



Innovation Fund

Industry priorities and funding for bioenergy and biofuels workshop
27 June 2022
Agata Prządka



Agenda

CINEA in a nutshell

Innovation Fund

Results of the first calls

Future calls

CINEA in a nutshell

CINEA in a nutshell



~ **56 billion** for the period
2021-2027



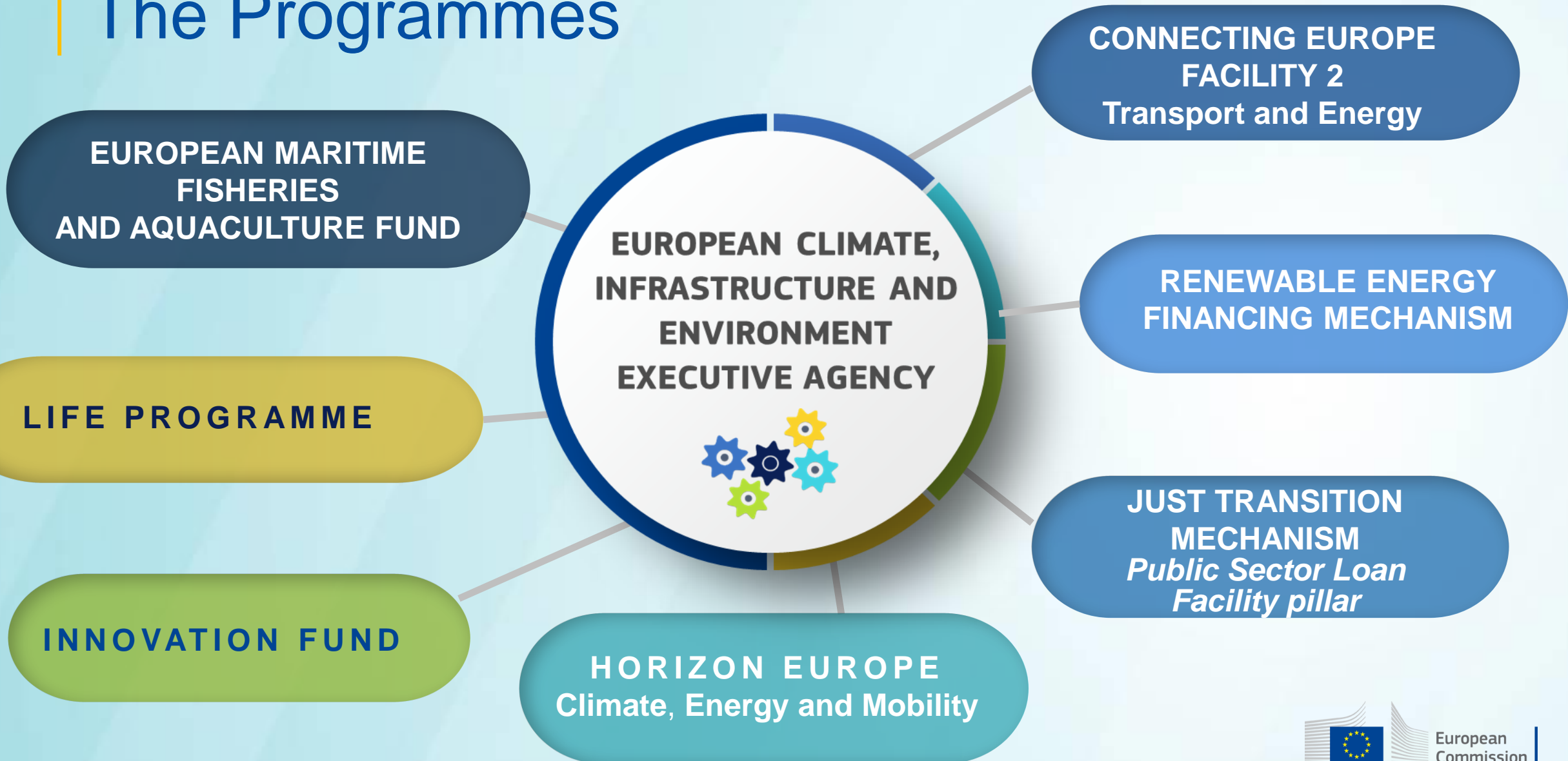
> **500 staff** by 2027



