

The Innovation Fund Introduction and calls for proposals

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18 January 2024 Croatia

Content

The Innovation Fund The IF 2023 Call The IF 2023 Auction Call Also important to know



The Innovation Fund



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







- RePowerEU objective of 10Mt of renewable H2 domestic production.
- European Hydrogen Bank: first pilot auction under the Innovation Fund.
- Net-Zero Industry Act: clean tech manufacturing topic (€700 million in 2022, €1.4 billion in 2023).

Contributing to the EU Green Deal



Cleaning our Energy system



Making transport sustainable for all



Renovating buildings



Transforming our economies and societies



Working with nature to protect our planet and health



Leading the third industrial revolution



Boosting global climate action

- The Innovation Fund focuses on **highly innovative technologies** and **flagship large-scale demonstration** or **first-of-a-kind projects**, located in the EEA that can deliver **significant GHG emission reductions**.
- After revision of the ETS Directive the Innovation Fund can implement **competitive bidding** mechanisms to reward the most cost-efficient projects with a lighter selection procedure.
- Since 2020 the Innovation Fund has selected more than 100 projects that have the potential to avoid more than 470 million tonnes of CO₂eq.



Innovation Fund

Deploying innovative net-zero technologies for climate neutrality









EUR 40 billion* to invest from 2020-2030 in EU's climate neutral future

Avoid emissions and boost competitiveness











Energy storage



Carbon capture, use and storage



*based on a carbon price of 75 EUR/tonne



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

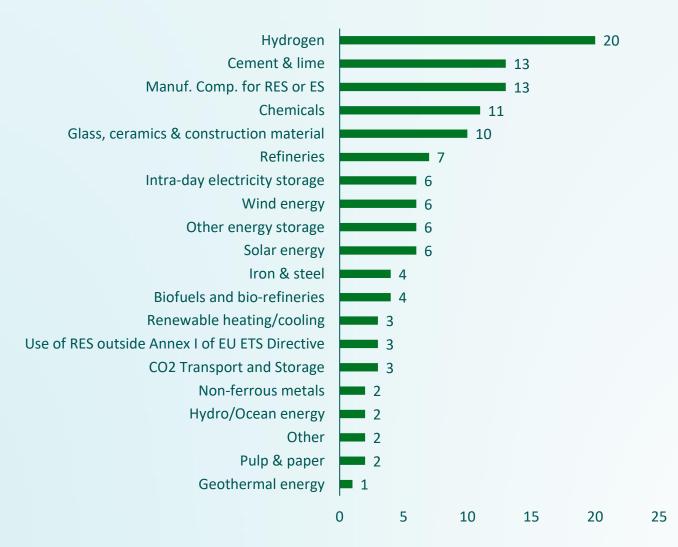
- EUR 4 billion
- Open 23/11/2023



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



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



€ 6.83 Billion EU granted + ongoing GAP



Projects: 104 ongoing +20* invited

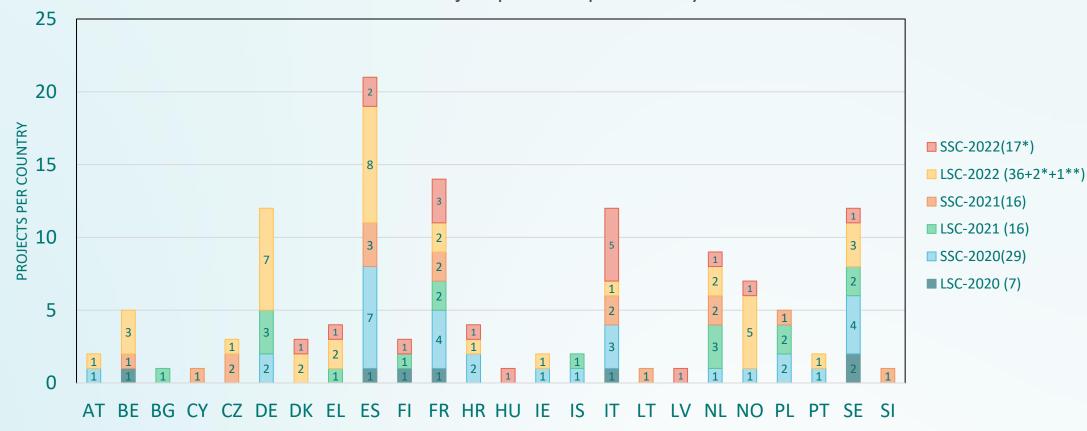
European

Commission

*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

Croatia

Ongoing & pre-selected projects



4 Projects

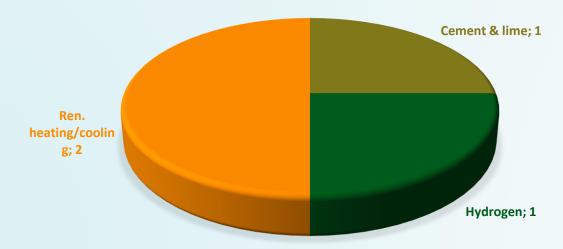


130.4 million € EU contribution



3 824.9 ktCO₂ eq first 10 years

Sectoral distribution









Croatia

Project acronym	Location	Call Name	Innov. Fund Grant (million EUR)	Expected GHG avoidance (ktCO2 eq)	Description	Project status
CCGeo	Draškovec	InnovFund- SSC-2020	4.5	61.3	Produce near-zero carbon power and heat from gas dissolved in water extracted from geothermal wells using the process of Internalization of Carbon Compounds	Pre-FC
DMC	Nova Gradiska	InnovFund- SSC-2020	4.5	43.7	Build a solar thermal heating plant, heat pumps and a storage facility to provide renewable heat to an energy-intensive malt production process in Croatia.	Pre-FC
KOdeCO net zero	Koromaçno	InnovFund- LSC-2022	116.9	3 691	Achieve the first net zero cement plant in Croatia and to create a first-of-its-kind end-to-end carbon capture and storage (CCS) value chain from the Holcim cement plant. And integrate first-of-its-kind water treatment and desalination plants further decreasing the plant's environmental footprint, aiming to become a zero freshwater production site.	Pre-FC
