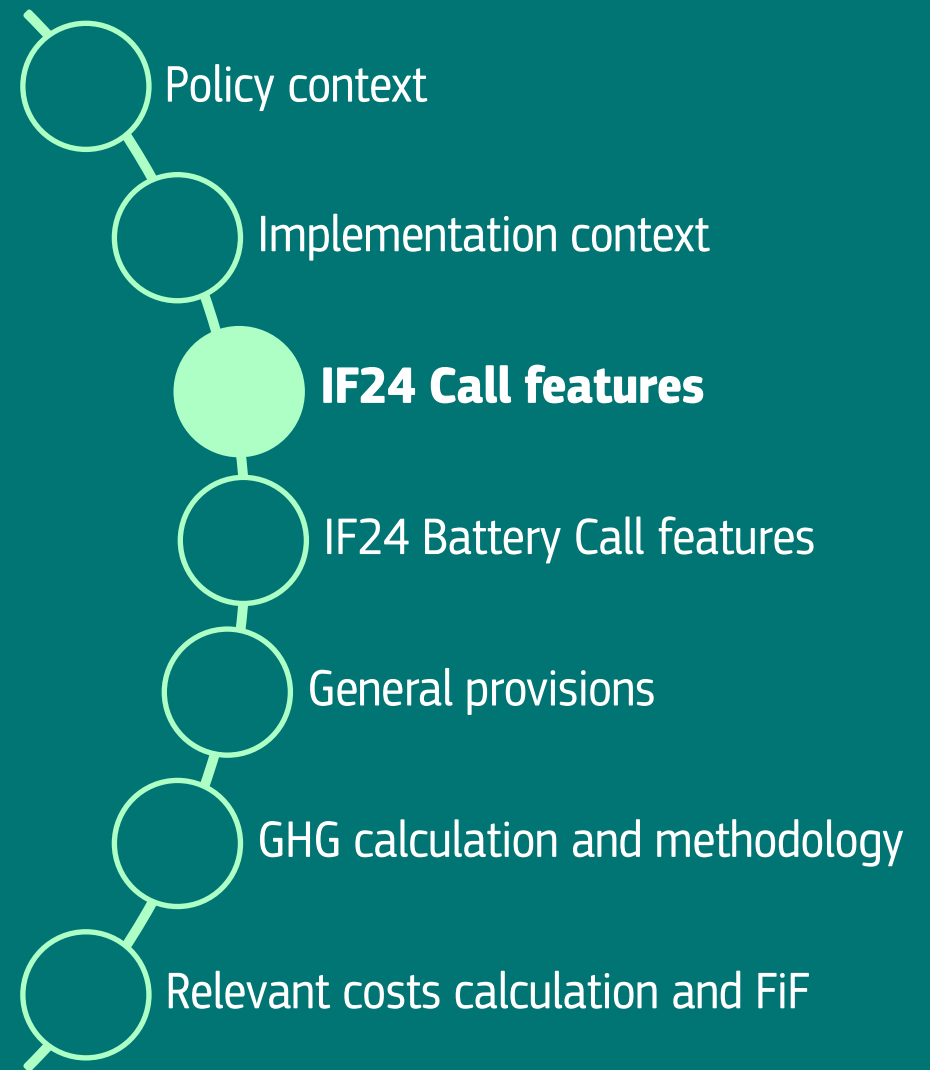


IF24 Call features

Joaõ SERRANO GOMES, *Policy Officer*
DG CLIMA, Low Carbon Solutions (II):
Research & Low Carbon Technology
Deployment CINEA



IF24 Call in a nutshell



Launch 3 Dec. 2024

Deadline 24 April 2025

Results Q4 2025



€2.4 billion for grants

Project Development Assistance

STEP Seal

Possibility of “Grants-as-a-Service”

New



Five topics

AWARD CRITERIA

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

Bonus points: Net Carbon Removals, Other GHG savings, electricity from additional RES, projects in the maritime sector

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



Grants-as-a-Service (GaaS)

- **Growing pool of decarbonisation projects** that meet Innovation Fund criteria but cannot be funded due to budget limitations
- GaaS schemes will **increase the reach and impact of the Innovation Fund** by delivering a number of decarbonisation projects faster
- **Member States and companies benefit from an EU-level competition, less administrative effort, well-established selection process at the EU level and faster State aid clearance**
- Member States can express their interest for IF24 Call within 3 months from opening of the call



