

EUROPEAN COMMISSION DIRECTORATE-GENERAL CLIMATE ACTION Directorate C – Innovation for a Low Carbon, Resilient Economy CLIMA.C.2 – Low Carbon Solutions (II): Research & Low Carbon Technology Deployment

# **Innovation Fund IF24 Auction**

# **Terms and Conditions**

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Date:

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Authors:

CLIMA C.2 – Low Carbon Solutions (II): Research & Low Carbon Technology Deployment

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## I. Background and auction objectives

The Innovation Fund is one of the world's largest funding programmes for the demonstration of innovative low-carbon technologies. The Innovation Fund aims to demonstrate and commercialise industrial solutions to decarbonise Europe and support its transition to climate neutrality. It is funded by revenues from the European Union Emissions Trading System (EU ETS).

The revision of the ETS Directive in 2023 introduced the possibility of using competitive bidding procedures (i.e. auctions) to award the Innovation Fund funding. The objectives of the competitive bidding procedures are fourfold:

- A cost-efficient way of distributing financial support. Auctions have been a significant instrument in the power sector in many Member States<sup>1</sup>, bringing down the support costs for renewable electricity by magnitudes.
- Price discovery and market formation. Auctions can reveal the "real" cost of certain activities or products if there is sufficient competition. This creates valuable data points for the public sector but also helps to create markets where there are none yet, by providing vetted price points.
- De-risking projects and leveraging private capital into them.
- Reducing administrative burden for projects developers and contracting authorities.

The Commission has committed that the Innovation Fund will support the decarbonation of the maritime sector, which is subject to the EU ETS from 1 January 2024. This call for proposal will therefore include two topics subject to separate competitive bidding procedures:

- a general topic to support the production of RFNBO<sup>2</sup> hydrogen regardless of the sector in which it will be consumed (EUR 1 000 000 000); and
- a specific topic for the production of RFNBO hydrogen to be used in the maritime sector (EUR 200 000 000).

With the RePowerEU Plan<sup>3</sup>, the European Commission explicitly states renewable hydrogen uptake as a central measure to reduce fossil fuel consumption in hard-to-abate industrial and transport sectors.

In November 2023, a pilot auction was opened to support RFNBO hydrogen producers located in the European Economic Area("EEA") with a fixed premium in EUR / kg of RFNBO H2 produced during a maximum period of 10 years. The auction closed on 8 February 2024 and received 132 bids from 17 countries. Seven projects were selected to sign grant agreement, resulting in a clearing price of 0.48 EUR / kg of RFNBO H2 and a total support requested amount of EUR 720 million.

The first auction already enabled Member States to use the auction "as-a-service", which will also be in place for the IF24 Auction. Through this "Auctions-as-a-Service" scheme, EEA countries can use their own resources to award support to projects located in or delivering Hydrogen to their territory while relying on the Innovation Fund's EU-wide auction mechanism to identify the most competitive projects. This avoids fragmentation of public support at the early stage of hydrogen market formation in Europe while facilitating administrative procedures and State aid clearance as national support follows the design of the Innovation Fund's auction. For the 2023 pilot auction, Germany participated in Auctions-as-a-Service with a budget of EUR 350 million.

<sup>&</sup>lt;sup>1</sup> Competitive auctions are recommended under the Guidelines on State aid for climate, environmental protection and energy (CEEAG): <u>https://eur-lex.europa.eu/legal-</u>

content/EN/TXT/?uri=uriserv%3AOJ.C\_.2022.080.01.0001.01.ENG&toc=OJ%3AC%3A2022%3A080%3ATOC.

<sup>&</sup>lt;sup>2</sup> *Renewable fuels of non-biological origin.* 

<sup>&</sup>lt;sup>3</sup> *REPowerEU Plan (COM/2022/230 final)* 

## II. Overview of auction design elements for the second Innovation Fund hydrogen auction

Based on the large oversubscription of the 2023 pilot auction, the European Commission will open in 2024 a second auction to support RFNBO hydrogen producers located in the EEA with a budget of EUR 1.2 billion. IF support will again take the form of a fixed premium payment upon verified and certified production for a maximum period of 10 years.

This support is still needed for the sector, as most projects would not be carried out without the proposed support from the Innovation Fund, given the gap between their costs of producing RFNBO hydrogen and the market price. The support will be allocated through an open competitive bidding procedure that will ensure a proportionate remuneration of the projects funding gap.<sup>4</sup> The ranking of proposals will directly reflect the environmental benefits the scheme aims to achieve, as displacing fossil fuels and products made using fossil-based hydrogen with the use of the RFNBO hydrogen produced under the instrument will directly reduce GHG emissions.

**This document presents the** *Final* **Terms and Conditions** on which the design of the second Innovation Fund Auction for RFNBO Hydrogen (IF24 Auction) will be based<sup>5</sup>. It is intended to help potential applicants preparing their submission already before the publication of the call for proposals by the end of 2024. This document takes into account feedback received through written public consultation and a stakeholder event held in June 2024.

To ease orientation, the design elements are presented in five categories:

- 1. general auction design elements (2.1)
- 2. qualification requirements (2.2 together with section III on mandatory documents)
- 3. auction procedure (2.3)
- 4. rights and obligations (2.4)
- 5. auction framework conditions (2.5)
- 6. rules on combination of public support (Section IV)

## 2.1 General auction design elements

Table 1: Overview of design elements for the IF24 Auction - general design

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen auction	Change from IF23 Auction
1.0	Objective of the auction	To cost-efficiently support the production of renewable fuels of non-biological origin (RFNBO) hydrogen within the EEA and thus contribute to achieving security of supply of essential goods and to Europe's industrial leadership and competitiveness hydrogen sector.	Expanded objectives of the auction that are reflected by new award sub criterion
1.1	Auctioned good	RFNBO hydrogen produced from water electrolysis in line with requirements put forward in the Renewable Energy Directive (Directive	No change apart from a precision on water electrolysis technology.