S2H2	Zagreb	InnovFund- SSC-2022	[GAP]	28.9	Transform sewage sludge into hydrogen, thus effectively shaping the local circular ecosystem around the city. Through the S2H2 project, 25 tonnes of the city sludge can be efficiently processed and gasified daily, producing 1 tonne of hydrogen that can be blended into the local gas grid or used as fuel for 20 hydrogen powered public buses.	GAP



Innovation Fund 2023 Call



Innovation Fund 2023 call in a nuthshell

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

Торіс	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 transhipment ports

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



Eligibility

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

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		



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

Eligibility

- Participants have to be **legal entities**; can be established anywhere in the world.
- Projects must be located in the **EEA** (EU Member States and Iceland, Liechtenstein, and Norway)
- The project must:
 - Reach **financial close within 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



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 transhipment ports

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.



^{*(}see the list in the call text)

Award Criteria

Degree of innovation

- 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

GHG emission avoidance potential

- Absolute
- Relative
- Quality of the GHG emission avoidance calculation and minimum requirements

Project maturity

- Technical
- Financial
- Operational

Replicability New

- Efficiency gains
- Further deployment
- Resilience of EU industrial system
- Multiple environmental impacts
- Knowledge sharing

Cost efficiency

New

- Cost efficiency ratio (different formula for Pilot projects)
- Quality of the cost calculation and minimum requirements



Degree of Innovation

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 (<u>mandatory annex</u>)
- Any existing technical due diligence report (optional)



Degree of Innovation

 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)

Very low / incremental innovation

Intermediate or strong

Very strong or breakthrough

Incremental innovation: minor changes or improvements to existing products, processes or business models; implies limited new knowledge / technology; such projects will not be retained.

Intermediate or strong: new or considerably changed technologies or processes or business models; novel combinations of mature technologies; scale-up of innovative technologies

Very strong or breakthrough:

completely new technologies or processes or business models; innovations leading to significant changes that transforms entire markets or industries or creates new ones



Degree of Innovation for topic General - SSP

Innovation at national level

- For <u>small-scale projects</u> (INNOVFUND-2023-NZT-GENERAL-SSP), the reference point can be at <u>European or national level</u>.
- For innovations at national level: the geographical reference of the <u>state-of-the-art</u> 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-ofthe-art at European level, it may receive a higher score.



GHG emission avoidance potential (1)

- 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 (2)

Quality of the GHG emission avoidance calculation and minimum requirements

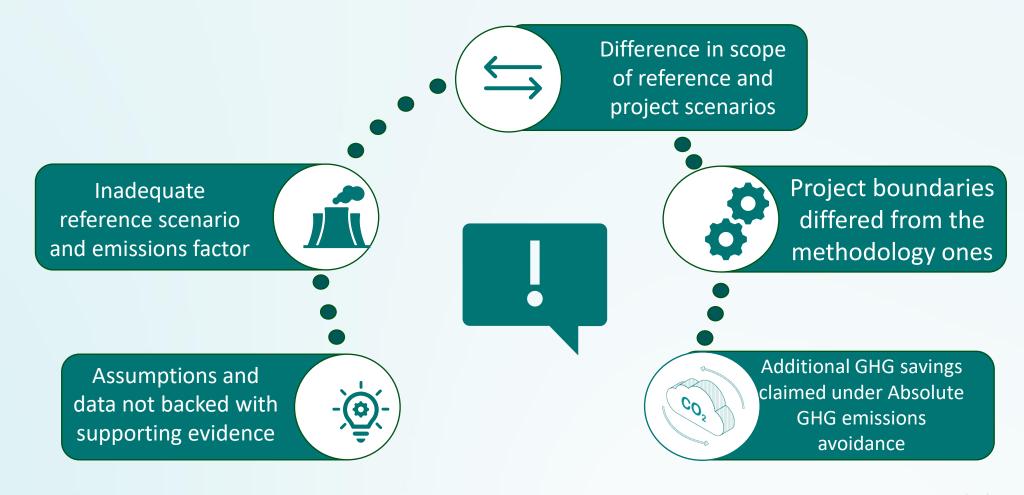
Where relevant, the proposal should demonstrate whether the proposed project meets or not the **minimum requirements**:

- 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% New
 - for INNOVFUND-2023-NZT-PILOTS topic: at least 75%.