Strategic Technologies for Europe Platform (STEP) Seal

- Benefits per programme:
 - **Cohesion policy funds (ERDF, CF, ESF+, JTF):** Possibility for Managing Authority to fast-track project (ERDF, ESF+) and grant combined support
 - **Recovery and Resilience Facility (RRF):** Project to be considered as a priority for funding under national Recovery and Resilience Plans
 - **Modernisation Fund:** Project may be considered as a priority for funding
 - **InvestEU:** To be taken into account by Commission in its 'policy check', and project to be examined by implementing partners
 - **Other Union funds or programmes:** Project could be granted (combined) support



IF24 Call – Topics

Topic	Capital Expenditure	Topic budget	Sectors covered
Large-scale projects	above € 100 million	€ 1 200 million	<ul style="list-style-type: none"> • Annex I and Annex III to the EU ETS Directive <u>2003/87</u>, including CCU • CCS • Renewable energy and energy storage technologies • Maritime and aviation
Medium-scale projects	between € 20 million and € 100 million	€ 200 million	
Small-scale projects	between € 2.5 million and € 20 million	€ 100 million	
Clean-tech manufacturing for components	above €2.5 million	€ 700 million	<ul style="list-style-type: none"> • Components for renewable energy installations • Electrolysers and fuel cells • Energy storage solutions • Heat pumps
Pilot projects	above €2.5 million	€ 200 million	Validating, testing and optimising highly innovative, deep decarbonisation solutions in all sectors eligible for Innovation Fund support

IF24 Call award criteria

Degree of Innovation

Innovation beyond state of the art at European level (except SSP – European or national level)

! Consider ongoing IF projects !

GHG emissions avoidance potential

Absolute emissions avoidance

Relative emissions avoidance

Quality of calculation and minimum requirements

Project maturity

Technical maturity

Financial maturity

Operational maturity

Replicability

Efficiency gains and multiple environmental impacts

Further deployment potential and technology transfer

Europe's industrial leadership and competitiveness

Cost efficiency

Cost efficiency ratio (different formula for Pilot projects)

Quality of the relevant cost calculation and minimum requirements

- Bonus points:
- 1) Net Carbon Removals
 - 2) Other GHG savings
 - 3) Electricity from additional RES or use of RFNBOs
 - 4) Maritime sector projects

New



General Decarbonisation Topic(s)

Objectives:

- Accelerate the decarbonisation of **sectors covered under the EU Emissions Trading System (EU ETS)**
- Promote **sustainable development and technological leadership** within Europe

Activities that can be funded:

- Innovation in low-carbon technologies and processes, including **products substituting carbon-intensive ones**
- Safe capture and geological storage or utilisation of CO₂ (**CCS**)
- Innovative **renewable energy** and **energy storage technologies**



General Decarbonisation Topic(s)

Some eligibility aspects:

- Carbon capture and utilisation (CCU) can be funded if the captured CO₂ is from activities in Annex I of the EU ETS Directive, or if the utilisation of CO₂ results in products substituting carbon-intensive ones from the sectors listed in Annex I to the EU ETS Directive
- Hydrogen use in industry (i.e., hydrogen use as an energy carrier, reducing agent, or feedstock) and hydrogen production projects with a demonstrated sufficient degree of innovation can be funded
- Installation and operation of mature electrolyser technologies without additional relevant innovation are advised to apply to the **IF24 Auction for RFNBO Hydrogen**
- Support **to maritime** and **aviation** can be provided for innovative technologies, including **innovative infrastructure** in the maritime sector, notably for EU container transshipment ports
- Production and installation of new or retrofitted innovative technology into a ship or plane is eligible for funding provided that the manufacturing and/or installation is done in EU/EEA



General Decarbonisation Topic(s)

Important aspects:

- Projects must **operate at least 5 years** after entry into operation or **at least 3 years** if small-scale or pilot
- Contribution to **building EU industrial capacity, technology leadership, supply chain resilience, and strategic autonomy**
 - assessed under Replicability award criterion
- **Relative GHG emission avoidance:** at least **50%**
- **Cost efficiency ratio:** max **€200/t CO₂eq**
- **Simplification for small-scale projects:** degree of innovation can be at national level



General Decarbonisation topic(s)

IF23 Call General Decarbonisation projects:

- **HERMES (LSP):** a hybrid electric regional aircraft in France
- **AdriatiCO2 (MSP):** permanent geological storage of CO₂ captured from a steel plant in Italy
- **FELIX (SSP):** fully electric furnace for production of high-quality perfumery glass in Spain



General Decarbonisation Topic(s)

Award criteria	Minimum pass score	Maximum score
Degree of innovation	9	15
GHG emission avoidance potential		
• Absolute GHG emission avoidance	n/a	2
• Relative GHG emission avoidance	n/a	5
• Quality of the GHG emission avoidance calculation and minimum requirements	3	5
Total GHG emission avoidance potential	n/a	12
Project maturity		
• Technical maturity	3	5
• Financial maturity	3	5
• Operational maturity	3	5
Total Project maturity	n/a	15



General Decarbonisation Topic(s)



Award criteria	Minimum pass score	Maximum score
Replicability		
• Replicability in terms of efficiency gains and of multiple environmental impacts	n/a	5
• Replicability in terms of further deployment	n/a	5
• Contribution to Europe's industrial leadership and competitiveness	n/a	5
Total Replicability	n/a	15
Cost efficiency		
• Cost efficiency ratio	n/a	12
• Quality of the cost calculation and minimum requirements	1.5	3
Total Cost efficiency	n/a	15
Total (without bonus)	n/a	72
• Bonus point 1	n/a	1
• Bonus point 2	n/a	1
• Bonus point 3	n/a	1
• Bonus point 4	n/a	1
Total (with bonus)	n/a	76

Clean-tech Manufacturing Topic

Objectives:

- Foster **innovative manufacturing in Clean-tech** for hydrogen production/consumption, renewable energy, and energy storage
- Build industrial capacity, technology leadership, and supply chain resilience within the EU

Activities that can be funded:

- Production of **components** for:
 - **Renewable energy** installations (e.g., wind, solar, geothermal)
 - **Electrolysers** and **fuel cells**
 - **Energy storage** solutions for stationary and mobile use for intra-day and long duration storage
 - **Heat pumps** for various uses



Clean-tech Manufacturing Topic

Important aspects

- Components: **the final equipment** such as wind turbines, solar panels, batteries, heat pumps or electrolysers, as well as **sub-components** like nacelles or blades for wind turbines
- Targeting **components and materials (except mining activities) that are a significant factor** in the performance and/or cost of the final equipment
- **Recycling or reusing critical materials** used in the mentioned equipment or components is encouraged
- Components can be sold on the EU market and in third countries
- **Excluded activities:** demonstration of use of innovative components (including the final equipment) in power/heat generation/energy storage/production & consumption of hydrogen (submit those in General or Pilot topics)



Clean-tech Manufacturing Topic

Important aspects (cont.)

- Emphasis on **degree of innovation, project maturity and contribution to Europe's industrial leadership and competitiveness**
- Innovation possible in **manufacturing/production processes** and/or **components or final products**
- **Financial close within two (2) years** and **entry into operation within four (4) years** may earn a higher score in project maturity
- Relative **GHG emission avoidance: min 50%**
- **Cost efficiency ratio: max 200 €/t CO₂-eq**



Innovative Clean-tech manufacturing

IF23 Call manufacturing projects:

- **CircularSteam:** modular manufacturing plant to produce industrial high-temperature heat pumps
- **GRAND PIANO:** manufacture components for Proton Exchange Membrane and Anion Exchange Membrane electrolysis
- **HSS-Gen2:** plug & drive hydrogen storage system for commercial vehicles



Clean-tech Manufacturing Topic

Award criteria	Minimum pass score	Maximum score	Weight
Degree of innovation	9	15	2
GHG emission avoidance potential			
• Absolute GHG emission avoidance	n/a	2	1
• Relative GHG emission avoidance	n/a	5	1
• Quality of the GHG emission avoidance calculation and minimum requirements	3	5	1
Total GHG emission avoidance potential	n/a	12	1
Project maturity			
• Technical maturity	3	5	2
• Financial maturity	3	5	2
• Operational maturity	3	5	2
Total Project maturity	n/a	30	n/a