<sup>&</sup>lt;sup>4</sup> This assessment is made based on the results of the pilot auction (IF23 Auction) which can be consulted on the following link: https://climate.ec.europa.eu/eu-action/eu-funding-climate-action/innovation-fund/competitive-bidding\_en

<sup>&</sup>lt;sup>5</sup> Only the forthcoming call for proposals and its annexes (the call documents) are binding on the Commission). The call documents will be authoritative in the event of any discrepancy with the present document.

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen auction	Change from IF23 Auction
		(EU) 2018/2001) and its Delegated Regulations (EU) 2023/1185 and 2023/1184	
		The RFNBO hydrogen needs to be produced by <i>new</i> production capacity (i.e. capacity for which at the time of application start of works <sup>6</sup> did not yet take place) in order to ensure an incentive effect of the subsidy.	
1.2	Constraining value	<ul> <li>The total available Innovation Fund budget for each topic is the constraining value of the auction and is known in advance.</li> <li>For the general topic, the budget will be EUR 1 000 million</li> <li>For the specific topic for maritime sector, the budget will be EUR 200 million</li> </ul> The total RFNBO hydrogen volume for which support will be awarded derives from the total available budget and the individual bids with their respective bid prices and volumes.	New constraining value.
1.3	Support type	Output-based support (payment per unit of verified and certified RFNBO $H_2$ produced).	No change
1.4	Reference price	No reference price needs to be defined for a fixed premium auction.	No change
1.5	Support form	Fixed premium	No change
1.6	Safeguards against over- subsidisation	Ensuring competition through market testing, total available budget, a ceiling price, and feedback on the level of competition from one round to another. No claw backs concerning over-subsidisation situations	Clarification that the ceiling price is also an element avoiding over-subsidisation.
1.7	Ranking of bids	Price-only ranking	No change
1.8	Bid components	<ol> <li>Bid price (which will correspond to the fixed premium if the project is selected) in EUR/kg of RFNBO hydrogen production (basis for ranking of bids), expressed with two digits after the comma.</li> <li>Expected average yearly volume of RFNBO hydrogen production in kg per year over a 10 years production period.</li> <li>The maximum grant amount is therefore calculated as:         <ul> <li>[Bid price in \frac{\epsilon}{kg}] *</li> <li>[expected average yearly volume in \frac{kg}{year}] * 10 years</li> <li>3) The new electrolyser capacity in MWe that will be installed and verified as being operational by the time of entry into operation.</li> </ul> </li> </ol>	No change

<sup>&</sup>lt;sup>6</sup> The first firm commitment (equipment or starting construction) making an investment irreversible. Buying land and preparatory works (e.g. obtaining permits and conducting preliminary feasibility studies) are not considered as start of works.

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen auction	Change from IF23 Auction
1.9	Minimum and maximum yearly production thresholds	No upper or lower limits to the expected average yearly production as stated in the bid. However, the maximum grant amount requested by each proposal must stay within the limits expressed in point 2.3 and during implementation the project will have to comply with the production conditions described in points 1.10 and 4.2	Specific maximum grant amount limit as described in line 2.3
1.10	Production flexibility rules	Semi-annual production can be increased up to 140% compared to half of the expected average yearly volume of RFNBO hydrogen production as stated in the bid (see point 1.8). Semi-annual production beyond 140% will not be supported by grant payments. The total grant amount is restricted to 100% of the maximum grant amount. See points 4.2 on severe underperformance and 4.3 on semi-annual payment schedule.	No change
1.11	Grant duration (disbursement period)	The grant duration will end ten years after the Entry into Operation of the project (unless the total RFNBO Hydrogen production volume as stated in the bid is reached earlier, due to the production flexibility rules (see line 1.10). See also point 4.2 on grant agreement termination.	No change
1.12	Indexation of support	No indexation.	No change
1.13	Technology baskets, differentiation by regions or actors	There will be two topics: (i) a general topic, and (ii) a budget of EUR 200 million will be earmarked for projects with maritime off-taker(s) and (For more information on the clearing mechanism, please refer to line 3.8.) For the maritime topic, 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. If a portion of the resources remains unawarded, the Commission may redistribute them between the call topics.	Introduction of a topic for projects supplying RFNBO hydrogen to off-takers in the maritime sector, in line with the requirements of the ETS Directive, and the Communication on Europe's 2040 climate target and path to climate neutrality by 2050.
1.14	Method to estimate the subsidy per ton of CO2e abated	The value of the subsidy per tonne of CO2e abated will be calculated by CINEA and does not have to be provided by the applicant / does not form part of the evaluation. The expected CO2e abatement per kg of renewable hydrogen produced will be calculated using the 2021-2025 ETS benchmark of 6.84 t_CO2e/t_H2. This is a conservative estimate in not taking into account additional carbon abatement due to substitution effects in the RFNBO H2 end use application.	Clarification on how the subsidy per tonne of CO2e abatement is calculated.