Proposals not meeting minimum requirements will be rejected!



Main mistakes on GHG emissions avoidance





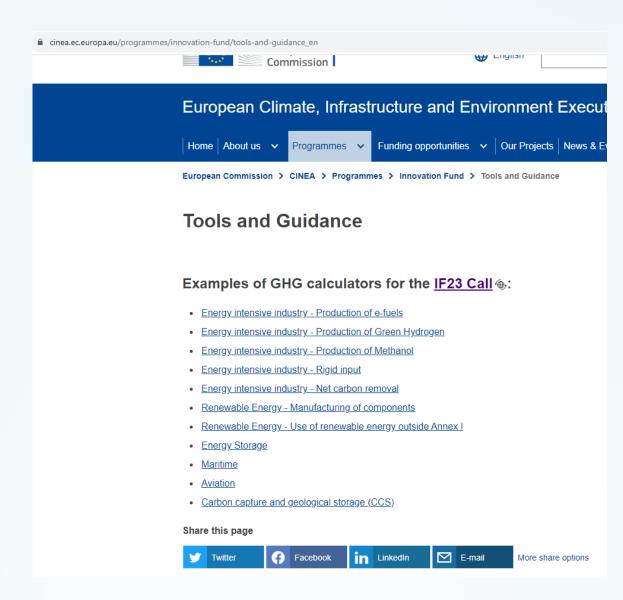
New features of the GHG Calculation criterion

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



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 (<u>mandatory annex</u>)
- Any existing technical due diligence report (optional)



Technical Maturity – technical feasibility

Guiding principle / key questions to reply:

- Explain the degree of <u>technology readiness</u> of the proposed solution and the <u>technical feasibility of</u> <u>delivering the expected output</u> (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 <u>Feasibility</u> <u>study</u> 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 <u>key risks</u> identified in relation to the <u>proposed technology/process</u>,
- Describe the proposed risk <u>mitigation measures</u> and explain why they are suitable
- Moreover, risks identified should be summarised in the <u>risk table (section 3.4 application form)</u>
- Underpin your analysis with the <u>feasibility study</u> and provide the <u>risk heat map</u>

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)



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

1. Ensure concrete evidence of the commitment from each project funder, in particular if your project is not profitable (NPV<0)

7. Provide evidence (main project contracts and financing agreements)

6. Identify & provide <u>effective</u> mitigation measures for key risks and add a sensitivity analysis

Financial maturity

2. Check Business Plan assumptions, their detailed break down and credibility (the more evidence, the better)

3. Make sure your financing plan is robust enough (sources clearly identified with concrete evidence)

5. Ensure consistency across all application documents

4. Follow our guidance on how to calculate your project WACC



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

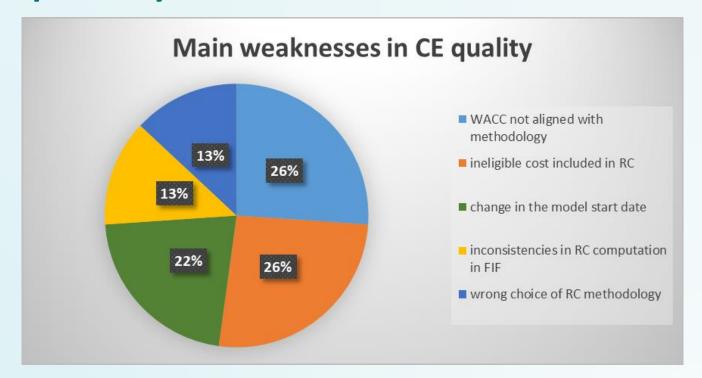
- Cost efficiency is split in two parts:
 - One automatic
 - One "qualitative" on how the computation of Cost Efficiency ratio was made
- Cost efficiency ratio level has minimum requirement (except for Pilots):
 - (a) for all topics except Pilots:
 - If cost efficiency ratio is lower than or equal to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

12 –

(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.



