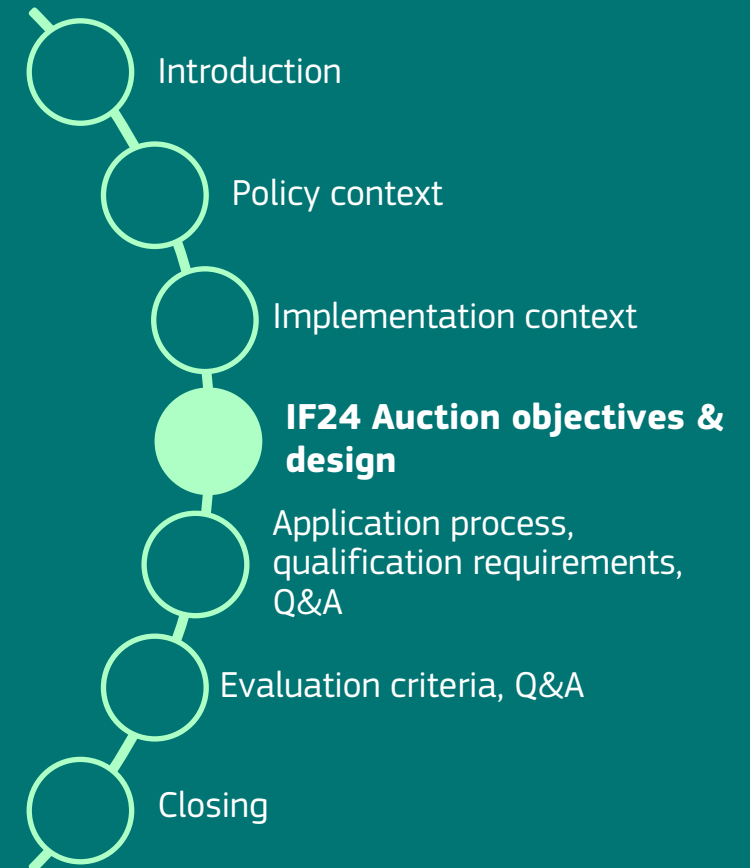


Objectives & design

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



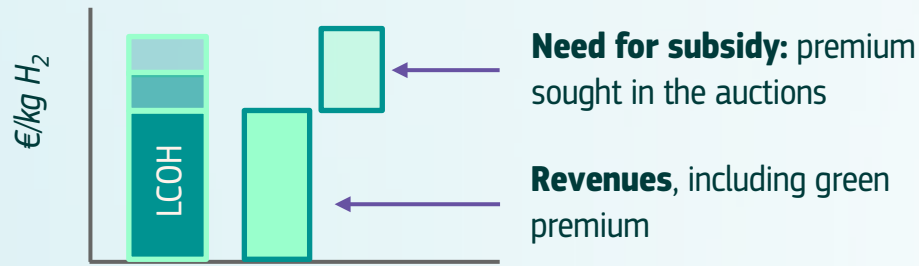
IF24 Auction timeline



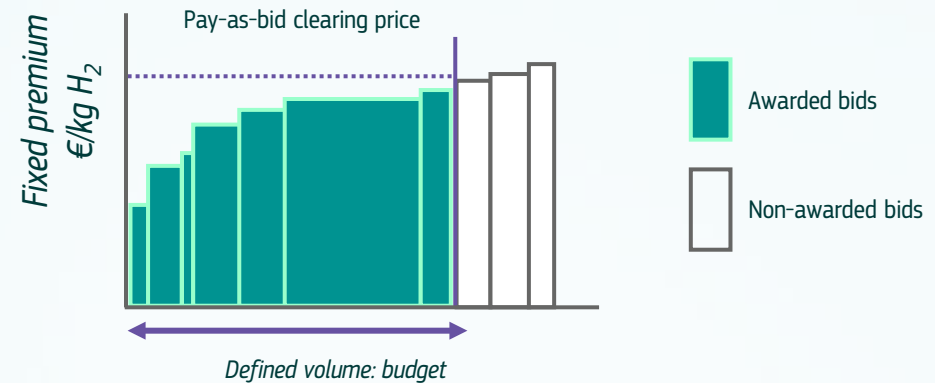
IF24 Auction overview

- 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 off-takers, 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 production OR stack assembly 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/Lol 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 sufficient evidence 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.