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen auction	Change from IF23 Auction
1.15	Resilience related requirements for the electrolyser	Multi-pronged approach is implemented: I. New sub-criterion under "relevance" criterion: Under the 'relevance' criterion (see in line 2.1) a sub-criterion is inserted (with pass/fail assessment): "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness", in line with the objectives of Net Zero, Industry, Act. (NZIA) for the EU	New resilience related criteria
		<ul> <li>Net Zelo industry Act (NZIA) for the EO manufacturing capacity of net-zero technologies (for the purpose of this auction, electrolysers) to meet at least 40% of the EU's annual deployment needs by 2030.</li> <li>To fulfil this sub-criterion, projects have to:</li> </ul>	
		1. contribute to a diversified supply chain and avoid building dependency on a single third country which may threaten the security of supply of electrolysers.	
		Having regard to the current and projected global and EU supply and demand trends for electrolysers, including the fact that Chinese production capacity is already more than 50% of global production and the projected hydrogen production in China surpresses by far it domestic 2025	
		target and foreseeable global demand <sup>7</sup> , it is assessed that there is a significant risk of increased and irreversible dependency of the EU on imports of electrolysers originating in China, which may threaten the EU's security of supply. Thus special measures are	
		justified in this nascent industry, contributing to the objectives of the Net Zero Industry Act. As a result, <b>projects</b> <b>have to limit the sourcing of</b> <b>electrolyser stacks with surface</b> <b>treatment or cell unit production or</b> <b>stack assembly carried out in China</b>	
		<ul> <li>to not more than 25% (in MWe) to fulfil this criterion.</li> <li>A proposal will pass this sub-criterion if it can demonstrate a contribution as laid out in point 1. There needs to be enough evidence in the application to underpin the claims (e.g. MoU with the sub-criterion is the sub-criterion in the sub-criterion in the sub-criterion in the sub-criterion in the sub-criterion.</li> </ul>	
		Compliance with the claims made at application will be monitored during implementation. At the Financial Close and at the Entry into Operation projects will have to report on intended/actual origin of the electrolyser. At the end of the	

<sup>7</sup> Around 10 GW by 2025 (source: Bloomberg New Energy Finance)

Design Element	renewable hydrogen auction	Change from IF23 Auction
	implementation, projects will have to report how they fulfilled the claims made under the "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness" sub-criterion (see Section 2.4). Penalties (reduction of grant or even termination) apply in case the claims were not fulfilled (see section 2.4).	
	II. Compliance with standards	
	Projects need to:	
	<ol> <li>comply with safety standard ISO 22734:2019 for "Hydrogen generators using water electrolysis — Industrial, commercial, and residential applications" or latest approved version replacing it.</li> </ol>	
	<ol> <li>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.</li> </ol>	
	These requirements must be complied with at the moment of the Entry Into Operation. If they are not fulfilled, the grant agreement will be terminated and completion guarantee called.	
	III. Information gathering	
	Additional information will be gathered as part of the electrolyser procurement strategy (mandatory document to be submitted alongside the bid – see Section III) on:	
	1. Intended origin of equipment,	
	2. CRM intensity of the equipment,	
	<ol> <li>Recycling strategy of the electrolyser OEM,</li> </ol>	
	4. What standards does the equipment comply with	
	5. whether OEM receives foreign financial contribution	
	Planned origin of electrolyser of successful bidders (as indicated in the strategy) will be published.	
	Further data from those strategies (of successful and unsuccessful bids) and analysis from it may be published where anonymisation is guaranteed	
	IV. Foreign Subsidy Regulation, State aid rules and trade defence instruments apply	
	Internal market distortions caused by foreign subsidies (or incompatible State aid granted by Member States), or imports being unfairly subsidised or dumped on the EU market, may be investigated under the EU's Foreign Subsidies Regulation (or EU State aid rules) or EU trade defence investigations, respectively.	

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen auction	Change from IF23 Auction
1.16	Auction-as-a-Service	Auction-as-a-Service mechanism is open to all EEA States	No change

# 2.2 Qualification requirements.

Bidders need to fulfil qualification requirements to have their bids ranked. Qualification aims to ensure that bidders are capable of implementing the project, the project is sufficiently advanced to be implemented in time, and to prevent speculative bidding. The following table lists the qualification requirements for the IF24 Auction. Qualification requirements will be assessed on a Pass/Fail basis.

Table 2: Overview of design elements for the Innovation Fund competitive bidding mechanism – qualification requirements

	ects already awarded under the IF will not be ble
2.1       Qualification requirements       For further details on qualification projections.       Projection III of the Terms & Conditions.         Admissibility:       •       Strict respect of submission deadlines, use of forms provided through the Funding and Tenders Portal, and compliance with presenting all required documentation (Application Forms), together with mandatory documents and supporting documents (see section III).       Eligibility:         •       Proposals must relate to projects located in the EEA.       •         •       Project and budget size in the limits expressed in point 2.3       •         •       The bid amount may not exceed the ceiling set in point 3.6       •         •       Compliance with legal entity checks (compliance with legal entity checks (compliance with legal entity checks situation limitations (default, prosecution, etc). All beneficiaries will have to be validated.         •       No geographical limitation on origin of members of the consortium.         •       The same project has not been already awarded under the Innovation Fund.         •       Signed self-declarations, see section III of the Terms & Conditions (also part of Application Form Part B)         •       Self-declaration that the electrolyser procured and installed will be in compliance with the required safety standards (i.e., ISO 22734:2019 for "Hydrogen generators using water"	datory compliance with electrolyser's safety dards

