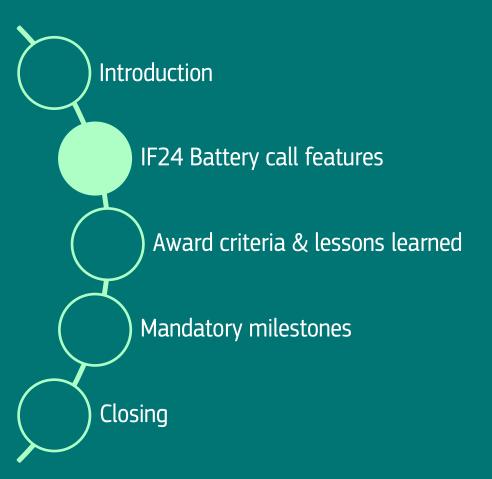
IF24 Battery call features

Johanna SCHIELE, *Policy Officer*DG CLIMA - Low Carbon Solutions (II):
Research & Low Carbon Technology Deployment





Calls launched on 3 December

1

Regular call for proposals:

- Call size: **€2,4 billion**
- Includes dedicated topic & budget envelope for manufacturing of Cleantech components
- Any upstream battery components manufacturing (precursor materials, CAM, AAM, anodes, cathodes, electrolyte...), cell manufacturing & pack assembly can be funded
- 5 classic Innovation Fund evaluation criteria

2

New, dedicated EV battery cell manufacturing call:

- Call size: **€1 billion**
- Only project including EV cell manufacturing can be funded
- Upstream component manufacturing can be included as part of the project
- New, additional award criteria focusing on manufacturing carbon footprint and resilience of supply chains

2nd EU H2 Bank auction:

- Auction budget size: €1.2
 billion.
- Not relevant for batteries.

3

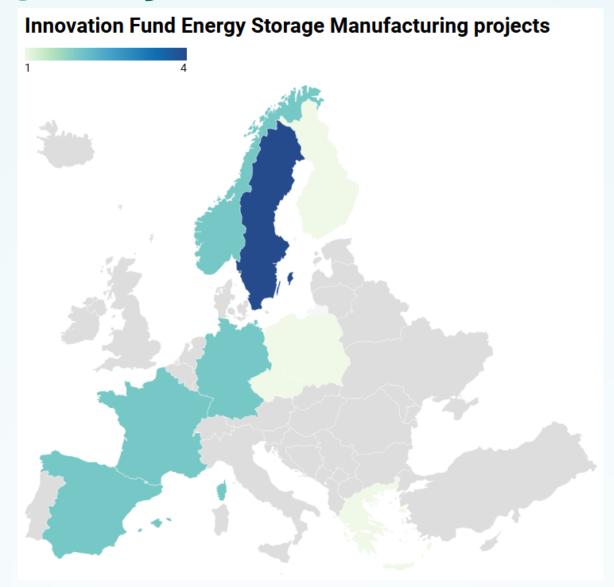
Additional **€200 million** Invest EU top-up (= loan guarantee from the Innovation Fund to Invest EU) planned to enable further lending/venture debt to battery value chain projects



Portfolio of energy storage projects

Already has an impressive portfolio of energy storage projects

- 9 Energy Storage manufacturing projects part of the IF portfolio
- 7 selected in the IF23 call and preparing grant agreements
- Projects in Czechia, Finland, France, German, Greece, Norway, Poland, Spain and Sweden



