



The Innovation Fund

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Online meeting

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4. Important to know
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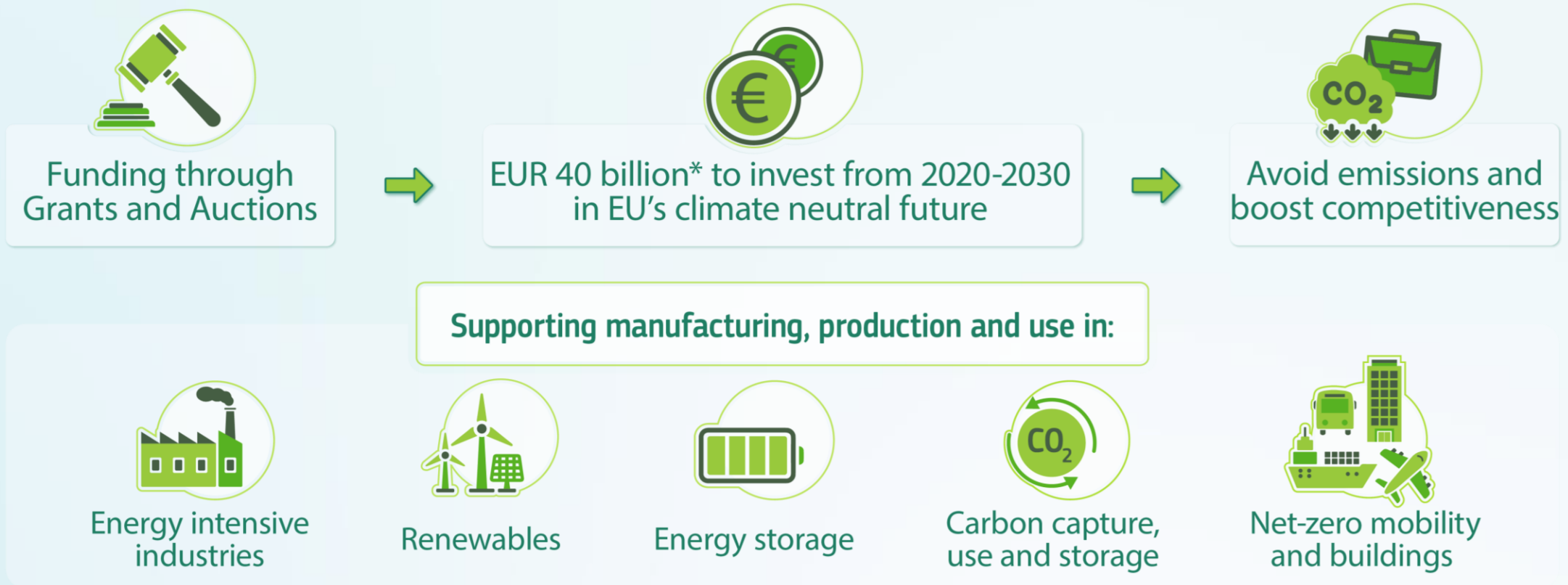


Introduction and policy update

- 1 Introduction and policy update
- 2 Innovation Fund 2023 Call
- 3 Innovation Fund 2023 Auction
- 4 Important to know
- 5 Back-up slides

Innovation Fund

Deploying innovative net-zero technologies for climate neutrality



*based on a carbon price of 75 EUR/tonne

The Innovation Fund can support urgent policy priorities, but holds a long-term line of support across sectors and focus on excellence



- **RePowerEU** objective of 10Mt of renewable H2 domestic production.
- **Net-Zero Industry Act:** clean tech manufacturing topic (€0,7 billion in 2022, €1.4 billion in 2023).
- **European Hydrogen Bank:** first pilot auction under the Innovation Fund
- **Wind package:** Priority in project development assistance

Evolution of the Innovation Fund

LSC 2020

- EUR 1.1 billion
- 7 ongoing projects

LSC 2021

- EUR 1.8 billion
- 16 ongoing projects (including 2 from reserve list),
- 1 terminated

LSC 2022

- EUR 3.6 billion
- 36 projects starting
- +2 *under GAP*
- + 1 *reserve list under GAP*

IF 2023 Auction

- EUR 800 million (+350 million Germany) to RFNBO H2
- Open 23/11/2023

SSC 2020

- EUR 105 million
- 29 ongoing projects
- 1 terminated

SSC 2021

- EUR 59 million
- 16 ongoing projects

SSC 2022

- EUR 65 million
- 17 projects invited for GAP*

IF 2023 Call

- EUR 4 billion
- Open 23/11/2023

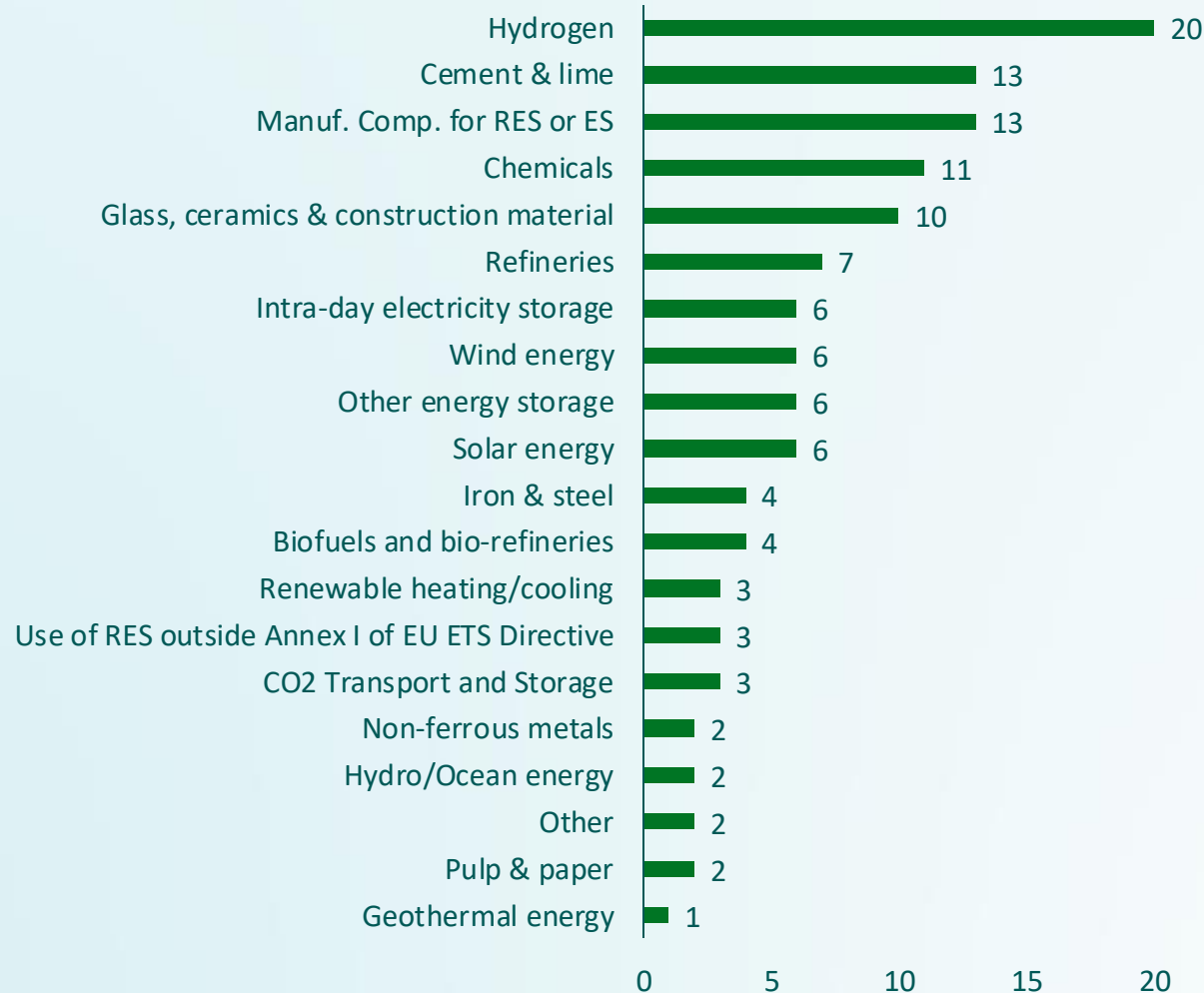


Over EUR 6.6 bn already committed for low-carbon innovation projects

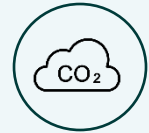
*GAP – grant agreement preparation

Portfolio of ongoing and selected projects

2020 LSC, 2020 SSC, 2021 LSC, 2021 SSC, 2022 LSC*, 2022 SSC*



**24
Countries**



**478 Mt
CO2 eq to be avoided –
equivalent of ETS
emission in BE over the
past decade**



**€ 6.83 Billion
EU granted +
ongoing GAP**

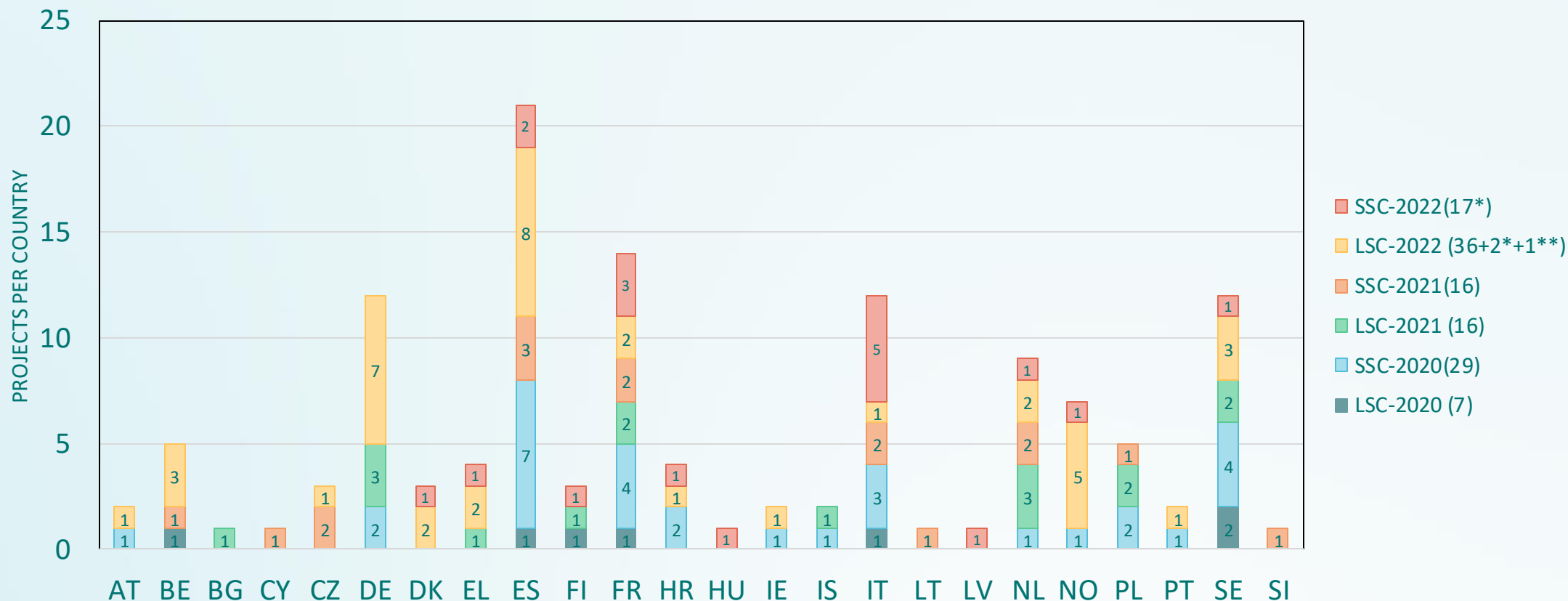


**Projects:
104 ongoing
+20* invited
21 reached FC
5 reached EiO**

**Data includes ongoing projects and preselected proposals from SSC-2022+ one from reserve list LSC-2022 and two LSC-2022 currently under GAPs*

Geographical Distribution - Project Portfolio

Innovation Fund's Project portfolio per country ***



* Projects pre-selected / invited to GAP (17 SSC-2022* +2 LSC-2022* + 1 from LSC-2022 reserve list**)