No.	Design Element	Specific implementation of the Innovation Fund renewable hydrogen auction	Change from IF23 Auction
		<ul> <li>and residential applications" or latest approved version replacing it).</li> <li>Self-declaration the project will have 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.</li> <li>the operational control and the data used for or generated in the installation, remains within the EEA</li> <li>The proposals will be evaluated on a pass/fail basis on relevance (including their contribution to achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness), technical, financial, and operational maturity assessed based on the documents listed in section III of the Terms &amp; Conditions and their description in Application Form B.</li> <li>After evaluation and before grant agreement signature, an additional financial capacity check will be made, to ensure that applicants have stable and sufficient resources to successfully implement the projects and contribute their share.</li> </ul>	
2.2	Completion guarantee	A completion guarantee covering 8% of the maximum grant amount (see point 1.8) will be requested from projects invited to prepare grant agreement. A letter of intent from a bank or financial institution to issue a completion guarantee will be required as part of the proposal. A template will be made available and will have to be used (no changes to the template are allowed). The completion guarantee should be in euro and issued by an approved bank/financial institution (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 an EEA. This completion guarantee must be able to be called on first demand by the granting authority if the project (i) does not reach financial close within 2.5 years, or (ii) does not reach approved entry into operation will only be accepted if compliance with Safety standards and cybersecurity requirements referred to in line 2.1 is demonstrated. The completion guarantee shall be issued at the latest two months after receiving the evaluation result letter inviting the selected	<ul> <li>Change:</li> <li>Increased value of completion guarantee from 4% to 8%</li> <li>Projects must reach financial close within 2.5 years after signing the grant agreement, and enter into operation within 5 years.</li> <li>More detailed requirements non the institution providing the completion guarantee.</li> </ul>

No.	Design Element	Specific implementation of the Innovation Fund renewable hydrogen auction	Change from IF23 Auction
		applicants for grant agreement preparation. It shall be valid from the date of issuance until six months after the maximum time to entry into operation (i.e. after verification that the electrolyser capacity stated as part of the bid production capacity is operational). The duration of the completion guarantee is expected to be at least 5 years and 11 months. A template will be made available and will be mandatory. If entry into operation is reached earlier, the guarantee can be released earlier. The enforcement of completion guarantees is further explained in point 4.2.	
2.3	Minimum or maximum restriction for project size and for bid volume	Maximum grant amount restriction for each bid applies: EUR 250 million in the general topic and EUR 200 million in the maritime topic Minimum project size requirements: 5 MWe of newly installed electrolyser capacity (which must be in a single location; virtual pooling of capacity is not permitted).	Changes: New maximum grant amounts restrictions
2.4	Off-taker restrictions	No off-take restrictions in the general topic. However, limitations apply within the maritime topic. Please refer to line 1.13	No change in the overall auction, but limitations introduced for each topic.
2.6	Regulations for transporting hydrogen	Infrastructure costs can be priced into the bid but there is no explicit mechanism to offset comparative disadvantage of projects with infrastructure costs.	No change
2.7	Consideration of "General measures" <sup>8</sup>	See section IV of the Terms & Conditions on combining support under auction with other public support.	No change
2.8	Combining support under auction with other public support for RFNBO hydrogen producer	See section IV of the Terms & Conditions on combining support under auction with other public support.	No change on substance – improved clarity of requirements. See section IV.
2.9	Combining support under auction with other public support for RFNBO hydrogen off-taker	See section IV of the Terms & Conditions on combining support under auction with other public support.	No change on substance – improved clarity of requirements. See section IV.
2.10	Exclusion of cross- subsidisation of "grey" hydrogen	Beneficiaries will need to provide certification that the total volume of hydrogen produced by the supported capacity achieves at least 70% GHG savings following the rules set out in the Commission Delegated Regulation (EU) 2023/1185 (on average during the disbursement period of the scheme). The certification will be required as a deliverable for the last work package (independent third-	No change

<sup>8</sup> e.g. green premium stemming from regulations

No.	Design Element	Specific implementation of the Innovation Fund renewable hydrogen auction	Change from IF23 Auction
		party certificate or audited reports).	

# 2.3 Design elements defining the auction procedure

Table 2: Overview of design elements for the Innovation Fund competitive bidding mechanism - auction procedure

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen Auction	Change from IF23 Auction
3.1	Competitiveness of the process	The key rules ensuring competitiveness of the process are: No discrimination against participants in auction. Transparency on requirements and sufficient lead times to prepare bids. No ex-post adjustments of auction rules.	No change
3.2	One-stage or two-stage auction	One-stage.	No change
3.3	Auction type	Static auction.	No change
3.4	Pricing rules	Pay-as-bid.	No change
3.5	Minimum prices	No minimum price.	No change
3.6	Ceiling prices	Disclosed ceiling price: 4 EUR /kg of hydrogen produced as a maximum bid price. The same ceiling price applies to both the general topic and the maritime topic.	Ceiling price reduced from 4.5 to 4 EUR/kg
3.7	Clearing mechanism and marginal bid	Proposals will be first ranked according to their bid price from lowest to highest. Those proposals whose maximum grant amounts fit within the Innovation Fund budget, and the proposals necessary to fill the reserve list, if any, will be assessed against the award criteria of 'Relevance' and 'Quality', on a pass/fail basis. Remaining proposals will be rejected. They will not be evaluated against the 'Relevance' and 'Quality' award criteria. The last proposal proposed for funding that exceeds the call budget will be added to the reserve list.	Text revised for further clarity
3.8	Tie-breaking rules	For proposals with the same bid price, a priority order will be determined according to the following approach: Successively for every group of ex-aequo proposals, starting with the lowest bid price group, and continuing in descending order:	Inclusion of a conclusive tiebreaker rule in the form of random draw, supervised by the evaluation committee

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen Auction	Change from IF23 Auction
		<ol> <li>Proposals with the overall smaller maximum grant amount will be preferred.</li> </ol>	
		<ol> <li>If this does not allow to determine the priority, proposals located in the country with fewer funds awarded previously under the Innovation Fund will be preferred.</li> </ol>	
		<ol> <li>If this also does not allow to determine the priority, the proposal with a shorter time until entry into operation will be preferred.</li> </ol>	
		<ol> <li>If this also does not allow to determine the priority decision will be taken by random draw, supervised by the evaluation committee</li> </ol>	
3.9	Minimum number of bidders	The auction volume will not be adapted to the observed participation.	Further clarification on the minimum number of bidders.
		Each topic of the auction may be cancelled if less than two proposals are submitted.	