from 2800+ projects managed in
October 2021 to > **4500 projects**
in 2027

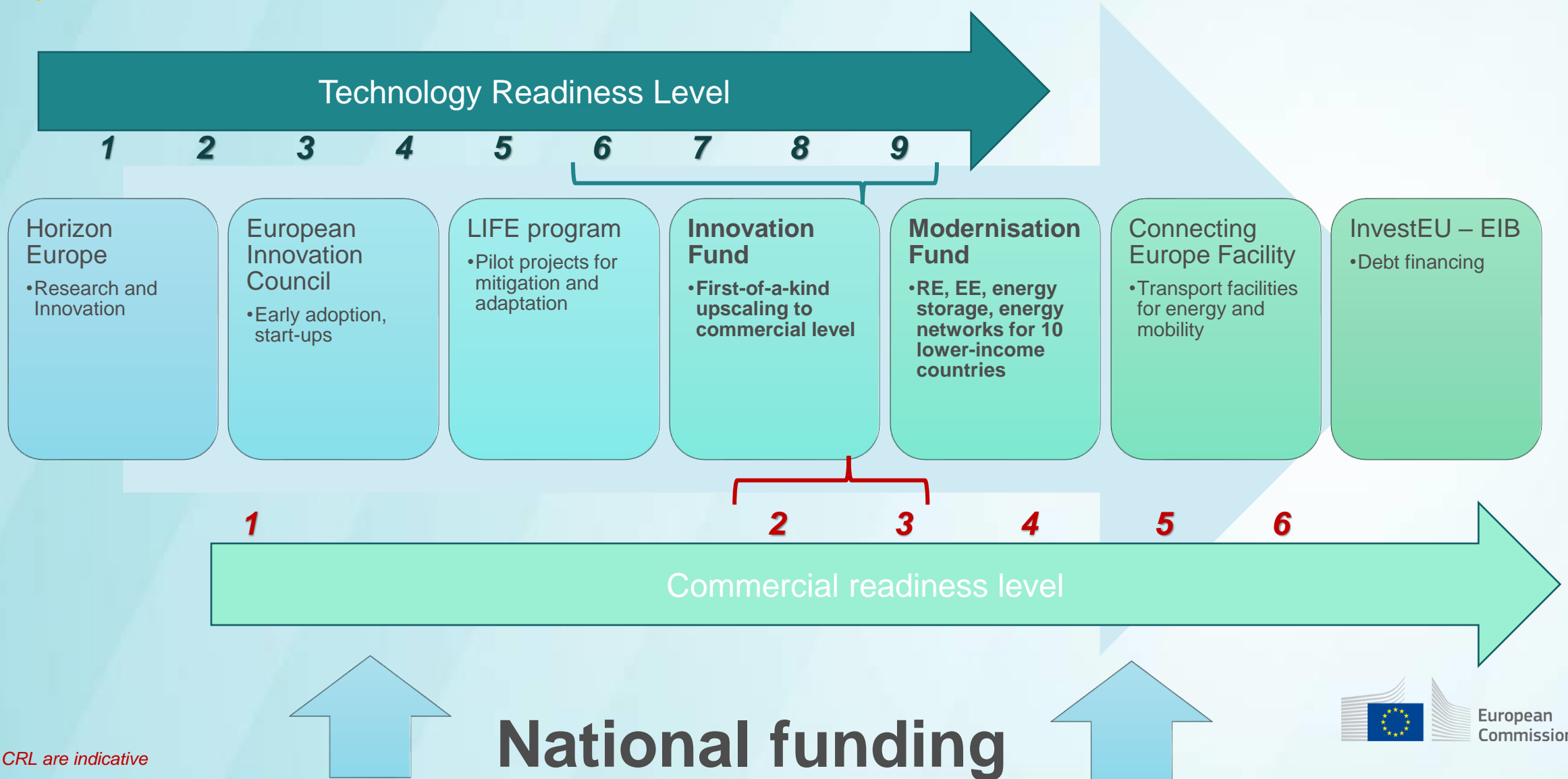
- **Policy feedback** as an essential part of funding activities
- **Expertise** at the service of **beneficiaries** in managing the complete lifecycle of projects
- Exploitation of **synergies** and dynamic ways to work **across programmes**