*** Projects with locations in more than one MS have been represented for each MS where they are implemented

Ireland

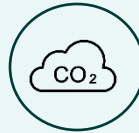
Ongoing projects



2
Projects

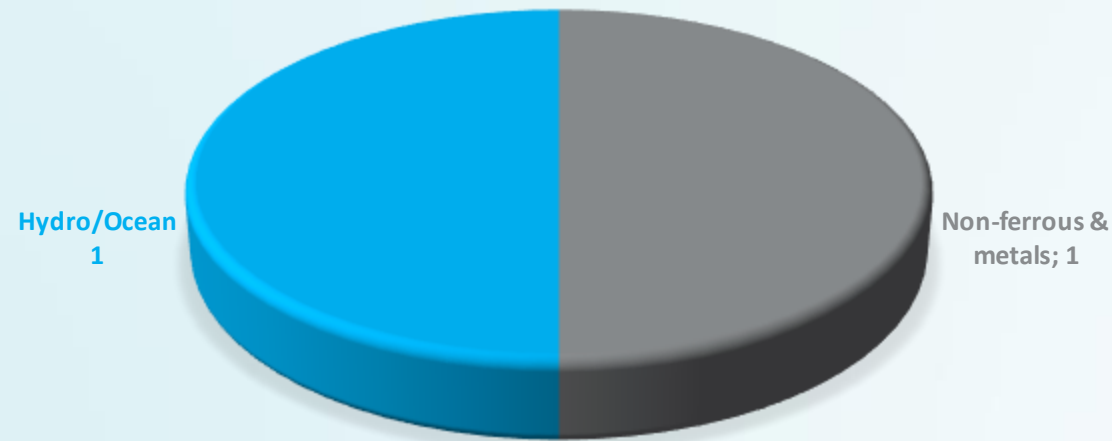


43.7 million €
EU contribution

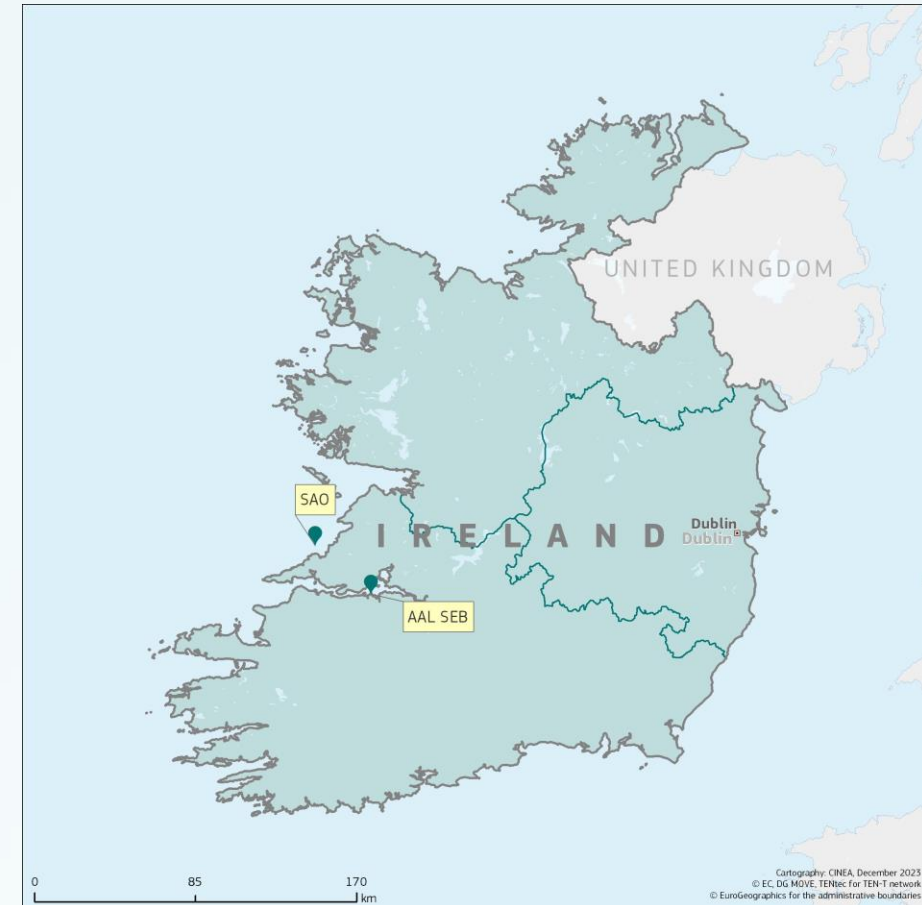


128.6 kt CO₂ eq
first 10 years

Sectoral distribution



Ireland



Ireland

Project acronym	Location	Call Name	Innovation Fund Grant (million EUR)	Expected GHG avoidance (ktCO2 eq)	Description	Project status	On time/delayed
AAL SEB	Aughinish Island	InnovFund-SSC-2020	4.2	102.34	Aim to partially decarbonise the production of high-pressure steam used in an aluminium refinery, by substituting existing gas-fired boilers with an electric boiler powered during peak renewable production.	Entered into Operation	On time
SAO	Southern Ireland	InnovFund-LSC-2022	39.5	26.26	Deploy 4 kilometer offshore and demonstrate the CorPack, a pre-commercial wave energy 5 MW array using the CorPower Ocean wave energy converter (WEC) technology.	Pre-FC	On time

Innovation Fund 2023 Call



Innovation Fund 2023 call in a nutshell

Timeline

- Launch: [23 November 2023](#)
- Deadline for application: 9 April 2024
- Results to be announced: Q4 2024

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.

Links

- [Link to the information day and recording](#)
- [Link to Funding and Tenders portal](#)

Topic	Topic budget
Large-scale projects	EUR 1 700 million
Medium-scale projects	EUR 500 million
Small-scale projects	EUR 200 million
Clean-tech manufacturing	EUR 1 400 million
Pilot projects	EUR 200 million
IF23 Call Total Budget +PDA	EUR 4 billion + 20% flexibility reserve

Eligible activities scope

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 transshipment ports

New

Cleantech components 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



Only projects, which at the time of grant application have not reached start of works, can be funded

Admissibility and eligibility criteria

Admissibility

- Submitted **before** call **deadline**, electronically and using forms in the Submission System
- Complete all the application forms and include mandatory annexes (full list in section 5 of the call text)

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). Projects may also be located in Northern Ireland on the condition that they concern the generation, transmission, distribution or supply of electricity.
- The project must:
 - Reach **financial close within four years** after grant signature (maximum time to financial close)
 - **Operate at least** (minimum GHG emission avoidance monitoring period) **five years** after entry into operation
 - Except Small Scale Projects and PILOTS – at least **three years** after entry into operation
- Maximum grant amount **must not exceed 60% of the relevant costs**
- Eligible activities

Eligibility: project budget

Topic	Project eligibility CAPEX
Large-scale projects	CAPEX > EUR 100 million
Medium-scale projects	EUR 100 million > CAPEX > EUR 20 million
Small-scale projects	EUR 20 million > CAPEX > EUR 2.5 million
Clean-tech manufacturing	CAPEX > EUR 2.5 million
Pilot projects	CAPEX > EUR 2.5 million

Eligibility: Geographical location for new sectors

Maritime sector projects



- When the projects concern **investments in ships**, those ships must call ports under the jurisdiction of an EEA country* on a regular basis (at least **30% of their annual calls** on ports) or perform service or support activities in such ports
- When the projects concern **investments in ports infrastructure** the ports must be under the jurisdiction an EEA country.
 - Some examples: renewable alternative fuel bunkering infrastructures in ports, including container transshipment ports

**(see the list in the call text)*

Maritime, buildings, and road

For new activities introduced by the revised ETS Directive (meaning maritime, buildings and road transport) the eligibility of projects located in **Norway, Iceland, and Liechtenstein** is dependent on the incorporation of the **revised ETS Directive into the EEA Agreement and its entry into force before the deadline for submission of proposals.**

Award Criteria

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

Degree of Innovation (1)

Innovation in relation to the state of the art:

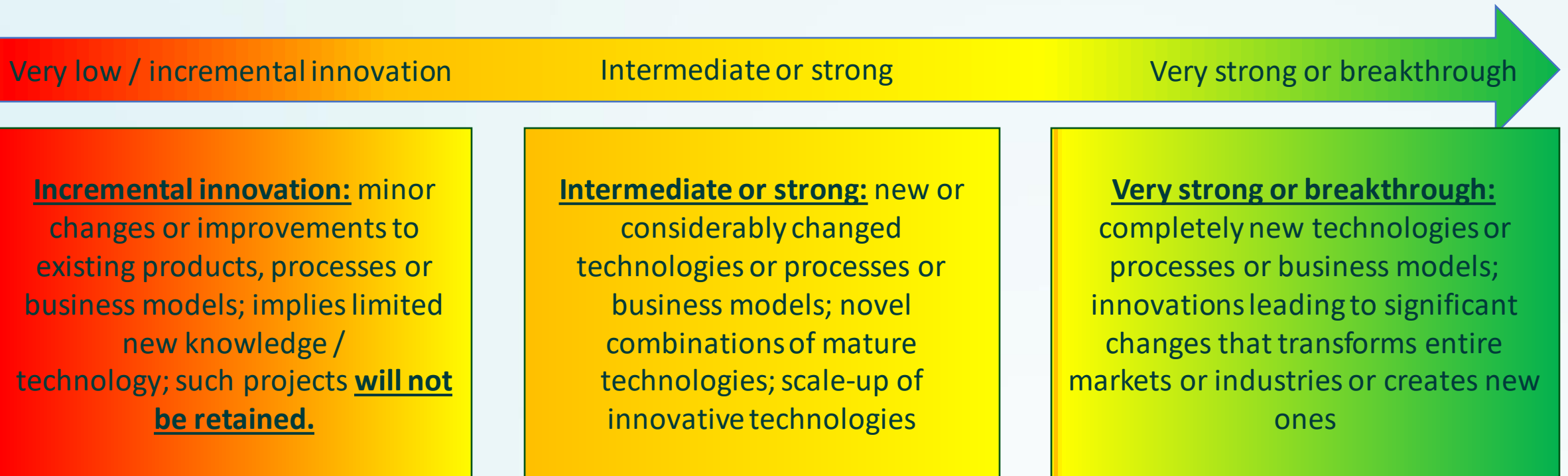
- State of the art
- Innovation beyond the state of the art

Quality, soundness, and reliability of the information provided

- **Application form, Part B:**
 - Section 1: Degree of innovation
- Feasibility study (mandatory annex)
- Any existing technical due diligence report (optional)

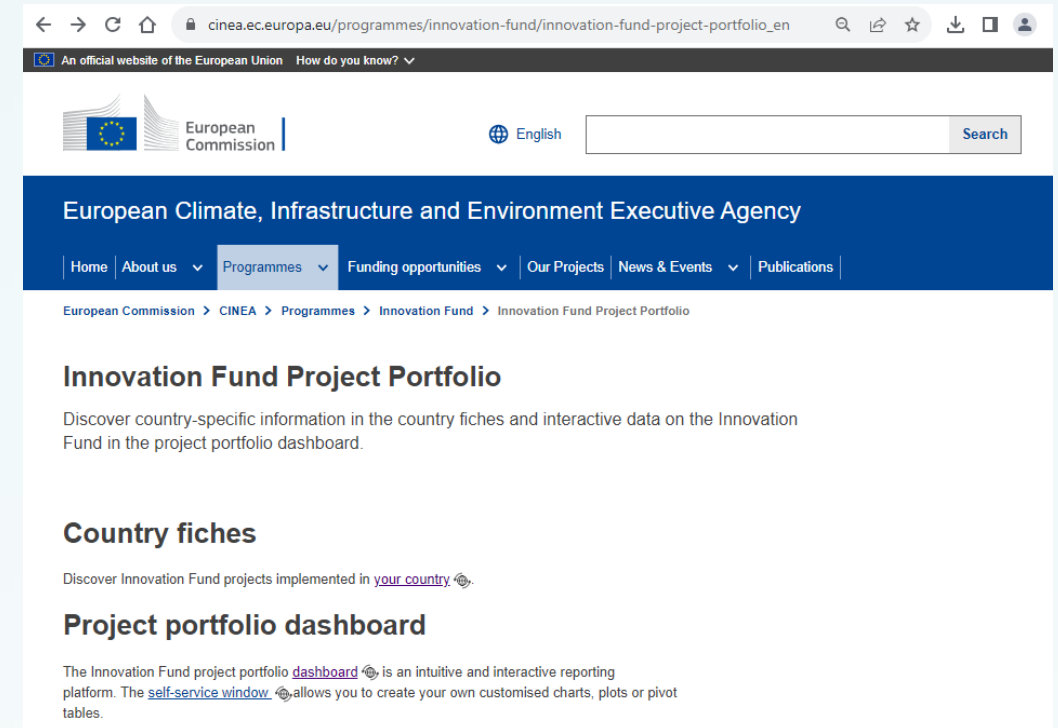
Degree of Innovation (2)

- Innovation Fund aims at supporting projects beyond incremental innovation on a scale from intermediate to breakthrough, including scaling-up, considering the European level as reference point (for SSP topic the European or national level)



References to Innovation Fund projects

- Proposals focusing on innovations similar to the ones of ongoing Innovation Fund projects, must clearly justify where the new innovative elements lie
- Such projects may receive a lower score
- Consult the list of funded Innovation Fund projects ([Innovation Fund Project Portfolio Dashboard](#))



GHG emission avoidance potential

Absolute GHG emission avoidance

Relative GHG emission avoidance

Quality of the GHG emission avoidance calculation and minimum requirements

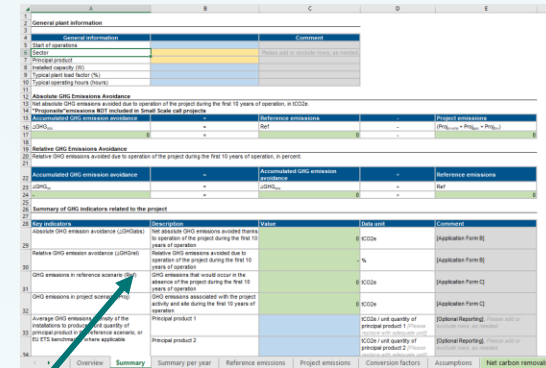
- **Application form, Part B, sections:**
 - Section 2: GHG emission avoidance potential
 - 2.1 Absolute GHG emission avoidance
 - 2.2 Relative GHG emission avoidance
 - 2.3 Minimum requirements
- **GHG emissions avoidance calculator**
(mandatory annex)

GHG emission avoidance potential (1)

- Absolute GHG emission avoidance: difference between the expected GHG emissions of the proposed project and the GHG emissions in the reference scenario during 10 years after entry into operation.
- Relative GHG emission avoidance: absolute GHG emission avoidance divided by the GHG emissions in the reference scenario over the same 10 years period

The calculation must be done:

- using the relevant GHG emission avoidance calculator
- following the [Guidance on the GHG emission avoidance methodology](#)



The screenshot shows a complex spreadsheet with multiple tabs. The 'Summary' tab is active, displaying a table with columns for 'Scenario', 'Summary per year', 'Reference emissions', 'Project emissions', 'Conversion factors', 'Assumptions', and 'Net carbon intensity'. The table contains numerical data for various scenarios and projects, with some cells highlighted in green and others in blue. The spreadsheet also includes sections for 'General project information' and 'GHG Emissions Avoidance'.



Innovation Fund (INNOVFUND)

Methodology for GHG Emission Avoidance
Calculation

Version 3.0
01 November 2025

GHG emission avoidance potential (2)

❖ **Quality of the GHG emission avoidance calculation** and minimum requirements:

- external experts will assess the quality and credibility of your calculation of GHG emission avoidance potential;
- in case of issues in the quality of the calculation (including reliability and margin of uncertainty of key parameters and/or key assumptions), points may be reduced;
- in case the calculation methodology is incorrectly applied or in case the Application documents have not been filled correctly, the score for this sub-criterion will be below the minimum threshold and the proposal will be rejected.

