INNOVATION FUND

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11-22 OCTOBER 2021

INNOVATION FUND IN A NUTSHELL

Production and use of Renewable energy

including manufacturing plants for components

Carbon
Capture Use
and Storage

Scaling up clean tech

Energyintensive industries

including substitute products

Energy storage

including manufacturing plants for components



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KEY FEATURES

Financed from the revenues of the EU Emissions Trading System Volume: EUR 25 billion* until 2030 (depending on carbon price) *at EUR 50 / tCO2 Large projects: Support of up to 60% of additional capital and operating costs (up to 10 years)
Small projects: up to 60% of CAPEX

Up to 40% of grant disbursed at financial close (FC)

At least 60% of grant disbursed after FC and during 10-years operating period against GHG emission avoidance

Small scale projects – shorter **3-years** period

Annual calls for large-scale and small-scale projects

Projects must be implemented in the EU. NO and IC

Project development assistance provided by the European Investment Bank



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SMALL SCALE PROJECTS KEY FACTS



Launch

1 Dec 2020

Deadline

10 Mar 2021



100M€

+

Project Development Assistance



232 Proposals

175 admissible and eligible



6 Experts



AWARD CRITERIA

Degree of innovation*

Scalability

GHG avoidance

Cost efficiency

Project maturity

*BONUS for degree of innovation criterion Direct air capture Net carbon removal or substitute products

GRANT DISTRIBUTION

LUMP-SUM contribution

up to 40% of grant at financial close and grant covering up to 60% of the CAPEX

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SMALL SCALE CALL 2020 IN A GLANCE

32 projects cover 14 different sectors and 12
 Member States + Norway and Iceland



France, Spain and Sweden have the highest number of selected projects

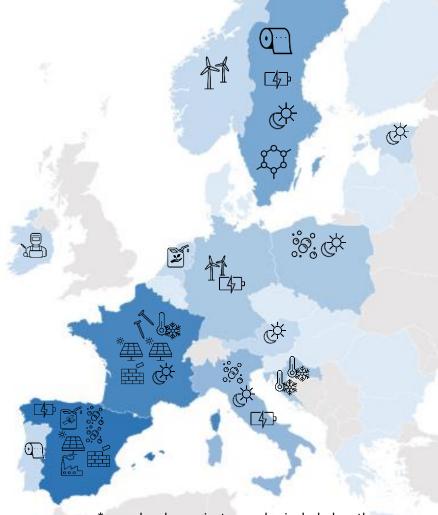


Biofuels and biorefineries 👸 Hydrogen

Iron and steal Refineries

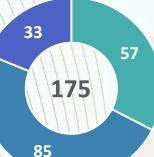
Non-ferrous metals Intra-day electricity storage



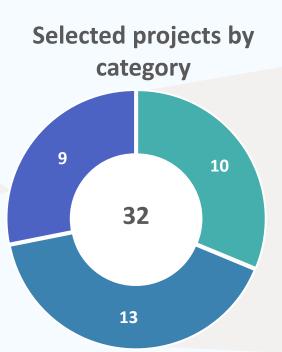


SECTOR REPRESENTATION

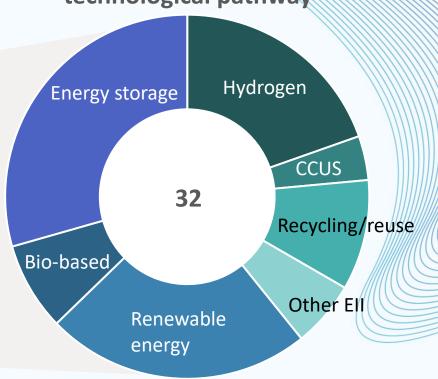
Eligible projects by category



- Renewable Energy
- Energy Intensive Industry
- Energy Storage



Breakdown by technological pathway



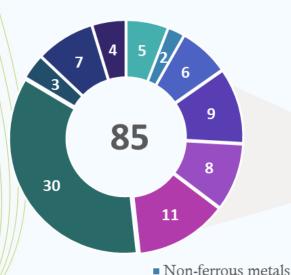
Legend: High-level screening of applied technological pathways. Classification of projects can be overlapping. Other Energy intensive industries (EII) = New process/product and Electrification



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ENERGY INTENSIVE INDUSTRY: MANY SECTORS REPRESENTED

Eligible projects



■ Cement and lime

■ Refineries

■ Glass, ceramics & construction mat

■ CO2 transport and storage

- Iron and steel
- Pulp and paper
- Chemicals
- Hydrogen
- Other sector(s)