# 2.4 Design elements defining rights and obligations

Table 3: Overview of design elements for the Innovation Fund competitive bidding mechanism - Rights and obligations

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen Auction	Change from IF23 Auction
4.1	Maximum time to reach financial close and entry into operation	Maximum time to reach Financial Close: 2.5 years after signing the grant agreement Maximum time to reach EiO: 5 years after signing the grant agreement.	New mandatory requirements: the project must reach financial close within 2.5 years after signing the grant agreement, and must enter into operation within 5 years.
4.2	Sanctions in case of non- compliance with support requirements	If the maximum time to reach financial close or entry into operation is exceeded, the grant agreement will be terminated, and the granting authority will call the completion guarantee described in point 2.2 A project entering into operation should be able to demonstrate as operational a nameplate capacity of at least 100% of that expressed in the bid. The entry into operation needs to be approved by the granting authority. The grant agreement may be terminated or the grant reduced if the verified and certified RFNBO hydrogen production falls on average below 30% of the expected yearly average volume as stated in the bid for three consecutive years. This average will be calculated over a rolling 3-year period. At the moment of entry into operation the project must demonstrate compliance with the required safety standards and cybersecurity requirements as	<ul> <li>Change:</li> <li>Contractual actions also apply if financial close is not reached within the required period.</li> <li>Emphasis that the EiO achievement must be approved by CINEA.</li> <li>Mandatory safety standards and cybersecurity requirements</li> <li>Contractual sanctions related with non-compliance on the criteria of "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness".</li> <li>Contractual sanctions for projects participating in the maritime topic: termination if not compliant with the required maritime off-taker at the</li> </ul>

		defined in line 2.1 above. If not, the grant agreement will be terminated. As of financial close, at the moment of entry into operation and during implementation, the project must demonstrate that it complies with the commitments made in its application form, including those under the criteria "Achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness". Contractual sanctions (grant reduction or even termination) may apply in case the claims were not fulfilled. If the project cannot certify that the overall total amount of hydrogen produced achieves at least 70% GHG savings (see point 2.10), the grant may be reduced at the end of the implementation period. If a project was awarded under the maritime topic and is not able to demonstrate signed contracts for 60% of the production volumes as stated in the bid with a maritime off-taker/s at the moment of reaching Financial Close, the project will be terminated. At the end of the implementation period, the project will have to demonstrate that 60% of the produced volumes were directed to off-taker/s from the maritime sector, non-compliance will result in proportional reduction of the maximum grant.	moment of reaching Financial Close, and grant reduction if non- compliance with the delivered volumes at the end of the implementation period.
4.3	Payment schedules	Semi-annual (every 6 months after entry into of operation)	No change
4.4	Reporting requirements	<ul> <li>Until entry into operation, projects will have to report annually on their progress</li> <li>The origin of the electrolyser will be reported at FC and EiO. At the end of the implementation period, a report on project's contribution to achieving security of supply of essential goods and contribution to Europe's industrial leadership and competitiveness will have to be provided.</li> <li>After entry into operation, projects will report periodically alongside their requests for payment (i.e. for every six months of the operation). Reports will concern the verification and certification of the produced volume of RFNBO hydrogen.</li> <li>In these reports, projects will also have to report during implementation (i) changes in the planned off-takers, clearly stating the sector to which the new off-takers belongs and (ii) confirm that rules on combination of support are respected.</li> <li>At the end of the implementation period, the beneficiaries will need to provide certification that the total volume of hydrogen produced during the support period achieves at least 70% GHG savings according to the rules set out in the Commission Delegated Regulation (EU) 2023/1185 (calculated and certified at the end of the support period). Certification can be provided by a third party or through audited reports.</li> <li>To fulfil the call objective of price discovery and contribution to market formation, the following information will be published: (i) identified bid price, total volume, electrolyser capacity, planned electrolyser origin, and name of successful projects,</li> </ul>	<ul> <li>Change:</li> <li>Projects to report during implementation on changes in their off-takers and on forbidden cases of combined support.</li> <li>Need to confirm during implementation the absence of cumulation as required in the T&amp;C.</li> <li>Information on the planned origin of the electrolysers of successful applicants will be made public.</li> </ul>

(ii) anonymised bid price, total volume and capacity for unsuccessful bidders, (iii) anonymised and aggregated off-take prices for all bidders. Additional data and analysis may be published where anonymisation is guaranteed.	

# 2.5 Design elements defining the auction and framework conditions.

Table 4: Overview of design elements for the Innovation Fundcompetitive bidding mechanism - auction and framework conditions

No.	Design Element	Specific implementation in Innovation Fund renewable hydrogen auction	Change from IF23 Auction
5.1	Scheduling/auction frequency	To be defined based on participation received in previous auctions.	Change: schedule of auctions dependent on the participation received in previous auction calls.
5.2	Timing of the auction (early stage or late-stage auction)	Late-stage auction.	No change
5.3	Granting authority	Climate, Infrastructure and Environment Executive Agency (CINEA) or national granting authority in case of Auction-as-a-Service.	No change

## **III.** Qualification requirements

#### 1) Renewable electricity sourcing strategy

The renewable electricity sourcing strategy needs to demonstrate that the project has a credible plan and has taken initial precontractual steps towards securing renewable electricity that in volumes and time profile matches the 60% of volumes of RFNBO hydrogen as stated in the proposal. The electricity sourcing strategy should address the main principles of RFNBO hydrogen production: additionality, geographical and temporal correlation.