The Programmes



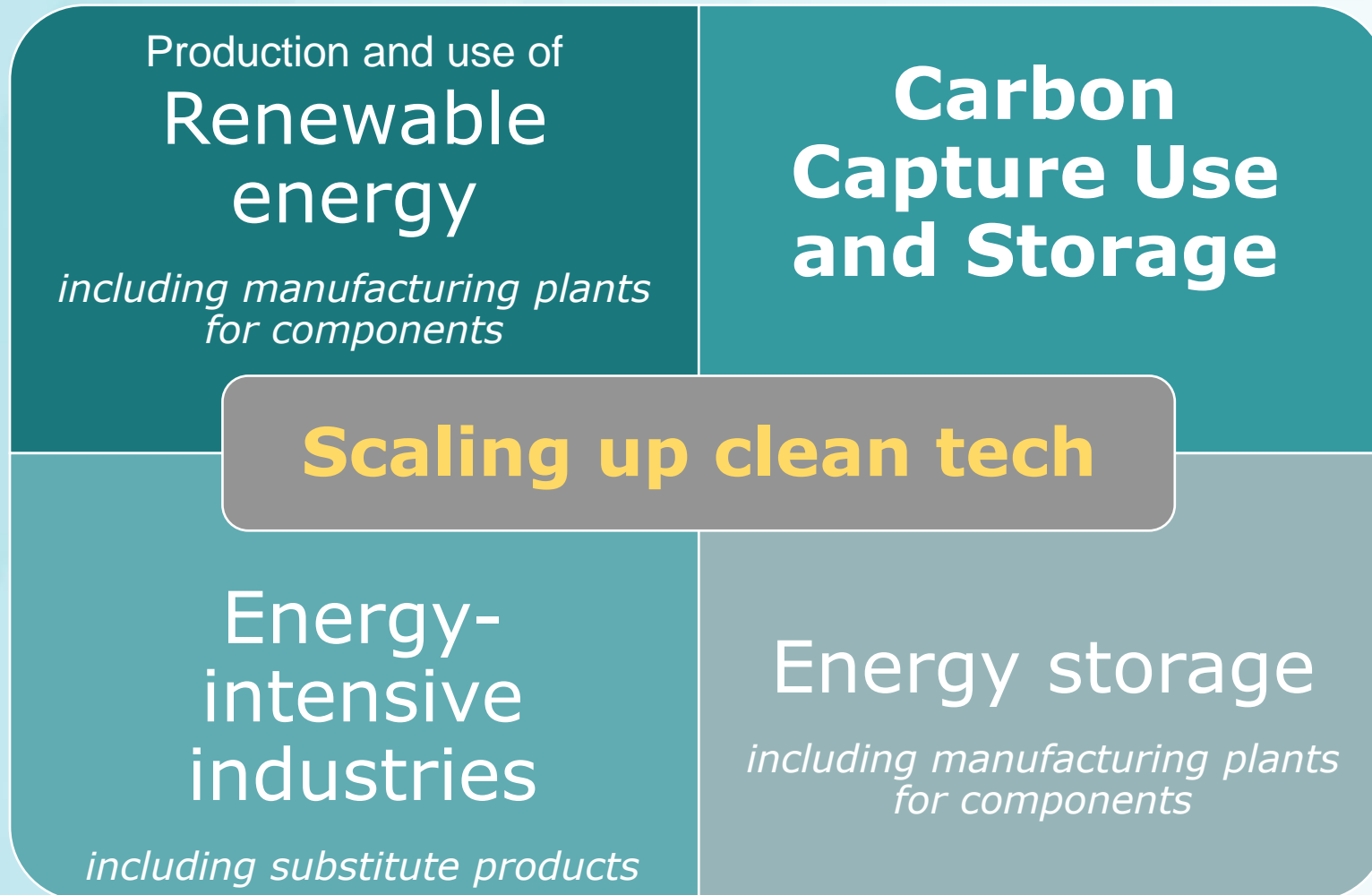
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EU Funding Programmes



TRL & CRL are indicative

Innovation Fund in a nutshell



Key features

Financed from the revenues of the **EU Emissions Trading System**

Volume: **EUR 33 billion*** until 2030 (depending on carbon price)

**at EUR 75 / tCO₂*

Grants: Large projects: Support of up to **60% of additional capital and operating costs** (up to 10 years)
Small projects: **up to 60% of CAPEX**

Grants: **Up to 40%** of grant disbursed at financial close

Grants: **Up to 60%** of grant disbursed during construction and **10-years** operating period against GHG emission avoidance

Small scale projects – shorter **3-years** period

Grants: **Annual calls** for large-scale and small-scale projects

Single applicant or consortium
Projects must be implemented in the EU, NO and IC

Project development assistance by the EIB

InvestEU: Green Transition Investment Facility: top-up of blending operations

Award criteria

GHG EMISSIONS AVOIDANCE

- **Absolute** emissions avoidance
- **Relative** emissions avoidance
- **Quality and credibility** of the calculation, Potential to deliver **net carbon removals and Other GHG savings**

** Based of GHG emission avoidance calculation methodology*

DEGREE OF INNOVATION

- Innovation beyond state of the art
- Large-scale projects only: Contribution to EU policy objectives: RESe, circularity, EE