GHG emission avoidance potential (3)

❖ Quality of the GHG emission avoidance calculation and **minimum requirements**

Where relevant, the proposal should demonstrate whether the proposed project meets or not the **minimum requirements**:

- For projects producing products with an EU ETS benchmark: the process emissions of the project per unit of product must be below the **EU ETS benchmark(s)** applicable at the call deadline;
- For projects using biomass feedstocks: the biomass used will at least meet the **sustainability requirements** of the Renewable Energy Directive;
- For all projects: the **relative GHG emission** avoidance must be:
 - for **all topics** except INNOVFUND-2023-NZT-PILOTS: **at least 50%**
 - for INNOVFUND-2023-NZT-**PILOTS** topic: **at least 75%**



Proposals not meeting minimum requirements will be rejected!

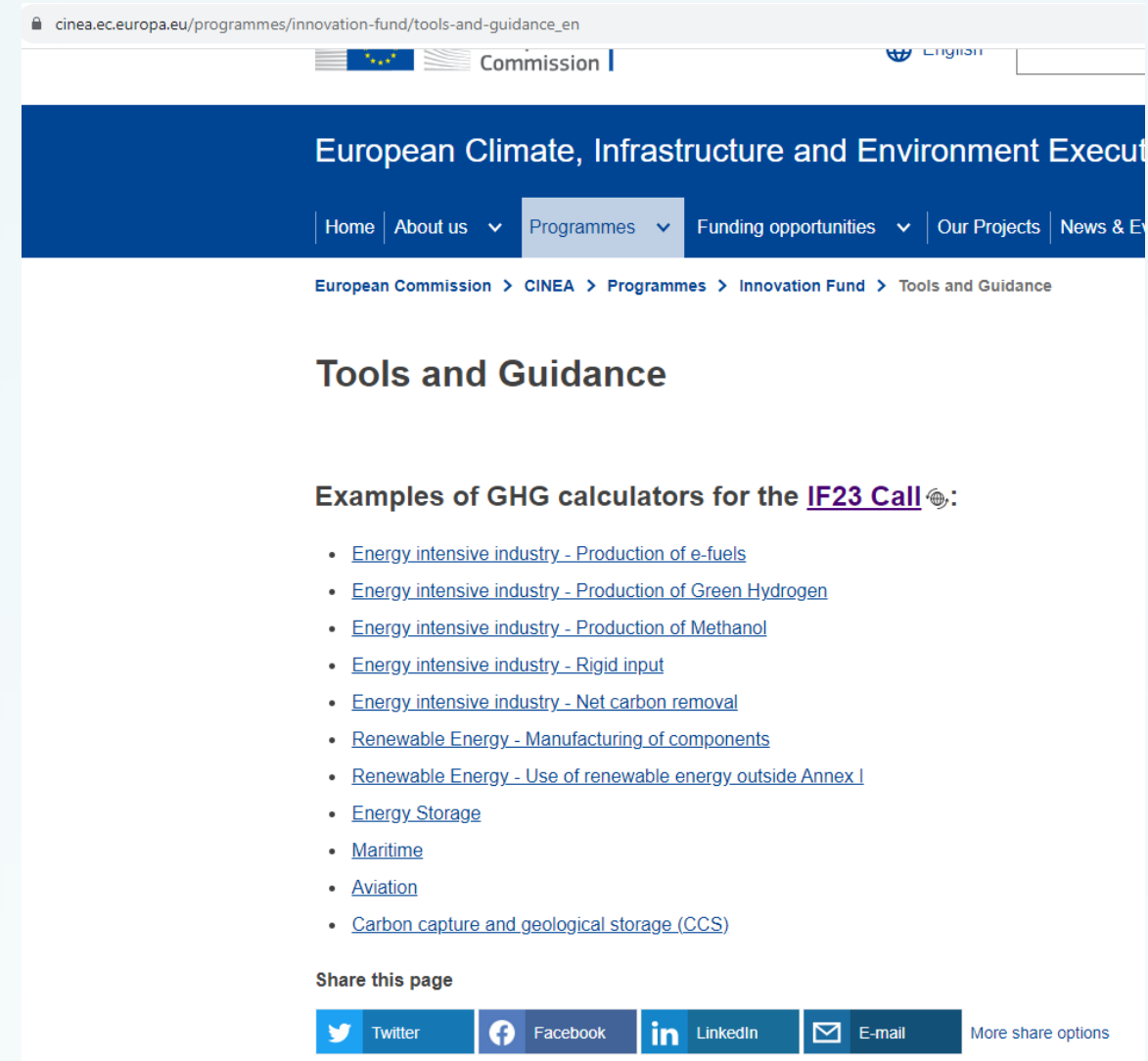
New features of the GHG Calculation criterion

Two new sections in the GHG calculation methodology and GHG calculators

- Maritime
- Aviation

A new set of filled examples in the templates

Tutorial on how to fill in the GHG Calculators



The screenshot shows the CINEA website (cinea.ec.europa.eu) with the following structure:

- Header:** Includes the European Commission logo and a language selector set to 'English'.
- Navigation Bar:** Contains links for Home, About us, Programmes (selected), Funding opportunities, Our Projects, and News & Events.
- Breadcrumb:** European Commission > CINEA > Programmes > Innovation Fund > Tools and Guidance.
- Section Title:** 'Tools and Guidance'.
- Content:** 'Examples of GHG calculators for the **IF23 Call** 🌐:' followed by a list of links:
 - [Energy intensive industry - Production of e-fuels](#)
 - [Energy intensive industry - Production of Green Hydrogen](#)
 - [Energy intensive industry - Production of Methanol](#)
 - [Energy intensive industry - Rigid input](#)
 - [Energy intensive industry - Net carbon removal](#)
 - [Renewable Energy - Manufacturing of components](#)
 - [Renewable Energy - Use of renewable energy outside Annex I](#)
 - [Energy Storage](#)
 - [Maritime](#)
 - [Aviation](#)
 - [Carbon capture and geological storage \(CCS\)](#)
- Footer:** 'Share this page' with social media icons for Twitter, Facebook, LinkedIn, and E-mail, plus a 'More share options' link.

Project Maturity

Technical maturity

Financial maturity

Operational maturity

Technical Maturity

Technical feasibility to deliver the expected output and GHG emissions avoidance

Technology risks and proposed mitigation measures

- **Application form, Part B, sections:**
 - Section 0: technical characteristics and scope / technology scope
 - 3.1 (technical maturity)
 - 3.4 (risk management)
- Feasibility study (mandatory annex)
- Any existing technical due diligence report (optional)

Project Maturity : Operational Maturity

Credible project implementation plan covering financial close, entry into operation and annual reporting after the entry into operation and related deliverables

Relevance and track record of the project management team and soundness of the project organisation

State of play and credibility of the plan for obtaining required permits, intellectual property rights or licences and other regulatory procedures

Soundness of the strategy for ensuring public acceptance

Address project's implementation risks (e.g. dependencies on other projects) and credible risk mitigation measures

Application form, Part B, sections:

- 3.3 - Operational maturity
- 3.4 - Risks and mitigation measures
- 7.1 - Work Plan
- 7.2 – Work Packages, activities, resources and timing

Timetable-Gantt chart (mandatory document)

Participant information (including CVs and previous projects, if any)

- Any existing due diligence report (optional)

Project maturity

Timeline

Define project timeline

- Comprehensive, realistic and consistent with technical and financial elements of your project

Risks

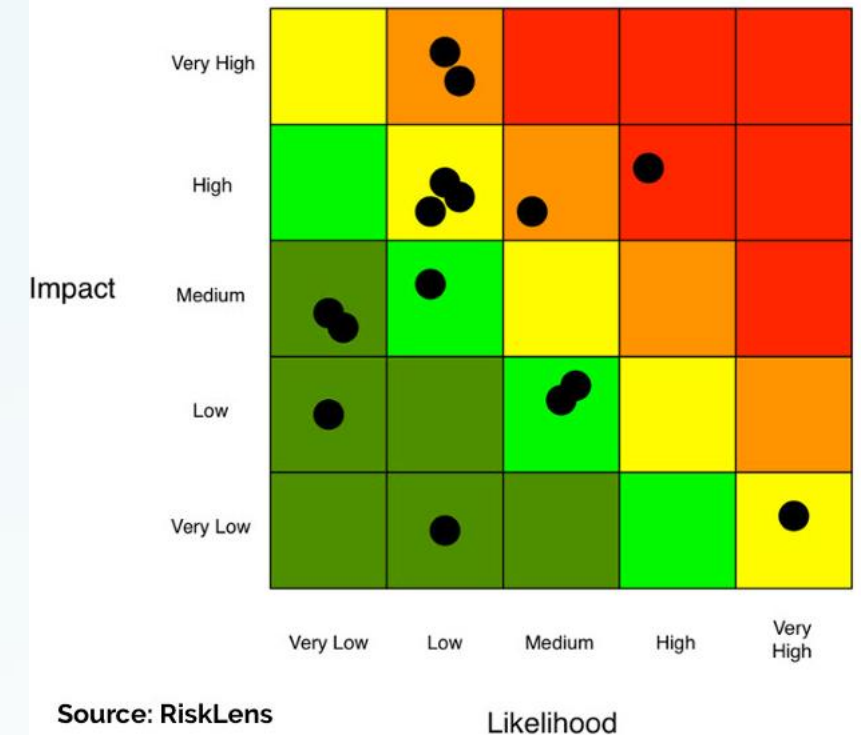
Identify Technical, financial and operational risks

- Provide a **comprehensive risk assessment**
- Ensure convincing **mitigation strategies** across all major risks

Evidence

- **Provide contractual evidence**
- E.g., letters of support, MoUs, indicative terms of agreement for off-take agreements, key suppliers, quotes from vendors, EPC parties

Sample Risk Heat Map



Replicability



Replicability in terms of efficiency gains

Replicability in terms of further deployment

Resilience of EU industrial system

Potential in terms of multiple environmental impacts

Quality and extent of the knowledge sharing

- **Application form, Part B, sections:**
 - 4.1 - Replicability
 - 4.2 - Knowledge sharing — Communication, dissemination and visibility
- **Knowledge sharing plan**
 - Mandatory document for all topics except INNOVFUND-2023-NZT-GENERAL-SSP (Small-scale projects)

Lessons learned for Replicability (previously Scalability)



Provide a credible plan for technology uptake in other sites



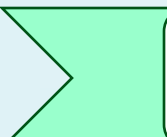
Provide credible assumptions on cost reductions



Underpin your claims with evidence and calculations



Present how IPR and licensing issues will be handled,
e.g., technology transfer at sector level



Avoid unsubstantiated, generic claims
related to EU policy objectives and initiatives



Clear and comprehensive communication & dissemination strategy

Bonus points

Bonus	Scoring
1.The potential to deliver net carbon removals	1 point (half point 0.5 possible)
2. Other GHG savings from emissions sources that go beyond the boundaries established in the Innovation Fund methodology for the given sector	1 point (half point 0.5 possible)
3. Commitment to use electricity from additional renewable sources or to use RFNBO hydrogen	1 point (half point 0.5 possible)
4. For Maritime sector projects <u>only</u> : demonstrated potential to decarbonising the maritime sector and reducing its climate impacts	1 point (half point 0.5 possible)

New

Financial Maturity – key points

Objective: assess the project capacity to reach Financial Close within 4 years or faster