For each expected electricity source, the following information must be stated:

- a) Name of renewable electricity provider or indication of own assets<sup>9</sup>, where applicable.
- b) Type of renewable electricity source.
- c) Type of connection (dedicated assets with a direct connection with the renewable electricity generation asset or connection via the grid).
- d) Volume of electricity supplied from the source (incl. % of absolute volume needed for the project).
- e) Pricing structure (fixed price, collar, price floor, floating, indexed etc.).
- f) Duration of supply.
- g) If the power supply is conditional on the development of infrastructure independent of the project, information and timetables for commissioning the infrastructure.

a) to f) must be represented in an overview table for all electricity sources.

For at least 60% of the required total electricity volumes during the project's implementation period, Heads of Terms (HoT) or other forms of pre-contractual signed term sheets must be provided, containing points a) to f) above.

Where the electricity provider is the same legal entity as the beneficiary, a letter signed by a director/senior executive of the beneficiary can be provided instead of HoT, explaining how the renewable energy is produced and reserved internally for the production of RFNBO hydrogen by the project. The letter should contain points a) to f) above.

The evidence of a renewable electricity sourcing strategy must be consistent with the bid and the financial information file, as well as basic project parameters like the assumed full load hours, hydrogen off-take profile or electrolyser efficiency presented in the application forms.

#### 2) Hydrogen off-take and price hedging strategy

The hydrogen off-take and price hedging strategy must show that the project has a credible plan and has taken initial pre-contractual steps towards securing the off-take for the produced volumes of RFNBO hydrogen as stated in the bid. Expected off-takers must be listed with the following:

- a) Name of the off-taker.
- b) Sector and sub-sector of the off-taker. Please refer to the sector categorization provided in Form C).
- c) Off-take volumes
- d) Pricing structure (fixed price, price floor, floating, indexed etc.).
- e) Duration of the off-take agreement.
- f) Method of delivery.
- g) Where the delivery of the hydrogen to an off-taker is dependent on significant energy infrastructure that needs to materialise on time (e.g. pipelines) or other installations beyond the boundaries of the project, please describe and provide a timeline (including permitting) for that energy infrastructure to become operational in line within the maximum time to entry into operation required in the auction.

a) to f) must be presented in an overview table for all off-takers.

For at least 60% of the RFNBO hydrogen production volumes during the project's implementation period, Heads of Terms (HoT) or other forms of pre-contractual signed term sheets with (an) off-taker(s) must be presented, containing points a) - f) above.

<sup>&</sup>lt;sup>9</sup> Location and bidding zone of the asset(s).

As a general rule, the 'off-taker' will be the entity to which the renewable hydrogen, as stated in the bid, is supplied to. If the 'off-taker' is the same legal entity as the beneficiary of the auction, the project will be considered an 'integrated project'. In the case of integrated projects:

- The bidder must present a letter signed by a director/senior executive of the beneficiary containing points a) to f) above explaining how 60% of the RFNBO hydrogen production volumes during the project's implementation period are reserved internally for self-consumption. The information reflected in the letter should be the same as that required in the HoT of a third party off-taker except that instead of the name of the off-taker one should indicate one's own asset within the project.
- If the hydrogen is transformed/used within the integrated project (e.g., producing ammonia, methanol), the project must also present Heads of Terms (HoT) or other forms of pre-contractual signed term sheets with off-taker(s) containing points a) f) above concerning the volumes of derivative product that are equivalent to 60% of the RFNBO hydrogen production volumes, as stated in the bid, during the project's implementation period. Information in point c) must also mention the expected conversion factor from the volumes of RFNBO hydrogen to the final derivative product volumes. If the hydrogen is transformed into a derivative fuel for bunkering activities in the maritime sector, as 'off-taker' will be considered the entity taking the derivative product from the 'integrated project' (this aspect concerns the eligibility conditions under the maritime topic)

All projects must present an hydrogen off-take and price hedging strategy that shows that the project has considered hedges against the variability risk of prices of electricity supply and off-take. Particularly, to mitigate the risk of production stops or schedule alterations due to unforeseen revenue decreases or cost increases (assessed in conjunction with evidence provided in the renewable electricity sourcing strategy). There needs to be substantial symmetry between the price structure of the expected renewable electricity sourcing and the expected off-take arrangements<sup>10</sup>.

For being eligible under the maritime topic a project must present in its application, and as part of the documentation for its offtaker strategy, HoTs or other forms of pre-contractual signed term sheets with (an) off-taker(s) belonging to the maritime sector for at least 60% of the RFNBO hydrogen production volumes, as stated in the bid, during the project's implementation period.

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<sup>11</sup> in ports within the EEA. Fuel traders and/or intermediaries (including storage facilities), are not eligible as off-takers, neither are virtual agreements, under the maritime topic. To justify its claim, the hydrogen off-take strategy presented with the bid must include a self-declaration from the off-taker confirming that it belongs to the maritime sector, together with the following documentation:

- a) If the off-taker is a shipping company making use of bunkering activities, the Maritime Operator Holding Account (MOHA) number of that company and/or the IMO unique company and registered owner identification number, or proof of maritime chartering agreements in the case of bareboat charterers
- b) If the off-taker is a provider of bunkering activities (including fuel supply, and operation of bunkering), endorsement letter from a maritime authority (e.g EMSA), Industry Associations (e.g International Bunker Industry Association, SGMF, etc), Port Authorities (e.g Port of Rotterdam) or a valid statement of a third party auditor.

### 3) Electrolyser procurement strategy

The submitted electrolyser procurement strategy must include a Memorandum of Understanding, Letter of Intent or another form of pre-contractual signed term sheets<sup>12</sup> with an electrolyser manufacturer and must include at least the following elements:

- a) Type of technology
- b) Declaration on company which will produce the electrolyser and where the manufacturing of the electrolyser will take place
- c) Declaration of Origin: indication of the origin of the electrolyser stacks used in the project (in case of mixed origin which % is manufactured in the EEA)

<sup>&</sup>lt;sup>10</sup> E.g. the expected shares of fixed and floating pricing structures should match between the renewable electricity sourcing strategy and the offtake arrangements.

