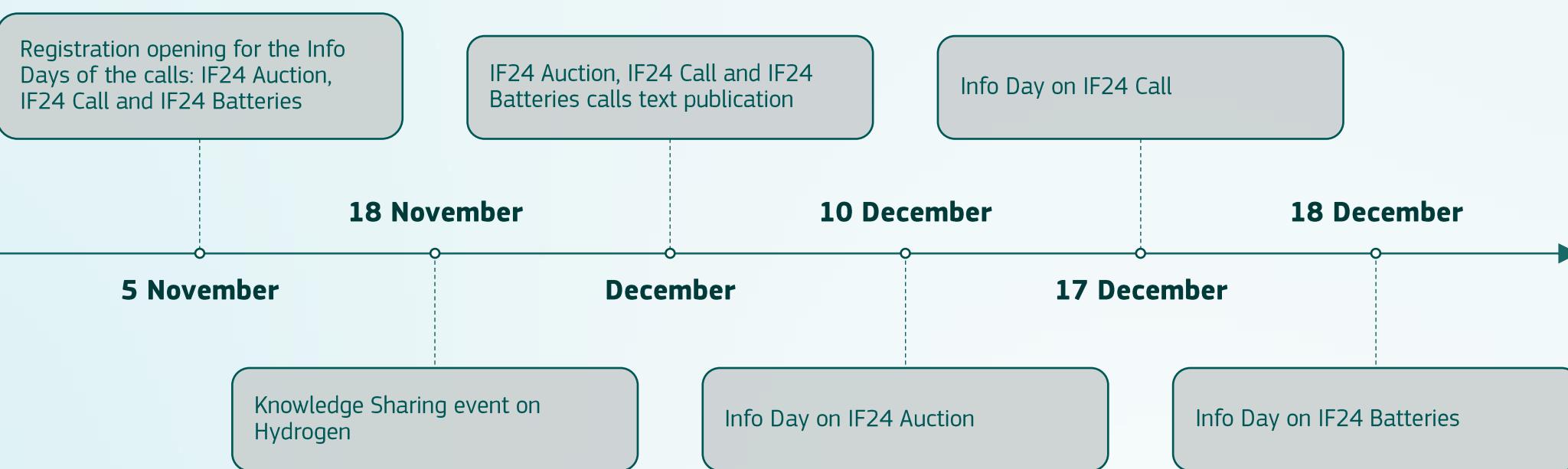
## IF24 Batteries

- Manufacturing of electric vehicles battery cells
- Date and the budget to be announced beginning of November 2024

All relevant documents for applicants will be available on the **EU funding & Tenders Portal**

**Info Days are planned in December, National Info days early 2025**

# Forthcoming events & Future Calls



# IF Regular Grants – *overview of the IF23 Call*

# A reference - Innovation Fund 2023 call in a nutshell



**Launch** 23 Nov. 2023  
**Deadline** 9 April 2024  
**Results** Q4 2024



**€ 4 billion for grants**  
+  
Project Development Assistance



**Five topics**

## GRANT DISTRIBUTION

**LUMP-SUM contribution grant up to 60% of relevant costs**

- up to 40% of grant at financial close
- remaining amount of at least 60% after financial close
- generally, at least 10% after Entry into operation.

## AWARD CRITERIA

- **Degree of innovation**
- **GHG emission avoidance**
- **Project maturity**
- **Replicability**
- **Cost efficiency**

**Bonus points: Net Carbon Removals, Other GHG savings, electricity from additional RES, maritime sector decarbonisation potential**

# Innovation Fund 2023: Five Topics

<b>Topic</b>	<b>Project eligibility</b>	<b>Topic budget</b>
Large-scale projects	CAPEX > EUR 100 million	EUR 1 700 million
Medium-scale projects	EUR 100 million < CAPEX > EUR 20 million	EUR 500 million
Small-scale projects	EUR 20 million < CAPEX > EUR 2.5 million	EUR 200 million
Clean-tech manufacturing	CAPEX > EUR 2.5 million	EUR 1 400 million
Pilot projects	CAPEX > EUR 2.5 million	EUR 200 million

# Admissibility and Eligibility

## Admissibility

- Submitted **before** call **deadline**, electronically and using forms in the Submission System
- Complete** all the application forms and **include mandatory annexes**