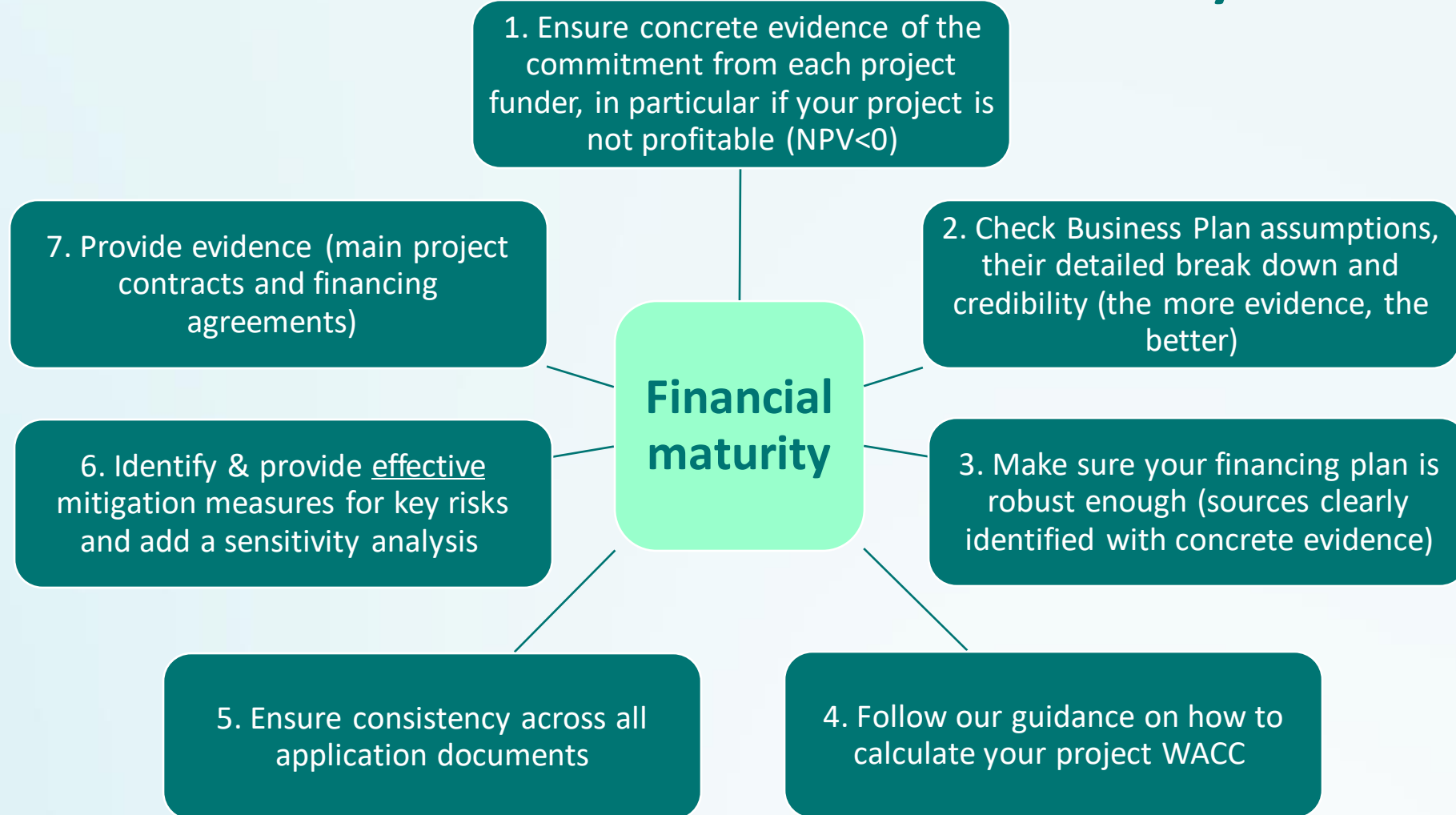
Project business plan and profitability

Soundness of the financing plan

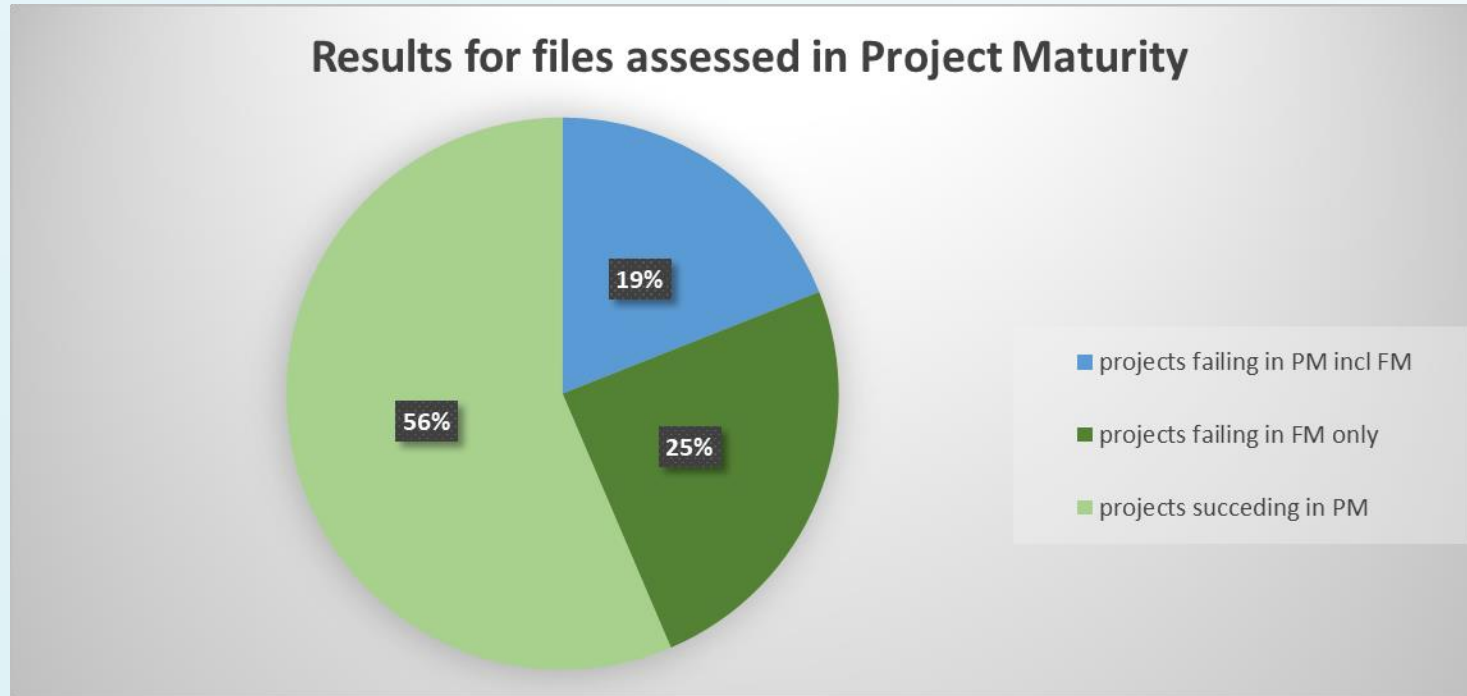
Commitment of project funders

Understanding of project business and financial risks

7 golden rules of Financial Maturity

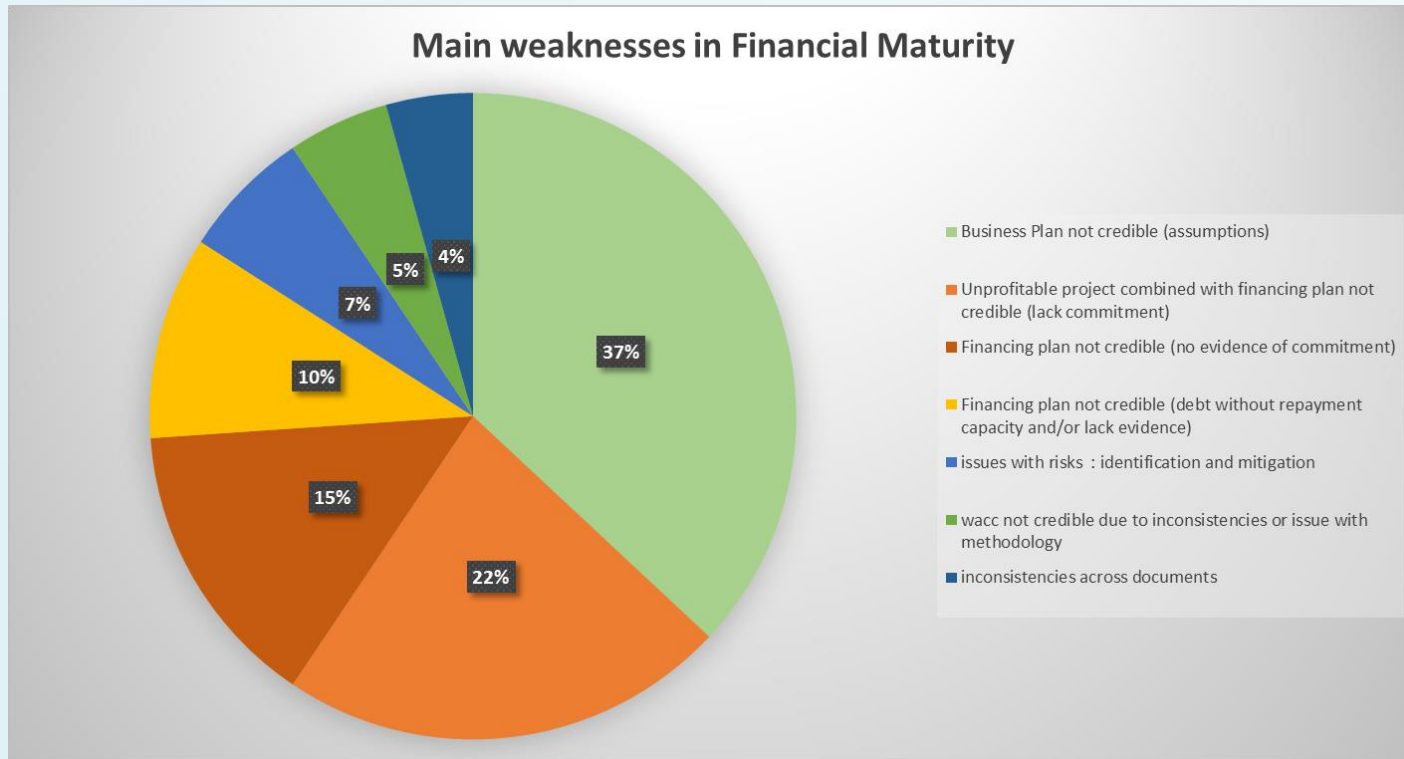


Main lessons from previous Large-scale call in Financial Maturity



- Project maturity failing rate decreased in the last call from 49 to 44%, but project maturity still remains the most selective criterion.
- Applications failing only in financial maturity decreased from 36 to 25% of all evaluated applications in project maturity.

Main reasons for failure in Financial Maturity



- Issues with **Business Plan** credibility was the **most frequent weakness**
- Followed by **unprofitable projects showing a lack of commitment** from shareholders and then
- **Credibility of the financing plan** coupled with lack of commitment/evidence



Clearly **identify all funding sources** with their terms and conditions and the progress made in defining and/or negotiating them with funding counterparts.

Cost efficiency

**Requested Innovation Fund
grant + other public support ***

**Absolute GHG emission
avoidance**

During 10 years after entry into operation

Maximum requested IF grant is
60% of total relevant costs

Applicants choosing not to
apply for the maximum grant
will be more competitive when
ranked against other applicants
in 'cost per unit performance'
metric.

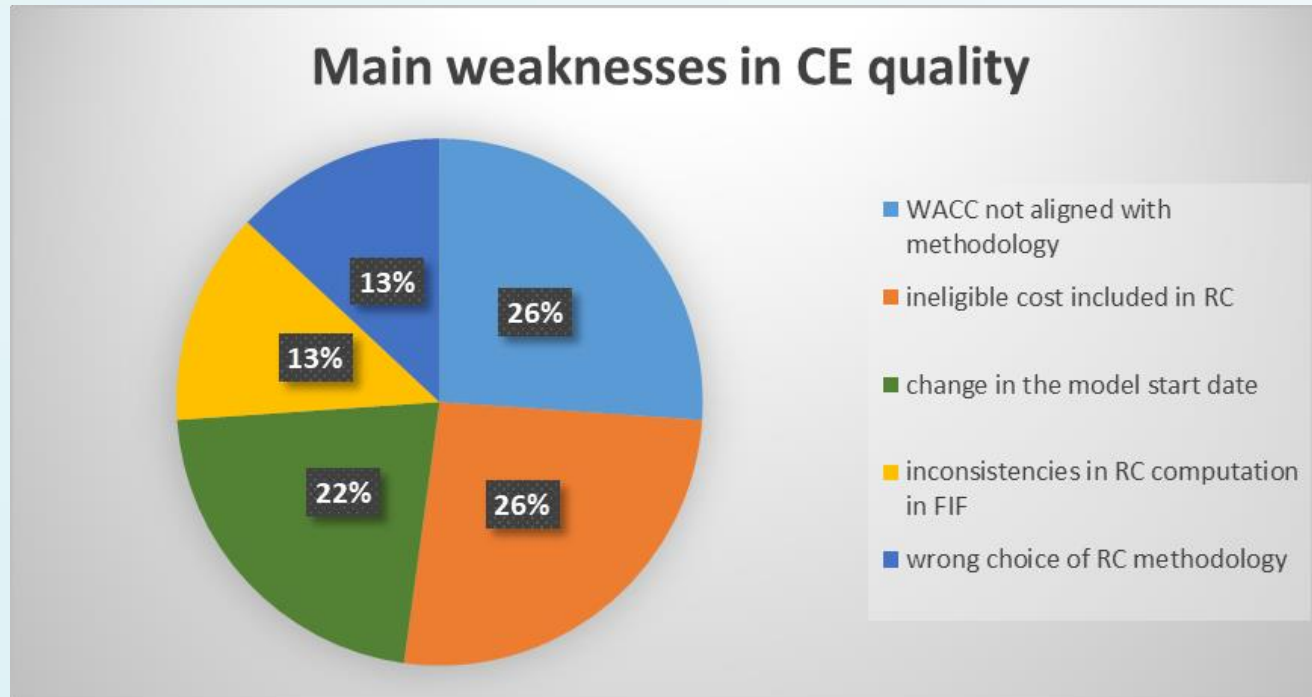
(*) Other public support must impact the same project (i.e. the case of cumulation) and include State aid or funding from the EU funding programmes

For public support received during operation, the rule is to add the undiscounted amount during the first ten years of operation

Cost efficiency– key points

- **Cost efficiency is split in two parts :**
 - One automatic based on the numerical value derived from cost efficiency formula
 - One “qualitative” on how the computation of Cost Efficiency ratio was made
- **Cost efficiency ratio level has minimum requirement (except for Pilots) :**
 - (a) for all topics except Pilots:
 - If cost efficiency ratio is *lower than or equal to* €200/tCO₂eq, score will be based on formula **12 – (12 x (cost efficiency ratio/200))**
 - If cost efficiency ratio is *higher than* €200/tCO₂eq, **proposal will be rejected (i.e. not considered for funding)**
 - (b) for Pilots
 - If cost efficiency ratio is *lower than or equal to* €2000/tCO₂eq, score will be based on formula **12 – (12 x (cost efficiency ratio/2000))**
 - If cost efficiency ratio is *higher than* €2000/tCO₂eq, proposal gets zero score but is **NOT rejected**

Main reasons for failure in Cost Efficiency quality



Several measures have been taken in the documentation to grasp address the points mentioned above:

- Further streamlining the Relevant Cost (RC) methodologies and simplifying the WACC computation by proposing default values for Beta and ERP.
- Clarifying even more the eligible costs for the RC computation in the guidance.
- Locking calculation cells in the FIF.

Relevant Cost

What has changed since the last large-scale call?

- New definition of Relevant Cost following the revised Innovation Fund Delegated Regulation.
- The same methodologies apply whatever the size of the project
- Further streamlining by reducing the number of methodologies to 2 (Levelised cost methodology is no longer used).
- Simplification of the WACC computation by proposing default values for the beta levered and the ERP.
- New data transfer sheet in the FIF to help fill in the Application Form Part C.
- Further guidance for manufacturing projects on CAPEX and EiO.

Innovation Fund 2023 Auction



Key principles: which methodology should applicants use?

No reference plant: default methodology, recommended for all projects

Reference plant: “fall-back” option if the project fulfils the following conditions :

- The Project relates to the construction of a completely new plant/unit. Add-ons to existing installations must use the No Reference Plant Methodology.
- The Reference Plant has the similar characteristics (output, capacity) as the Project plant.
- The Reference Plant complies with the European Union environmental standards and with EU legislation, including the EU ETS benchmark for industrial products where relevant.
- Applicants must provide documents necessary to assess the credibility of the financial and technical data of the reference plant, such as: proof of planning of such a (reference) plant/unit as an alternative to the project, formal board documents, financial reports, internal business plans or studies.
- A complete and detailed set of verifiable financial projections is added to the Applicant’s detailed financial model (mandatory).

