

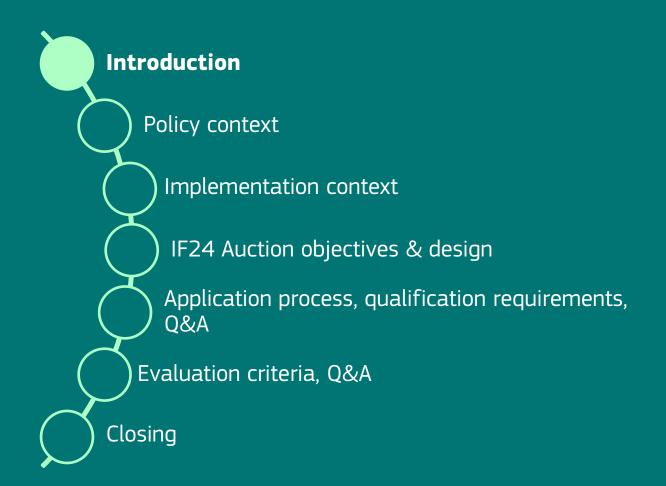
Innovation Fund 2024 Auction

INFO DAY

10 December 2024

IF24 Auction

Roman DOUBRAVA, Head of Unit CINEA C4 - Innovation Fund





Disclaimer

The recording of the Info-Day held on 10 December 2024 for the IF24 Auction for RFNBO Hydrogen, as well as the presentation support materials, are made public to provide potential applicants with general guidance to help them complete their proposals.

If there is any conflict between:

- the information provided during the Info day session itself, its recording, the Financial Information File tutorial recording, and the presentation support materials on the one hand, and
- the provisions set out in the official call text for RFNBO Hydrogen as well as the related FAQ posted on the EU Funding & Tenders portal on the other,

the latter two documents take precedence over the materials from the Info day and act as the text of reference for the IF24 Auction.



Q&As

We will answer questions throughout the Info day!

- 1. Take your mobile device
- 2. Go to slido.com
- 3. Enter the code **#IF24Auction**
- 4. Ask your questions!

Thank you!



Policy context

Stefanie HIESINGER, Head of Unit

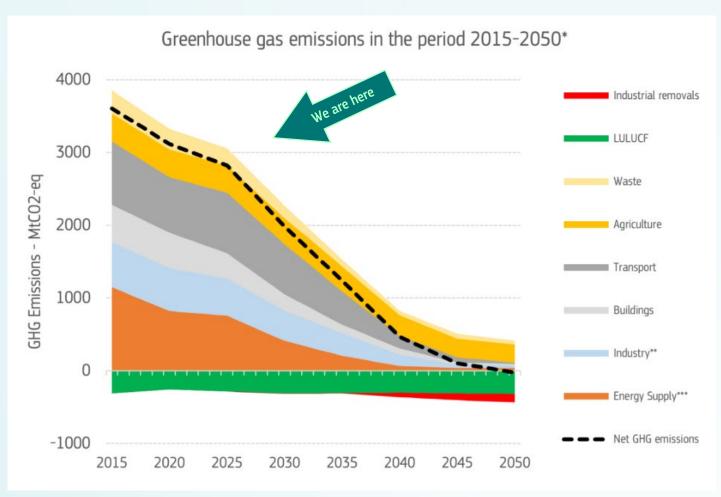
DG CLIMA C2 - Low Carbon Solutions (II):

Research & Low Carbon Technology Deployment





To achieve GHG abatement in line in net-zero objectives, all sectors require investments



*Source:. 2040 climate target - European Commission





INNOVATION FUND

Funded by the EU Emissions Trading System

Deploying innovative net-zero technologies for climate neutrality



€40 billion* available between 2020-2030





grants awarded through regular calls and auctions



avoid GHG emissions, boost competitiveness



supporting innovation in:



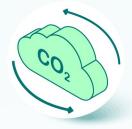
Energy-intensive industries



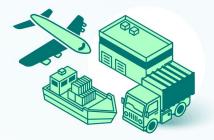
Renewable energy



Energy storage

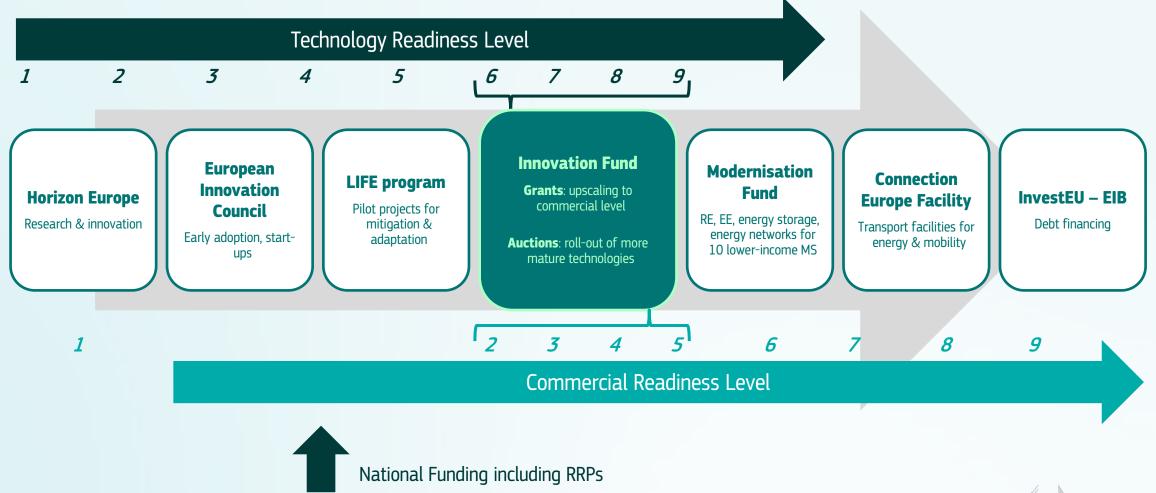


Carbon capture, use and storage



Net-zero mobility and buildings

A targeted projects portfolio



The Innovation Fund supports urgent policy priorities







- Net-Zero Industry Act: clean tech manufacturing (€0.7 billion in 2022, €1.4 billion in 2023, 1.7 billion in 2024) IF24 Call (dedicated topic) + IF24 Battery
- European Hydrogen Bank: domestic auctions for renewable hydrogen under the Innovation Fund
- Wind Package: clean tech manufacturing topic & Project Development Assistance (PDA)
- Strategic Technologies for Europe Platform (STEP): STEP Seal for funded projects
- Industrial Carbon Management (ICM) Strategy: support CCUS deployment since 2020



The European Hydrogen Bank (EHB)

- Announced in the State of the Energy Union 2022 linked to REPowerEU objectives. Communication adopted on 16 March 2023
- Pilot auction (IF23 Auction) launched in November 2023, including "Auctions-as-a-Service" scheme (AaaS)

Domestic market creation

Fixed premium auctions under the Innovation Fund (DG CLIMA)

Imports to the EU

Instrument for renewable hydrogen imports (TBD)

Cooperation with H₂ Global (DG ENER)

Transparency and coordination

- Demand assessments
- Demanu assessment
- Hydrogen flows

- Infrastructure needs
- H₂ cost data

Existing European financing instruments

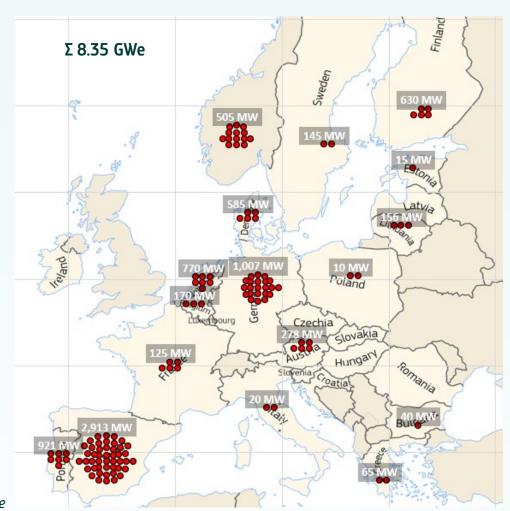
InvestEU
Structural funds
Innovation Fund grants

