

Innovation Fund

Call for small-scale projects



Innovation Fund

Production and use of Renewable energy

including manufacturing plants for components

Carbon Capture Use and Storage

scaling up clean tech

Energy-intensive industries

including substitute products

Energy storage

including manufacturing plants for components



Innovation Fund Small Scale Call

Main Features

CALL VOLUME	PROJECT SIZE	ELIGIBLE SECTORS	GRANT SIZE				
 EUR 100 million (grants) Project development assistance provided by EIB for around 20 projects 	 Total project capital expenditure between EUR 2.5 and EUR 7.5 million 	 Renewables Energy-intensive industries (incl. substitute products, CCUS) Energy storage 	 Max. 60% of total project capital expenditure 				
TIMELINE Call open since 1 December 2020, apply by 10 March 2021!							



Innovation Fund Small Scale Call

Award Criteria & Focus

AWARD CRITERIA

- Degree of Innovation
- Greenhouse gas emission
 avoidance
- Project maturity
- Scalability
- Cost efficiency

GRANT DISTRIBUTION

- Up to 40% before or at financial close
- Remaining 60% over construction and operation phase (3 year default reporting period)

FOCUS

Innovative projects close to market e.g. first sale of new technology to pioneer customers



Innovative small-scale projects ready for the market

think of

examples

Pioneer Customer(s)

Installation of an innovation in a new

- "pioneer" market with a "pioneer" customer.
- You have an exciting new technology but need a market

• Include the customer(s) in your application

- Battery solutions
- Hydrogen fuel cells powered data centres
- climate neutral public buildings: renewable energy, energy storage and substitute materials pilot buildings

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Award Criteria Small Scale Call

DEGREE OF INNOVATION	GHG EMISSIONS AVOIDANCE	PROJECT MATURITY	SCALABILITY	COST EFFICIENCY
 Beyond incremental innovation Encouragement of specific activities (e.g. substitute products) 	 Absolute & relative emissions Below ETS benchmark Biomass sustainability 	 Implementation maturity (e.g. contract with customer) Financial maturity 	 Project & regional level Sector level Economy level 	 EU contribution requested per tCO₂ avoided Max EU contribution = 60% of CAPEX Up to 7.5 million CAPEX



Grant Disbursement





Selection process

Assessment of award criteria

List of preselected projects to be consulted with Member States Award of Project Development Assistance

Award of project grants



Timeline	
1 December 2020	Call launched
9 December 2020	First Webinar
January 2021	More webinars
10 March 2021	Deadline for submission of applications
August 2021	Information on evaluation results, and invitation for grant preparation

Useful links

- Direct link to the Funding and Tender portal, IF small scale text call, FAQs: <u>https://ec.europa.eu/info/funding-</u> <u>tenders/opportunities/portal/screen/opportunities/topic-details/innovfund-ssc-2020-single-stage</u>
- Helpdesk Innovation Fund: <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/contact-program;programCode=INNOVFUND;callType</u>=
- Webinar video: https://webcast.ec.europa.eu/innovation-fund-webinar
- DG CLIMA website: <u>https://ec.europa.eu/clima/policies/innovation-fund_en#tab-0-2</u>



Project Development Assistance

Which projects can benefit from PDA?

- Rejected proposals that:
 - meet minimum requirements under degree of innovation and GHG emissions criteria and are awarded at least 50% points under project maturity;
 - are considered by evaluators as having potential to improve their maturity with PDA; and
 - are confirmed by the EIB as shortlisted projects for the PDA

How does it work?

- The PDA support consists of the EIB expert services for further development of projects
- Managed separately under project specific contract with the EIB
- Up to 20 projects could benefit from the PDA in this call

Join us as a project evaluator!

WE ARE LOOKING FOR



Technical Experts

Expertise on Life Cycle Assessment



) Financial Experts



Check INEA website for the application process!