Projects selected for grant preparation



 Sectors with more selected projects cover hydrogen, chemicals, and glass, ceramics & construction material

All eligible projects in cement & lime and other sectors failed either minimum requirements or minimum thresholds

Success rate of Energy Intensive Industry: 15%



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ENERGY INTENSIVE INDUSTRY PROJECTS & THEIR CONTRIBUTION TO THE GREEN DEAL









Iron and steel Non-ferrous metals

EB/UV curing without Gas

 High pressure electric boiler Pulp and paper

- Towards fossil fuel free tissue production

 Biamana production
- Biomass as pulp mill fuel source

Chemicals

Biomaterial to replace fossil-based plastics



Glass, ceramics and construction material

 Decarbonization of flat glass production
 CO2 negative aggregates by ACT



- Green hydrogen production
 Hydrogen production
- Hydrogen production based on waste



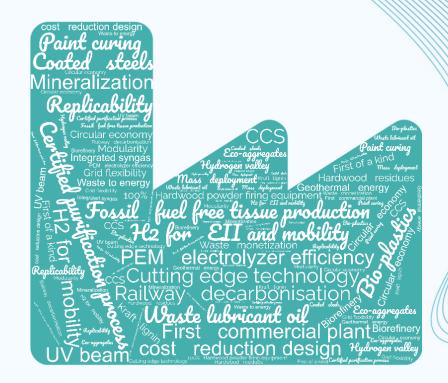
CO2 transport and storage

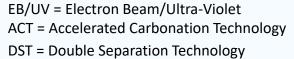
 Carbon Capture and Mineral Storage



Refineries

Regenerating industrial oils by DST

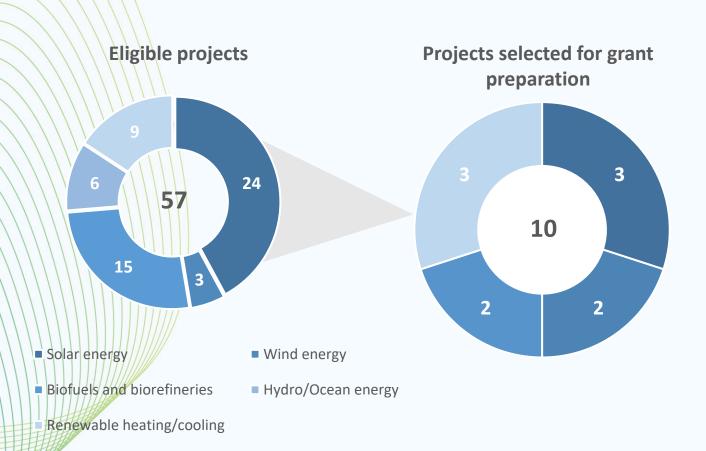






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RENEWABLE ENERGY



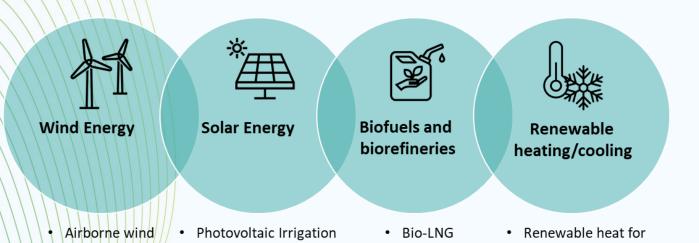
- 2 out of the 3 eligible wind energy projects were selected for grant preparation
- Only a few eligible solar, biofuels and biorefineries projects were selected
- All eligible projects in hydro/ocean energy failed criteria minimum thresholds
- Success rate of renewable projects: 18%



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RENEWABLE ENERGY PROJECTS & THEIR CONTRIBUTION TO THE GREEN DEAL

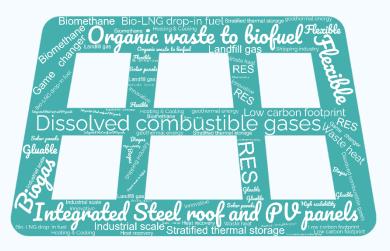
malt industry



Cryoconsender &

methane recovery

module







energy

System (PVI)