Existing international financing instruments

Concessional loans
Blending
Guarantees

IF23 Auction, a high-level of participation & competition

- **€800 million** budget (Innovation Fund)
- + **€350 million** (Germany's contribution in the AaaS scheme)
- 132* bids received from 17 different EEA countries
- Only 13 projects failing admissibility and eligibility criteria



Slido #IF24Auction

6 projects awarded for grant agreement signature, covering 1.4 GWe of electrolyser capacity

Project acronym	Project coordinator	Project location	Bid price (€/kg)	Bid volume (kt H ₂ /10years)	Bid capacity (MWe)	Expected GHG abatement* (ktCO ₂ /10years)	Total requested funding**
eNRG Lahti	Nordic Ren-Gas Oy	Finland	0.37	122	90	836	€ 450,228,375
Grey2Green-II	Petrogal S.A.	Portugal	0.39	216	200	1477	€ 84,227,910
HYSENCIA	Angus	Spain	0.48	17	35	115	€ 8,104,918
SKIGA	Skiga	Norway	0.48	169	117	1159	€ 81,317,443
Catalina	Renato Ptx Holdco	Spain	0.48	480	500	3284	€ 230,463,819
MP2X	Madoquapower 2x	Portugal	0.48	511	500	3494	€ 245,178,772
			Ø €0.45	Σ 1515 kt_H ₂	Σ 1442 MWe	Σ 10 365 kt_CO ₂	Σ € 694,521,237

^{*}Calculated vs. 6.84 t_CO2e/t_H₂ (<u>2021-2025 ETS benchmark</u>) not taking into account additional carbon abatement due to substitution effects in the H₂ end use application (conservative estimate). ** Remaining budget will accrue back to the Innovation Fund.

Objectives fulfilled – IF23 Auction









Reducing the cost gap

between renewable & fossil H₂ in the EU



of up to €0.48 /kg of renewable H₂ Allowing for **price discovery** & renewable **H₂ market formation**



Price information shared on selected bids & anonymised European bid curve

De-risking

European hydrogen projects



€694 million in grant support for 6 renewable H₂ producers

Reducing

administrative burden



Simplified application process & results provided in less than 3 months



IF24 Auction

After the success of the pilot auction, we have opened a second auction (IF24 Auction):

- Total budget: €1.2 billion
 - General topic: €1 billion
 - Maritime topic: €200 million
- Additional €836 million budget (up to) under the AaaS scheme

Open for applications: **3 December 2024**Applications submission deadline: **20 February 2025**



Implementation context

Matthias LANGEMEYER, Head of Department CINEA C – Green research and innovation





CINEA in a nutshell



• > **€65 billion** for 2021-2027



> 7 EU Programmes



from **3700 projects** managed (2024)
 to > **4000+** by 2027



• > **600 staff** by 2027

Policy feedback as an essential part of funding activities

Expertise in managing the complete lifecycle of projects, at the service of beneficiaries

Exploitation of **synergies** & dynamic ways to work across programmes

Innovation Fund portfolio





208 projects
123 ongoing
85 under GAP*

€12.04 billiongranted +

under GAP*

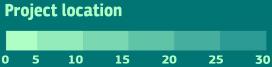
~929 Mt CO₂e to be avoided**

Over 1 500 proposals received

More than €12 billion allocated to selected projects







Hydrogen portfolio

- 40* hydrogen/hydrogen-related ongoing projects**
- Implemented in **14 EEA countries**
- For a value of around **€3 billion** grants committed
- Total expected RFNBO hydrogen production: 0.5
 million tonnes/year***

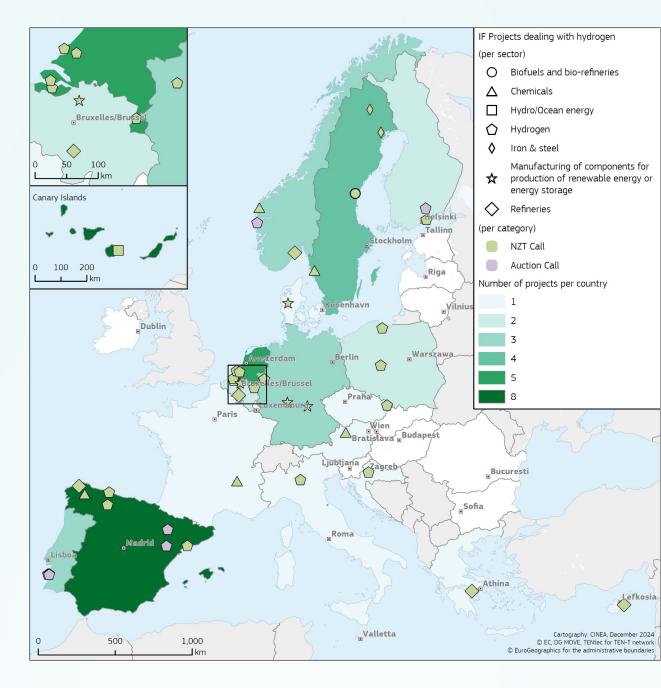
of which:

- 6 ongoing auction projects
- Around **€700 million** grants committed
- 1.52 million tonnes RFNBO Hydrogen expected to be produced in 10 years of operation

*3 projects requested to withdraw.

**Includes all projects that have the hydrogen production, derivatives and
manufacturing of electrolyser components.

***Only considering projects with hydrogen as principal product.



Objectives & design

Javier GARCIA, Policy Officer Johanna SCHIELE, Policy Officer Ewelina DANIEL, Policy Officer

DG CLIMA C2 - Low Carbon Solutions (II): Research & Low Carbon Technology Deployment





IF24 Auction timeline

April – 6 June 2024

Written consultation with stakeholders

26 September 2024

Publication of final T&Cs on our website

20 February 2025

Closing of the Auction



Consultation event, recording available here 3 December 2024

Opening of the Auction

Small updates in the call text compared to T&Cs (see Q&As document for details)

Spring 2025

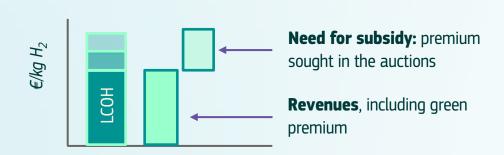
Bids selection



IF24 Auction overview

- Objective: **support production of Renewable Fuel of Non-Biological Origin (RFNBO) Hydrogen** as defined in the Renewable Energy Directive & its Delegated Acts
- Also: contribute to achieving security of essential goods supply & to Europe's industrial leadership & competitiveness
- **Fixed-premium auction**, single stage, pay-as-bid bidders are free to decide their bidding strategy
- Pass/fail qualification criteria & ranking based on price

Fixed-premium auction



Bids ranked on price only



IF24 Auction vs. IF23 Auction

Increased budget to €1.2 billion

• AaaS: additional contribution up to **€836 million** from Austria, Spain, & Lithuania

Budget divided in 2 topics

- General: €1 billion no off-taker restrictions
- Maritime sector: €200 million

Increased maturity requirements for bidding projects (mandatory time to reach Financial Close, higher completion guarantee) & **lower ceiling price**

