Innovation Fund

Innovation Fund Expert Group meeting
5 June
Agenda

10:00 – 10:20
Introduction
Calendar

10:20 – 12:00
First stage
Award criteria

12:00 – 12:30
Primer on application
Handling of confidential information

12:30 – 13:30
Break

13:30 – 15:00
Second stage
Award criteria

15:00 – 15:20
Call for small-scale projects

15:20 – 15:30
Call for evaluators

15:30 – 15:40
Conclusions
During the event, you can use Slido to submit your questions and comments

TO JOIN:

1. Take out your smartphone, tablet or computer and open your browser
2. Go to Slido.com and enter the event code #IFEG.
3. You can now post comments or like comments.
4. Identify yourself when posting comments. These comments will be considered with priority.
Volume of at least EUR 10 billion until 2030 (at EUR 20 carbon price)

Support of up to 60% of additional costs related to innovative technology

Renewable energy CCS and CCU Industry Storage

Financed from the revenues of the EU Emissions Trading System

Support of additional capital and operating costs (up to 10 years)

First call in mid-2020 with a volume of EUR 1 billion

Single applicant or consortium

Project start possible after application for first stage
Selection process

Expression of interest
(a) GHG emissions avoidance
(b) Degree of innovation
(c) Project maturity

Full application
(a) GHG emissions avoidance
(b) Degree of innovation
(c) Project maturity
(d) Scalability
(e) Cost efficiency

List of pre-selected projects to be consulted with MS
Criteria (a) and (b) are met

Award of Project Development Assistance (PDA)

Award of project grants
Payments upon milestones

**Basics**

- **Entry into Operation**
  - Annual payments for achieved GHG emissions avoidance during 10 years after entry in operation

- **Financial Close**
  - Possible to agree payments at add’l milestones during construction phase (subject to recovery in case that emission avoidance will not be achieved)

- **Up to 40% independent of achieved emissions avoidance**

- **At least 60% depending on achieved emissions avoidance**
  - Possible to agree payments at add’l milestones during drilling with geothermal project
Calendar

Launch First Call

W4 June/ W2 July

H2 July

H1 Sep

H2 Sep

End Oct

Submission 1st stage

Q1 21

Invitation 2nd stage

Q2 21

Submission 2nd stage

H2 21

Grant Award

Webinar
Application and FAQs

Webinar
GHG calculations and FAQs

Innovation Fund Day
Clean Tech Finance Conference
Final workshop for 1st stage
First stage award criteria

Overview
• Christian Holzleitner

GHG emission avoidance
• Maria Velkova

Degree of Innovation
• Melina Boneva

Project maturity
• Christian Holzleitner
First-stage award criteria

GHG emissions avoidance
- Absolute and relative avoidance
- Below ETS benchmark(s)

Degree of innovation
- Beyond state-of-the-art
- Beyond incremental innovation

Project maturity
- Ready to reach financial close within 4 years
- Ready to improve maturity with PDA

Quantitative assessment
Qualitative assessment
Quantitative and qualitative
<table>
<thead>
<tr>
<th>GHG emission avoidance calculations</th>
<th>Reference scenario</th>
<th>GHG emission avoidance in project scenario calculated based on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GHG emissions in reference scenario based on</td>
<td>Expected quantity during 10 years after entry in operation</td>
</tr>
<tr>
<td>Energy intensive industry</td>
<td>ETS benchmark(s)</td>
<td>Quantity of product</td>
</tr>
<tr>
<td>Renewable electricity</td>
<td>Expected 2030 electricity mix</td>
<td>Quantity of electricity produced</td>
</tr>
<tr>
<td>Renewable heat</td>
<td>Natural gas (NG) boiler</td>
<td>Quantity of heat produced</td>
</tr>
<tr>
<td>Energy storage</td>
<td>Single-cycle NG turbine peaking power</td>
<td>Quantity of energy stored</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changes in.inputs, processes, outputs (e.g. waste) compared to reference scenario</td>
</tr>
<tr>
<td>Project and reference scenarios</td>
<td>Grid Electricity substituted by export from the project</td>
<td>Grid Electricity Consumed</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td></td>
<td>Discharging for energy storage</td>
<td>Charging for energy storage</td>
</tr>
<tr>
<td>Energy intensive industry CCS</td>
<td>Fully decarbonised electricity mix</td>
<td>Fully decarbonised electricity mix</td>
</tr>
<tr>
<td>Renewable electricity and heat</td>
<td>Expected 2030 electricity mix for net export</td>
<td>Fully decarbonised electricity mix for net import</td>
</tr>
<tr>
<td>Energy storage</td>
<td>Single-cycle NG turbine <em>peaking power</em></td>
<td>Fully decarbonised electricity mix</td>
</tr>
</tbody>
</table>
GHG emission avoidance

**Absolute GHG emission avoidance**
- Compared to best project in sector
- Applicants to specify their sector
- In case of cross-sectoral projects, applicants to choose most appropriate sector (e.g. in which sector is higher amount of GHG emissions avoided?)

**Relative GHG emission avoidance**
- Compared to GHG emissions in reference scenario
- In case of cross-sectoral project, compared to reference emissions in chosen sector
First stage

**Degree of innovation**

- **First-of-a-kind commercialisation** or large-scale commercial size demonstration of processes previously proven at pilot, smaller scale or large-scale demonstration plants.
- A second or more of a kind commercialisation is also considered innovative if relevant costs remain a significant share of total costs.