The European Hydrogen Bank

- Announced in the State of the Energy Union 2022 – linked to **REPowerEU** objectives
- Communication adopted on 16 March 2023
- **Pilot auction** opened on 23 November 2023 and will **close on 8 February**
 - Available application information and helpdesk on [EU Funding & Tender Portal](#)
 - Frequently asked questions document on the [IF website](#) and in the EU Funding and Tender Portal
- **Auctions-as-a-service** offered to MS looking to move towards their hydrogen targets



IF23 Auction objectives

Putting Europe's net-zero industry in the lead:



Reducing the cost gap between renewable and fossil hydrogen in the EU



Allowing for **price discovery** and renewable hydrogen **market formation**



De-risking European hydrogen projects

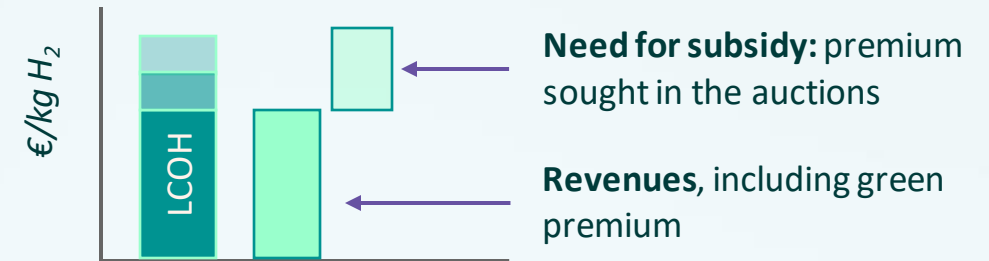


Reducing administrative burdens

simplicity and implementation speed in mind...

- Budget: **€800 million**
- 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
- Other award criteria assessed **Pass/Fail**
- **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
- No cumulation with other public support (with some exemptions)

Fixed-premium auction



Bids ranked on price only



Requirements for participating projects

Minimum electrolyser capacity

5MWe per bid

- one location in EEA, no virtual capacity pooling
- new capacity only (no “start of works” prior to application)

Maximum requested grant per project (=price*volume) capped

1/3 of total auction budget (€800m) to avoid “winner takes all”

Maximum bid price (“ceiling price”)

4.5 €/kg of RFNBO hydrogen produced

Planned entry into operation

less than **5 years** from grant signature

No restriction on off-take sectors or origin of electrolyzers

Termination for severe under-production over 3 consecutive years

Below 30% on average of planned yearly average volume

Completion guarantee (“deposit”)

4% of maximum grant amount

- To enter the auction, you need to provide an Lol for the guarantee from a financial institution
- To sign GA, you need the financial institution to issue the guarantee

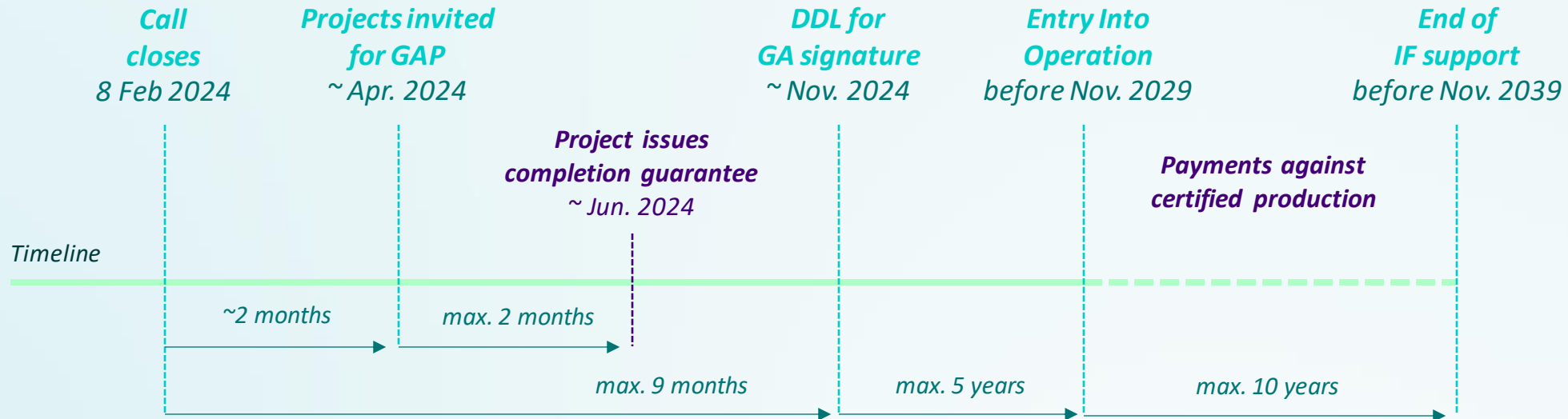
Reporting at the end of the support period

Certification of 70% GHG savings on overall production

- Independent third-party certificate or audited report

IF23 Auction implementation timeline

indicative



- Evaluation is simplified (compared to regular grants) and much faster: approx. 2 months
- If the completion guarantee is well prepared, winners could sign grants well before the deadline for GA Signature
- Maximum time to Entry into Operation (EiO) of 5 years to allow projects to manage delays, but normally EiO can be achieved earlier

Assessment criteria

Relevance and Quality

Relevance

Pass/Fail

Contribution to the objectives of this call
(i.e. production of RFNBO hydrogen
based on the sourcing strategy)



Quality

Pass/Fail

Technical maturity
Financial maturity
Operational maturity



Ranking

- According to the bid price
(in € per kg, with two digits after the comma)
- Within the limits of the available budget



Assessment criteria

Relevance and Quality



Credibility & consistency of the documents

Renewable electricity sourcing strategy

Hydrogen off-take and price hedging strategy

Electrolyser procurement strategy

Plan to receive environmental permits on time

Plan to receive grid connection permits on time

Completion guarantee letter of intent

Germany - first country to join 'auctions as a service' with a EUR 350 million national window

Easy: Germany notified State aid scheme based on Commission-provided pre-notification template

Fast: Fast State aid approval (Auction T&Cs CEEAG compatible)

Low administrative burden:

Following the evaluation and ranking by CINEA, MS with a national support window receive a list of projects wanting to be passed on to national funding.

MS signs grant agreements and manages payments of successful projects, respecting the price ranking of the overall EU-wide auction.

- **Great option for allocating national funds such as RRF or Modernisation Fund resources with streamlined State aid process & reduced administrative effort through an existing scheme**

Important to know

- 1 Introduction and policy update
- 2 Innovation Fund 2023 Call
- 3 Innovation Fund 2023 Auction
- 4 Important to know**
- 5 Back-up slides

How to apply

Check all relevant information to apply

- [Funding and Tenders Portal link](#)
- [Application process tutorial](#)
- [Financial Information Sheet tutorial](#)
- [GHG Methodology tutorials](#)
- [Legal validation and financial capacity assessment process tutorial](#)
- [Info Day recording and slides](#)
- [Where to find useful information](#)
- [Innovation Fund dashboard](#)
- [FAQ](#)

The screenshot shows the website of the European Climate, Infrastructure and Environment Executive Agency. The URL in the browser is cinea.ec.europa.eu/funding-opportunities/calls-proposals/innovation-fund-2023-call_en. The page title is "Innovation Fund 2023 Call". The navigation bar includes links for Home, About us, Programmes, Funding opportunities, Our Projects, News & Events, and Publications. The breadcrumb trail is: European Commission > CINEA > Funding opportunities > Calls for proposals > Innovation Fund 2023 Call. The page is categorized as "CALL FOR PROPOSALS" and is currently "Open".

Details

Status	OPEN
Publication date	23 November 2023
Opening date	23 November 2023
Deadline model	Single-stage
Deadline date	9 April 2024, 17:00 (CEST)

Description

On 23 November 2023, the European Commission launched the [Innovation Fund 2023 Call](#), with a total budget of €4 billion.

You can already find all information and documentation related to the call on the [Funding & Tenders Portal](#), including the call text and application forms.

APPLY NOW

The deadline is 9 April 2024, 17:00 Brussels time.

Events

To provide better guidance to applicants during the submission process, CINEA and DG CLIMA have organised an [online Info Day](#), on 7 December, to learn more about the new call, the award criteria allowing questions and answers from participants.

Registration

Tutorials

CINEA has also produced a series of [tutorials](#) to help you throughout the application process:

[Where to find useful information](#)

Application Process

(soon available)

[GHG Methodology](#)

[Financial Information File](#)

Last consistency check before submission

(How to avoid simple mistakes)

Application forms

Proposal ID: _____

Accession: _____

1 - General information

Topic: _____ Type of Action: _____

Call: _____ Type of Model Grant Agreement: _____

Accession: _____

Proposal title: _____

Note that for technical reasons, the following characters are not accepted in the Proposal Title and will be removed: < > " & "

Duration in months: _____

Free keyword 1: _____

Free keywords: _____

General information

General information	Comment
Start of operations	
Sector	
Principal product(s)	
Non-principal products	
Function of principal product(s)	
Reference product(s) substituted by principal product(s), if different	
Technology	
Estimated annual production	(Please specify unit)

Type of project and sector

Type of project: ☐

☐ Carbon capture and geological storage (CCS)

☐ Energy Storage (ES)

☐ Energy intensive industries (EII)

☐ Renewable Energy (RE)

Project sector: ☐

☐ Bio-electricity ☐ Biofuels and bio-refineries ☐ CCS transport and storage ☐ Cement & lime

☐ Chemicals ☐ Geothermal energy ☐ Grass, permanent & semi-permanent material ☐ Hydrogen

☐ Hydrogen ☐ On-site electricity storage ☐ Non-ferrous metal ☐ Manufacturing of components for production of renewable energy or energy storage

☐ Non-ferrous metal ☐ Other energy storage ☐ Other ☐ Other ☐ Other

☐ Other ☐ Other ☐ Other

Hybrid or cross-sectoral project ☐

☐ Cross-border ☐ Cross-sectoral ☐ Hybrid project ☐ Other

☐ Other ☐ Other ☐ Other

	Part A	GHG Calculator (Summary sheet)	Part C	Financial Info. File (Cost efficiency sheet)
Sector				
GHG Absolute or relative				
Requested Grant Amount				

Application forms

Proposal ID: _____

Accession: _____

3 - Budget

No	Name of Beneficiary	Country	Requested grant amount
1			
Total			

Absolute GHG Emissions Avoidance

Net absolute GHG emissions avoided due to operation of the project during the first 10 years of operation, in tCO₂e.

Accumulated GHG emissions	Reference emissions	Project emissions
NGHG ₂₀₂₀	Ref	Proj

Relative GHG Emissions Avoidance

Relative GHG emissions avoided during operation of the project during the first 10 years of operation, in percent.

Accumulated GHG emissions	Accumulated GHG emissions avoided	Reference emissions
NGHG ₂₀₂₀	NGHG ₂₀₂₀	Ref

IPSCJECT - Cost efficiency calculation

Cost efficiency ratio: _____

Accumulated GHG emissions avoided (tCO₂e)

Relative GHG emissions avoided: _____

Requested grant: _____

Relative GHG emissions avoided (tCO₂e)

Requested grant (tCO₂e)

Cost efficiency ratio: _____

Forthcoming events

IF SSC 2022

- Results announced in December 2023

IF23 Auction

- [Application period 23 November 2023 - 8 February 2024](#)
- [Link to application](#)

IF23 Call

- [23 November 2023 - 9 April 2024](#)
- [Link to application](#)

Innovative Clean Tech Conference 2024

- SAVE THE DATE - 11 April 2024
- Hybrid event

Sign up as an EU expert

for the INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality



Join as project evaluator for Innovation Fun

- Technical expert
- Financial expert
- GHG expert
- Rapporteur

[Sign up as an Expert \(europa.eu\)](https://europa.eu/IRtnFw)

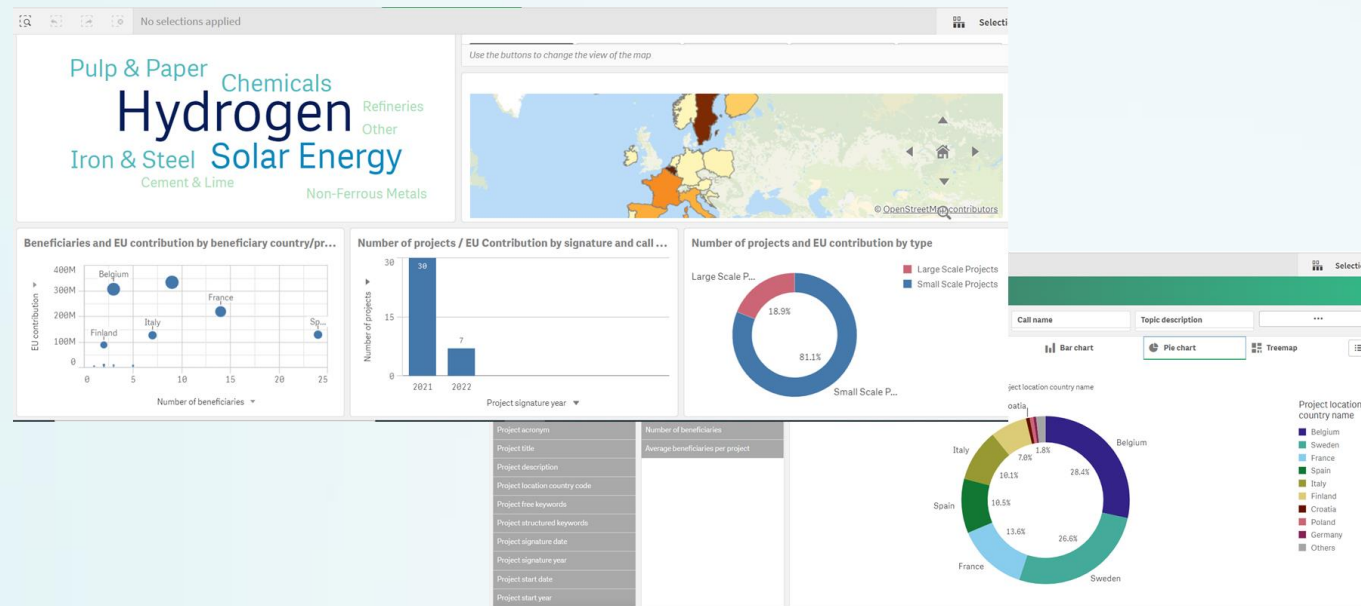
More information here:



<https://europa.eu/IRtnFw>



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>

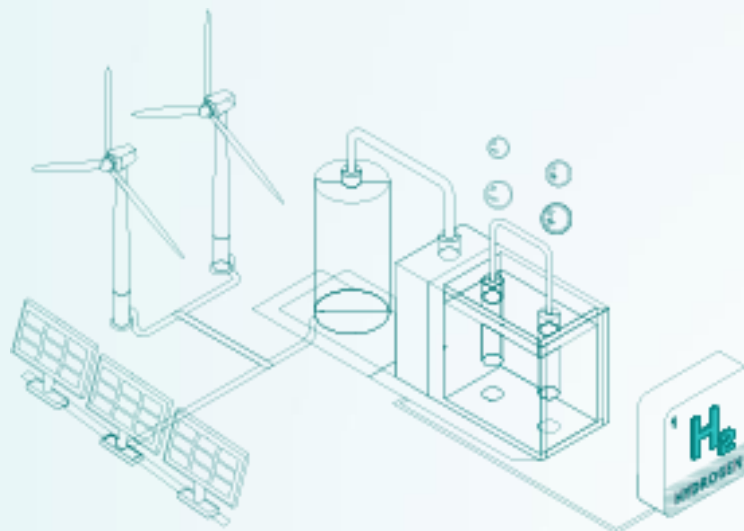


Further info, planning of new calls, recorded webinars and videos available on the IF Website:

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

And more videos available on YouTube:

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



Let's keep in touch



climate.ec.europa.eu

cinea.ec.europa.eu/programmes/innovation-fund_en



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Thank you



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Additional slides (back-up)



Additional slides on the scope of the call topics

General Decarbonisation Topic(s)

The following **activities can be funded** under these topics:



- supporting innovation in low-carbon technologies and processes in sectors listed in **Annex I and Annex III to the EU ETS Directive**, including environmentally safe carbon capture and utilisation (**CCU**), as well as **products substituting carbon-intensive ones** produced in sectors listed in Annex I.
- construction and operation of projects that aim at the environmentally safe capture and geological storage of CO₂ (**CCS**).
- support the construction and operation of innovative **renewable energy** and **energy storage technologies**.