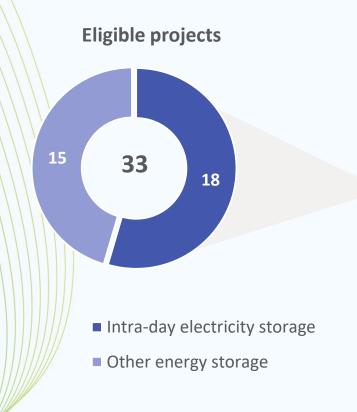
conformable panels

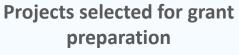
• BIPV roof components

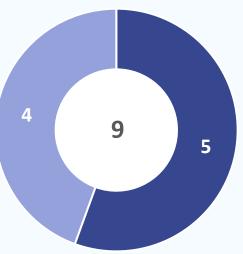
Lightweight &

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UROPEAN ENERGY SYSTEM

ENERGY STORAGE







- Both intra-day electricity storage and other energy storage
- Relatively high success rate - 27%



ENERGY STORAGE PROJECTS & THEIR CONTRIBUTION TO THE GREEN DEAL

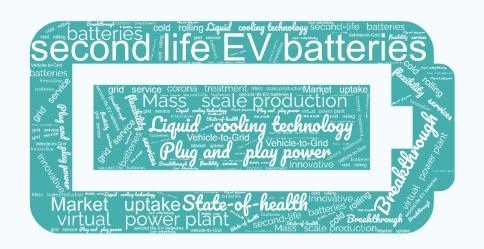


Intra-day electricity storage



storage

- V2G tech
 Battery Energy
 Storage System
 Virtual Power Plant
 Electric propulsion for ferry
- Battery foil as current collector for battery cells
- ESS based on zero- and second life EV batteries
 - Off-grid seaport
 - Airport second life battery storage



V2G= Vehicle to Grid EV = Electric Vehicle ESS = Energy Storage System



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TOWARDS 2030: RESHAPING THE EUROPEAN ENERGY SYSTEM

#EUSEW2021

RECOMMENDATIONS ON HOW TO PREPARE GOOD PROPOSAL

- Start well on time preparing your application.
- Read carefully all the requirements (including the admissibility and eligibility ones) and call documentation. Check the related videos and available guidance.
- **Do not wait the last day to submit** and make sure to have all the supporting documents ready. Use the Helpdesk.
- Follow the IF methodologies and templates. Focus on evidenced and correct financial and technical data.
- Be realistic in your assumptions and calculations.
- Ensure consistency of claims and numbers across your documentation: always have somebody (that was not involved in the preparation of the proposal) checking the proposal documents
- **Do not underestimate the risk analysis**: comprehensive risk assessment and convincing mitigation measures are key.



TIPS AND TRICKS (1)

GHG Calculation

- <u>Follow properly</u> the <u>Innovation Fund GHG</u> emissions methodology
- Use the provided GHG calculation tool
- <u>Document</u> and properly reference <u>all</u> <u>assumptions</u> and emissions factors

Scalability

- Present a clear and comprehensive communication & dissemination strategy
- Clearly present how <u>IPR and licensing issues would be handled</u> for e.g. technology transfer at sector level
- <u>Provide detailed assumptions regarding the expected cost reductions</u> based on e.g. economies of scale, avoid <u>Greenwashing claims</u> unsubstantiated, generic claims about greening the economy

Degree of Innovation

- <u>Establish the relevant State-of-the-Art</u> in a comprehensive manner
- Explain in detail why the innovation goes beyond incremental innovation
- <u>Provide key performance data evidenced in</u> the feasibility study and other documentation

Technical Maturity

- Properly <u>associate WPs with activities</u> and with their <u>planned costs</u>
- Define a <u>timeline</u> that is <u>comprehensive</u>, <u>realistic</u> and <u>consistent</u> with your project's technical and financial elements
- <u>Underpin</u> any information you provide on technical maturity <u>with</u> <u>credible evidence</u> (including due diligence report where available)

TIPS AND TRICKS (2): FINANCIAL MATURITY

- <u>Provide a full financial model covering the entire project lifetime</u> and consistent with the project milestones.
- Ensure that the financial projections are coherent with the assumptions of the business plan and across the other application documents.
- Ensure that the assumptions used for the <u>WACC</u> adequately reflect the risks of the project.
- Fully describe and <u>substantiate the main revenues and cost assumptions</u>: <u>be transparent on your CAPEX assumptions</u> and avoid to underestimate them to fall within the eligibility criteria
- <u>Justify the cost contingencies assumed</u> and ensure that they are <u>in line with market practice in your sector</u>