PROJECT MATURITY

- Technical maturity
- Operational maturity
- Financial maturity

SCALABILITY

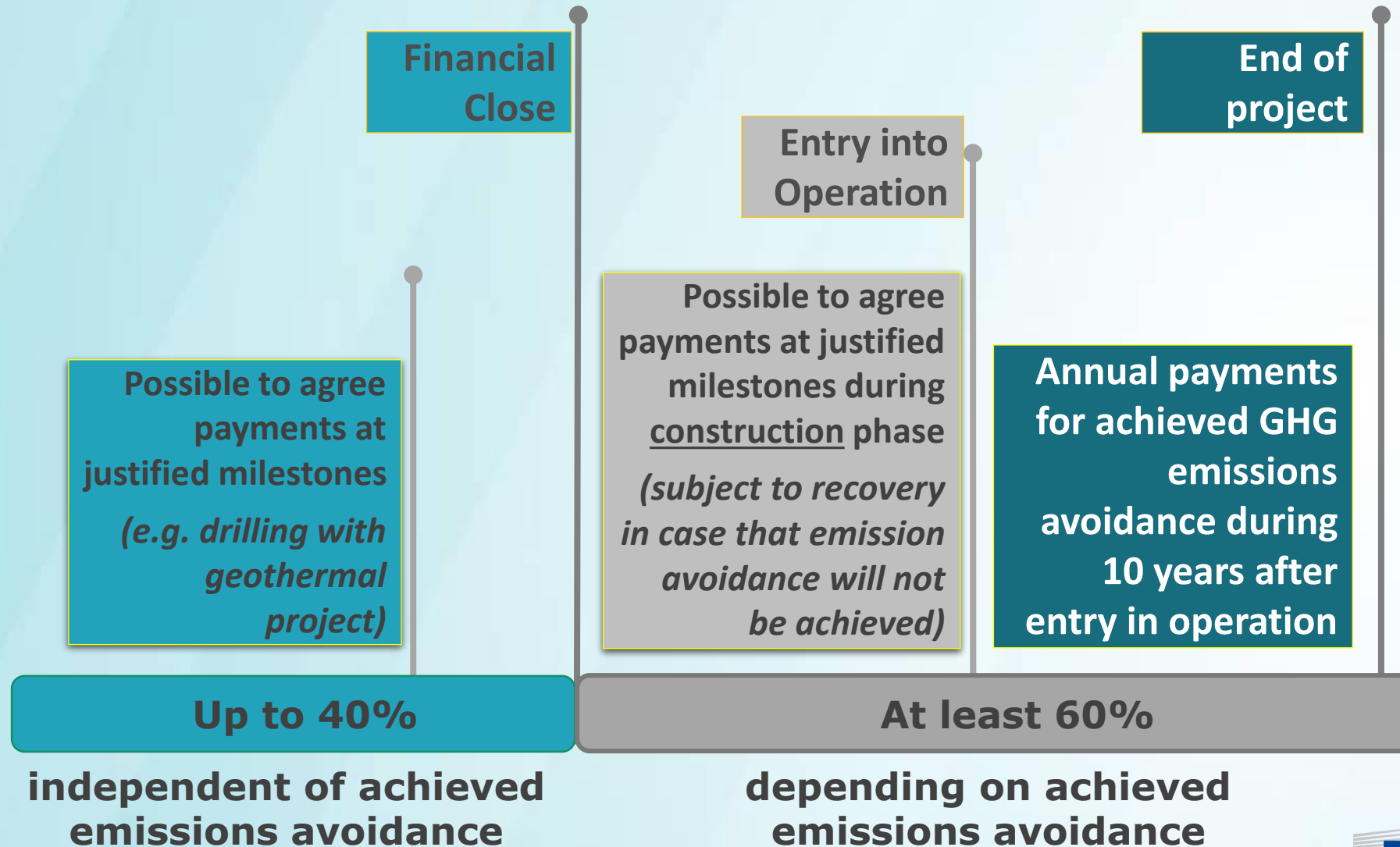
- Looking at
 - Project & regional level
 - Sector level
 - Economy level
- Also incorporates resource constraints and raw materials

COST EFFICIENCY

- EU contribution requested per tCO₂ avoided
- Quality and credibility of the relevant cost calculation