• Individual evaluation

• 5 working days

- To be organized fully remotely from your office or home
- Can be performed during weekends and evenings

Consensus group

- Full week of discussion with other fellow evaluators
- Either in Brussels or virtually
- Up to € 5000 compensation <u>OR</u> pro-bono
- Confidentiality and conflict of interest rules apply



Thank you



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Deep dive on award criteria



Award criteria overview

DEGREE OF INNOVATION	GHG EMISSIONS AVOIDANCE	PROJECT MATURITY	SCALABILITY	COST EFFICIENCY
 Beyond incremental innovation Encouragement of specific activities 	 Absolute & relative emissions Below ETS benchmark Biomass sustainability 	 Implementation maturity (e.g. MoU or contract with customer) Financial maturity 	 Project & regional level Sector level Economy level 	 Relevant costs = total project CAPEX EU contribution requested per tCO₂ avoided



Scoring

Criterion	Max score	Min threshold after normalisation	Weighting
Innovation	5	3	x2
GHG avoidance	5	None (minimum requirements apply)	x1
Project maturity	5	3 (1.5 for each sub-criterion)	x2
Scalability	5	1	x1
Cost efficiency	5	None (projects with ratio higher than 600 EUR / t CO2-eq get 0)	European Commission

Degree of Innovation

Consult Annex B to call text

Project goes beyond state of the art

- Describe the state of the art
- Describe the extent to which the project goes beyond it

Project goes beyond incremental innovation

- Proposed technology / product / business model goes beyond minor changes
- Projects contributing to SET-Plan implementation targets likely to go beyond incremental innovation

Specific encouraged activities

- Products substituting carbon intensive ones
- Direct Air Capture (DAC) plus CO₂ storage or use
- Potential for net carbon removal



GHG Emission Avoidance

Sub-criteria	Description
Absolute GHG emission avoidance	the difference between the expected GHG emissions of the project and the GHG emissions in the reference scenario during 10 years after entry into operation*
Relative GHG emission avoidance	the absolute GHG emission avoidance of the project divided by the GHG emissions in the reference scenario

*default monitoring and reporting period once the project has entered into operation: 3 years



GHG Emission Avoidance Application To Do

- 1) Calculate the potential for absolute GHG emission avoidance
- 2) Calculate the potential for relative GHG emission avoidance
- 3) Support the calculation with:
 - Copy of own detailed calculation as one editable Excel document (mandatory).
 - Please use the available templates.
 - Detailed explanation of the assumptions made and consistency with the methodology.

+ [EII] Comparison with EU ETS benchmark emissions: Calculate the GHG emissions of the project per unit of product and compare with the equivalent EU ETS benchmark(s) applicable at the deadline of submission of the application

+ Sustainability of biomass: Projects using biomass as feedstock should explain how they will procure biomass that will at least meet the sustainability requirements of the Renewable Energy Directive and originate from feedstocks with a low risk of causing indirect land-use change