Energy storage manufacturing projects

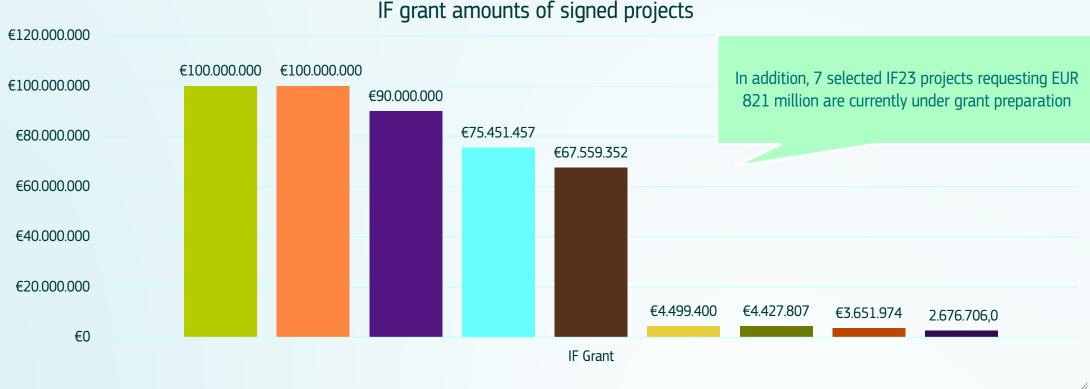
Giga Arctic

ELAN

NorthSTOR PLUS

■ ReLieVe

16 energy storage manufacturing projects requesting EUR 1.27bn of public support in total



CarBatteryReFactory

NorthFlex

Listlawelbattcool2

■ Green Foil project2



Political context

- The Commission will support manufacturing of the "most sustainable [EV] batteries" through "a dedicated instrument under the Innovation Fund [...]" with "up to € 3 billion for the next three years"*
- Difficult situation of the battery manufacturing sector in Europe and risk of dependency on foreign imports
- Implementation of the Battery Regulation
- Stakeholders largely in favour of "regular" grants with more flexible payment schedule
 & possibility of combined support

*EVP Šefčovič announcement relating the EU-UK Trade and Cooperation Agreement), Dec 2023



Scope and budget

- EV batteries cell manufacturing (cells <u>can</u> be used in EVs)
 - V **Possibility of integrated projects** (cell manufacturing incl. upstream components manufacturing or recycling but not exceeding 100% of the project's cell production capacity)
 - X Pure assembly projects (e.g., battery pack or module assembly), as well as EV manufacturing & other battery applications excluded
 - X Remaining value chain will remain eligible in the IF24 Call
- Budget: €1 billion for the dedicated call for proposals in 2024 (IF24 Battery)



EV batteries definition

The Battery Regulation [Article 3(1)14] defines EV batteries as follows:

"'electric vehicle battery' means a battery that is specifically designed to provide electric power for traction in hybrid or electric vehicles of category L as provided for in Regulation (EU) No 168/2013, that weighs more than 25 kg, or a battery that is specifically designed to provide electric power for traction in hybrid or electric vehicles of categories M, N or O as provided for in Regulation (EU) 2018/858"



Project Maturity and disbursement schedule

Eligibility conditions:

- Only projects that have not yet reached Financial Close at the time of grant application can be funded
 - No costs can be reimbursed for activities that took place before the project starting date/proposal submission
- Modular scale-up possible; project scope has to be defined accordingly

Project Maturity requirements:

• Demonstrated shorter time to Financial Close and Entry into Operation rewarded (provided that all other aspects of the project maturity criterion are addressed).

Payment schedule:

- Projects can receive up to 40% of payments before financial close and up to 90% before EiO if well justified / needed
- 60% of payments have to be linked to actual GHG emissions reduced

Demarcation between IF24 Call and IF24 Battery

Battery Call (IF24 Battery)

- V Battery cell manufacturing
- V Battery cell manufacturing including production of upstream components(*)
- V Battery cell manufacturing including recycling activities(*)
- X Batteries for stationary storage
- X Batteries applications (e.g., EV production)
- X Assembly projects (e.g., battery packs or modules)
- X (standalone) Batteries components manufacturing
- X (standalone) Batteries recycling activities
- X Mining activities

Net Zero Technologies Call (IF24 Call)