** Based on RC calculation methodology*

Payment upon completed work-packages



Results of the first calls

Results of first calls

Call for large-scale projects



Grants of EUR 1145 million for 7 projects



Project development assistance for 15 projects

Call for small-scale projects



Grants of EUR 109 million for 30 projects



















Project development assistance for 10 projects

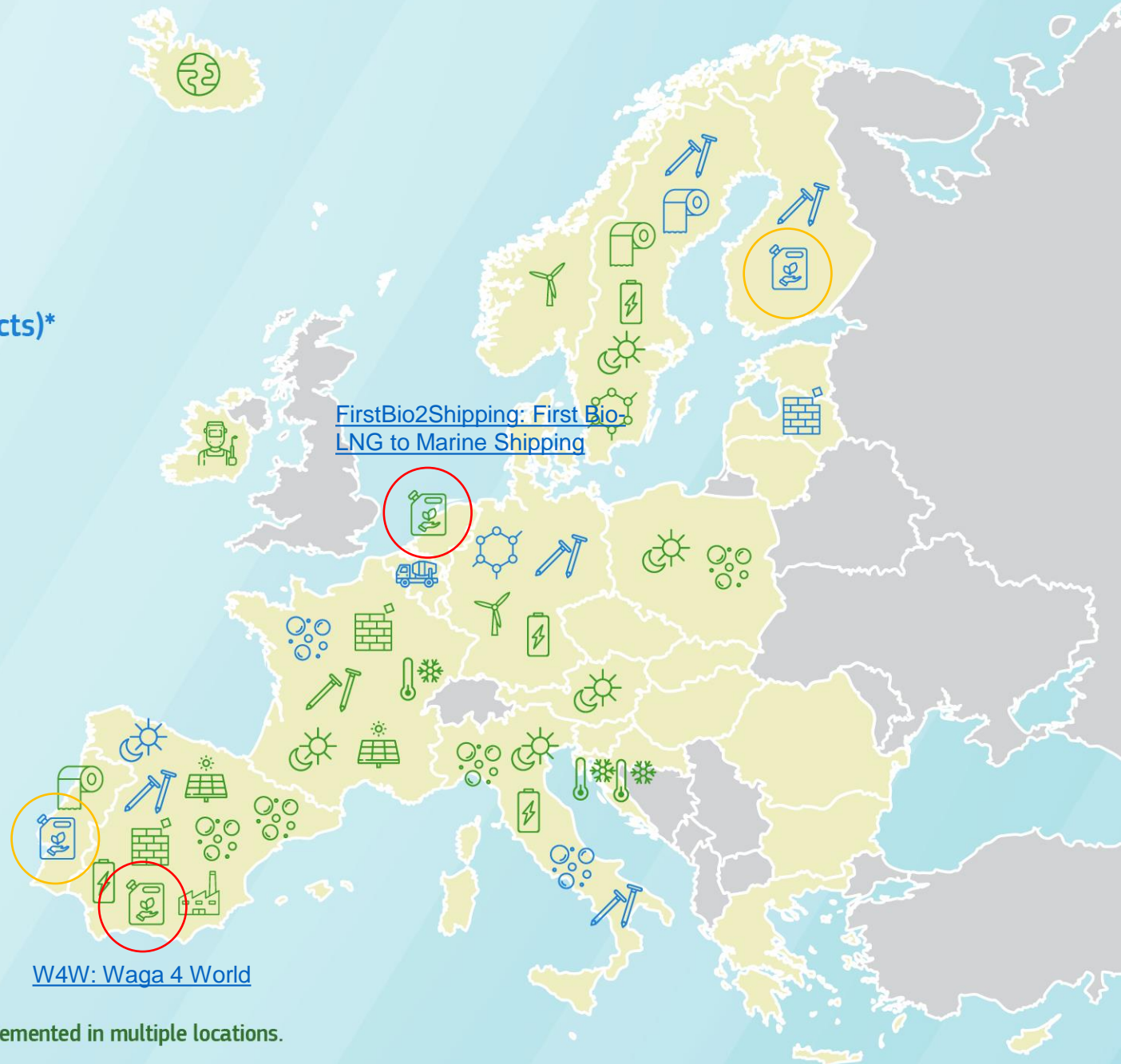
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Small-scale projects