Define project and its boundaries		lology and tools, if	4 entify the reference scenario for your ject type and sector	Apply your projected operational data to adequate(s) methodology(ies) 5 Upload estimated GHG emissions avoidance to submission portal alongsid supporting calculation too		
Category of the project	[category name from list: (Energy energy, Production facilities, Energy CCU, Substitute products, CCS)]					
Sector of the project ¹	[sector name from list: Must be the s in Application Form part A (Intra-d Other energy storage, Wind en Hydro/Ocean energy, Geothermal e Renewable Heating/Cooling, Refiner	ay electricity storage, ergy, Solar energy, energy, Bio-electricity, ries, Biofuels and bio-				
	refineries, Iron & steel, Non-ferrous n	Category	Sector	Product		
	Glass, Ceramics & construction ma Chemicals, Hydrogen, Other, CO2 Tr	Energy storage, incl. manufacturing	Intra-day electricity storage	electricity		
		plants for components	Other energy storage	electricity, heating/cooling, e-fuels, hydrogen		
Principal product(s) ²	[all products chosen for principal pro		Wind energy	electricity		
	the same sector as explained in the	Ν	Solar energy	electricity		
	emission avoidance calculation; (if	Renewable energy, Incl. manufacturin	Geothermal energy	electricity		
	please indicate the product substitute	plants for components	Bio-electricity	electricity, CHP electricity, CHP		
		-	Renewable Heating/Cooling	heating/cooling		
Other products ³	[list any other final products of the	p	Refineries	fuels (incl. e-fuels)		
	considered principal products]		Biofuels and bio-refineries	biofuel, bio-based products		
		-	Iron & steel	coke, iron ore, iron, steel, cast ferrous metals products, other		
			Non-ferrous metals	aluminium, precious metals, copper, cast non-ferrous metal products, other		
		Energy Intensive Industries,	Cement & lime	cement, lime, dolime, sintered dolime, other		
		incl. CCU,	Glass, ceramics & construction	flat & container glass, glass fibres, tiles, plates, refractory products, bricks,		
		incl. substitute products,	material	houseware, sanitary ware, mineral wool, gypsum, other		
		incl. CCS (CO2 capture and full scale)	Pulp & paper	chemical pulp, mechanical pulp, paper and paperboard, sanitary and tissue paper, other		
			Chemicals	organic basic chemicals, inorganic basic chemicals, nitrogen compounds, plastics in primary forms, synthetic rubber, other		
			Hydrogen	hydrogen		
			Other	electricity, heat, other		
		CCS (CO2 transport and/or storage)	CO2 transport and/or storage	CO2 transport and/or storage		

Choice of a sector

1) determine principal product(s) and use

2a) **if one principal product**: the choice is straightforward: e.g. wind energy or cement production

...but may be influenced by the use: e.g. ethanol can be used in chemicals or as a fuel (refineries)

2b) **if more than one principal product but all in the same sector**: also straightforward: e.g. different chemicals (chemicals) or fuels (refineries)

2c) **if principal products from 2 or more sectors**: **choose one of the sectors** of the principal products

3) don't forget to list all 'other products'



Choice of a sector: example

The main aim of the project may determine the sector and the reference emissions:

Example: a project produces hydrogen with electricity: if the main aim of the project is

... to store otherwise curtailed renewable electricity, the sector is 'energy storage'

... to produce as much hydrogen as possible: then the sector is 'hydrogen' and the reference is EU ETS benchmark for hydrogen

... to produce hydrogen for transport applications: sector still hydrogen but reference is fossil fuel comparator for the transport fuel displaced

... if it is **combined with innovative renewable electricity**: then either '<u>renewable</u> <u>electricity</u>' or '<u>energy storage</u>'





Hybrid projects: combine the methodology from different sections



Define project and organisational boundaries	2 Classify your project ···►	3 Identify the appropriate methodology and tools, if any	4 Identify the reference scenario for your project type and sector	Apply your projected operational data to adequate(s) methodology(ies)	5 Upload estimated GHG emissions avoidance to submission portal alongside supporting calculation tool
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Projected operational data							G⊦ Emiss								
Source	Parameter monitored	Description	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	t CO2e / [unit]	t CO2e
Ref _{grid}	EG _{grid}	Net amount of electricity to be generated by the renewable technology and fed into the grid	MWh											0.150	0
Ref _{heat}	EG _{heat}	Net amount of thermal energy to be delivered by the renewable technology	MWh											0.202	0

Tools available to support the calculation for Ell, CCS, RES and energy storage projects. Due to the variety of possible cases in the Ell sectors, applicants may tailor their calculations using the provided Excel template, and are encouraged to:

- Split calculation of reference and projects emissions, for the ease of verification
- Maintain projected input data separated by year
- Not hardcode conversion factors into the formulas, so that these are easily traceable and updatable
- Use the suggested colour code for input and linked/calculated data
- Provide a full description of the data traceability and responsibility