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

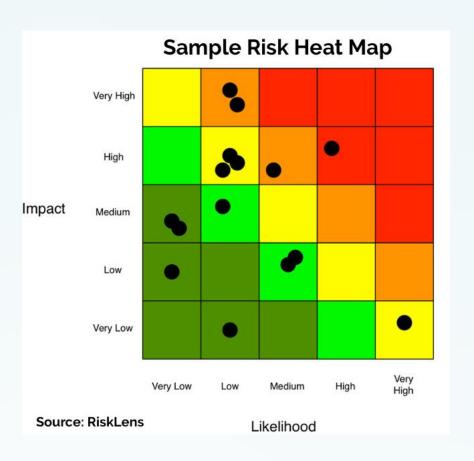
Risks

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





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)



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)



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 <u>resource constraints</u>:
 - 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 costcompetitive 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



- 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 transhipment 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



Quality and extent of the knowledge sharing

- Communication and dissemination activities initiated by the project
- Provide a summary of the knowledge-sharing plan in part B (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.



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

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CALL FOR PROPOSALS | Open

Innovation Fund 2023 Call

Details PAGE CONTENTS Details Status OPEN Publication date 23 November 2023 Description Opening date 23 November 2023 Events Deadline model Single-stage Tutorials Deadline date 9 April 2024, 17:00 (CEST) Supporting documents

Description

On 23 November 2023, the European Commission launched the @Innovation Fund 2023 Call @I 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 6, 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 [2]

Application Process

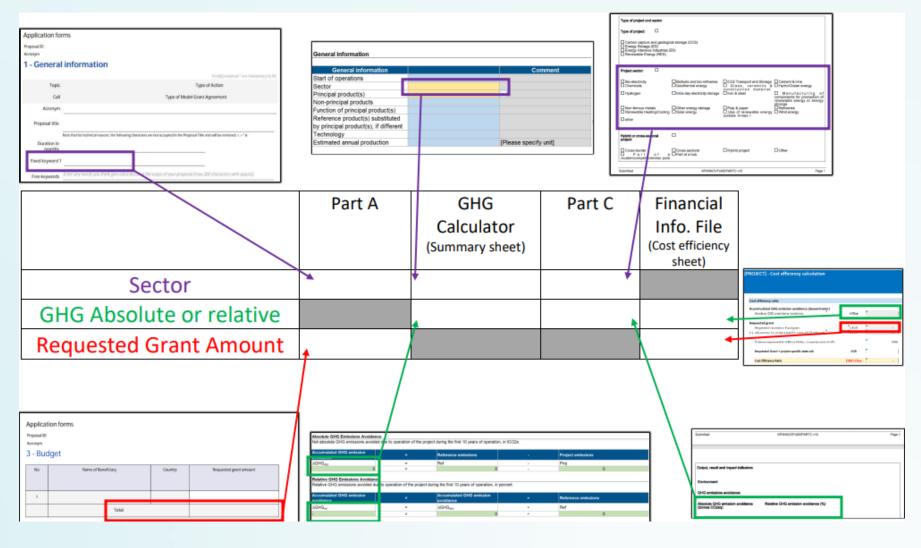
(soon available)

GHG Methodology



Last consistency check before submission

(How to avoid simple mistakes)





Some Recommendations

- Read carefully the call documents and understand well the requirements (including the admissibility and eligibility ones)
- Get familiar with and follow the call methodologies and guidance (GHG and relevant costs)
- Before submitting, please <u>check consistency</u> between different parts and documents of your application
- Help is available:
 - Lessons learned and info-day recordings
 - <u>Tutorial on the application procedure</u>
 - FAQ
 - Innovation Fund helpdesk
 - IT helpdesk
 - The existing Innovation Fund projects dashboard

*Recording, the presentation and extra slides on lessons learned from LSC 2022 will be available on CINEA website



Innovation Fund 2023 Auction



IF23 RFNBO H2 Auction call in a nutshell



Link to Info Day for recordings

⁴⁷Link to Funding and Tenders portal





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
- Auctions-as-a-service





European Hydrogen Bank proposed activities

Domestic market creation

Fixed premium auction(s) under the Innovation Fund (DG CLIMA)

Imports to the EU

Instrument for renewable hydrogen imports TBD (DG ENER)



Transparency and coordination

- Demand assessments
- Hydrogen flows

- Infrastructure needs
- H₂ cost data



Existing European financing instruments

InvestEU
Structural funds
Innovation Fund grants

Existing international financing instruments

Concessional loans
Blending
Guarantees



IF23 Auction 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

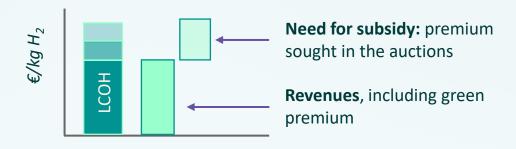
Reducing administrative burdens



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





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 electrolysers

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 LoI for the guarantee from a financial institution
- To sign GA, you need the financial institution to issue the guarantee

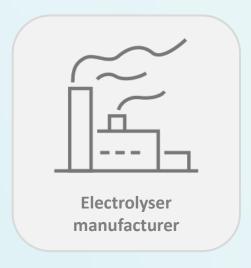
Reporting at the end of the support period