Green: Grant agreements signed (30 projects)*

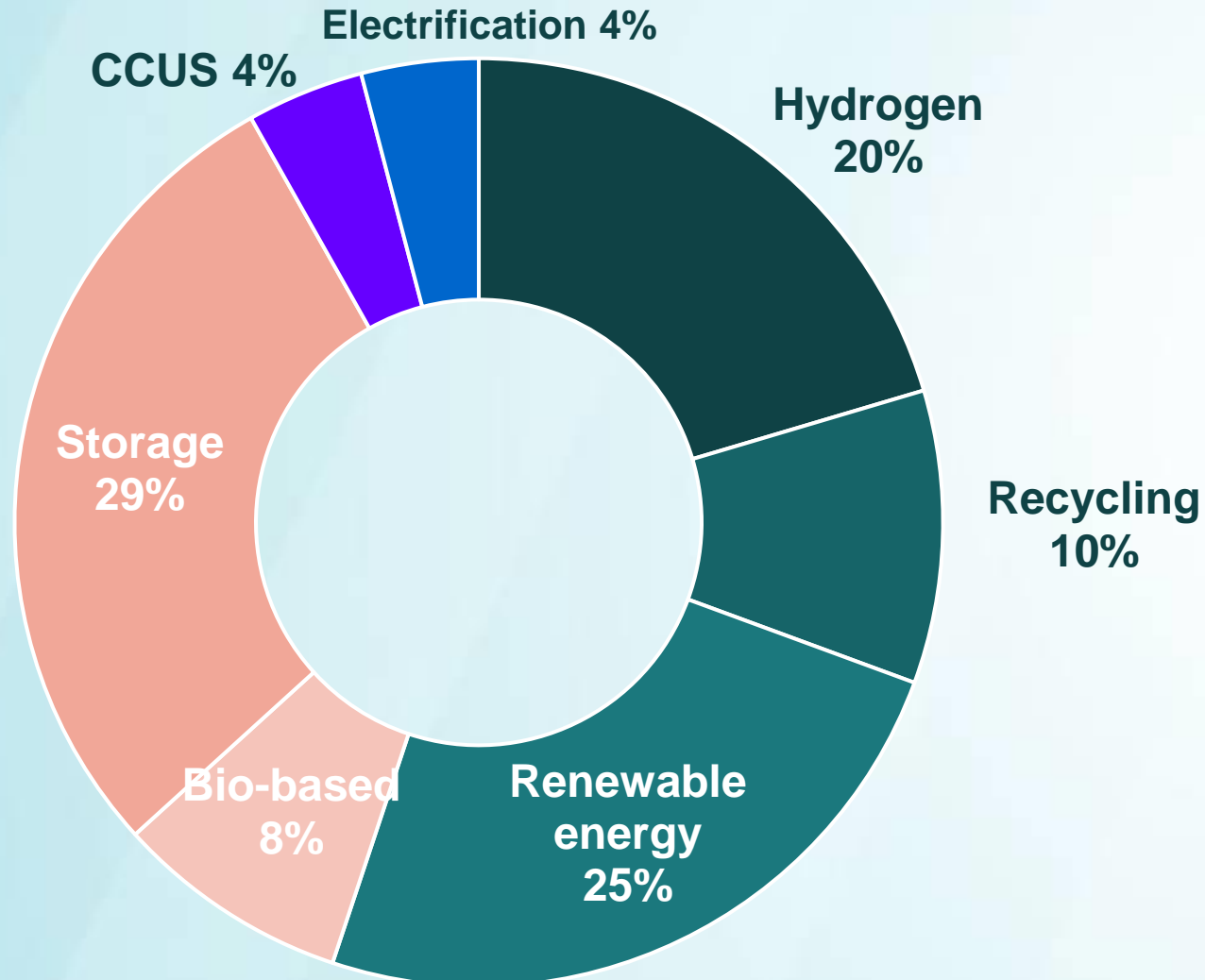
Blue: projects awarded project development assistance (10 projects)*

- | | |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|  Biofuels and biorefineries |  Other energy storage |
|  Chemicals |  Bio-electricity |
|  CO ₂ transport and storage |  Pulp and paper |
|  Hydrogen |  Refineries |
|  Intra-day electricity storage |  Renewable heating/cooling |
|  Iron and steel |  Solar energy |
|  Non-ferrous metals |  Wind energy |
|  Glass, ceramics and construction material |  Cement and lime |



*The number of symbols is higher than the number of projects, as some projects are implemented in multiple locations.