Resilience criteria

 "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness" – reflected in qualification criterion + other requirements

General eligibility conditions

- Location: within the EU/EEA (no virtual production)
- Installed capacity: min. 5 MWe, new capacity, single location (no virtual capacity pooling)
- Projects must limit the sourcing of electrolyser stacks with surface treatment or cell unit
 production or stack assembly carried out in China to no more than 25% (in MWe) of the
 total electrolyser capacity as expressed in the bid
- Off-takers: no restriction (general) / min. supply to maritime off-takers (maritime)
- Bid ceiling price: €4/kg RFNBO Hydrogen
- Maximum grant support period: 10 years
- Maximum size of the bid: €250 million (general) / €200 million (maritime)



Key implementation arrangements 1/2

- Financial close: within **2.5 years** after signing Grant Agreement
- Entry into Operation (EiO): within **5 years** after signing Grant Agreement
- Completion guarantee: **8%** of the requested grant covers reaching Financial Close & EiO under the call requirements
- Payments: no payments before EiO; then, biannual basis €/kg of RFNBO
 Hydrogen produced, certified & verified for a maximum period of 10 years



Key implementation arrangements 2/2

- Production requirements: semi-annual production may be increased to up to 140% of planned. Total grant amount cannot be increased. Production cannot fall < 30% of planned production for more than 3 rolling consecutive years
- Compliance with the criteria during implementation: monitoring of maritime offtakers, resilience criteria, and certification of 70% GHG savings on overall production
- Cumulation with other public funding: limitations apply, same as for IF23
 Auction

A dedicated topic for the maritime sector 1/2

After its 2023 revision, the ETS Directive extended to the maritime transport. **20 million allowances** to be deployed by the Innovation Fund by 2030 to support the decarbonisation of the maritime sector, through **dedicated topics**

Specific eligibility condition:

- projects presenting pre-contractual off-take agreements in their applications, with
 off-takers belonging to the maritime sector covering at least 60% of their
 planned RFNBO H₂ production as stated in the bid
- monitored throughout the project's operation



A dedicated topic for the maritime sector 2/2

Off-taker in the maritime sector = one that will use the hydrogen (or the hydrogen derivative, if integrated project) produced by the project for **carrying out/making use of bunkering activities in ports within the EEA**

 Fuel traders and/or intermediaries (including storage facilities), are not eligible as off-takers, neither are virtual agreements

Documentation to be presented as part of the "off-taker strategy":

- 1. Self-declaration from the off-taker stating that it belongs to the maritime sector, &
- 2. If a shipping company: the Maritime Operator Holding Account (MOHA) number of that company and/or the IMO unique company & registered owner identification number, or proof of maritime chartering agreements in the case of bareboat charterers
- 3. If a provider of bunkering activities (including fuel supply, & operation of bunkering): endorsement letter from a maritime authority, Industry Associations, Port Authorities, or a valid statement of a third-party auditor

New resilience requirements

(I) "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness"

Assessing projects' contribution to a diversified supply chain and avoiding building dependency on a single third country which may threaten the security of supply of electrolysers in Europe.

(II) Compliance with standards

ISO Standard: ISO 22734:2019

Cybersecurity: present a cybersecurity plan at Entry into Operation

(III) **Increased information** requirements as part of the "Electrolyser procurement strategy" documentation

(IV) **Risks of investigations:** reminder of existing rules under the Foreign Subsidy Regulation, State aid and Trade Defence Instruments

Evidence to be provided at bidding stage

Monitoring how the requirements are fulfilled at Financial Close, Entry into Operation & end of monitoring period

New resilience requirement (I)

(I) "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness"

Background:

- alignment with the objectives of Net-Zero Industry Act
- significant risk of increased & irreversible dependency of the EU on imports of electrolysers originating in China

New award sub-criterion under "relevance" (pass/fail assessment)

Projects must limit the sourcing of electrolyser stacks with surface treatment OR cell unit <u>production</u> OR stack <u>assembly</u> carried out in China to not more than 25% (in MWe) to pass

Electrolyser cell: electrodes +diaphragm/ membrane/solid electrolyte

Evidence needed to underpin the claim in application (self-declaration + MoU/LoI from the electrolyser OEM and implementation will be monitored)



Source: IRENA



New resilience requirement (II)

(II) Compliance with standards: **ISO standards** + **cybersecurity plan**

- ISO 22734:2019 for "Hydrogen generators using water electrolysis Industrial, commercial, and residential applications" or latest approved version replacing it
- Cybersecurity plan: outlining how, in order to ensure the security of the installation, the operational control of the installation remains within an entity established in the EEA and the data are stored within the EEA
 - The operator of the electrolyser must be an entity established in the EEA. (i.e. having operations in the EEA)
 - The project's data must be stored on project/company premise on their own server in EEA or data is on the cloud but data centre serving this cloud must be in the EEA (incl. server redundancies)



New resilience requirement (III)

(III) **Increased information** requested as part of the "Electrolyser procurement strategy documentation"

- Intended origin of equipment (information that might be published)
- **Critical Raw Materials (CRM) intensity** of the equipment (% of value of electrolyser allocated to critical raw materials)
- Recycling strategy/equipment end of life strategy of the electrolyser manufacturer
- What **standards** does the equipment comply with
- Information whether the electrolyser supplier has signed up to a responsible business code of conduct
- Whether the manufacturer (established in Europe) has received **foreign financial contribution** over the past 3 years ("no information available" will have to be explained)



New resilience requirement (IV)

(IV) **Risks of investigations:** reminder of existing rules under the Foreign Subsidy Regulation (FRS), State aid and Trade Defence Instruments (TDI)

- **FRS**: Investigations to companies **established in the EU** that might have received foreign subsidies which could distort the competition in the internal market
- **TDI**: Investigations to unfair trade practices focusing on companies **established outside the EU** (e.g. subsidy schemes, dumping practices affecting all sector etc.)



Compliance during implementation

At financial close:

- Signed contract with electrolyser supplier that states electrolyser origin and has a clause confirming that the supplied electrolyser stacks will allow the bidding project comply with the sourcing of electrolyser stacks limitations under "Achieving security of supply of essential goods and contributing to Europe's industrial leadership and competitiveness" criterion.
- Signed off-take agreement with an off-taker belonging to the maritime sector covering at least 60% of the planned volumes (maritime topic).

At entry into operation:

- Proof of compliance with ISO Standards and presentation of a Cybersecurity Plan.
- Self-declaration from electrolyser supplier that states and contain <u>sufficient evidence</u> to prove that the sourcing of electrolyser stacks limitation is complied with.

During implementation:

Report on changes in the electrolyser or in the off-take agreement status.

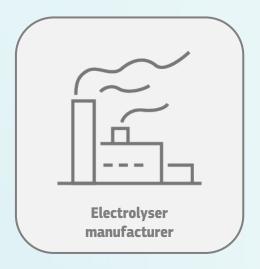
At the end of implementation:

- Report confirming compliance with resilience criteria.
- Third-party certification that at least 60% of the produced volumes were supplied to an off-taker of the maritime sector.
- Certificate of characteristics of total output produced. Certification of the total volume of hydrogen produced by the awarded capacity as meeting at least 70% GHG reduction.



Combination with other public support

As general rule: strict prohibition of double funding from the EU budget. Any given action may receive only one grant from the EU budget.