Certification of 70% GHG savings on overall production

Independent third-party certificate or audited report



General cumulation rules with other support



V Other public support is allowed



Rules for public support spelled out in RFNBO Delegated Act



X Cumulation is in general not allowed

V Some exceptions to this rule



V For CAPEX or non-dedicated infrastructure other public support is allowed

X For OPEX related to consumption of hydrogen from auction winner other public support is not allowed an Commission

illustrative

Auctions-as-a-Service

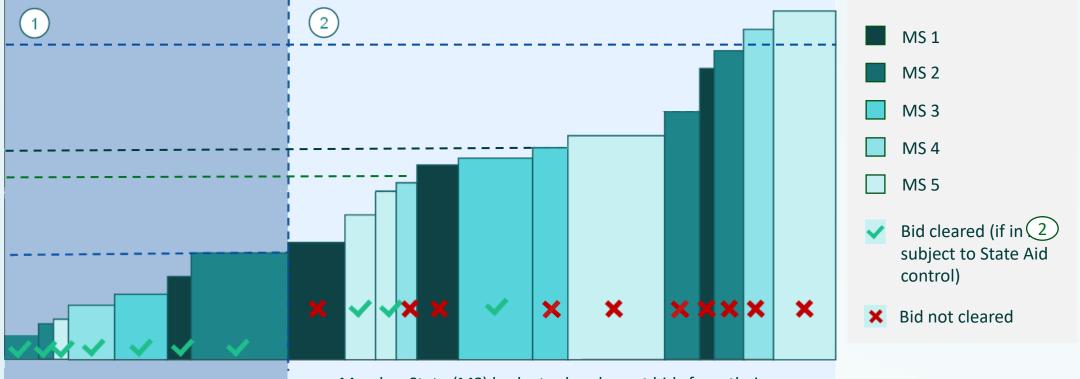
€/kg_H2

Auction ceiling price (4.5 €/kg)

Exogenous ceiling price for non-marginal bids

Exogenous ceiling price for the marginal bid

IF clearing price



IF budget clears lowest bids until exhausted, independent of MS of the bids ("best in Europe")

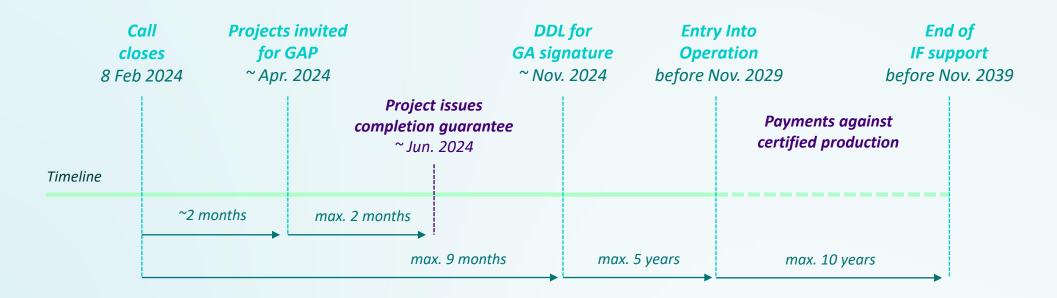
- Member State (MS) budgets clear lowest bids from their own MS only ("best in MS"), until national budget is exhausted. Award subject to State Aid control.
- MS who contribute no own budget cannot award any national bids.

kg_H2



IF23 Auction implementation timeline

indicative

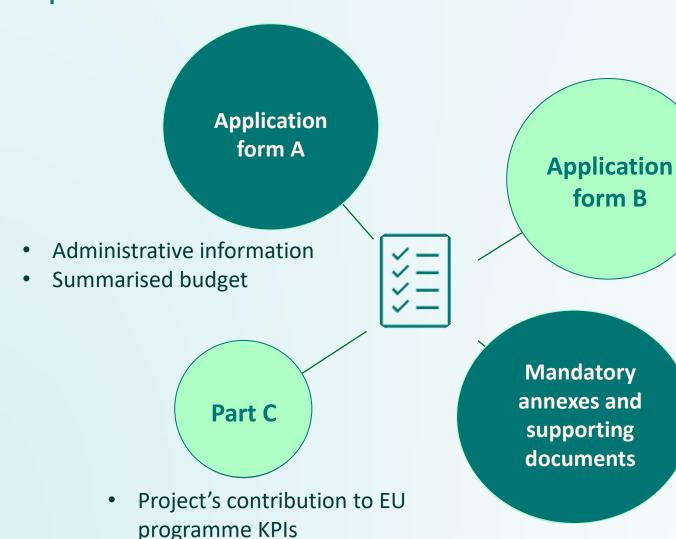


- Evaluation is simplified (compared to regular grants) and much faster: approx. 2 months
- If the completion guarantee is well prepared, winners could sign grants well before the deadline for GA Signature
- Maximum time to Entry into Operation (EiO) of 5 years to allow projects to manage delays, but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