<sup>&</sup>lt;sup>11</sup> bunkering is the supply of solid, liquid or gaseous fuels or any other source of energy used for propulsion of ships or for the general or specific energy supply on board ships

<sup>&</sup>lt;sup>12</sup> Note that only pre-contractual agreements are needed at bidding stage. Note also the requirement on start of works (in auction good).

- d) Electrolyser capacity in MWe
- e) Expected delivery date
- f) Terms of delivery
- g) Price
- h) Information of the standards the electrolyser will comply with
- i) Indication of percentage (%) of the value of the electrolyser allocated to critical raw materials as recorded in the fifth list of critical raw materials for the EU (Annex II, to COM (2023) 160)
- j) Information whether the electrolyser supplier has signed up to a responsible business code of conduct.
- k) Information whether the electrolyser supplier has an end of life / recycling strategy plans for the electrolyser
- 1) Information about foreign financial contributions received by the manufacturer of the electrolyser (in the last 3 years).

#### 4) Environmental permits

Evidence of initiated process with relevant national or regional authority to receive an environmental permit for the RFNBO hydrogen production installation within the maximum time to entry into operation.

The submitted documents must establish in a credible manner that the initiation of the process of obtaining a permit has been accepted by the relevant authorities and that the timeline of achieving the permit before the maximum time to entry into operation is realistic. The documentation provided will be assessed considering the national context, which you can also describe in your application.

The document must also explain the water sources planned for the project.

#### 5) Grid connection permits

If the project will be using power from the electricity grid, credible evidence of ongoing process with relevant authority to receive a grid connection permit for the RFNBO hydrogen production installation within the maximum time to Entry into Operation.

The submitted documents must establish in a credible manner that the initiation of the process of obtaining a permit has been accepted by the relevant authorities and that the timeline of achieving the permit before the maximum time to entry into operation is realistic. The documentation provided will be assessed considering the national context, which you can also describe in your application.

#### 6) Completion guarantee letter of intent

A letter of intent to issue the completion guarantee (using the mandatory template provided alongside the call for proposals) from a bank or a financial institution, 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 an EU Member State). Financial institutions including banks or insurance companies (with the minimum required rating) can be accepted as guarantor even when they are affiliated to the beneficiary.

The signed completion guarantee will need to be issued no later than two months after the receiving the evaluation result letter inviting successful applicants for the grant agreement preparation.

The letter of intent provided at the bid stage (a mandatory template will be provided) which stating that the said financial institution will provide, if the project is selected for funding, a completion guarantee on behalf of the applicant, issued to the granting authority as beneficiary, for an amount corresponding to 8% of the maximum grant amount. The completion guarantee shall be valid from the moment of issuance until six months after the maximum time to entry into operation (i.e. after verification that the electrolyser capacity stated as part of the bid production capacity is operational).

The project will have to clearly state in the letter of intent i) the rating level, 2) the name of the entity providing the rating 3) In case of difference between the rated entity and the one signing the letter of intent, an explanation of the relation between both of them, an 4) a link to and open rating data base, or a letter from the rating entity, proving the rate itself.]

## 7) Feasibility study

The feasibility study is a stand-alone mandatory document that should contribute to assess the maturity of the project at the moment of application. It must be drafted in accordance with the minimum requirements that will be established in a template available on EU Funding and Tenders Portal. Main sections of the feasibility study will be:

- Project description and requirements (including aspects such as objectives, resource and feedstock availability, equipment, location, situation of regulatory requirements, rights and licenses or public acceptance)
- Technology readiness, expected project output and impacts
- Project Organization, staffing and schedule
- Risks analysis and management

### IV. Rules on combination of support under the auction with other public support

This section describes the rules for combining the support awarded through this auction with other public support in the form of: either State aid (both notified e.g. under the CEEAG<sup>13</sup> or the IPCEI Communication<sup>14</sup> and not notified e.g. under the GBER<sup>15</sup>) or funding from EU programmes (e.g. Horizon Europe, Connecting Europe Facility, InvestEU).

Cases of combination of support marked  $\mathbf{X}$  are not allowed. A self-declaration will be required as part of the project application, stating that by the time of grant agreement signature the project will not be in any excluded cases of combined support.

Cases marked V are allowed.

For all cases of allowed combination of support (under the IF auction), please also note that there are also rules on combination of support that have to be respected coming from State aid requirements (e.g. in some case of funding gap assessment under CEEAG/IPCEI).

For avoidance of doubt, general measures such as general tax reduction measures applicable to all economic operators, when they are *not* State aid, fall outside the scope of this section.

Entity	Cases of combination of support that are not allowed	Cases that are allowed
RFNBO hydrogen producers signing Grant Agreement for an Innovation Fund auction grant ('IF auction project')	<ul> <li>X Combination with public support for RFNBO hydrogen producer's CAPEX or OPEX is <i>not</i> allowed.</li> <li>X For avoidance of doubt, compensation for indirect emission costs provided under the ETS State aid Guidelines<sup>16</sup> is a form of State aid and cannot be combined.</li> <li>X For avoidance of doubt, reductions from levies or taxes which reflect part of the cost of providing electricity to the beneficiaries, e.g. reductions from network charges or from charges financing capacity mechanisms or reductions in electricity taxes (not covered by point 403 of CEEAG or equivalent points under other State aid frameworks) cannot be combined when they are State aid.</li> </ul>	<ul> <li>V Combination with previous public support for early project development stages such as: research, feasibility studies or FEED studies preceding the commercial operation is allowed.</li> <li>V Combination with previous public support for capacity development that is <i>not</i> part of the bid is allowed<sup>17</sup>.</li> <li>V Combination with public support for energy infrastructure<sup>18</sup> connected to the project (e.g. Connecting Europe Facility support) is allowed, provided that the energy infrastructure is not infrastructure dedicated to this project ("non-dedicated infrastructure").</li> <li>V Combination with reduction from levies on electricity consumption which finance energy and environmental policy objectives (as described in section 4.11 of CEEAG or equivalent measures under other State aid frameworks)<sup>19</sup> is allowed<sup>20</sup>, even if these measures qualify as State aid.</li> </ul>
Electrolyser manufacturers from whom IF auction		V Public support provided to the electrolyser manufacturers supplying equipment for projects.