Define project and organisational boundaries	ssify your project <mark>···≻</mark> methodology and tools, if <mark>···≻</mark> scena	4 the reference ario for your ype and sector 4 Apply your projected operational data to adequate(s) methodology(ies) 5 Upload estimated GHG emissions avoidance to submission portal alongside supporting calculation tool
Category / Sector	Reference scenario	Project scenario (1 st stage)
Energy Intensive Industry	EU ETS benchmark(s) for the product(s) or the existing plant in case of modification or fossil fuel comparators	Changes in inputs, processes, products, use and end of life.
Biofuels	Fossil fuel comparators	Fully decarbonised electricity mix for electricity inputs
CCS	CO2 is not captured, but released/available in atmosphere	Emissions from capture, transport and storage
Renewable electricity	Expected 2030 electricity mix	
Renewable heat	Natural gas boiler	Emissions from the production and supply of biomass- derived fuels and emissions due to leakage during the
Renewable cooling	Expected 2030 electricity mix or fossil fuel comparator in some cases	operation of geothermal power plants
Energy storage	Single-cycle natural gas turbine (peaking power)	Direct and indirect emissions from the use of fossil fuels and generation of heat, process-related
Heat / Hydrogen storage	ETS benchmark for heat / hydrogen production	emissions from the production of hydrogen as well as from transmission losses associated with the grid
Energy storage in vehicles	Diesel-fuelled internal combustion engine	transport. Fully decarbonised electricity mix for electricity inputs.

For calculations of emissions due to generation and use

Sector	Net grid electricity consumed or charging, for energy storage	Grid electricity substituted by net electricity export or discharging, for energy storage
Energy intensive industry / CCS	Expected 2050 electricity mix*	Expected 2030 electricity mix
Renewable electricity / heat	Expected 2050 electricity mix for net import (in heat projects)	Expected 2030 electricity mix for net export
Energy storage	Expected 2050 electricity mix	Emissions for electricity produced with single-cycle NG turbine (used for peaking power)

* Electricity is treated as zero carbon presuming full decarbonisation of the electricity mix by 2050







Source: Adapted from INEA, 2020. Innovation Fund First stage of the large scale call. Application procedure

GHG Emissions Avoidance Scoring of proposals

Absolute GHG emission avoidance

Score is calculated by comparing the absolute GHG emission avoidance for the project to the "best in sector", i.e. the application with the highest value of absolute GHG emission avoidance, which also meets min project maturity criteria and min requirements re ETS benchmarks and biomass.

The best in each sector gets 5 points, the worst gets 0 points.

Relative GHG emission avoidance

To derive the score for the relative emission avoidance, the resulting percent for the relative emission avoidance is normalised across all submitted proposals to a score between 5 and 0. 100% or more results in 5 points.

Sub-criteria	unit	Max score	Min score
Absolute GHG emission avoidance	tCO2	5 (the best in the sector)	0 (the worst in the sector)
Relative GHG emission avoidance	%	5 (100%)	0 (0%)
Total		10	0
Normalised score		5	0

More than 100% relative emission avoidance will be considered under degree of innovation.

Points may be reduced if calculations are not robust and accurate

- Clerical errors: minor errors, normally caused by inadvertent negligence in the application of formulas, or conversion of units, and that can be easily corrected (e.g. wrong links in formulas, wrong unit conversions, inadequate EF)
- Manifest errors: discrepancies that can be seen to influence the GHG avoidance estimates significantly and, consequently, the result of the evaluation / scoring. Such errors could derive from an incorrect application of the GHG emission methodology, omission or miscalculation, etc. → leads to a zero score and rejection of the proposal



Project maturity

Implementation maturity

- Technical feasibility
- Credibility of implementation planning
- Project team
- Permitting procedures
- Contracts or MoU with customers

Financial maturity

- Viability of financial plan and bankability
- Soundness of financial model



Implementation Maturity

Technical feasibility of achieving the GHG emission avoidance within project's operational environment

- describe the **degree of technology readiness** (TRL) of your project and individual components before and after the project is implemented.
- describe the technical readiness of the project site, expected project output and technical feasibility of achieving this output, including GHG avoidance
- how the proposed **technology has already performed at the TRL preceding this proposal** (i.e. at a pilot or smaller-scale demonstration).
- how changes in scale or change in circumstances compared to previous testing/projects have been taken into account in the project design, where applicable

- Robust feasibility study addressing at least points in application form is a mandatory document
- Applicants may use an existing technical feasibility study
- Always provide precise references to the text in supporting documents
- Technical design of project should be consistent with financial/operational set-up.
- Key question:

CAN THE TECHNOLOGY DELIVER THE EXPECTED OUTPUT AND GHG EMISSIONS AVOIDANCE?