V Allowed

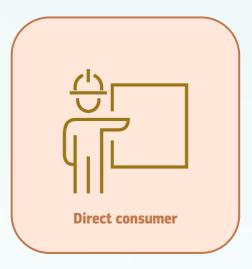


Rules for public support spelled out in RFNBO Delegated Act



X In general not allowed





V Allowed for CAPEX or non-dedicated infrastructure

X Not allowed for OPEX related to consumption of hydrogen from auction winner

Exceptions for electrolysers



X Cumulation is in general not allowed

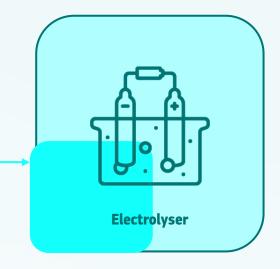
V Some exceptions to this rule

V Very early stages of the project (e.g. feasibility, FEED studies, research)

V Capacity expansion

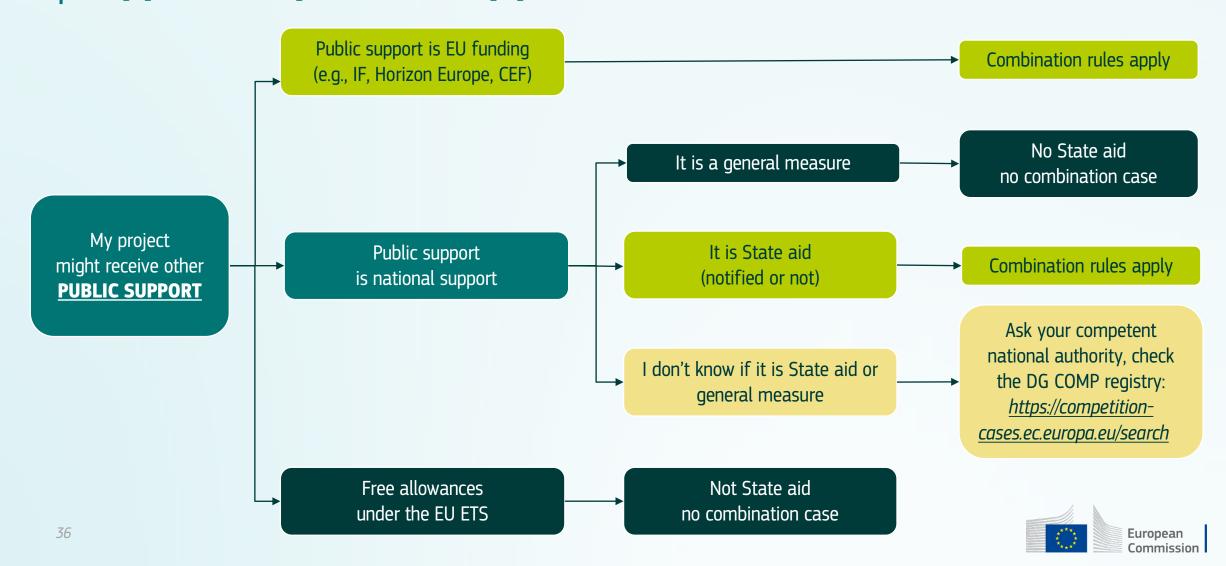
V Reduction from levies on electricity consumption, which finance energy and environmental policy objectives (as described in point 403 and section 4.11 of the CEEAG)

V Support for transport and storage infrastructure connected to the project, provided that the infrastructure is not dedicated to this project only





Types of public support



Auctions-as-a-Service (AaaS)

EEA countries can use the competition to **allocate** *additional* **national funds to** *national projects*. For IF24 Auction, contributions to General topic:

Austria: €400 million

Spain: €280-400 million*

Lithuania: €36 million

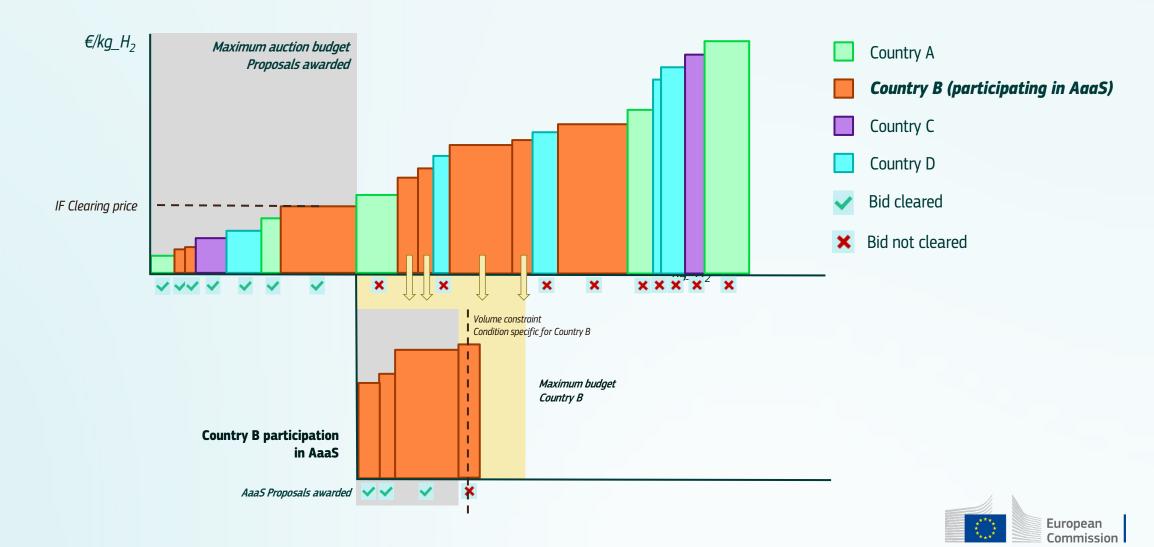
The auction is by design 'State aid' = CEEAG compatible:

- Notification facilitated with the help of Commission templates
- Note: no adjustments for fast State aid clearance

Avoid unnecessary administrative burden of developing & running new support schemes Streamline renewable hydrogen funding across the EEA

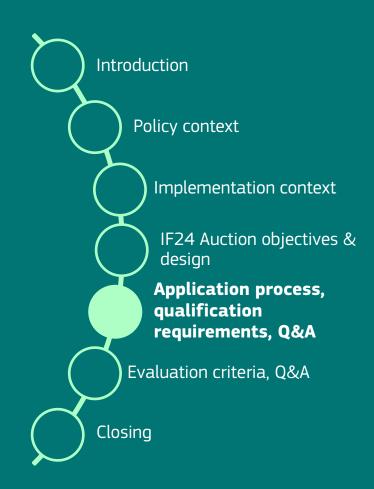


AaaS concept



Application process & requirements

Roman DOUBRAVA, Head of Unit CINEA C4 - Innovation Fund





Application process - Call objectives & scope

INNOVFUND-2024-AUC-RFNBOH2-GENERAL

Fixed Premium Auction for RFNBO hydrogen production



to cost-efficiently support the new production of Renewable Fuel of Non-Biological Origin (RFNBO) hydrogen



installation of new additional RFNBO hydrogen capacity & the verified and certified production from this installation for a period of up to 10 years

INNOVFUND-2024-AUC- RFNBOH2-MARITIME

Fixed Premium Auction for production of RFNBO hydrogen production for the maritime sector



to provide specific support to the production of RFNBO hydrogen to be used by stakeholders in the maritime sector



projects must supply at least 60% of their expected total RFNBO hydrogen production to off-takers belonging to the maritime sector



Application process - Scope & indicative deadlines

3 December 2024

Auction opening

March - May 2025

Evaluation

November 2025

Latest Grant Agreement signature



May - June 2025

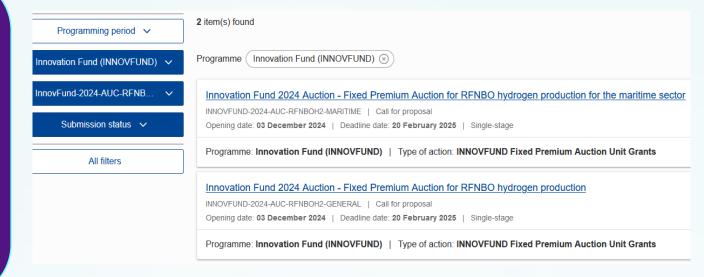
Results



Application process - How to apply & mandatory documents

All relevant information to apply:

- EU Funding & Tenders Portal
- Application process tutorial
- Financial Information File (FIF) tutorial
- Info Day recording and slides
- Innovation Fund Helpdesk
- Q&A on the general design of the IF24 Auction



Call information

on EU Funding & Tenders portal

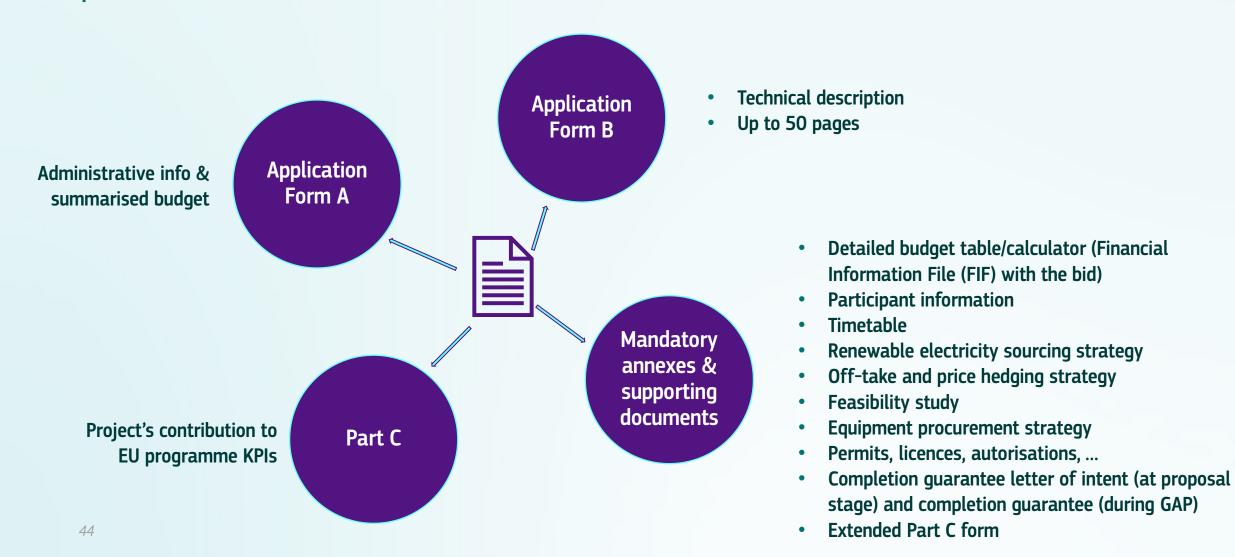


Application process





Application process - Compulsory documents



Application process - Admissibility & eligibility

ADMISSIBILITY

Proposals must be:

- 1. Submitted before the call deadline
- 2. Submitted electronically
- 3. Complete
- 4. Readable, accessible, printable

ELIGIBILITY

Participants - legal entities established in any country in the world

- Comply with legal entity checks (KYC, AML, Anti Bribery, etc.)
- Comply with EU exclusion situation limitations

Eligible activities – explained on following slides

Geographic location – target countries Member State or EEA country, i.e. Norway, Iceland or Liechtenstein

Duration

- Reach Financial Close within 2.5 years after the GA signature
- Entry into Operation within 5 years after the GA signature
- Operate for 10 years, unless total volume committed reached earlier

Project's budget & ceiling price

- Budget must not exceed €250 million (general) or €200 million (maritime)
- The bid must not exceed €4/kg of RFNBO hydrogen produced

Completion Guarantee & Letter of Intent

Application process - Eligible activities 1/2

Installation of <u>new</u> RFNBO hydrogen capacity* & verified and certified production of RFNBO hydrogen from those installations** for a period of up to 10 year

*hydrogen production capacity for which at the time of the grant application the start of works did not yet take place.

**in kg of produced volume.

The bid price per unit is expected to cover the premium required by the producer*** - cost elements like production, sale, transport, and storage can be priced into the bid

***the difference between the expected revenues from the sale of one unit and the unit's levelised cost.

The produced RFNBO hydrogen can be sold to any off-taker or self-consumed or stored – the RFNBO definition applies to hydrogen purchased by any off-taker (not only in transport)

for **Maritime** topic, at least 60% of produced hydrogen must be supplied to maritime off-takers.

Minimum installed capacity of electrolyser – 5 Mwe

The electrolyser capacity must be in a single location - virtual pooling of capacity is not permitted

Application process - Eligible activities 2/2

Projects must comply with EU policy interests & priorities (such as environment, social, security, industrial and trade policy, etc)

Financial support to third parties is not allowed

Projects must comply with resilience requirements of:

- limiting the sourcing of electrolyser stacks from China
- complying with minimum ISO standard
- complying with cybersecurity requirements

<u>Projects under MARITIME topic</u> must supply at least 60% of their expected total volume of production to off-takers belonging to the maritime sector

• An off-taker will be considered to belong to the maritime sector, if it will use the hydrogen or the hydrogen derivative produced by the project for carrying out/making use of bunkering activities in ports within the EEA. Fuel traders and/or intermediaries (including storage facilities), are not eligible as off-takers, neither are virtual agreements.

Application process – Financial & operational capacity, exclusion

Financial capacity

- Applicants must have stable & sufficient resources to successfully implement the projects and contribute their share
- The financial capacity check will be carried out by the Central Validation Service during grant preparation
- If we consider that your financial capacity is not satisfactory, mitigating measures could be taken

Operational capacity

- Applicants must have the know-how, qualifications & resources to successfully implement the projects and contribute their share
- This capacity will be assessed under the 'Quality' award criterion
- Additional supporting documents may be requested, if needed to confirm the operational capacity of any applicant

Exclusion

- Applicants subject to an EU exclusion decision or in an exclusion situation that bars them from receiving EU funding <u>canNOT</u> participate (see Articles 136 and 141 of EU Financial Regulation 2018/1046)
- Applicants will also be rejected if it turns out that:
- during the award procedure they misrepresented information required as a condition for participating or failed to supply that information
- they were previously involved in the preparation of the call and this entails a distortion of competition that cannot be remedied otherwise (conflict of interest).

Application process - Lessons learned admissibility & eligibility

- Ensure the proposal is complete and contain all the requested information (Application Forms A, B, and C) and all required annexes and supporting documents
- Use the mandatory forms and templates provided and do not modify them
- Ensure your application is readable, accessible and printable
- Ensure minimum installed capacity of the electrolyser of at least 5 MWe, project and budget size in the limits expressed in the call
- The bid price may not exceed the ceiling of €4/kg of RFNBO hydrogen



Application process - Lessons learned admissibility & eligibility

Examples of *non-admissible* **proposals (non-exhaustive list):**

- No renewable electricity sourcing strategy, or missing mandatory information
- No evidence of initiated process with relevant authority to receive an environmental permit
- No letter of intent from a bank or financial institution to issue a completion guarantee
- Letter of intent to provide a completion guarantee is not based on the template provided or has missing elements
- Financial information file provided not used
- No description of the applicant
- Some pages of the documents are not readable



Application process - Lessons learned admissibility & eligibility

Examples of thresholds for *non-eligible* proposals (non-exhaustive list)

- Maximum grant amount
 - €250 million in the general topic
 - €200 million in the maritime topic
- Maximum installed electrolyser capacity: 5MWe
- Maximum Bid price: €4/kg of RFNBO hydrogen produced
- Maximum time to Reach Financial close: 2.5 years after grant signature
- Maximum time to Entry into operations: 5 years after grant signature



Evaluation - Evaluation & award procedure (evaluation)

Evaluation

- Admissibility
- Eligibility

Formal requirements

Award criteria (will be explained later):

- Bid price
- Relevance
- Quality

 From the lowest to the highest bid price

Ranking



Evaluation - Evaluation & award procedure (cascade approach)

Ranking according to the bid price

From lowest to highest

Proposals will be assessed if...