## Eligibility

- Participants have to be **legal entities**; can be established anywhere in the world
- Projects must be located in the **EEA** (EU Member States and Iceland, Liechtenstein and Norway)
- The project must:
  - Reach **financial close within 4 years** after grant signature (maximum time to financial close)
  - Operate at least** (minimum GHG emission avoidance monitoring period) **5 years** after entry into operation
    - Except SSP and PILOTS – at least 3 years after entry into operation
- Project budget: the maximum grant amount **must not exceed 60 % of the relevant costs**

# Eligibility: Themes and priorities

## Large, Medium and Small-Scale projects

- **Innovation in low-carbon technologies and processes** in sectors listed in Annex I and Annex III to the EU ETS Directive [2003/87](#), including CCU
- Construction and operation of projects for **CCS**
- Construction and operation of innovative **renewable energy** and **energy storage technologies**
- **Maritime and aviation** transport sectors: energy efficiency, sustainable alternative fuels, electrification, zero-emission propulsion technologies, wind technologies, innovative infrastructure in the maritime sector for EU container transhipment ports

## Clean-tech manufacturing

- **Renewable energy installations** (in photovoltaics, concentrated solar power, on-shore and offshore wind power, ocean energy, geothermal, solar thermal, and others), including their connection to the electricity/heat grid
- **Electrolysers and fuel cells**
- **Energy storage solutions** covering batteries and other storage solutions for stationary and mobile use for intra-day and long duration storage
- **Heat pumps**

## Pilot projects

- Construction and operation of projects **validating, testing and optimising highly innovative, deep decarbonisation solutions in all sectors** eligible for Innovation Fund support

# Award Criteria

Degree of Innovation	GHG emission avoidance potential	Project maturity	Replicability	Cost efficiency
<ul style="list-style-type: none"><li>Innovation beyond state of the art (see Annex 1 of call text) at European level (except SSP – European or national)</li><li>Consider the ongoing Innovation Fund <a href="#">projects</a></li></ul>	<ul style="list-style-type: none"><li>Absolute</li><li>Relative</li><li>Quality of the GHG emission avoidance calculation and minimum requirements</li></ul>	<ul style="list-style-type: none"><li>Technical</li><li>Financial</li><li>Operational</li></ul>	<ul style="list-style-type: none"><li>Efficiency gains</li><li>Further deployment</li><li>Resilience of EU industrial system</li><li>Multiple environmental impacts</li><li>Knowledge sharing</li></ul>	<ul style="list-style-type: none"><li>Cost efficiency ratio (different formula for Pilot projects)</li><li>Quality of the cost calculation and minimum requirements</li></ul>

## Bonus:

1. Potential for **net carbon removals**
2. **Other GHG savings**, e.g. due to transportation of raw materials or finished products, waste management, upstream emissions of fuels in the project scenario

**New GHG emission calculation methodologies for maritime and aviation**

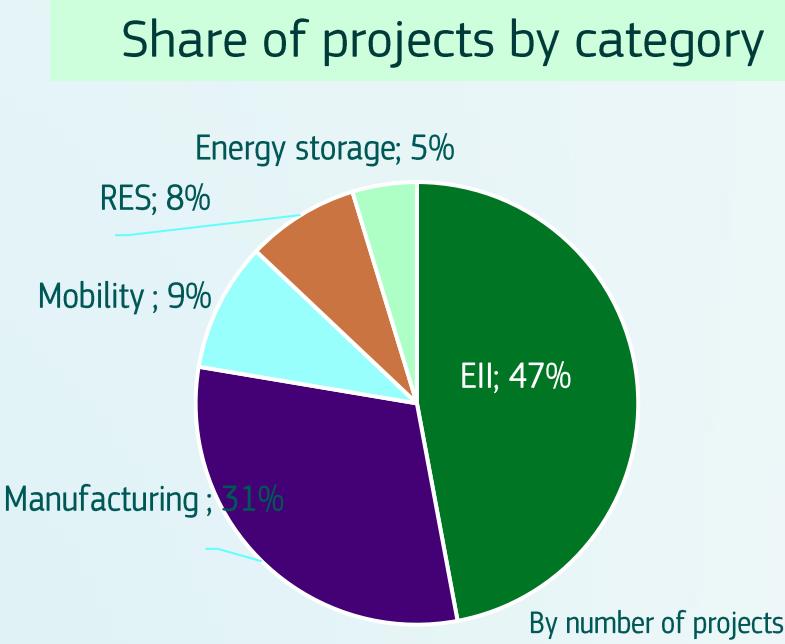
## Bonus:

1. Use **electricity from additional renewable sources** or use **RFNBO** hydrogen
2. Demonstrated potential to decarbonising the **maritime sector** and reducing its climate impacts

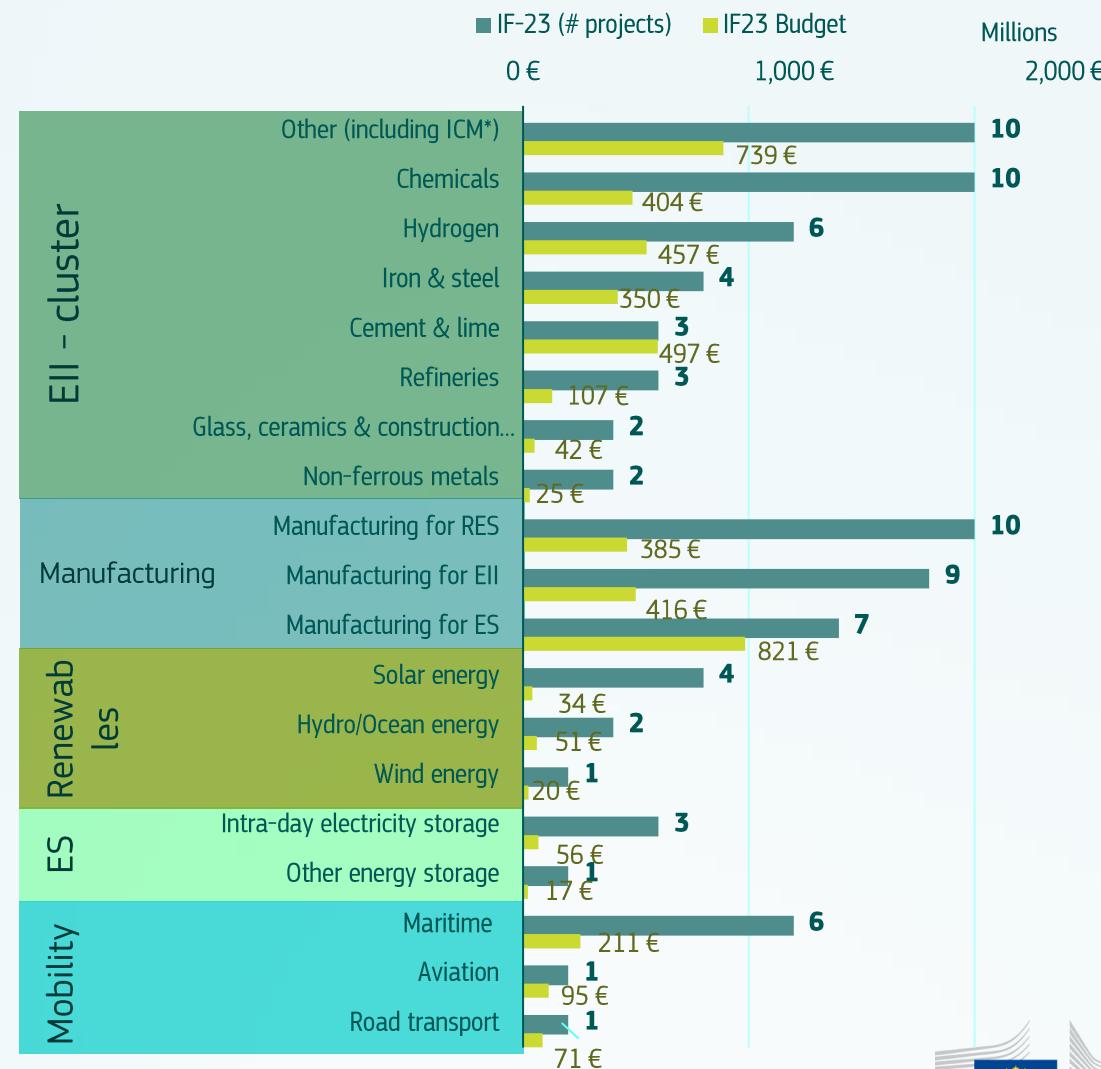


European

# IF23 selected projects



Newly added mobility projects in:  
Aviation, Road transport, Maritime\* sectors



# IF Auctions

## *IF24 Auction for RFNBO H2*

# EU domestic RFNBO H2 auction objectives



# 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.**

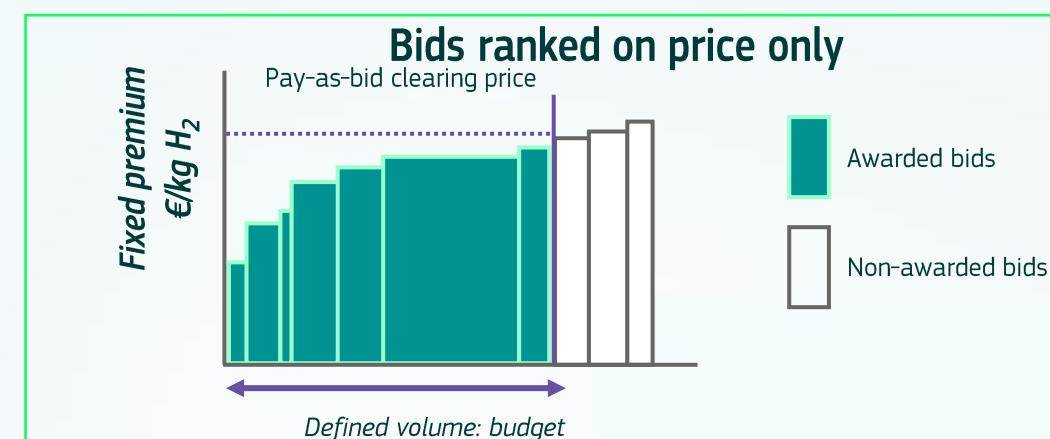
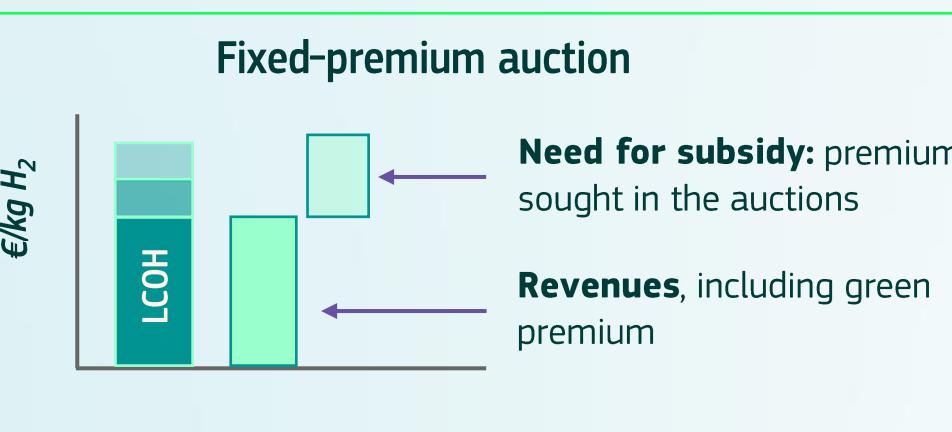
Support in form of a **fixed premium** in €/kg of renewable hydrogen **produced over 10 years**

Single stage, pay-as-bid (no indexation to inflation).

**Pass/Fail qualification** criteria and **Ranking based on price** - budget allocated to projects with the lowest specific support requirements

**Output based support**, upon verified and certified production of RFNBO volumes (no payments before entry into operation), Semi-annual payments.

## Auctions-As-A-Service



# General eligibility conditions

Location:

**within the EEA**

Installed capacity:

minimum **5 MWe, new** capacity,  
**Single location** (no virtual capacity pooling)

Bid ceiling price:

**4 EUR/kg RFNBO Hydrogen**

Maximum size  
of the bid:

**General Topic: EUR 250 million** (1/4<sup>th</sup> of total budget 1b€)  
**Maritime Topic : EUR 200 million**

# Key implementation arrangements

## Financial close

**2.5 years** after signing Grant Agreement

## Entry Into Operation

**5 years** after signing Grant Agreement

## Completion guarantee

**8%** of the requested grant

## Payments

No payments before entry into operation. Then, **biannual** basis - EUR/kg of RFNBO Hydrogen produced, **certified and verified** for a maximum period of **10 years**.