- Ensure that the level of debt assumed is supported with stable cash flows to be demonstrated by long-term off-take contracts
- <u>Provide contractual evidence</u> (e.g., letters of support, MoUs, indicative terms of agreement) for off-take agreements, key suppliers, EPC parties
- <u>Provide evidence</u> of credible support <u>by your project owners</u> (e.g., binding letters of support, MoU, indicative terms of agreement)
- If the project is planning to <u>raise external debt</u>, <u>justify the key terms assumed</u>, expected cash flows and that it is in line with market standards. If possible, <u>provide letters from banks/debt investors</u> to support these assumptions.
- If <u>additional public funding</u> sources are foreseen, <u>describe</u> <u>potential contingency measures</u> in case this public support does not materialize

CONCLUSION

- The Innovation Fund supports the Green Deal with a growing portfolio of <u>innovative and</u> mature projects starting with the 32 small-scale call projects
- The IF small-scale projects aim to deliver overall more than 42,6 MtCO2* avoided
- The European Union is investing <u>EUR 118,4 million</u> in the small scale projects triggering investments for EUR 1.04 billion.
- All the selected project have wider impacts at the level of the region, sector and wide economy
 - Get ready for the next SSC planned for spring 2022
 - Check our websites and video from the SSC webinar on 12/10 for more detailed tips and tricks
 - Join us as an expert evaluator
 - * This includes an outlier project with 36 MtCO2 of GHG emissions to be avoided



GET READY

New Large Scale Call

- Expected launch of single-stage call on 26 October 2021
- Expected deadline for submission in beginning March 2022
- Expected results in July 2022
- Expected volume of EUR 1.5 billion

New Small Scale Call

- Expected launch of single-stage call in March 2022
- Expected deadline for submission late <u>August 2022</u>
- Expected results in Q1 2023
- Expected volume of EUR 100 million



NEXT EVENTS



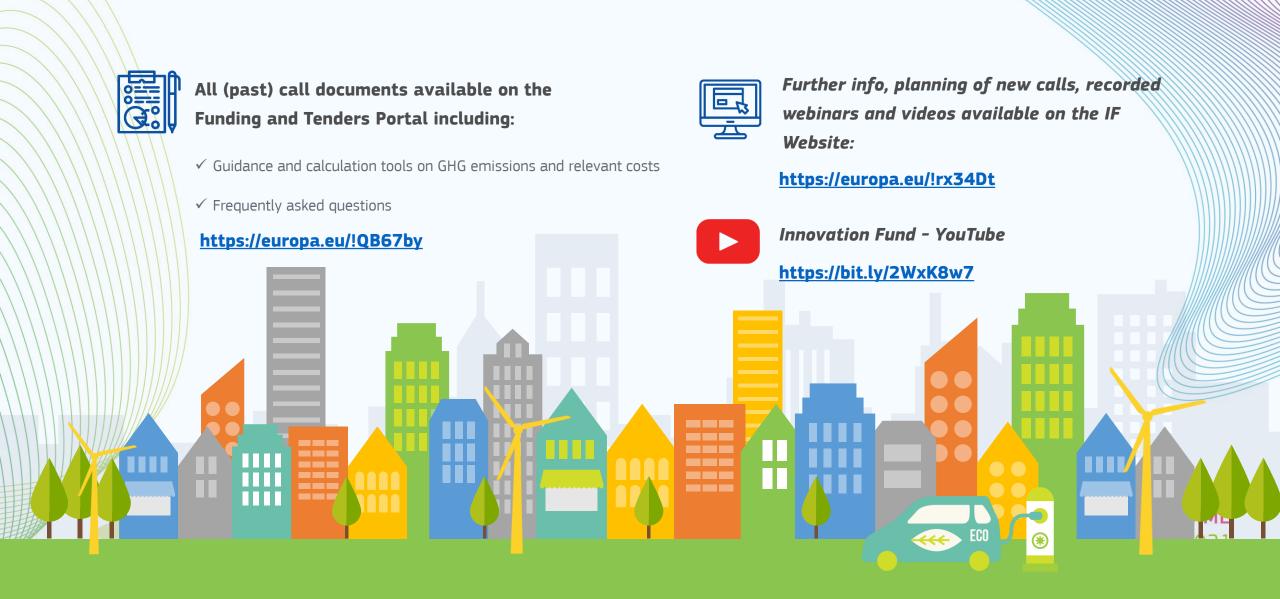
- 4 November 2021
- Mobilising finance for clean tech deployment
- During COP26 →
- Check DG CLIMA
 website
 https://ec.europa.eu/cli
 ma/eu action/innovation fund en



- 10 November 2021
- Webinar Innovation Fund | Second call for Large-scale projects
- Check CINEA's website
- https://cinea.ec.europa.eu/innovation-fund en



WHERE TO FIND MORE INFO



GET IN TOUCH



cinea.ec.europa.eu/



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Innovation Fund Helpdesk



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