- The maximum grant amounts fit within the **topic** budget
- The proposal fits the budget from national funding windows
- The proposal is necessary to fill the reserve list (if any)

Evaluating the proposals against the award criteria

- Relevance
- Quality
- · Assessment result: Pass/Fail

The first proposal proposed for funding ('marginal bid') exceeding the call budget will be added to the reserve list and the total auction budget volume will be decreased accordingly.



Evaluation – National funding windows ('Auctions-as-a-Service')

Austria, Lithuania & Spain have opened national funding windows - up to €836 million available



...has given consent in the application form

...passed the evaluation for 'Relevance' and 'Quality'

IF YOUR PROPOSAL IS

- rejected by the Innovation Fund due to budget limitations
 - located in a country with open national funding window

AND...

...requested grant support fitting within the national funding

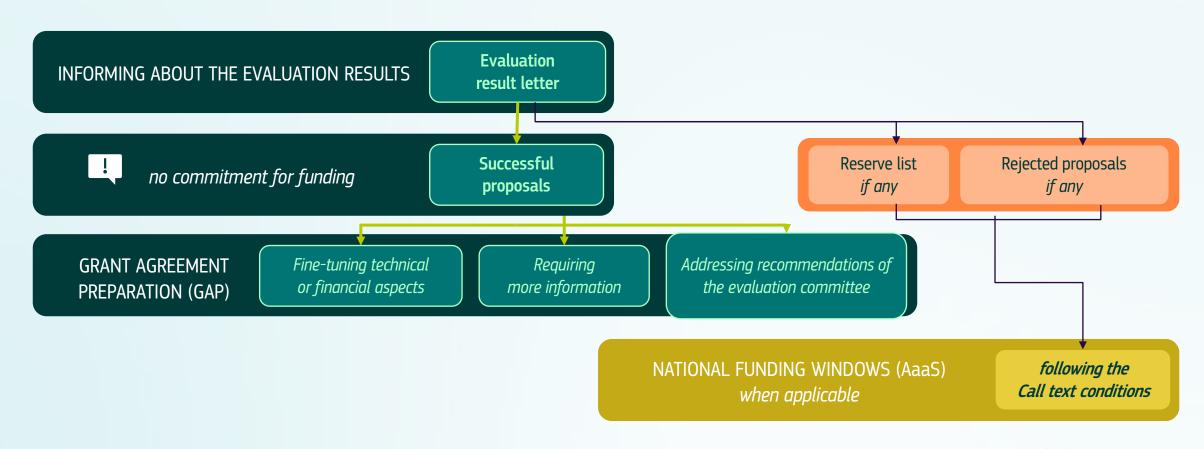
...does not exceed auction's ceiling price - €4/kg of RNFBO hydrogen



Reserve-listed proposals might be asked whether they want to remain on the Fund's reserve list or withdraw and be proposed for the national funding window



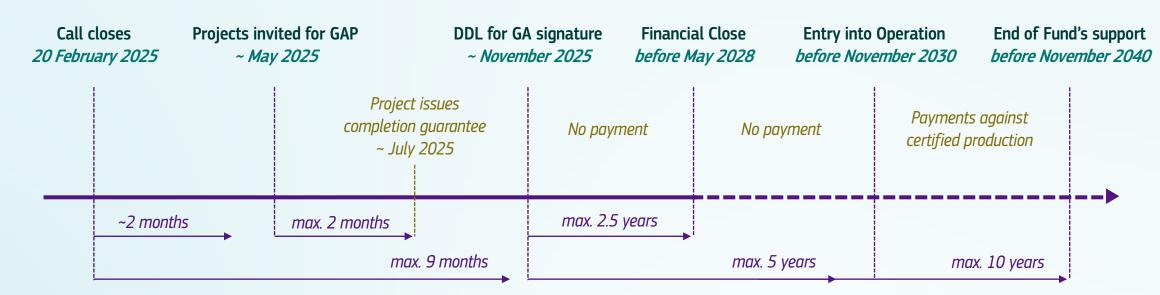
Evaluation results - Grant preparation & award procedure





IF24 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.



Evaluation criteria

Lorena IGLESIAS, Head of Sector CINEA C4 - Innovation Fund

Alban VITAL, Senior Financial Engineering Manager CINEA A1 - Financial Engineering, Business Intelligence & IT





Call & assessment structure

RELEVANCE

(pass/fail)

- Contribution to objectives of the call
- Achieving security of supply of essential goods & contribution to Europe's industrial leadership & competitiveness

QUALITY

(pass/fail)

- Technical maturity
- Financial maturity
- Operational maturity





RANKING

- according to the bid price (€/Kg H₂)
- within the limits of the available budget

APPLICATION DOCUMENTS

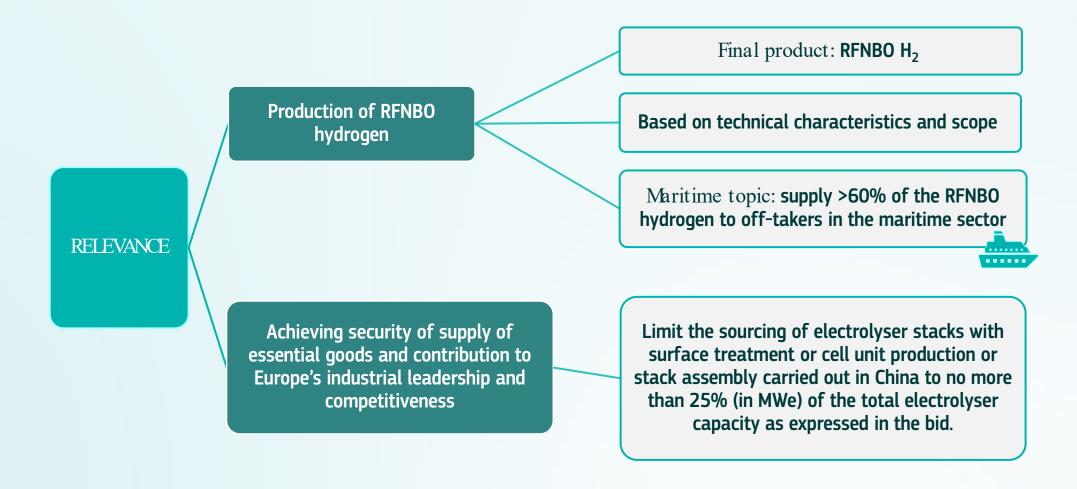
required

- 1. Renewable electricity sourcing strategy
- Hydrogen off-take & price hedging strategy
- 3. Electrolyser procurement strategy
- 4. Plan to receive environmental permits on time
- 5. Plan to receive grid connection permits on time
- 6. Feasibility Study



7. Completion guarantee letter of intent

Award criteria - Relevance 1/2



Award criteria - Relevance 2/2

Contribution to achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness

The electrolyser stack will be considered as sourced in China if any of the following steps took place in China:

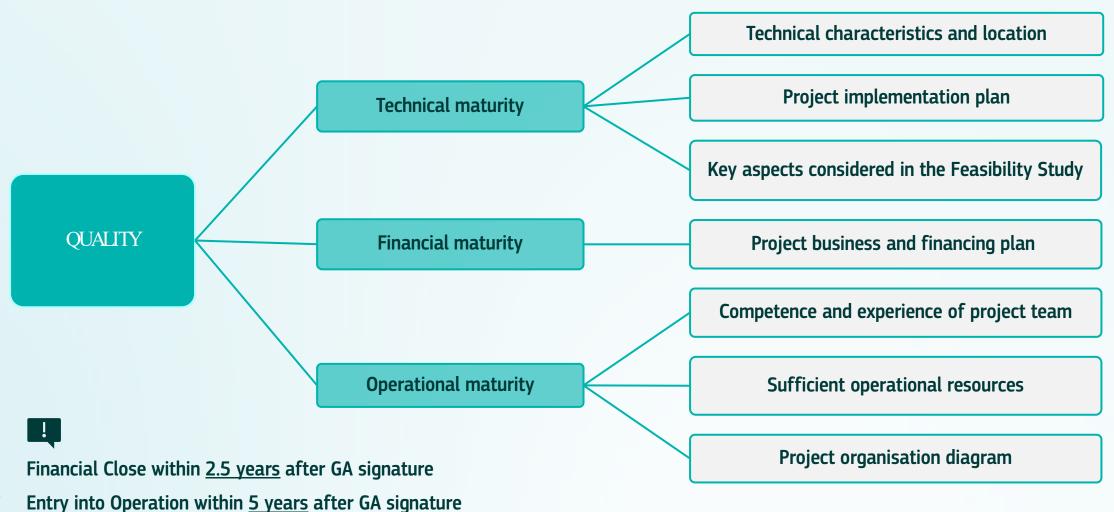
- Surface treatment, meaning coating techniques of the electrolyser's cell electrodes, membranes and of stack's bipolar plates.
- Cell unit production, meaning manufacturing of key components of electrolyser's cell: the electrodes and, depending on the electrolyser technology, the membrane/diaphragm/solid electrolyte.
- Stack assembly, meaning workmanship needed to assemble the electrolyser's stack with all its functional elements to separate hydrogen and oxygen from water.



Applicants must provide **sufficient evidence in the application to underpin the claims** made under this sub-criterion (e.g. MoU with electrolyser supplier)



Award criteria - Quality



Award criteria – 'Quality': technical maturity 1/3

The technical maturity of the proposals will be evaluated against **technical characteristics** elements, such as:



design elements of the proposal



equipment that will be installed



project location

Technical characteristics and implementation plan

Please describe in detail the technology applied for the production of the final product in line with the call requirements. Include information on:

- technical characteristics of the project, including key elements of the project technical/technology design and main components and capacity installed
- project location and site/plot plan.
- Keys aspects considered as part of the feasibility study, which is a mandatory annex.

Please describe the implementation arrangements of the project, including

- project implementation schedule, including the description of state of play and expected timeline for obtaining the required permits for achieving project's planned financial close, for EPC contracting and for achieving entry into operation, as planned.
- explanation of the status of the required permits and of the infrastructure, connected projects or installations beyond the boundaries of the project that are necessary for the project to reach financial close and entry into operation, as planned.
- State of play in terms of equipment supply, geographical origin of key components and the procurement strategy.
- The schedule must respect the deadlines defined in the Call document. Please reflect this in the required Gantt diagram Annex
- Schedule of production of the final product, expected volumes, and consistency with sourcing and off-take strategy.

Note: The implementation plan must be aligned with the requirements of the call and be consistent with the milestones and deliverables described in section 4.

Attach the project supporting documents listed in section 5 of the Call document.

Award criteria - 'Quality': technical maturity 2/3

Project implementation plan/schedule	Timeline for: • obtaining the required permits • achieving project's planned financial close • EPC contracting • achieving entry into operation
Gantt Chart	Showing the deadlines defined in the Call document
Project's supporting documents listed in section 5 of the Call document	 Energy sourcing strategy Feasibility study Off-take and price hedging strategy Equipment procurement strategy Status of permits, licenses and authorisations



Award criteria – 'Quality': technical maturity 3/3

The technical maturity of the proposals will be evaluated against the **soundness**, **credibility** and **consistency** of information provided:

- Credibility of the feasibility study and the implementation arrangements
- Consistency between pre-contractual steps securing renewable electricity and the volumes of expected RFNBO H2 production
- Consistency of renewable electricity sourcing strategy with the bid and the FIF
- Credible plan to receive required permits on time
- Credible plan to receive grid connection and energy infrastructure on time
- Soundness of basic project parameters (assumed full load hours, hydrogen off-take profile, electrolyser efficiency, etc.)

Objective:

assessing the project capacity to reach financial close in 2.5 years and entry into operation within 5 years of grant signature.



Lessons learned - Technical maturity 1/2

Provide all mandatory annexes!

- Ensure a detailed feasibility study (follow the mandatory annex)
- Ensure a complete implementation plan including:
 - ✓ **Project implementation schedule**, including timeline for obtaining the required permits, achieving financial close, for EPC contracting and entry into operation
 - Explanation of the status of the required permits and of the infrastructure, connected projects or installations beyond the boundaries of the project that are necessary for the project to reach financial close and entry into operation, as planned
 - ✓ **State of play in terms of equipment supply**, geographical origin of key components and the procurement strategy

Ensure <u>consistency</u> **between documents**:

Part B, feasibility study, renewable electricity sourcing strategy, off-take strategy, financial information file



Lessons learned - Technical maturity 2/2

Provide all mandatory annexes!

- Provide a credible plan for the renewable electricity sourcing strategy and state all the mandatory information
- For at least 60% of the required total electricity volumes during the project's implementation period, Heads of Terms or other forms of pre-contractual signed term sheets must be provided, containing all requested points
- The submitted electrolyser procurement strategy must include a Memorandum of Understanding,
 Letter of Intent or another form of pre-contractual signed term sheets with an electrolyser manufacturer

Ensure <u>consistency</u> **between documents**:

Part B, feasibility study, renewable electricity sourcing strategy, off-take strategy, financial information file



Award criteria - 'Quality': financial maturity 1/6

Objective:

assess the project capacity to reach Financial Close in 2.5 years and Entry into Operation within 5 years of grant signature.

Credibility of business plan Application Form B 2.2 + FIF Soundness of the financing plan Application Form B 2.2 + FIF

Credibility of Off-take and price hedging strategy

Consistency across all documents of the application is key!



Award criteria – 'Quality': financial maturity 2/6

BUSINESS PLAN

- Credibility of the business plan:
- Briefly describe the proposed project business model and value proposition
- Integrated project vs standalone RFNBO Hydrogen production

Describe and substantiate:

- Main revenues stream (hydrogen off-takers, oxygen, heat, etc.)
 - Off-takers sectors
 - Include a breakdown of prices and volumes assumed
- Cost assumptions (CAPEX and OPEX)



Award criteria – 'Quality': financial maturity 3/6

FINANCING PLAN

- Describe the financing plan for the project including the type of funding used (equity, debt, shareholder loan) the financial standing of shareholders and banks support, amount of capital injections
 - Explain how advanced are you in the debt and equity raising?
- Explain clearly the complete sources and uses of funds of the project
- Demonstrate financial viability of your project
 - Does the financing plan cover the full 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?)