Application Process

Compulsory documents

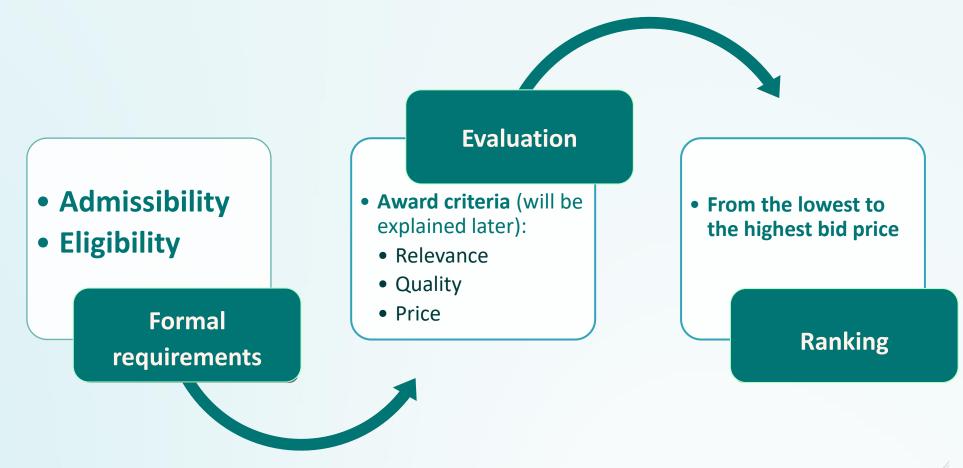


- Technical description
- Up to 50 pages

- Detailed budget table/calculator (Financial Information File (FIF) with the bid)
- Participant information
- Timetable
- Renewable electricity sourcing strategy
- Off-take and price hedging strategy
- Equipment procurement strategy
- Permits, licences, autorisations, ...
- Completion guarantee letter of intent (at proposal stage) and completion guarantee (during GAP)

Application Process

Evaluation and award procedure - Evaluation





Relevance and Quality

Relevance

Pass/Fail

(i.e. production of RFNBO hydrogen based on the sourcing strategy)

Quality

Pass/Fail

Technical maturity
Financial maturity
Operational maturity



Pass/Fail

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





Relevance and Quality

Į.

consistency of

the documents

Credibility &

Renewable electricity sourcing strategy

Hydrogen off-take and price hedging strategy

Electrolyser procurement strategy

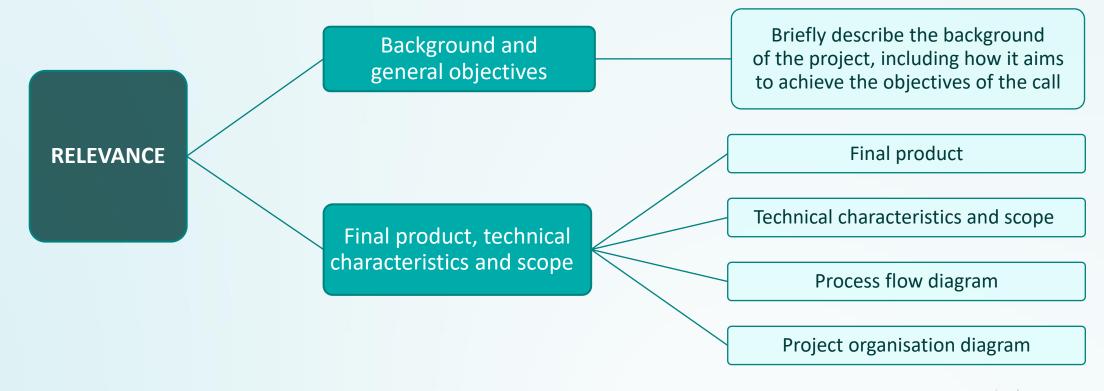
Plan to receive environmental permits on time

Plan to receive grid connection permits on time

Completion guarantee letter of intent



Relevance and Quality





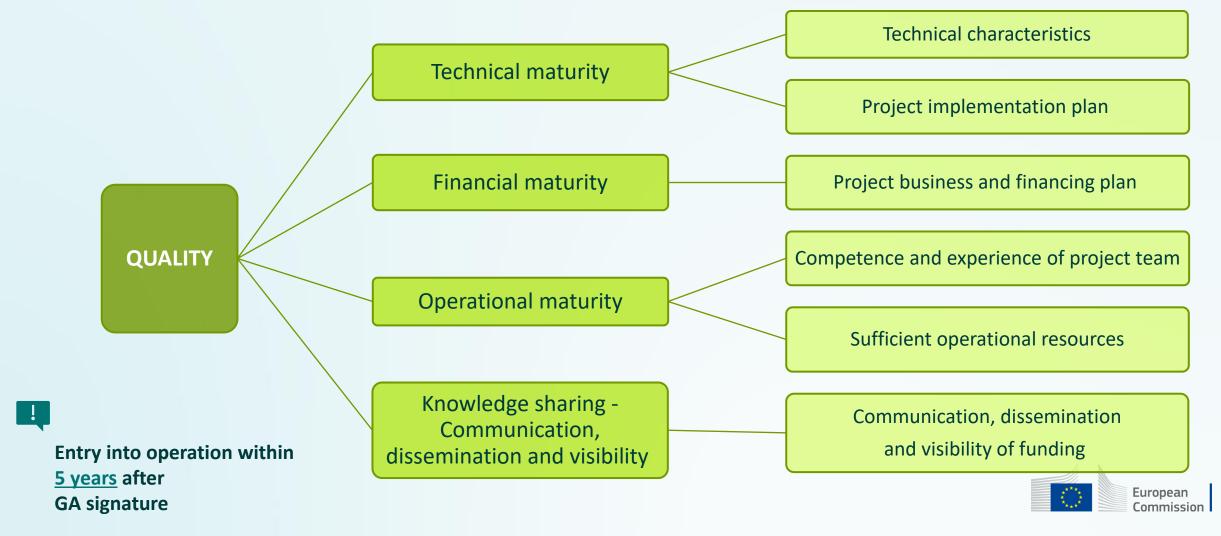
Solid strategies to reach EiO within time