Clean-tech Manufacturing Topic



Award criteria	Minimum pass score	Maximum score	Weight
Replicability			
• Replicability in terms of efficiency gains and of multiple environmental impacts	n/a	5	1
• Replicability in terms of further deployment	n/a	5	1
• Contribution to Europe's industrial leadership and competitiveness	n/a	5	2
Total Replicability	n/a	20	n/a
Cost efficiency			
• Cost efficiency ratio	n/a	12	1
• Quality of the cost calculation and minimum requirements	1.5	3	1
Total Cost efficiency	n/a	15	1
Total (without bonus points)	n/a	107	n/a
• Bonus point 1	n/a	1	1
• Bonus point 2	n/a	1	1
• Bonus point 3	n/a	1	1
• Bonus point 4	n/a	1	1
Total (with bonus points)	n/a	111	n/a

Pilot Projects Topic

Objectives:

- **Highly innovative, disruptive or breakthrough technologies** for deep decarbonisation needed for achieving the climate neutrality goal

Activities that can be funded:

- Innovation in sectors listed in Annex I and Annex III to the EU ETS Directive 2003/87, including environmentally safe carbon capture and utilisation (**CCU**)
- **Products substituting carbon-intensive ones** produced in sectors listed in Annex I to the EU ETS
- Construction and operation of innovative **energy storage, CO₂ storage** and **renewable energy installations**, including electricity/heat grid connections



Pilot Projects Topic

Important aspects:

- **Higher degree of innovation** is expected
 - Degree of Innovation: points are doubled
- Possibility to addressing technical risks linked to the innovative technologies, such as **optimising process and operational parameters**, and **enhance final product characteristics**
- Prove an **innovative technology** in an operational environment but are not expected yet to reach large-scale demonstration or commercial production
- **Limited production/operation** for testing purposes is possible but not required, including delivery to/from potential customers for validation



Pilot Projects Topic

Important aspects (cont.):

- Demonstrate **Project viability** rather than project profitability
- Typically projects with **limited life-time (3-5 years)** and the technology should then move to large-scale demonstration or first-of-a-kind commercial production
 - To be demonstrated under the replicability award criterion
- Potential to be fully compatible with a 2050 climate neutrality objective, i.e., pilot installations should have minimal residual emissions or result in net carbon removals
 - **Relative GHG emission avoidance: min 75%**



Pilot Projects Topic

Important aspects (cont.):

- **Financial close within two (2) years** and **entry into operation within four (4) years** may earn a higher score in project maturity
- Maximum grant: **€40 million**
- Min operation: **three (3) years after entry into operation**
- Less stringent requirements for **cost efficiency: max 2000 €/t CO₂eq**



Pilot Projects Topic

2023 call Pilot projects:

- **E02**: build the first low-emission commercial cargo ship fuelled by RNFB0 liquid hydrogen
- **eReform**: develop a novel electrified steam methane reforming plant to produce methanol from biogas
- **FloWatt**: build a tidal stream energy farm



Pilot Projects Topic

Award criteria	Minimum pass score	Maximum score	Weight
Degree of innovation	9	15	2
GHG emission avoidance potential			
• Absolute GHG emission avoidance	n/a	2	1
• Relative GHG emission avoidance	n/a	5	1
• Quality of the GHG emission avoidance calculation and minimum requirements	3	5	1
Total GHG emission avoidance potential	n/a	12	n/a
Project maturity			
• Technical maturity	3	5	1
• Financial maturity	3	5	1
• Operational maturity	3	5	1
Total Project maturity	n/a	15	n/a



Pilot Projects Topic



New

Award criteria	Minimum pass score	Maximum score	Weight
Replicability			
Replicability in terms of efficiency gains and of multiple environmental impacts	n/a	5	1
Replicability in terms of further deployment	n/a	5	1
Contribution to Europe's industrial leadership and competitiveness	n/a	5	1
Total Replicability	n/a	15	n/a
Cost efficiency			
Cost efficiency ratio	n/a	12	1
Quality of the cost calculation and minimum requirements	1.5	3	1
Total Cost efficiency	n/a	15	n/a
Total (without bonus points)	n/a	87	n/a
Bonus point 1	n/a	1	1
Bonus point 2	n/a	1	1
Bonus point 3	n/a	1	1
Bonus point 4	n/a	1	1
Total (with bonus points)	n/a	91	n/a

IF Self-check Questionnaire

- Provide an early high-level orientation on potential fit and readiness of project ideas for the Innovation Fund
 - Entirely independent from the official Innovation Fund application and evaluation process
- Available [here](#)