Award criteria – 'Quality': financial maturity 4/6

OFF-TAKE & PRICE HEDGING STRATEGY

- Describe the strategy to secure key contracts with off-takers providing:
 - a) names of off-takers, b) sectors of off-takers, c) volumes, d)pricing structure, e) duration of agreement, f) method of delivery
 - dependent energy infrastructure
- Demonstrate that the project has a credible plan and has taken pre-contractual steps (for **min. 60% of total volumes**) towards securing off-take, by providing **signed head of terms or pre-contractual term sheets** (incl. a) to f) above)
 - When the off-taker is the same legal entity as the beneficiary the project is considered **integrated**. The applicant must present a **letter** signed by a director/senior executive of the beneficiary instead covering the 60% of total volumes including a) to f) above)
- For the Maritime topic, integrated projects must present head of terms or pre-contractual signed term sheets with off-takers in the Maritime sector containing points a) to f) of the derivative product covering the equivalent of 60% of the RFNBO hydrogen produced
- Demonstrate that the **project's cost** (electricity) and **revenue** (off-take) **structures hedge** against excessive market variability (eg: passthrough price mechanism or similar split between fixed and floating components of electricity and Hydrogen prices)



Award criteria - 'Quality': financial maturity 5/6

How to fill in the Financial Information File - Annex I to Part B (Detailed Budget table)? (1)

- 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 /kg (cell G47 input **Cell G48 official bid price**)
 - Expected yearly average volume is calculated automatically by the FIF as the sum of the applicant inputs volume per off-taker
 - Total grant amount (cell D68 of FIF Inputs Tab) is calculated automatically and should be used in the application
 - Completion Guarantee amount (cell D70 of the FIF Inputs Tab)
- Ensure the financial projections inputs are coherent with the assumptions of the Application Form Financial Maturity section 2.2, Renewable energy sourcing strategy, off-take strategy and Electrolyser procurement strategy.





Award criteria - 'Quality': financial maturity 6/6

How to fill in the Financial Information File - Annex I to Part B (Detailed Budget table)? (2)

- Project producing both RFNBO & non-RFNBO hydrogen should follow this guidelines to fill the FIF: the
 overall revenues, and costs of the project (both RFNBO and non-RFNBO) need to be inserted in the
 FIF
- Bid components:
 - "Installed capacity in the bid" cell G51 need to be filled with the full electrolyser capacity of the project
- Revenues from hydrogen need to be split between RFNBO hydrogen and non-RFNBO hydrogen.
 - Volume and price of **RFNBO hydrogen** produced should be inserted from lines 90 to 117
 - Volume and price of **integrated RFNBO hydrogen** projects should be inserted in line 120 and 122
 - Volume and price of non-RFNBO hydrogen produced should be inserted in lines 130 to 137
- Costs of power sourcing for RFNBO hydrogen and non-RFNBO hydrogen should be split
 - Power costs and volume of renewable power should be inserted in lines 189 to 233
 - Power (costs) volume of integrated renewable power should be inserted in lines 237 to 241
 - Power costs and volume of **non-renewable power** should be inserted in lines 250 and 262



Assessment criteria – Letter of Intent & Completion Guarantee

Letter of intent:

- To be provided in the application stage
- Issued by a bank or financial institution, authorized to conduct its business by the competent national authorities, with the following minimum rating from at least one of these rating agencies: BBB- from S&P or Fitch, Baa3 from Moody's or BBB(low) from DBRS) established in the EEA
- Template must be used

Completion guarantee:

- Signed completion guarantee using the template due 2 months after receiving invitation for GAP
- Provided by a financial institution with minimum rating as specified above
- Covering 8% of the maximum grant amount
- Validity until 6 months after maximum time to Entry into Operation
- Template must be used



Lessons learned - Financial maturity

- Ensure CAPEX is sufficiently detailed & credible in lines 347 to 375 of the FIF. Make sure it ties with the
 electrolyser procurement strategy
- Ensure **sources of equity** financing and **debt financing are sufficiently** <u>described</u> & <u>credible</u> who is likely to provide it? Do they have the financial capacity to provide such an amount?
- Ensure the **off-take strategy** and **off-take pre-contractual signed term sheets encompasses** <u>all</u> **the elements listed in the call text** make sure it ties to the volume and prices in the FIF
- Letter of intent completion guarantee and completion guarantee: use strictly the template provided on the funding and tender portal without changing the text



Award criteria - 'Quality': operational maturity 1/3





Exceptionally, the measures to obtain the required operational resources by the time the task implementation starts.



Award criteria - 'Quality': operational maturity 2/3

Project organisation diagram Please insert a project diagram (the example below is only an illustrative example and should be deleted when inserting the project specific diagram). Provide the project organisation diagram (the below is only for illustration) Shareholders Suppliers Lenders Equity / shareholder loans Loans Raw materials / feedstocks Insurance Customers Project insurances Offtake Project Advisors Operator Operation and Advisory / development maintenance services Construction Land / concession Construction Grants / other contractor financing Permits/ Grantor consents Local authorities European Commission

Project organisation diagram

You should reproduce the organisational setup of your project in the Part B of your proposal ('Technical description')



Award criteria - 'Quality': operational maturity 3/3

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

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

- Attach the project supporting documents (in particular, participant information)
- 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



Lessons learned - Operational maturity

 Demonstrate that the applicants have the know-how, qualifications and resources to successfully implement the project and contribute their share (including sufficient experience in projects of comparable size and nature)

Ensure to provide:

- General profiles (qualifications and experiences) of the staff responsible for managing and implementing the project
- Description of the consortium participants
- Project organisation diagram
- Participant information, including CVs and previous projects, if any (follow template)



Other application requirements

DECLARATIONS

Fair bid conditions:

We confirm that the project bid refers to the low/zero carbon product required by the call and that we will produce this product in line with conditions set out in the Call document.

We confirm that for the capacity to which the bid refers the works have not started by the time of submission of this application, in line with the definitions in paragraph 82 of the <u>Guidelines</u> on <u>State aid for climate</u>, <u>environmental protection and energy</u>¹.

We confirm that, in case our proposal is successful, the Innovation Fund auction grant will not be combined with any of the types of excluded public support listed in the Rules on Combination of Support Annex of the Call Text (Annex 3)

We accept and acknowledge that EU auction grants must not lead to a cross-subsidisation of other products, if and as required by the call conditions (see section 10 of the Call document).

We confirm that all partners in the project consortium are in compliance with the Deggendorf rule (Deggendorf rule excludes undertakings that have received incompatible aid and are subject to a recovery obligation).

We accept and acknowledge that EU auction grants are subject to a completion guarantee that will be called by the granting authority if the funded installation does not reach approved entry into operation. In case our proposal is successful, we commit to provide such a completion guarantee in line with the conditions set out in the Call document. If no guarantee is received within the required time-limit, the granting authority may consider the application as withdrawn and decide to terminate grant preparation.



Other application requirements

DECLARATIONS

Information concerning other EU grants for this project:

We confirm that to our best knowledge neither the project as a whole nor any parts of it have benefitted from any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.

Call specific conditions:

If participating in the topic INNOVFUND-202X-AUC-MARITIME, We confirm that the project will supply at least 60% of the expected volume of production, during the implementation period and as expressed in the bid, to the maritime sector in line with conditions set out in the Call document. We accept and acknowledge that, in case of breach, the grant may be terminated and reduced or any other measure described in Chapter 5 of the Grant Agreement may be taken.

We confirm that the project will comply with the requirements set out in section 10 of the call text. We accept and acknowledge that, in case of breach, the grant may be terminated and reduced or any other measure described in Chapter 5 of the Grant Agreement may be taken.

Comply with **standard ISO 22734:2019** for "Hydrogen generators using water electrolysis — Industrial, commercial, and residential applications" or latest approved version replacing it (1)

Present a **cybersecurity plan** outlining how, in order to ensure the security of the installation, the operational control of the installation remains within an entity established in the EEA and the data are stored within the EEA (2)