Implementation Maturity

Implementation planning of project and key milestones

Describe **key deliverables and work plan for development, construction and entry into operation** (ensure consistency with both work packages/milestones in section 7.1 & timetable template in section 7.2)

Describe **status of steps concluded so far** (e.g. FEED study, *initial permits, etc.*)

Project business model – your business plan

- describe target markets, key customers, the value the innovation will deliver compared to other solutions, how it addresses market gaps and who are the main competitors.
- describe demand for products/services delivered.
- set out specific market entry barriers.

Relevance and track record of project management team and soundness of the project organisation

Describe the **project management team**, its professional capacity, key qualifications and relevant track record.

Set out proposed **project government structure** and alignment of interests between management and investors.

Describe decision-making structures and processes.

Describe **key business continuity approach** in case of key individuals leave project.

- **Business plan is a mandatory** document, to cover duration of project and including financial model and detailed implementation planning (e.g. Gantt chart)
- Detailed summary of business model
- Detailed plan of milestones and deliverables
- Focus on quality/relevance of the project team and partners for success of the project
- Key question:



European Commission

IS YOUR BUSINESS MODEL SOUND?

Implementation Maturity

State of play and credibility of the proposed plan for obtaining required permits, intellectual property rights or licences and other regulatory procedures.

- required **permitting** and other relevant **regulatory procedures/support**, steps towards acquiring intellectual property rights or licences.
- *list of permits/rights/licences already obtained*, those still needed and envisaged timing for obtaining them.

Strategy for ensuring public acceptance of the project

- describe environmental impacts during construction and operation, the state of public acceptance of the technology and the project and how you propose to ensure it.

Robustness and credibility of the strategy for securing the key supply and off-take contracts.

- describe main commercial contracts envisaged and the contractual relationship between the main parties involved with the project.
- list and describe any preliminary agreements with suppliers or off-takers and strategy for timely conclusion of further required agreements.
- key contracts and how the required solidity/track record of suppliers and off-takers will be ensured.

Conclusions of any relevant technical or legal due diligence report (where available) produced by an independent party. Includes due diligence on intellectual property.

- Public acceptance, permits and licenses are the responsibility of applicants think of related timing, procedures and steps
- Evidenced contracts or agreements with suppliers and off-takers increase the credibility of planning, e.g. pioneer customers
- Key questions: WHAT IS YOUR DEPLOYMENT STRATEGY?

HOW DO YOUR SALES LOOK LIKE? WHO ARE YOUR PARTNERS AND OFF-TAKERS?



Financial Maturity

Project cash flow, COSTS AND REVENUES

- provide a detailed calculation of expected costs and revenues (cash flow projections) along project milestones in constant prices.
- provide breakdown of project costs and revenues, i.e. capital expenditure (CAPEX), operation and maintenance costs (OPEX) and expected revenues.
- detail the **sensitivity of cash-flows** to regulatory frameworks and market conditions, and robustness of off-take agreements / pioneer customers. Have a fall-back plan.

Total project costs, relevant costs and requested EU contribution

- state total project costs and project relevant costs (equivalent to CAPEX) and provide justification.
- provide **background assumptions** (if available by supplying **letters of firm proposals (MoU)** from contractors).

- Independent financial due diligence report (optional)
- Maximum amount of requested EU contribution cannot exceed 60% of relevant costs (CAPEX)
- Requested EU contribution should be consistent with the business plan and relevant cost calculation for cost efficiency criterion
- Be mindful that your requested grant level will impact the cost efficiency criterion, and hence the relative competitiveness of your application
- Key message:

NUMBERS REALLY MATTER!

HOW ROBUST AND CLEAR IS YOUR FINANCIAL MODEL (part of the business plan)?