General Decarbonisation Topic(s)

- Carbon capture and utilisation: 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.

New

- In infrastructure related projects, fair and **open access for other operators** needs to be ensured.

New

- Projects installing and operating mature electrolyser technologies without additional relevant innovation in the use of the produced hydrogen are advised to apply to the **IF23 Auction for RFNBO Hydrogen.**

New

- Support **to maritime** and **aviation** can be provided for breakthrough innovative technologies, including **innovative infrastructure** in the maritime sector, notably for EU container transshipment ports.

General Decarbonisation Topic(s)

- The project must **operate at least five years** after entry into operation, **at least three years** for small-scale projects.



- Contribution to building EU industrial capacity, technology leadership, supply chain resilience, and strategic autonomy.

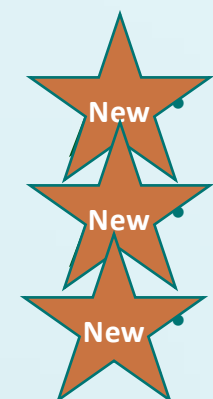
➤ To be assessed under Replicability award criterion

Only projects that have not started works at the time of grant application can be funded.

The **relative GHG emission avoidance** must be at least **50%**.

Cost efficiency ratio must be lower or equal than **200 €/t CO₂-eq.**

- Simplifications kept for small-scale projects: knowledge sharing plan requirements; degree of innovation at national level.



Cleantech Manufacturing Topic

Objectives:

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

The following **activities can be funded** under this topic:

- Develop facilities for producing **components** in:
 - **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.

Cleantech Manufacturing Topic

- Components definition also **includes the final equipment** such as wind turbines, solar panels, batteries, heat pumps or electrolyzers, as well as sub-components like nacelles or blades for wind turbines
- Topic is targeting those **components and materials (except mining activities) that are a significant factor** in the performance and/or cost of the final equipment.
- Scope includes **recycling or reusing critical materials** used in the mentioned equipment or components.
- Equipment and components can be sold on the EU market and in third countries.
- Promote innovation in **cleantech manufacturing/production processes and final product improvements**.
- Emphasis on factors like **cost reduction, performance improvement, efficiency, and sustainability**.

Pilot Projects Topic

Objectives:

- Support **highly innovative, disruptive or breakthrough technologies** in deep decarbonisation needed for achieving the climate neutrality goal.

The following **activities can be funded** under this topic:



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

- Topic is targeting a **higher degree of innovation** with respect to other topics
 - Points under Degree of Innovation award criterion are doubled.
- Emphasis on addressing technical risks linked to the innovative technologies, such as **optimising process and operational parameters**, and **enhance final product characteristics**.
- Pilot projects should prove an **innovative technology** in an operational environment, i.e., include pilot manufacturing lines, but are not expected yet to reach large-scale demonstration or commercial production.
- The projects can entail **limited production/operation** for testing purposes, including delivery to/from potential customers for validation.

Pilot Projects Topic

- **Project viability** rather than project profitability is to be demonstrated.
 - To be assessed under the Financial Maturity award criterion.
- 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 replicability award criterion.
- Potential to be fully compatible with a 2050 climate neutrality objective and pilot installations should exhibit minimal residual emissions or result in net carbon removals.
 - The **relative emission avoidance must be at least 75%**.
- Contribution to building EU industrial capacity, technology leadership, supply chain resilience, and strategic autonomy.
 - To be assessed under replicability award criterion.



Pilot Projects Topic



- Projects achieving **financial close within two years** and **entry into operation within four years** after grant agreement signature may earn a higher score in project maturity evaluation.

➤ To be assessed under the Financial and Operational Maturity award criterion.



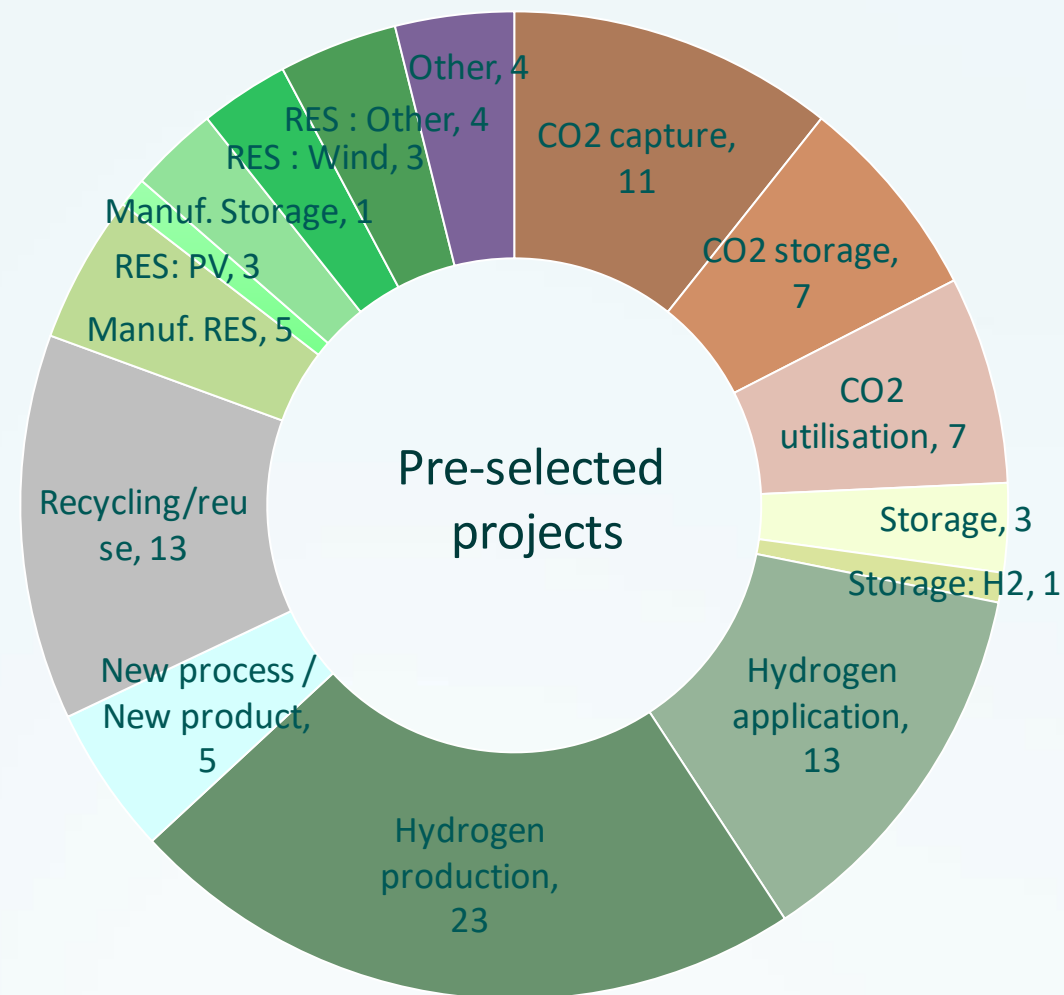
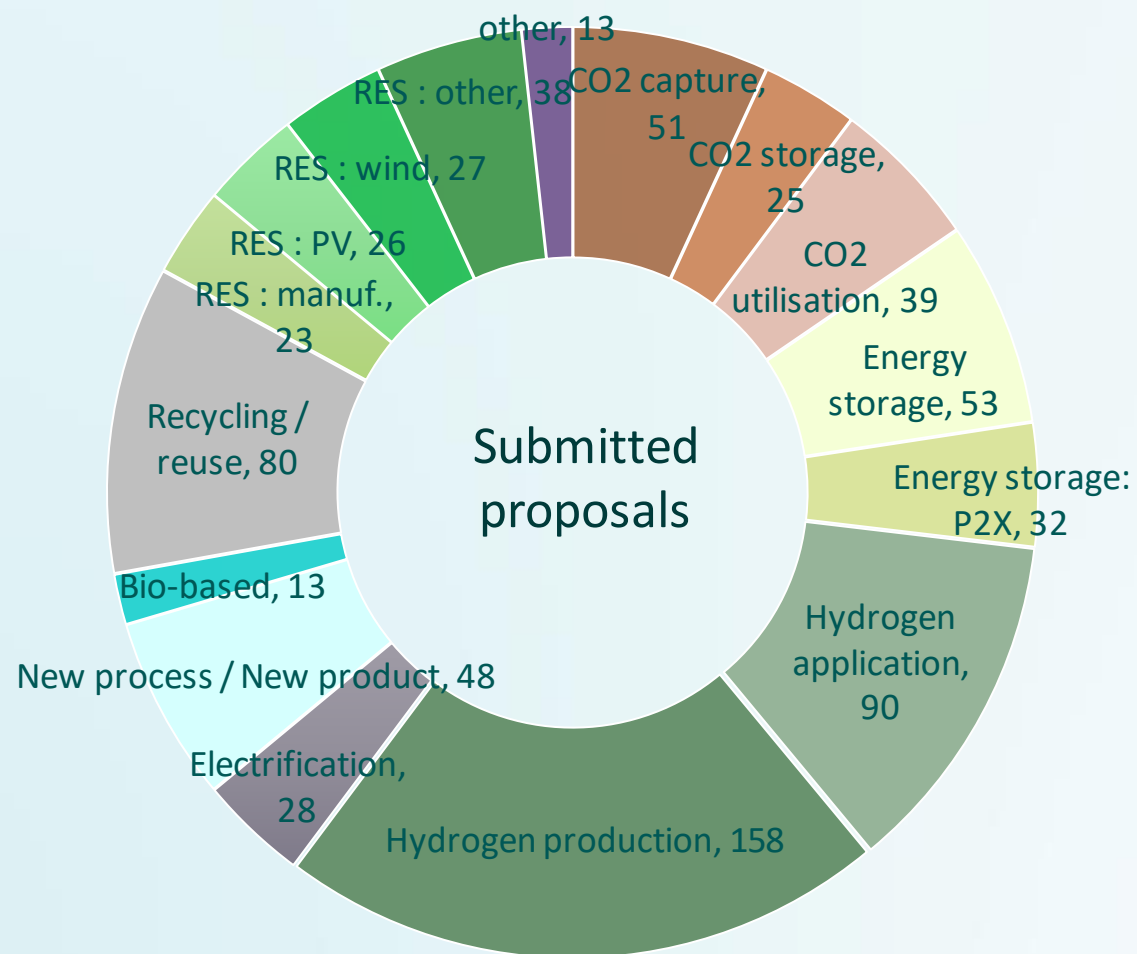
- Maximum grant is limited to **€40 million per project**.
- Only projects that have not started works at the time of grant application can be funded.
- The project must operate **for at least three years after entry into operation**.
- It is expected that projects will be more costly and thus less stringent formula **for cost-efficiency criterion** is applied: $12 - (12 \times (\text{cost efficiency ratio} / 2000))$

Lessons Learned from previous calls

Award criteria

Climate mitigation pathways

from Innovation Fund's LSC-2022 proposals & pre-selected projects



Performance of LSC-2022 proposals

Out of 239 proposals, 41 were pre-selected for funding (*)