## Cumulation

with other public funding: limitations apply, same as pilot auction

## Production requirements

Semi-annual production may be increased to **up to 140%** of planned.

Total grant amount cannot be increased.

Production **can not fall below 30%** of planned production for more than three rolling consecutive years

## Compliance

With the criteria under which the project was selected (e.g resilience criteria, maritime topic eligibility criteria) will be monitored during implementation



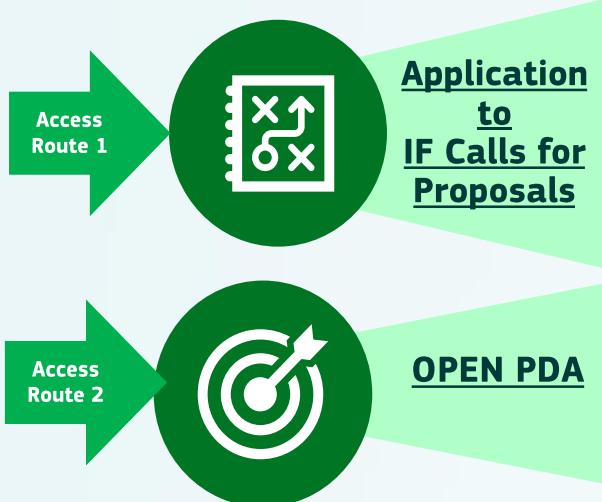
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# Project Development Assistance



# Innovation Fund PDA

EIB financial and technical experts provide Project Development Assistance (PDA) to Innovation Fund eligible projects



- After submitting an IF grant application, and if unsuccessful, your application may be eligible for PDA.
- PDA aims to **enhance the financial viability and improve the technical maturity of project proposals** for submission to future Innovation Fund Calls (although not compulsory) or other EU funding requests, national grant preparation or financing from private sources.
- Project promoters who are interested in obtaining PDA support may **approach the EIB directly**.
- **Eligibility for the Innovation Fund is a prerequisite** for consideration of Open PDA.

EXTENDED PDA  
FROM 2024  
ONWARDS

- ✓ Applying or benefitting from PDA is **not dependent** on submitting an application to the Innovation Fund.
- ✓ Under the extended PDA process, **new sectoral and geographic targets** are in place, and a larger number of projects will be supported.

More information on EIB webpage:



European

[Innovation Fund -  
Project Development](#)

Contact us directly at:  
[ifpda@eib.org](mailto:ifpda@eib.org)

# Blending Instruments

# EU Catalyst Partnership

- The partners: European Commission (Innovation Fund, Horizon Europe), EIB, and Breakthrough Energy.
- The Funding:
  - Innovation Fund: contributes with EUR 220 million as a top-up to the InvestEU Programme
  - Horizon Europe: contributes with EUR 200 million in direct grants
  - EIB: contributes with venture debt supported by InvestEU and with equity financing
  - Breakthrough Energy: contributes with grants and equity
- Projects are selected and assessed by EIB and BreakthroughEnergy, and validated by the Commission.
- Five eligible sectors covered:
  1. Clean Hydrogen
  2. SAF
  3. LDES
  4. DAC & Carbon removal
  5. Decarbonisation of Industry.

# EU Catalyst Partnership

- 2 Projects supported so far:



- . Project: Energy Dome Ottana Project
- . Location: Sardinia, Italy
- . Capacity: 20MW / 200MWh
- . Target Operations: ~Q3 2024