Renewable energy sourcing strategy:

- Demonstrate that the project has a credible plan and has taken initial precontractual steps (for min. 60% of volumes) towards securing renewable volumes and profiles in line with the RFNBO volume stated in the bid.
- Characteristics align with conditions set down in in the Delegated Acts of the RED-II for the definition of RFNBO.
- Guarantees of Origin (GOOs) alone are not sufficient to fulfil the RFNBO requirements.



Relevance and Quality



Letter of intent and completion guarantee

Letter of intent:

- To be provided in the application stage.
- From a financial institution rated at least (BBB-/Baa3).
- Template need to be used.

Completion guarantee:

- Signed completion guarantee using the template due 2 months after receiving invitation for GAP.
- Provided by a financial institution rated at least (BBB-/Baa3).
- Covering 4% of the maximum grant amount.
- Validity until 6 months after Entry into Operation.



Quality criteria – Technical maturity

Project implementation plan/schedule	 State of play Timeline for obtaining the required permits ✓ For achieving project's planned financial close ✓ For EPC contracting ✓ For achieving entry into operation Project implementation state at submission of the application
Gantt Chart	The deadlines defined in the Call document
Project's supporting documents listed in section 5 of the Call document	 Sourcing strategy Equipment procurement strategy Status of permits and authorisations



Solid strategies to reach EiO within time

Electrolyser procurement strategy:

- Pre-contractual steps (MoU, LoI) with an electrolyser manufacturer.
- No geographical restriction.
- It should include at least (i) type of technology, (ii) declaration of origin, (iii)
 Electrolyser capacity in Mwe, (iv) expected delivery date, (v) terms of delivery, and (vi) price.



Quality criteria – Financial maturity

Objective:

assess the project capacity to reach entry into operation within 5 years of grant signature.

Credibility of business plan

Application Form

B 2.2 + FIF

Credibility of
Off-take and price
hedging strategy

Soundness of the financing plan Application Form B 2.2 + FIF

Consistency across all documents of the application is key!



Business plan

Credibility of the business plan:

- Briefly describe the proposed project business model and value proposition.
- Describe and substantiate:
 - Main revenues stream (hydrogen off-takers, oxygen, heat, etc.)
 - Cost assumptions (CAPEX and OPEX)
 - Include a breakdown of prices and volumes assumed



Financing plan

- Describe the financing plan for the project including the type of funding used (equity, debt, shareholder loan) the size of shareholders and banks support, amount of capital injections.
- Explain clearly the complete sources and uses of funds of the project.
- Demonstrate financial viability of your project. Does the financing plan cover construction costs and potential negative operational cash flows?
- Describe the funding structure in the organisational chart highlighting the main legal entities and where the debt (if any) will be raised (will it be recourse/non-recourse?).



Off-take and price hedging strategy

- Describe the strategy to secure key contracts with off-takers providing:
 - Names and industry of off-takers.
 - Duration of agreement, method of delivery and consumption profile.
- Demonstrate that the project has a credible plan and has taken initial pre-contractual steps (for min. 60% of total volumes) towards securing off-take, provide contractual evidence for example letters of support, indicative terms from MoU's.
- No restrictions on the off-taker sector: for example, self-consumption and blending into gas network allowed.
- Demonstrate that the project's cost (electricity) and revenue (off-take) structures hedge against excessive market variability.