Electrolyser manufacturer

✓ Allowed




RE electricity producer

Rules for public support spelled out in RFNBO Delegated Act



Electrolyser

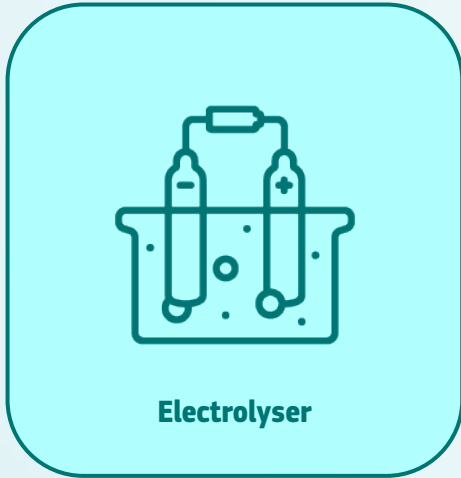
✗ In general not allowed
✓ Some exceptions to this rule



Direct consumer

✓ Allowed for CAPEX or non-dedicated infrastructure
✗ Not allowed for OPEX related to consumption of hydrogen from auction winner

Exceptions for electrolysers



X Cumulation is in general not allowed

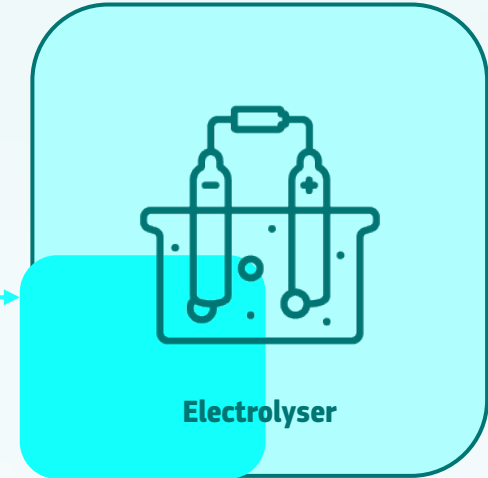
V Some exceptions to this rule

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

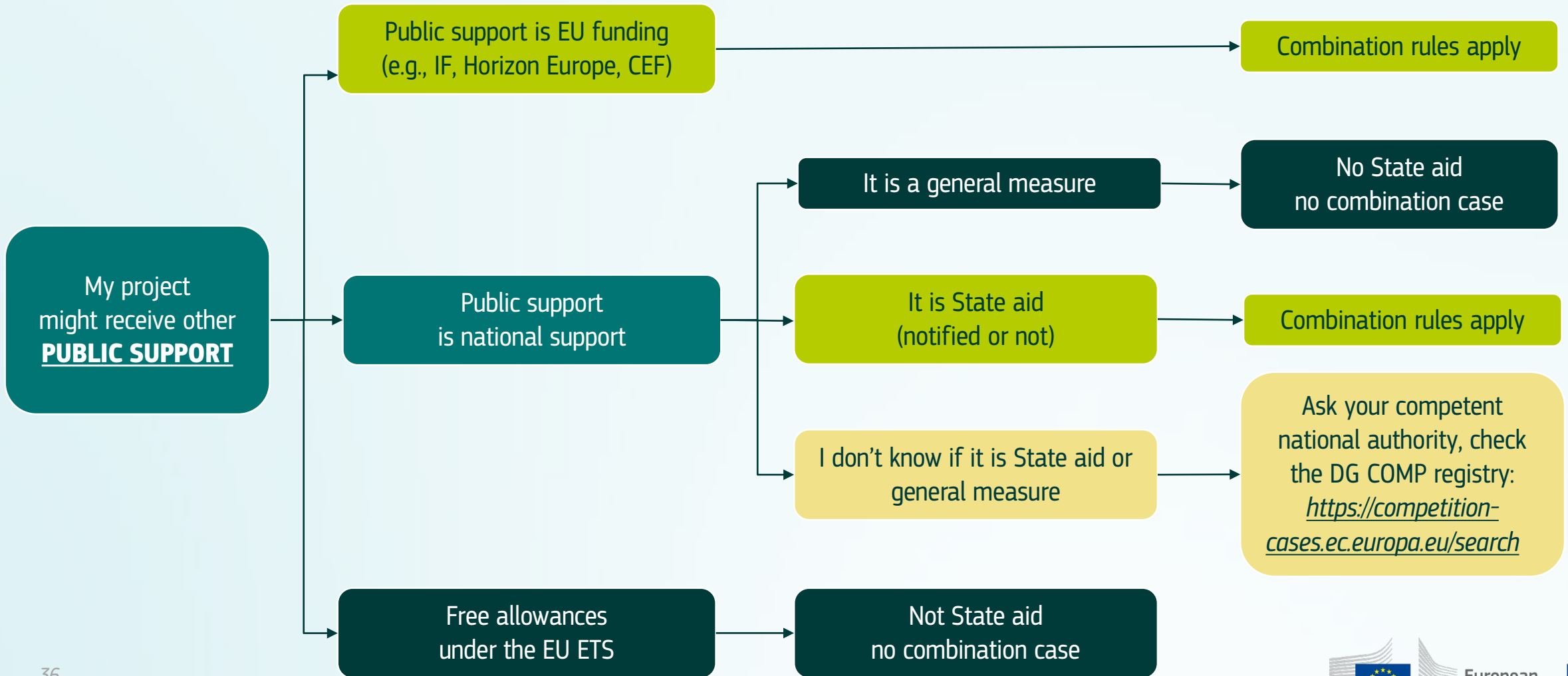
V Capacity expansion

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

*The final AaaS budget contribution from Spain is non-discretionary, and subject to left-over funds from the Spanish Recovery and Resilience Plan (RRP) measure C31.12

AaaS concept