SSC projects – Technological pathways



















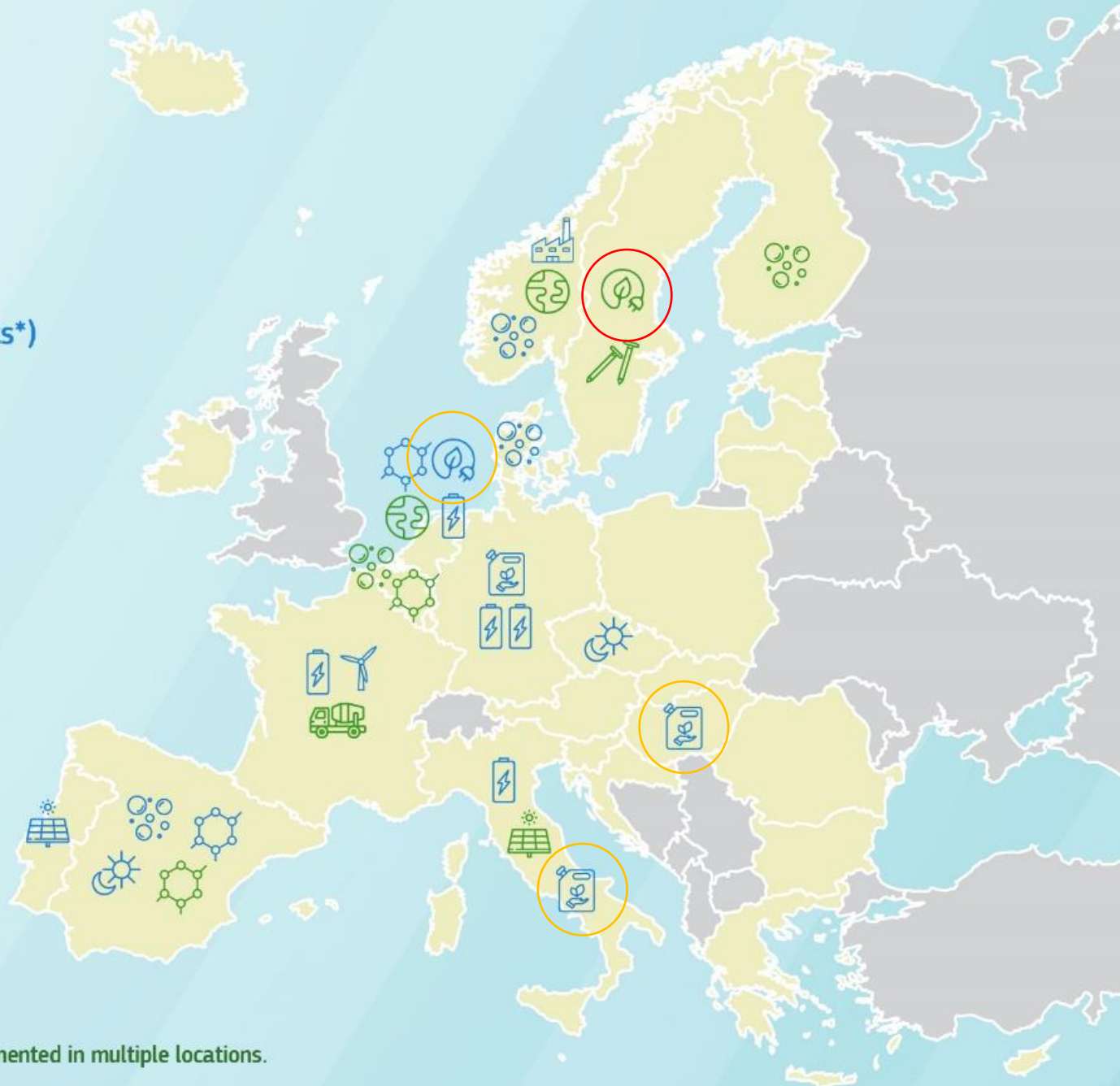
All project fact sheets can be found here: [Small-scale projects \(europa.eu\)](https://europa.eu)

Innovation Fund Large-scale projects

Green: Projects pre-selected for a grant (7 projects*)

Blue: Projects awarded project development assistance (15 projects*)

- | | |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|  Biofuels and biorefineries |  Other energy storage |
|  Chemicals |  Bio-electricity |
|  Planned CO ₂ storage location |  Pulp and paper |
|  Hydrogen |  Refineries |
|  Intra-day electricity storage |  Renewable heating/cooling |
|  Iron and steel |  Solar energy |
|  Non-ferrous metals |  Wind energy |
|  Glass, ceramics and construction material |  Cement and lime |



*The number of symbols is higher than the number of projects, as some projects are implemented in multiple locations.

7 first-of-a-kind Large Scale projects (€1.1 billion)

KAIROS-AT-C



Carbon capture from hydrogen, ammonia and ethylene oxide production and storage in North Sea, innovative shipping - Belgium

BECCS



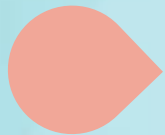
Bio-energy carbon capture at a combined heat and power plant and storage in North Sea – negative emissions - Sweden

K6



CCUS at cement plant with storage in North Sea and carbon use for concrete production - France

SHARC



Green hydrogen from water electrolysis and blue hydrogen with CCS, storage in North Sea - Finland

HYBRIT



Hydrogen-based direct reduction for steelmaking, including electrolyser - Sweden

ECOPLANTA



Bio-based methanol from non-recyclable municipal waste - Spain

TANGO



Bifacial heterojunction photovoltaic cells production at GW scale - Italy

Beccs Stockholm

COORDINATOR

Stockholm Exergi

LOCATION

Stockholm, Sweden

SECTOR

Bio-electricity

AMOUNT OF INNOVATION FUND GRANT

EUR 180 000 000

RELEVANT COSTS

EUR 608 863 394

CAPEX

EUR 455 661 141

TOTAL PROJECT COSTS

EUR 2 707 453 271

GHG EMISSION AVOIDANCE

7.8 Mt CO₂eq

STARTING DATE

01 July 2021

PLANNED DATE OF ENTRY INTO OPERATION

Q3 2026

- A world-class, full scale Bio-Energy Carbon Capture and Storage (BECCS) facility at its existing heat and power biomass plant in Stockholm.
- Combination of **CO₂ capture with heat recovery**. It will capture and permanently **store** large quantities of **biogenic CO₂**.
- The Beccs Stockholm project has a **potential to remove around 7.0 Mt CO₂eq** over the first ten years of operation.
- The project will also be a catalyst for paving the way for a new market of net carbon removals.
- Besides the actual negative emissions achieved, Beccs Stockholm will also have a positive impact on the balance for renewable heat and electricity, resulting in additional reduction of around 0,8 Mt CO₂eq over the same period.