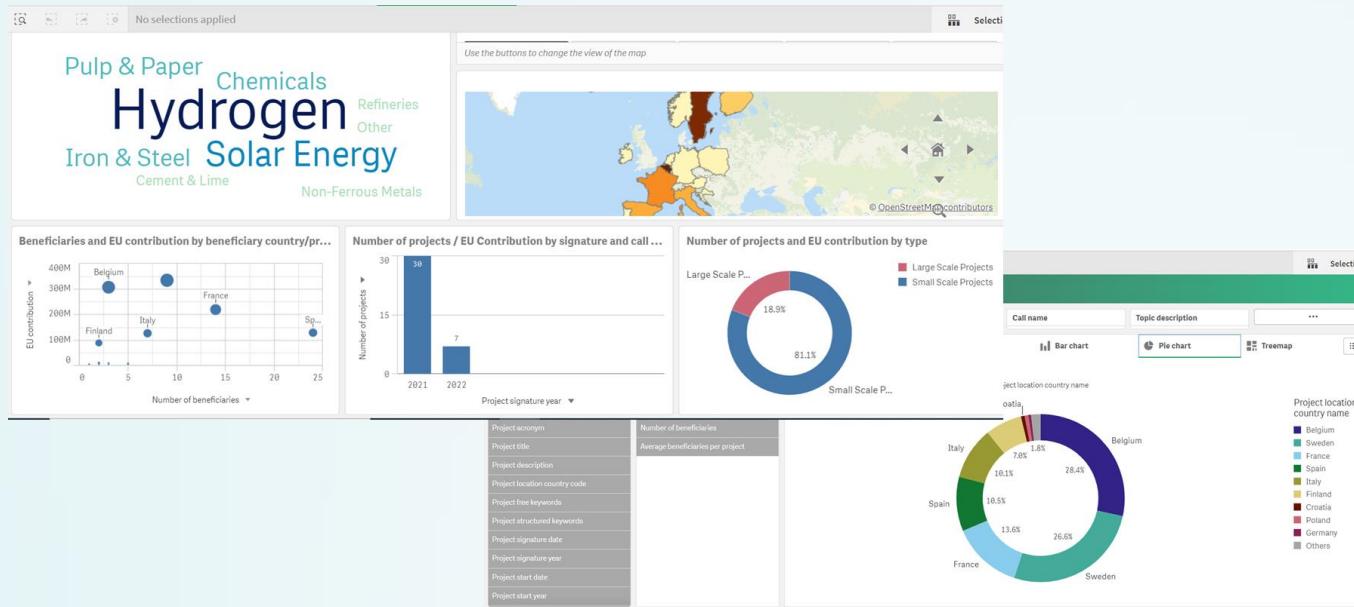
The project is being developed by Energy Dome, a leading long duration energy storage technology company based in Italy. The system will provide energy storage and grid services, with robust performance (high round-trip efficiency) and capex requirements that are more competitive than lithium-ion for utility-scale long duration energy storage.



- . Project: Three EU Projects
- . Location: Denmark, Germany, EU
- . Capacity: 100MWh Thermal Storage
- . Target Operations: ~2026 (all)

A portfolio of 3 projects are being developed by Rondo, an innovative heat storage company focused on decarbonizing industrial manufacturing by providing steam-as-a-service. The projects span 3 sites across the EU and will be deployed in different commercial settings demonstrating the versatility & effectiveness of the battery in reducing carbon emissions.

# IF dashboard



Available on [CINEA's website](#)

# 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>**

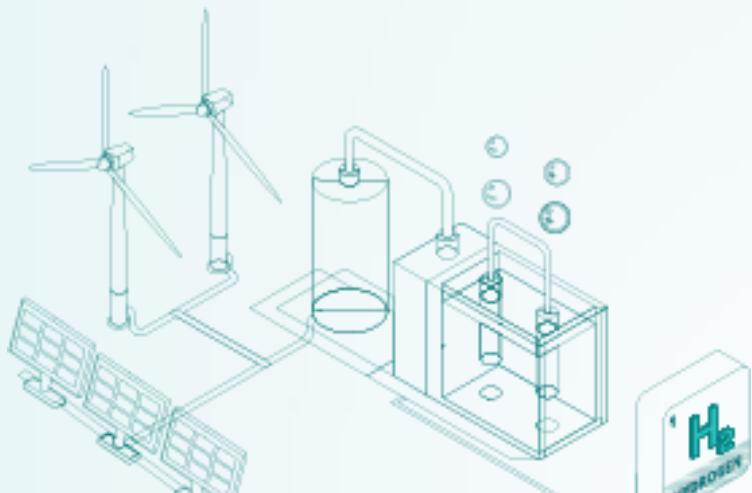


**Further info, planning of new calls, recorded  
webinars and videos available on the IF Website:**

**<https://europa.eu/!rx34Dt>**

**And more videos available on YouTube:**

**<https://bit.ly/2WxK8w7>**



# Let's keep in touch

[climate.ec.europa.eu](mailto:climate.ec.europa.eu)

[cinea.ec.europa.eu/programmes/innovation-fund\\_en](http://cinea.ec.europa.eu/programmes/innovation-fund_en)

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