<sup>&</sup>lt;sup>13</sup> https://competition-policy.ec.europa.eu/sectors/energy-environment/legislation\_en

<sup>&</sup>lt;sup>14</sup> <u>https://competition-policy.ec.europa.eu/state-aid/legislation/modernisation/ipcei\_en</u>

<sup>&</sup>lt;sup>15</sup> https://competition-policy.ec.europa.eu/state-aid/legislation/regulations\_en

<sup>&</sup>lt;sup>16</sup> Communication from the Commission – Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post-2021, 2020/C 317/04.

<sup>&</sup>lt;sup>17</sup> E.g. if a previous project stage of 5MWe of capacity has received public support, and a 15MWe capacity extension is bid into the auction, that bid is eligible. A combined 20MWe bid, comprising 5MWe previously supported would, however, not be allowed.

<sup>&</sup>lt;sup>18</sup> As defined in CEEAG (point 36 of section 2.4 Definitions).

<sup>&</sup>lt;sup>19</sup> Measures notified that fall under point 403 and section 4.11 of CEEAG or similar measures, for example those that fall under Article 44 of GBER.

<sup>&</sup>lt;sup>20</sup> Allowed for the 2024 auction round. If further auction rounds follow, this case of combined support may not be allowed.

Entity	Cases of combination of support that are not allowed	Cases that are allowed
projects will purchase equipment		
Renewable electricity installations <sup>21</sup> from which IF auction project will source electricity	X For RFNBO hydrogen producers entering into operation as of 1 January 2028, in order to comply with the "additionality principle" established in the Delegated Acts of the Renewable Energy Directive (RED), the renewable electricity installation from which power is sourced cannot receive public support (except cases listed on the right).	V For RFNBO hydrogen producers entering into operation before 1 January 2028, there is no need to apply the additionality requirement and renewable electricity installations can receive public support.
		V For RFNBO hydrogen producers entering into operation as of 1 January 2028, the "additionality principle" can be waived for renewable electricity installations if
		→ The grid has low emissivity (<18gCO2/MJ)
		$\rightarrow  \text{The grid has a high share of renewables} \\ (>90\%)$
		In such cases, renewable electricity and thus renewable electricity installations can benefit from public support.
		<b>V</b> For RFNBO hydrogen producers that are connected to installations generating renewable electricity with a direct line and not via the grid, the exclusion of public support does not apply.
		Please consult the Renewable Energy Directive and its Delegated Acts for detailed rules.
Direct consumers <sup>22</sup> of the output of IF auction projects.	For non-integrated projects: X Direct consumers of the RFNBO hydrogen output that is supported by	V Direct consumers of the output of IF auction projects can benefit from public support for their CAPEX costs.
Only the output supported by the IF auction grant is concerned <sup>23</sup> .	the Innovation Fund auction grant cannot benefit from public support for operational costs of their RFNBO hydrogen consumption levels <sup>25</sup> .	<b>V</b> Direct consumers of the output of IF auction projects can benefit from public support for their energy infrastructure costs provided it is not energy infrastructure dedicated for this project only ("non-dedicated infrastructure").
Output of non- integrated projects is RFNBO hydrogen.	For integrated projects, e.g. ammonia producers:	
Output of integrated projects <sup>24</sup> is the RFNBO hydrogen derivatives	<b>X</b> Direct consumers of the RFNBO derivatives output that is supported by the Innovation Fund auction grant cannot benefit from public	

<sup>&</sup>lt;sup>21</sup> Rules stemming from Renewable Energy Directive Delegated Regulations on RFNBOs and notably "additionality principle".

<sup>&</sup>lt;sup>22</sup> If and IF auction project sells to energy trader/aggregator, then the direct consumer is the entity buying from this energy trader/aggregator. Rules on combination of support do not apply further downstream – beyond the direct consumers.

<sup>&</sup>lt;sup>23</sup> An example: a green steel producer secures 10% of its RFNBO hydrogen consumption from a hydrogen producer who won the IF auction. The requirement for off-takers not to benefit from aid for operational costs concerns only the volume of RFNBO hydrogen acquired that would be receiving support through the Innovation Fund 2023 Auction, i.e. the volume of hydrogen stated in the bid of hydrogen producer (in the example the 10% of RFNBO hydrogen consumption). The reminder: 90% of the steel producer RFNBO consumption can receive the operational support. If it cannot be differentiated which fraction of the off-taker's hydrogen consumption receives other operational aid (e.g. aid is for the entire consumption volumes of the off-taker), this would be considered a breach of rules on combined support.

<sup>24</sup> An 'integrated project' is one in which the off-taker of the renewable hydrogen, as stated in the bid, is the same legal entity as the beneficiary of the auction.

<sup>&</sup>lt;sup>25</sup> Such as support to (partially) cover the costs of procuring or using hydrogen.

Entity	Cases of combination of support that are not allowed	Cases that are allowed
(e.g ammonia, e-gas, e- fuels)	support for operational costs of their RFNBO hydrogen derivatives consumption levels <sup>26</sup> .	

<sup>&</sup>lt;sup>26</sup> Such as support to (partially) cover the costs of procuring or using hydrogen derivatives.