Future calls

Innovation Fund Calls 2021-2022

Large scale projects 2021

Launch: 26 Oct 2021

Deadline: 03 Mar 2022

Results: Q3 2022

Budget: 1,5 Billion €

CLOSED

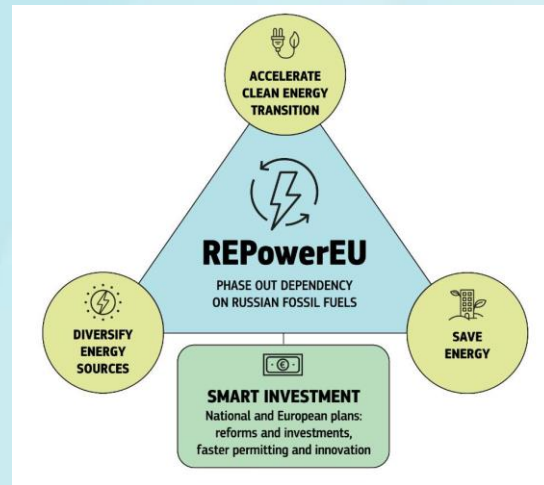
Innovation Fund Calls 2021-2022

Small scale projects 2021

Launch:	31 Mar 2022
Deadline:	31 Aug 2022
Results:	Q1 2023
Budget:	100 Million €

OPEN

Innovation Fund Calls 2021-2022



Additional REPowerEU topics will support:

- (1) innovative **electrification and hydrogen** applications in industry,
- (2) innovative clean tech **manufacturing** (such as electrolysers and fuel cells, innovative renewable equipment, energy storage or heat pumps for industrial uses), and
- (3) **mid-sized pilot projects** for validating, testing and optimising highly innovative solutions.

Source: [EUR-Lex - 52022DC0230 - EN - EUR-Lex \(europa.eu\)](#)

Large scale projects 2022

Launch:	Nov 2022
Deadline:	Mar 2023
Results:	Q3 2023
Budget:	~3 Billion €



**UNDER
CONSTRUCTION**



European
Commission

Past useful events

Recorded sessions and
slides available

- Innovation Fund: lessons learnt from the first call for small-scale projects (12/10/2021) (https://cinea.ec.europa.eu/events/innovation-fund-lessons-learned-first-call-small-scale-projects-and-state-aid-support_en)
- Second Large-scale call for projects Info day (10/11/2021) (https://cinea.ec.europa.eu/events/innovation-fund-second-large-scale-call-projects-info-day_en)
- Innovation Fund: lessons learnt from the first call for large-scale projects (13/01/2022) (https://ec.europa.eu/clima/news-your-voice/events/innovation-fund-lessons-learned-first-call-large-scale-projects_en)

Join as project evaluator

INNOVATION FUND

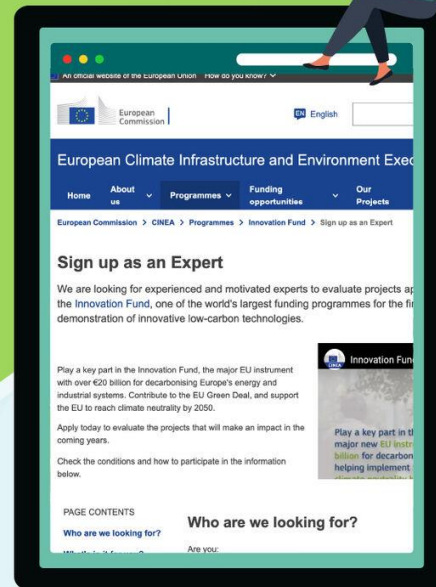
SIGN UP AS A

TECHNICAL EXPERT

FINANCIAL EXPERT

GHG EXPERT

RAPPORTEUR



MORE INFO: <https://europa.eu/!RTnFrw>

- Individual evaluation from your office/home at your best convenience
- Consensus group with other experts from your office/home

[Sign up as an Expert](https://europa.eu/!RTnFrw)
europa.eu

Where to find 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>

[Info day Large Scale Call 2021](#)



Innovation Fund - YouTube

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



THANK YOU