- X Battery cell manufacturing
- X Battery cell manufacturing including production of upstream components(*)
- X Battery cell manufacturing including recycling activities (*)
- V Batteries for stationary storage
- V Batteries applications (e.g., EV production)
- V Assembly projects (e.g., battery packs or modules)
- V (standalone) Batteries components manufacturing
- V (standalone) Batteries Recycling activities
- X Mining activities



Award criteria

1) Degree of Innovation

Beyond state-of-the art (including scaling up of innovative technologies)

2) GHG emissions avoidance

Absolute emissions avoidance

Relative emissions avoidance (with min thresholds)

Quality of calculation

4) Project maturity

Technical maturity

Financial maturity

Operational maturity

5) Replicability

Efficiency gains and multiple environmental impacts

Further deployment potential and technology transfer

Europe's industrial leadership and competitiveness

7) Cost efficiency

Cost efficiency ratio (different formula for Pilot projects)

Quality of the relevant cost calculation and minimum requirements

Specific for batteries call

New

3) Manufacturing carbon footprint reduction



6) Security of supply and countering dependency



Scoring table

Min. pass score	Max. score	Weight		
6	1.0			
	10	1		
GHG emission avoidance potential				
n/a	2	1		
n/a	5	1		
3	5	1		
n/a	12	n/a		
n/a	15	1		
Project maturity				
3	5	2		
3	5	2		
3	5	2		
n/a	30	n/a		
	n/a n/a 3 n/a n/a n/a 3 3 3 3	n/a 2 n/a 5 3 5 n/a 12 n/a 15 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5		

9%

11%

14%

28%



Scoring table

	Min. pass score	Max. score	Weight	
Replicability				
Eff. gains & multiple env. Benefits	n/a	5	1	
Further deployment	n/a	5	1	
EU industrial leadership & comp.	n/a	5	2	
Total	n/a	20		
Security of supply & countering overreliance	n/a	15	1	
Cost efficiency (CE)				
CE Ratio	n/a	3	1	
Quality	1.5	3	1	
Total	n/a	6	1	
TOTAL	n/a	108	n/a	

19%

14%

6%



Degree of Innovation: scale-up challenges

- Scaling-up of existing technologies explicitly encouraged:
- Lower scoring weight on DoI than in NZT call
- Cell manufacturing does not need to be "first-of-a-kind"
- Range of options to show innovation beyond new battery chemistries, e.g.:
 - Product performance
 - Manufacturing process
 - Reduced use of raw materials / increased circularity



Additional award criterion

Looking at the carbon footprint of the manufacturing process

- In the regular IF24 Call, the GHG methodology for manufacturing projects only captures the emission avoidance from the use phase of the manufactured component(s)
- The new batteries call will also evaluate the *manufacturing carbon footprint*

Award Criterion 2:

Absolute and relative GHG emission avoidance

Project scenario: EV use case and manufacturing emissions includes:

- Pack production
- EV use phase
- EoL treatment

Manufacturing carbon footprint, includes:

- Raw materials,
- Component production,
- Cell production

Reference scenario

includes:

- Fuel production
- Internal combustion engine (ICE) use phase



Additional award criterion

Award Criterion 3: Manufacturing carbon footprint reduction

- Manufacturing carbon footprint includes:
- Raw materials (BoM)
- Component manufacturing
- Cell manufacturing



Reference scenario

includes:

- Raw materials
- Component production
- Cell production



Resilience requirements

(both in NZT Call and in Battery Call) under "Replicability criterion": the dedicated sub-criterion: "Contribution to EU industrial leadership and competitiveness"

Battery Call also includes a new award criterion: "Security of supply and countering dependency", aiming to reduce sourcing of anode and cathode active material from China.

Requirement on patents: New patents originating from the project*, during the project's duration must be registered in an EU Member State or EEA country

* i.e. results within the meaning of Article 16 of the Grant Agreement

Reporting requirements at Financial Close, at Entry into Operation, in annual reports and reporting at the end of the monitoring period. **Penalties** apply if requirements are not fulfilled.