Financial Maturity

Project financial viability

- describe project's business viability measured by project's NPV and IRR over expected lifetime of project, before and after requested Innovation Fund support.

Financing plan

- describe **financial structure of project** including a description of type, sources and use of funds (level and source of equity, level and source of debt, expected public subsidies and their source).
- describe how potential negative cash flows at the start of operation will be funded and how project scale up will be financed when the project has entered into operation but is not yet generating sufficient revenue to become self-sustainable.
- explain allocation of costs (in Work Packages) and consistency of project planning with financing plan.
- describe alignment of requested funding and milestones with profile of cash consumption linked to cash injection during the project cycle.

- Provision of detailed insights from project financing plan, showing clear financial structure, sources of funding and demonstrating the financial sustainability of the financing plan
- Coherence with cash flow projections and project design and operational planning over project lifetime
- Key questions:

WHAT IS THE FINANCIAL STRUCTURE? CAN THE FUNDING AND REVENUES COVER THE COSTS AND RETURN ON INVESTMENT? HOW MUCH "SKIN IN THE GAME" DOES THE APPLICANT HAVE?



Financial Maturity

Robustness of project funders and investor commitments

- state expected date of financial close
- describe status, level and solidity of commitment of funding from project funders and investors, incl. own contribution by the applicant, external funding and financial support from Member States
- describe conditions of support provided by all parties and how funds will be injected into the legal entity owning the project and ownership structure
- Provide corresponding evidence (e.g. letters of interest/support, letters of approval from funders/shareholders or board confirming support of the project, MOU).
- Provide evidence of support from other sources including market mechanisms, or support from Member States

Conclusions of any financial due diligence report (where available)

- provide main conclusions produced by an independent party.
- Set out all funding sources other than the Innovation Fund
- Evidence on funding commitments may be integrated in the Business Plan as an annex
- Key questions:
- HOW QUICKLY CAN THE PROJECT REACH FINANCIAL CLOSE WITHIN THE 4 YEARS?
- IS THE PROJECT FUNDING SECURED AND EVIDENCED?
- WHAT IS THE OWNERSHIP STRUCTURE?



European Commission

Scalability

Project and regional level

Expansion at project site / possible transfer to other sites
Cooperation with other actors of the regional economy
Knowledge sharing, communication and dissemination

Sector level

• Extent to which the technology of the project can be applied within the sector and contribute to GHG emissions avoidance

• Support with qualitative and quantitative indicators

Consider demand and supply conditions

Economywide

- Contribution to wider economy impacts
- Potential to create new value chains or reinforce existing ones
- Support with qualitative and quantitative indicators



Cost Efficiency

Relevant costs less contribution by project applicant Max 60% of relevant costs

Relevant costs = total capital expenditure (CAPEX) of the project

(e.g. construction costs, site infrastructure; development costs; Intangible assets)

Absolute GHG emission avoidance

During 10 years after entry into operation

Min. of € 2.5M and max of €7.5M CAPEX

CAPEX to be certified by independent auditor during grant agreement negociation

It is mandatory to attach a detailed calculation of relevant costs (CAPEX) and cost efficiency as one editable Excel document



Overview of Supporting Documents

	Mandatory documents	Page limit	Optional documents Page lim
•	Detailed calculation of GHG emission avoidance potential, including (if relevant) detailed estimate of further emission avoidance that the project may be bringing and that are not covered under the GHG methodology. (in editable xls format)	n/a	 Any existing due diligence reports (pdf format)
•	Feasibility Study (in pdf format) Business Plan including financial model and, if available, any documents indicating support for the project (e.g. letters of interest, letters of support, letters of approval from funders, letters from shareholders or board) as an annex (in pdf)	100 in total for the feasibility study and the business plan	
•	Detailed calculation of relevant costs and cost efficiency (in editable xls format)	n/a	
•	Description of the profiles of the people primarily responsible for managing and implementing the project (accompanied by a curriculum vitae	20 in total including the description of profiles and the	
•	List of relevant recent projects and/or activities carried out by the applicant and relevant to delivery of the project	list of relevant projects	