From all 239 proposals

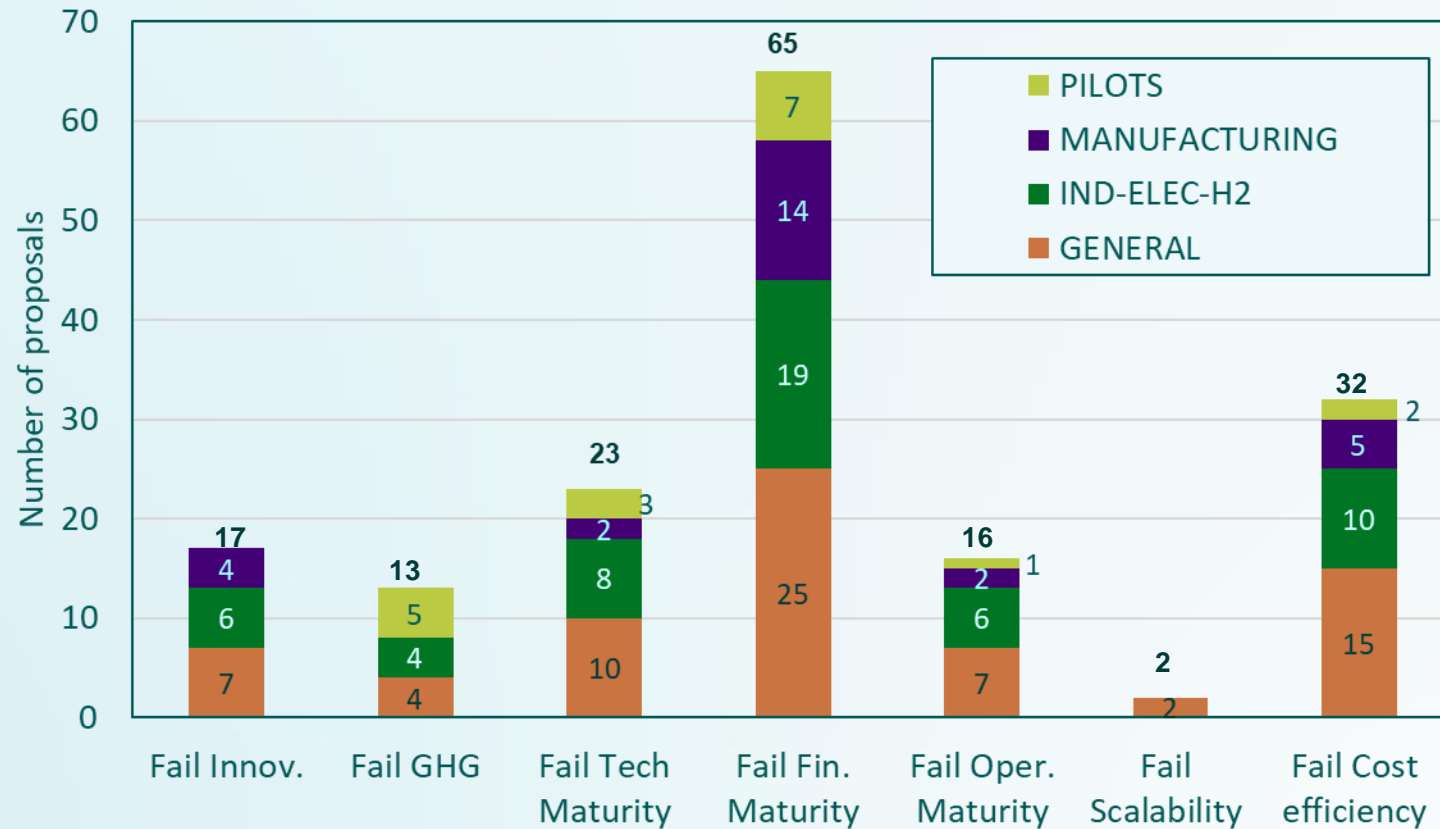
- 18% non-admissible or eligible
- 48% failed during evaluation
- 17% beyond funding

(*) based on proposals evaluated taking account of cascade approach

Main weaknesses of eligible proposals

Large-scale call 2022

Overview of the number of proposals that failed each criteria*

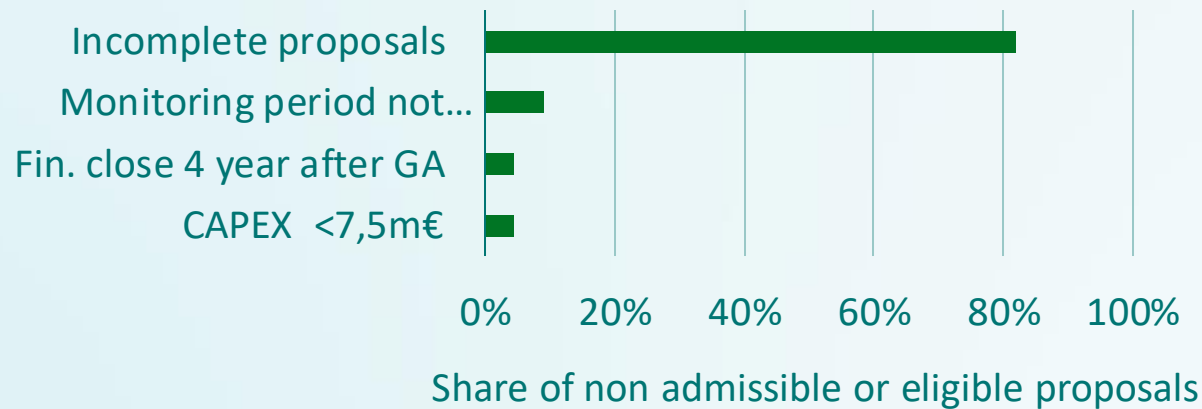


114 proposals failed during evaluation.

* Some proposals failed various criteria simultaneously

Admissibility and Eligibility (A&E)

How do proposals fail on A&E?



>80% of non- A&E proposals are incomplete

Common fails from incomplete proposals:

- *Relevant cost calculator* missing
- *Part B* not fully completed
- *Detailed financial model* missing
- *Business plan* missing
- *GHG calculator* missing
- *Feasibility study* missing
- *Gantt* missing
- *Knowledge sharing plan* missing

Be thorough to fulfil **Admissibility and Eligibility** criteria as described in the call text

The Award Criteria

- Degree of Innovation
- GHG emission avoidance
- Bonus points 1 and 2
- Project Maturity:
 - Technical,
 - Financial and
 - Operational maturity
- Bonus points 3 and 4
- Replicability
- Cost efficiency

Degree of Innovation

Degree of Innovation: types of innovative actions

Innovation Fund aims at supporting technologies, business models and processes that are not yet commercially available, representing innovative solutions which are sufficiently mature for demonstration at pre-commercial/commercial scale

First-of-a-kind commercialisation or large-scale commercial size demonstration of technologies, processes or business models previously proven at pilot or smaller scale, or large-scale demonstration plants

A **second or more of a kind commercialisation**, under certain conditions. In particular, where the relevant costs remain a significant share of total costs that prohibit commercialisation without further public support. Innovation beyond incremental must still be demonstrated.

Innovative smaller demonstrations or pilot plants, targeting validation of innovative solutions in industrial environment.

Projects aimed at demonstrated **scaling up** of innovative techniques, processes and technologies for their broad roll-out, which contribute significantly to the decarbonisation of the IF sectors.

Degree of Innovation for topic General - SSP

Innovation at national level

- For **small-scale projects** (INNOVFUND-2023-NZT-GENERAL-SSP), the reference point can be at European or national level.
- For innovations at national level: the geographical reference of the state-of-the-art must be the country where the project will be implemented. The proposal should demonstrate how it goes beyond this national state-of-the-art.
- Proposals going beyond state-of-the-art at national level can meet the minimum threshold of this criterion; however, if a proposal is also going beyond the state-of-the-art at European level, it may receive a higher score.

Lessons learned - Degree of innovation

- Check thoroughly **ANNEX 1** in call text
- Be clear, exhaustive and transparent
- Provide convincing and substantial evidence for your claims
- Make clear references to the feasibility study, where relevant

Describe

- Relevant **state-of-the-art**
 - Technological aspects
 - Commercial aspects
- Consider **quantitatively**
 - Costs
 - Technical characteristics - Performance
 - TRL/SRL

Identify

- How does your innovation go beyond state-of-the-art?
 - **Compare** with other previous & ongoing **EU and IF projects**
 - Include your geographical reference point
- **Consider Barriers**
 - for scaling up
 - for technology integration

Provide evidence

->Feasibility study, GHG calc, other

- Compare **key performance data vs state-of-the-art**
 - Relevant parameters
 - Consider also energy efficiency and circularity
- Provide **patent data** (when relevant)
- Consider how will the innovation be implemented or integrated?

GHG emission avoidance potential

Lessons learned - GHG Emissions avoidance potential



Follow the IF GHG emission methodology for calculation and reporting



Identify **principal product(s)**, select sector, scenario and methodology accordingly



Use correct **emissions factor(s)** in line with the methodology



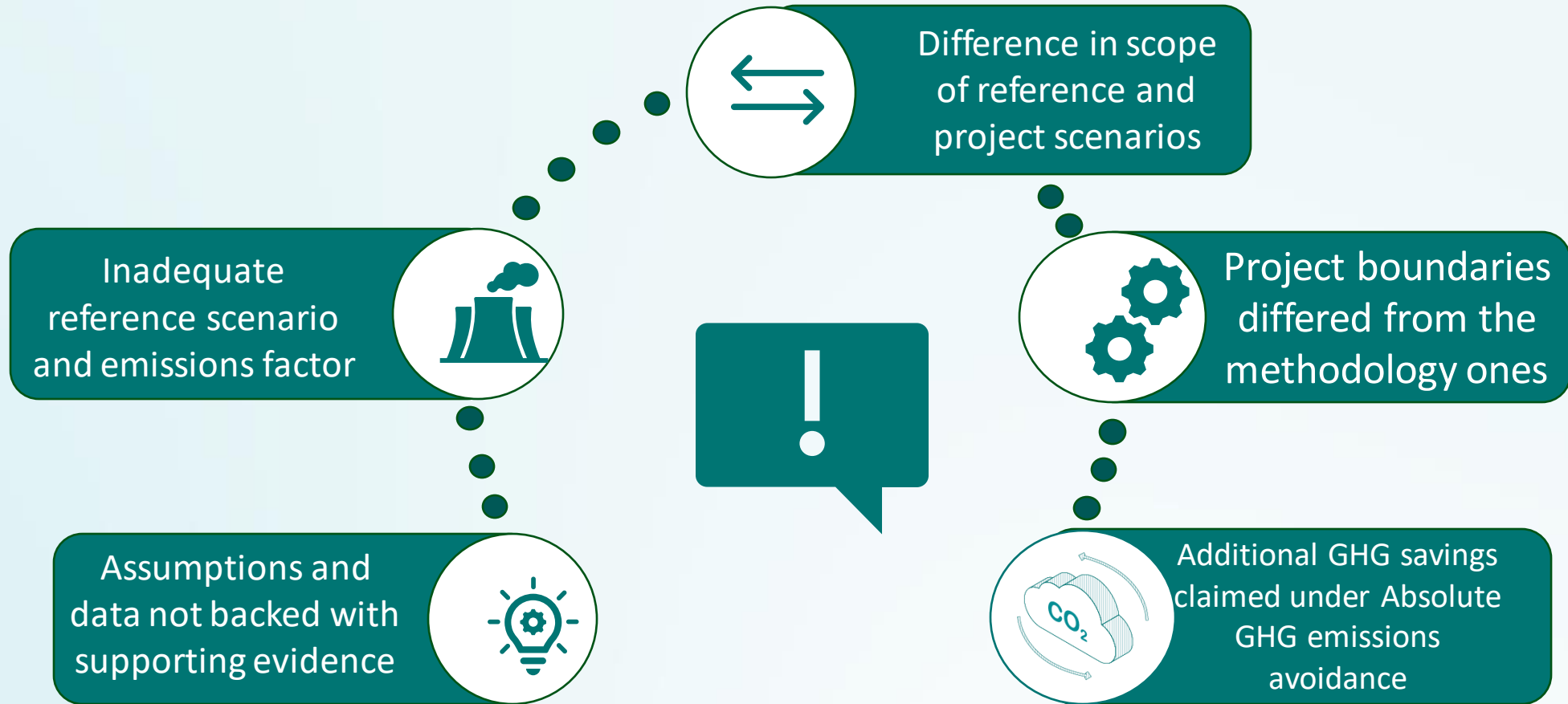
Justify choices made in the application of the GHG emissions avoidance methodology, when relevant



Assumptions must be **robust and properly justified**

Lessons learned:

Main mistakes on GHG emissions avoidance



Bonus 1 and 2

Bonus Point 1: net carbon removal



Application form, Part B

- Section 6

Template GHG emission Calculator

- Tab "Net carbon removals"

- The **total project emissions should be negative**
- For EII projects, negative emissions can only be claimed **excluding any credit for timed operation**
- For EII projects: the non-principal products are **not allowed to be the only source** of negative emissions in the projects

Bonus Point 2: other GHG emission savings

Other GHG savings from emissions sources that go **beyond** the boundaries established in the Innovation Fund GHG calculation methodology for the given sector, such as:

- Emissions due to transportation of raw materials or finished products,
- Waste management,
- Upstream emissions of fuels in the project scenario, etc.

Application form, Part B

- Section 6

Template GHG emission Calculator

- Tab "Other GHG emission avoidance"

Project Maturity:

- Technical maturity
- Financial maturity
- Operational maturity

Technical Maturity

Technical Maturity – technical feasibility

Guiding principle / key questions to reply:

- Explain the degree of technology readiness of the proposed solution and the technical feasibility of delivering the expected output (e.g., in terms of volume of the products).
- In particular:
 - Has the technology already been proven in a pilot scale demonstration?
 - Are the characteristics of the proposed plant credible and in line with basic engineering principles?
 - Provide robust and credible assumptions used for operational characteristics of the plant and estimation of the expected outputs
 - Provide clear reference to relevant parts of the Feasibility study and other supporting documents.

Technical feasibility

Explain the technical feasibility of the project to deliver the expected outputs and how the project will ensure reaching the expected GHG emission avoidance.

In particular, describe:

- *the technology readiness of the project, expected project output (in terms of volume of the products) and technical feasibility of achieving this output, including in terms of GHG emission avoidance*
- *whether the proposed technology has already been proven in a pilot scale demonstration (where available), and, if so, how it has performed*
- *how changes in scale or changes in circumstances compared to previous testing/projects have been taken into account in the design of the project, where applicable*
- *how the characteristics of the proposed plant are in line with basic engineering principles*
- *the assumptions used for operational characteristics of the plant and for the estimation of the GHG emissions avoidance*
- *whether the existing and envisaged assets in the project site are suitable for reuse.*

Insert text and refer to the relevant text of the supporting documents.

Technical Maturity - risks

Guiding principle / key questions to reply:

- Describe key risks identified in relation to the proposed technology/process,
- Describe the proposed risk mitigation measures and explain why they are suitable
- Moreover, risks identified should be summarised in the risk table (section 3.4 application form)
- Underpin your analysis with the feasibility study and provide the risk heat map

Technical risks and proposed risk mitigation measures

Describe key risks identified in relation to the technology, the proposed risk mitigation measures and why they are suitable.

Insert text and refer to the relevant text of the supporting documents.

Critical risks and risk management strategy

List critical risks, uncertainties or difficulties related to the implementation of your project, and your measures/strategy for addressing them.

Indicate for each risk (in the description) the impact and the likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures.