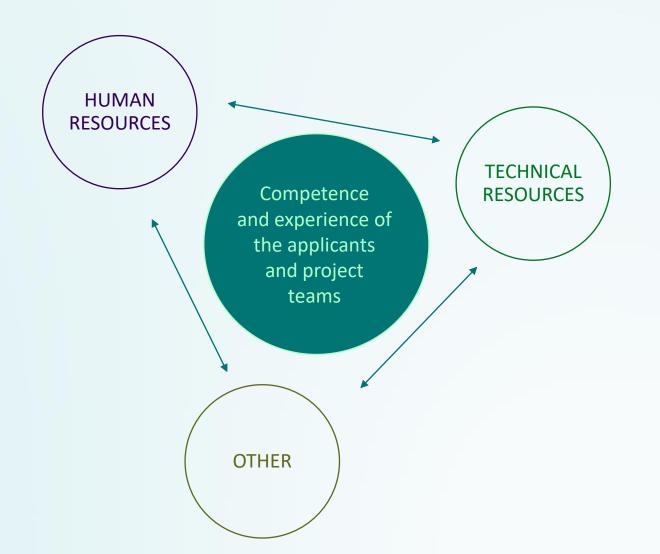
How to fill in the Financial Information File - Annex I to Part B (Detailed Budget table)?

- Fill in only the cells in yellow in the FIF Inputs tab (in k€, (+/-) for revenues or costs).
- Bid components:
 - Fixed Premium Price is at the discretion of the applicant to best adapt its bidding strategy. Maximum eligible bid price ("ceiling price") at €4,5/kg.
 - Expected yearly annual volume is calculated automatically by the FIF as the sum of the applicant inputs volume per off-taker.
 - Total grant amount (cell D53 of FIF Inputs Tab) is calculated automatically and should be used in the application.
 - Completion Guarantee amount (cell D55 of the FIF Inputs Tab).
- Ensure the financial projections inputs are coherent with the assumptions of the business plan, energy sourcing strategy, off-take strategy and electrolyser procurement strategy.





Quality criteria – Operational maturity



Exceptionally, the measures proposed to obtain them by the time the task implementation starts.



Quality criteria – Operational maturity

Workplan, work packages, activities, milestones, deliverables and timing

Work plan

A brief description of the overall structure of the work.

Work packages 2-21 will be composed of certified production of RFNBO H₂.

Credibility & level of detail of project implementation plan.

Consistency between work package descriptions, deliverables and milestones.

Work packages

WP1: up to Entry Into Operation

WP2 – WP21:

For years 2-10 of operation.
 Two work packages per year: end of months
 6 and 12 of year N of operation.

Mandatory milestones

WP1:

> Milestone 1:
Financial Close
> Milestone 2:
Entry Into Operation

WP2 - WP21:

Each WP ends with a (mandatory) milestone.

Mandatory deliverables

Linked to WPs and corresponding milestones.



Quality criteria – Operational maturity

Consortium: beneficiaries and other participants

- Brief presentation of the applicant(s) (including any affiliated entities involved in the action) outlining areas of overall and project-specific expertise, number of employees, founding year, geographical locations.
- Relationship between the participants in the project framework.
- Attach the project supporting documents (in particular, participant information).

Consortium roles - Project teams and staff – Project management, decision-making, quality assurance and monitoring

- Role of each of the participants in the project.
- Competence and experience of the applicants and their project teams, including operational resources (human, technical and other; see also participant information).
- Governance structure of the consortium implementing the project.
- Contractual and legal relationships between the participants in the project.



Key Information

- Auction opened on 23 November and close on 8 February
- Available application information through in <u>EU Funding & Tender</u>
 <u>Portal</u>
- Any questions? Ask us at <u>EU Funding & Tenders InnovFund HelpDesk</u>



Also important to know



Forthcoming events

IF SSC 2022

Results to be 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



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for the

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Deploying innovative net-zero technologies for climate neutrality

More information here:



Join as project evaluator for Innovation Fun

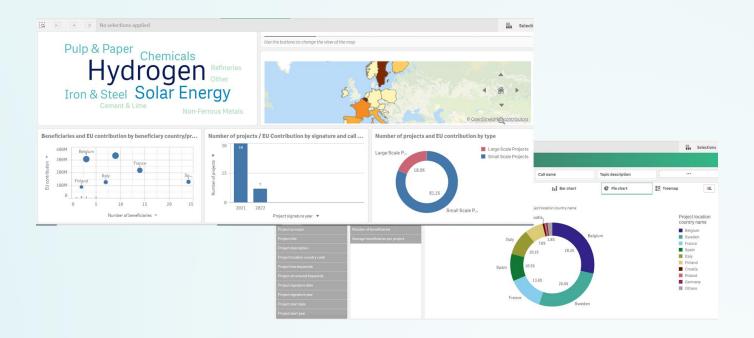
- Technical expert
- Financial expert
- GHG expert
- Rapporteur

Sign up as an Expert (europa.eu)





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

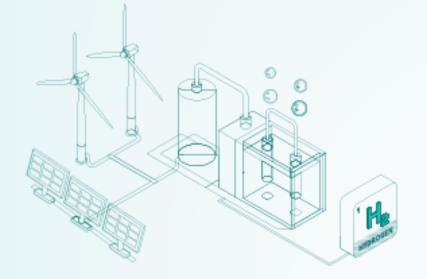


Further info, planning of new calls, recorded webinars and videos available on the IF Website:

https://europa.eu/!rx34Dt

And more videos available on YouTube:

https://bit.ly/2WxK8w7





Let's keep in touch



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