Note: *Uncertainties and unexpected events occur in all organisations, even if very well-run. The risk analysis will help you to predict issues that could delay or hinder project activities. A good risk management strategy is essential for good project management.*

Risk No	Description	Work package No	Proposed risk-mitigation measures

Feasibility study

- The feasibility study should include information in line with the minimum content indicated in section 5 of the call text:
 - Project description (background information, objectives, resource and feedstock availability and yield potential, expected project outputs, innovation)
 - Location analysis and strategic overlook (site, site plans, stakeholders' involvement and acceptance)
 - Technical maturity assessment (technology readiness, technology process, suppliers of technology, feasibility of achieving project outputs)
 - GHG avoidance and key consumptions figures
 - Environmental and socio-economic impacts and mitigation measures
 - Techno-economic feasibility
 - Risks and mitigation measures (including heat map)

Lessons learned - Technical maturity

Describe readiness level

- Actual readiness level of your technology
 - Be concise
 - Provide **key facts and figures**

Identify

- Relevant data – from your previous stages: pilots / projects...
- Include all relevant critical **risks** and **mitigation** strategies

Provide evidence ->Feasibility study, other docs

- Due diligence report
- Procurement quotes
- MoU
- Signed letters of intents/ support

Ensure **consistency** between documents:
Feasibility study, business plan, GHG calculations

Resubmissions are welcome, especially when TRL is improving

Operational Maturity

Susanna GALLONI, Head of Sector
CINEA C4, Innovation Fund

Operational Maturity

Credibility and level of detail of project implementation plan covering all project milestones & related deliverables

Guiding principle / key questions to reply:

- Project **milestones** must include at least financial close, entry into operation and annual reporting after the entry into operation (guidance provided in the call text and application form).
- Provide **timeline** from signature of the grant up to the end of the operation period; **ensure consistency** with timetable provided as annex.
- **key aspects**: strategy to reach milestones of financial close and entry into operation; ensure timing of planned activities during plant construction; regular operation of the technology during operation period.
- implementation planning **consistent** with work packages, milestones and deliverables described in section 7 of Part B.
- Ability to **reach entry into operation** in line with market standards in the sector or faster.

Project implementation plan

Describe the implementation planning of the project and key milestones, deliverables and work plan for project development, construction and roll out, and envisaged permitting procedures.

Provide the timeline which must cover the period of the project implementation starting from the signature of the grant up to the end of the monitoring and reporting period and include inter alia the status of project development, the steps concluded so far (e.g. FEED study, initial permits, etc.), the planned date for the final investment decision, start of construction, commissioning and testing, entry into operation.

The timeline should be illustrated in the Gantt chart required in section 6.2.

Provide information on the following aspects:

- strategy to reach the milestones of financial close and entry into operation as well as the intermediate milestones
- planned timing of project activities and milestones and how it ensures meeting the project milestones (e.g. sufficient time reserve for procurement and delivery of major capital components, commissioning and appropriate ramp-up period of reduced output in the initial operation of the project)
- strategy for regular operation of the proposed technology during the monitoring and reporting period (e.g. maintenance, down times for revisions, operational capacities, quality assurance/quality control)

The implementation planning must be consistent with the work packages, milestones and deliverables described in section 6.2, as well the project implementation plan.

Applicants are expected to implement the construction works/without delay and complete the construction of the project within a reasonable timeframe relative to market standards.

Insert text and refer to relevant sections of the supporting documents

Operational Maturity

State of play and credibility of the plan for obtaining required permits, IPR or licences and other regulatory procedures

Permits, rights, licences and regulatory procedures

Describe in detail the regulatory framework impacting the project, any intellectual property rights or licence and other relevant regulatory procedures, relevant permitting processes needed (including permits related to environmental impacts), permits obtained and still needed and the plan for obtaining them.

Include a timeline indicating the relevant permit application dates, expected reception dates and measures planned to ensure timely granting.

Insert text and refer to relevant sections of the supporting documents

Guiding principle / key questions to reply:

- Key aspects to be covered: detailed analysis of the regulatory framework; any intellectual property rights or licence; other relevant regulatory procedures; relevant permitting processes needed (including permits related to environmental impacts).
- State of play: description of permits already obtained and still needed and the plan for obtaining them, including timeline indicating the relevant permit application dates, expected reception dates and measures planned to ensure timely granting.

Operational Maturity

Soundness of the public acceptance strategy

Public acceptance

Describe all environmental impacts expected throughout the project life-cycle (from construction to operation to decommissioning), and the mitigation measures. Explain when the environmental studies, assessments and modelling will take place.

Explain the degree of public acceptance of the technology and the project.

Explain how public acceptance will be ensured.

Insert text and refer to relevant sections of the supporting documents

Guiding principle / key questions to reply:

- Detailed description of all environmental impacts expected throughout the whole project life-cycle (from construction to operation to decommissioning), and associated mitigation measures.
- Degree of public acceptance of the technology and the project.
- Clear and specific strategy on how public acceptance will be ensured (please do not limit to generic explanations of the issue).

Operational Maturity

Relevance & track record of project management/team and soundness of the project organisation

Guiding principle / key questions to reply:

- Project management team, e.g.: key qualifications and track record; sufficient coverage of all necessary skills; provide justifications on the need for additional outside resources.
- Project organisation, e.g. project management structure; governance, responsibilities and decision-making mechanisms and processes within the consortium; quality management, health and safety.
- Provide a project diagram visualising the involved actors and organisation of the project.

Project management team and project organisation

Describe the project management team and the project organisation, including:

Project management team:

- project team, including key qualifications and track records of the staff responsible for project implementation (see also Participant information)
- ability to operate without interruption if a key individual leaves
- sufficient coverage of all required skills (such as technical expertise, technology commercialisation, business management, financial management and environmental management)
- need for additional outside resources.

Project organisation:

- project management structure;
- governance, responsibilities and decision-making mechanisms and processes within the consortium;
- evidence that the applicant's management and sponsors are committed to implementing the project;
- quality management and health and safety processes and how they are expected to meet the best industry practice.

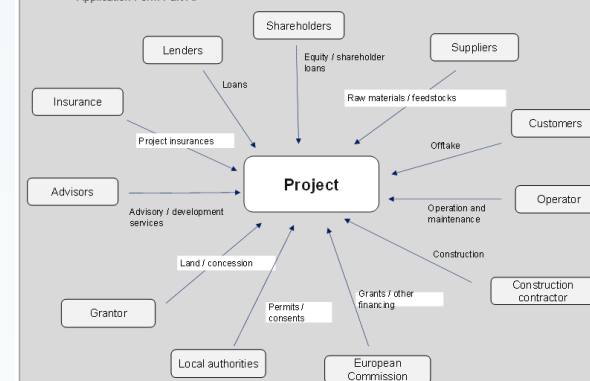
Please make reference to the project description

Insert text and refer to relevant sections

Project diagram

Please insert a project diagram (the example below is only an illustrative example and should be deleted when inserting the project specific diagram).

- A special purpose vehicle may be created for the implementation of the project or not (please specify in diagram).
- The parties mentioned are for illustration purposes only, please adapt the diagram and the parties to your specific project.
- Please specify as much as possible the legal and contractual relationships between the main project stakeholders and contractual parties, also including the coordinator and participants mentioned in Application Form Part A.



Insert text

Operational Maturity

Operational risks and credibility of proposed mitigation measures

Guiding principle / key questions to reply:

- Describe key project implementation risks (e.g., related to construction, project design, operation & decommissioning or risks stemming from dependencies from other projects).
- Propose convincing risk mitigation measures and explain in detail why they are suitable.
- Summarise the identified risks in the risk matrix in section 3.4 of the application form.

Operational risks and proposed mitigation measures

Detailed description of the project's operational risks and the proposed risk mitigation measures. Include all known risks associated with construction, project design, operation and decommissioning, relevant to the project technology, category and sector.

Explain how risks (including timing, weather conditions, commissioning conditions, unexpected or undesired events) are taken into account in the project planning and strategy and the proposed mitigation measures.

Description of measures proposed to handle any potential forced outages (e.g. power plant, capture or separation plant, compression plant, transportation, energy or CO₂ storage site) and operational interdependencies of all parts along the project value chain.

Insert text and refer to relevant text of the supporting documents.

Critical risks and risk management strategy

List critical risks, uncertainties or difficulties related to the implementation of your project, and your measures/strategy for addressing them.

Indicate for each risk (in the description) the impact and the likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures.

Note: Uncertainties and unexpected events occur in all organisations, even if very well-run. The risk analysis will help you to predict issues that could delay or hinder project activities. A good risk management strategy is essential for good project management.

Risk No	Description	Work package No	Proposed risk-mitigation measures

Lessons learned: Operational maturity

Justify the likelihood of your project deployment as planned

Operations

- Define solid **Work Packages** and **Tasks**
- Set clear and realistic **deliverables, milestones** and **means of verification**
- Include relevant **operational risk** assessment
- Ensure availability of necessary know-how in the team

Timeline

- Ensure consistency between **Gantt** & tasks/ WPs (interdependencies)/ FiF
- Consider realistic timing for:
 - Construction and supply
 - Obtaining permits, rights and licences
 - Ensuring public acceptance
 - Potential delays

Clear strategy

- Clearly identify project parties and responsibilities
- Clear **Role distribution**
- **Link WP &** corresponding **financial costs**
- Set a clear strategy for:
 - Construction, considering targets/ deadlines & needs
 - Obtaining permits, rights and licenses
 - Ensuring public acceptance

Ensure **consistency** between **all** your documents

Bonus points 3 and 4

Bonus point 3: Renewable Electricity, RFNBO

Commitment to use electricity from additional renewable sources or to use RFNBO hydrogen:

- Projects requiring significant amounts of electricity are encouraged to demonstrate whether they are using additional electricity of **renewable origin coming from project's own installation or that will be procured via the grid**, e.g. via Power Purchasing Agreements (or MoUs or Lols for such PPAs).
- Projects that propose to consume significant amounts of hydrogen are encouraged to demonstrate whether it is **RFNBO hydrogen** as defined in the Renewable Energy Directive 2018/2001 and its Delegated Regulations on methodology for RFNBOs.

Application form, Part B

- Section 6

Template GHG emission Calculator

- Tab "Additional renewable electricity"

Bonus point 4: maritime sector projects

- Only for maritime sector projects!
- Demonstrated potential to decarbonising the maritime sector and reducing its climate impacts.

Application form, Part B

- Section 6

Replicability

Replicability (1)

Replicability in terms of efficiency gains

- expected technology cost reductions
 - efficient use of resources or other ways to address resource constraints
-
- Describe the potential or the proposed solution to lead to **cost reductions**
 - Provide credible estimates on the expected cost reductions based on reliable assumptions, both in the short/medium-term and the long-term.
 - Describe how your project addresses **resource constraints**:
 - Through efficient use of or reduction in consumption of critical raw materials, biomass and other scarce resources.
 - Or in other ways through circularity, recycling and recyclability of such resources, or mitigation of supply shortage risk through partnerships with actors from the relevant supply chain.

Replicability (2)

Replicability in terms of further deployment

- Transfer of the proposed solutions to other sites
 - Related expected additional emission avoidance
 - Projects dependent on subsidies: potential to become cost-competitive and financially viable
-
- Describe the potential of the proposed solution to be replicated in **other sites**:
 - Plans of transfer to other sites, regionally or across the EU economy or globally where relevant.
 - Potential transfer beyond the sector, where relevant.
 - Substantiate the claimed potential, by providing data estimations on locations, budget allocation, products & production capacities, potential commercial activities and market share opportunities, sector coupling, cooperation with other actors of the regional economy and/or beyond.
 - Provide an estimation of the related expected **contribution to emissions avoidance**
 - e.g. number of potential replicable installations and resulting emissions avoidance; underpin your estimations with reliable assumptions.
 - For projects to a large degree dependent on subsidies, describe the potential to become **cost-competitive** and **financially viable** over time in the **absence of subsidies**

Replicability (3)

Resilience of EU industrial system

- net-zero technologies for EU resilience
- European value chains
- jobs, economic growth, competitiveness
- **Strengthening of the EU's maritime transport value chain**

New

New

- Describe the expected contribution to secure and sustainable supply of net-zero technologies, to safeguard the **resilience of the energy and industrial system in the EU**.
- Describe the contribution to new EU value chains / reinforcement of existing ones, in particular contribution to the development of strategic autonomy in industrial supply chains.
- Describe the positive impacts in terms of economic growth, competitiveness and creation of quality jobs, with clear evidence.
- For maritime sector projects, ability to strengthen the EU's maritime transport value chain, including port activities (e.g. delivery of renewable alternative fuels in container transshipment ports), increased competitiveness and job creation in the European maritime sector.

Replicability (4)

Potential in terms of multiple environmental impacts

- multiple environmental impacts, such as biodiversity protection, land, air and water pollution

New

Quality and extent of the knowledge sharing

- Communication and dissemination activities initiated by the project
- Provide in part B a summary of the knowledge-sharing plan (or for the topic GENERAL-SSP, outline the plan for the activities for knowledge-sharing).
- Describe the communication and dissemination activities planned to promote activities and results of your project and maximise its impact.
- Clarify how you will reach the target groups, relevant stakeholders, policymakers and the general public and explain the choice of the dissemination channels.
- Describe how the visibility of EU funding will be ensured.

The knowledge sharing plan should include a clear and concrete description of all knowledge sharing, communication and dissemination activities initiated by the project at the various project stages.

Quality and Extent of the Knowledge Sharing

- **Knowledge sharing goals:**
 - De-risking innovative low-carbon technologies with regard to wide-scale commercialisation
 - Acceleration of deployment
 - Increasing the undertaking of, and confidence in these technologies by the wider public
 - Maintenance of a competitive market for the post-demonstration deployment of the technologies
- **Check thoroughly ANNEX 2 in call text**
- **Please refer to the “Knowledge Sharing report template” available on the Funding & Tenders portal to better understand the information to be provided during project implementation**
- **Confidentiality will be ensured!**

Project Development Assistance

IF Project Development Ass(PDA) – key highlights

- The EIB has been supporting the European Commission and CINEA, with the implementation of the Innovation Fund through a dedicated **Project Development Assistance (PDA)** to improve the maturity of projects for subsequent applications
- The bank has been reviewing **87 projects** from **20 countries** in the first 6 calls (LSC and SSC 2020, LSC and SSC 2021, LSC and SSC 2022)
- Overall promoters have expressed **high satisfaction about the PDA service** provided

PDA process