**Project goes beyond state of the art**

- Proposed technology or product or business model goes beyond minor changes made to existing products, processes or business models.
<table>
<thead>
<tr>
<th>Technical maturity</th>
<th>Assessment criteria</th>
<th>Mandatory documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical feasibility, including project design and technical risks</td>
<td>Feasibility study</td>
<td></td>
</tr>
<tr>
<td>Financial maturity</td>
<td>Financial viability, including profitability and financing structure</td>
<td>Business plan</td>
</tr>
<tr>
<td>Operational maturity</td>
<td>Progress in planning and implementation, including permitting procedures, contracts with customers and suppliers</td>
<td>Project implementation plan</td>
</tr>
</tbody>
</table>
Deep dive on GHG emissions: see separate slide deck
Q&A
Primer on application - INEA
Innovation Fund first call
Application process and Confidentiality principles

Marc Vanderhaegen
HoU, INEA
5 steps of the first stage application process

1. Submission of proposals
   - Call is open

2. Admissibility & eligibility check

3. Evaluation by external experts

4. Information of applicants and decision on proposals recommended for PDA
   - EIB liaising with proposals recommended for PDA

5. Submission of second stage proposals
   - Call is open
Application process: where and how?

- Single entry point
  Funding and Tenders portal of the European Commission: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home
  All information displayed there, including news, application forms and access to application

- HELP is available (IT and general questions)
  https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/helpdesks
How to submit your proposal?

Find calls for proposals and tenders

Search calls for proposals and tenders by keywords, programmes...

---

### EU Programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Health Programme (SHP)</td>
<td>Asylum, Migration and Integration Fund (AMIF)</td>
</tr>
<tr>
<td>Europe For Citizens (EFC)</td>
<td>European Maritime and Fisheries Fund (EMFF)</td>
</tr>
<tr>
<td>Internal Security Fund Police (ISFP)</td>
<td>Justice Programme (JUST)</td>
</tr>
<tr>
<td>Union Civil Protection Mechanism (UCPM)</td>
<td>Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (CDMSE)</td>
</tr>
<tr>
<td>Programming Period 2007-2013 (FP7 - CIP)</td>
<td>Programme for the Environment and Climate Action (LIFE)</td>
</tr>
<tr>
<td>Overview of EU funding</td>
<td>Promotion of Agricultural Products (AGRP)</td>
</tr>
<tr>
<td></td>
<td>Research Fund for Coal &amp; Steel (RFCS)</td>
</tr>
<tr>
<td></td>
<td>Rights, Equality and Citizenship Programme (REC)</td>
</tr>
<tr>
<td></td>
<td>EU Aid Volunteers Programme (EVAN)</td>
</tr>
<tr>
<td></td>
<td>European Defence Industrial Development Programme (EDIDP)</td>
</tr>
<tr>
<td></td>
<td>Erasmus+ Programme (EPLUS)</td>
</tr>
<tr>
<td></td>
<td>EU External Action (RELEX)</td>
</tr>
<tr>
<td></td>
<td>HERCULE III (HERC)</td>
</tr>
<tr>
<td></td>
<td>External Action measures relating to the common agricultural policy (SMCP)</td>
</tr>
<tr>
<td></td>
<td>Internal Security Fund Borders and Visa (ISFB)</td>
</tr>
</tbody>
</table>

---

*Note: This page provides information on how to submit proposals and a list of EU Programmes and their respective programmes.*
Before applying

• READ
  • Call text and Annexes
  • Guide for Applicants
  • FAQs

• BE particularly AWARE of:
  • Admissibility and Eligibility conditions
  • Deadline
Main elements of proposals

• Application form Part A online (name of applicant, outline of the project, sector covered, budget...)

• Application form part B which includes the detailed information on the project. Part B can be edited outside the system.

• Necessary annexes
Admissibility & eligibility check

Are all forms submitted?
- Yes
- No

Are all call conditions met?
- Yes
- No

ATTENTION! Only admissible and eligible proposals will be evaluated

The call text will list all admissibility and eligibility criteria
Evaluation by external experts

Up to 5 experts for each proposal

Evaluation is framed by the call text
External experts

Dedicated campaign to recruit experts for IF

EU database of over 100,000 experts

1. High-level expertise
2. Independence
3. Impartiality
4. No Conflict of Interest

Balanced composition
What do we ask the external experts to do?

- Full knowledge of call text
- Evaluate individually - remotely
- Meet to reach consensus
- Write Evaluation Report
Against what do they evaluate?

- GHG emission avoidance potential
- Degree of innovation
- Project maturity
- Scalability
- Cost efficiency
Outcome of evaluation (1st stage)

List of proposals

- Invitation to 2nd stage
- PDA
- Rejection

Deadline to inform: 6 months
Submission of second stage proposals

Successful proposals (1\textsuperscript{st} stage) invited to submit application for 2\textsuperscript{nd} stage

Same submission and evaluation process

MORE information requested in the application
MORE evaluation criteria

! Deadline: 3-4 months application time
EIB engaging with proposals recommended for PDA

Successful proposals for PDA (1st stage) passed on to EIB

EIB starts discussion with applicants

No fixed deadline

Using the PDA will help maximise chances of projects to be successful in future IF calls
Confidentiality

• Information submitted by applicants is treated as confidential in every steps of the process

• Confidentiality rules apply at all times: before, during and after evaluation; also during project lifetime

• Submission and evaluation processes are supported by secure IT tools within the European Commission IT environment
Confidentiality

Access on “need to know” basis

• EC/INEA/EIB staff are contractually bound to confidentiality
• Each external expert signs a confidentiality clause as part of their contract
• Applicants only receive information concerning their own proposals
• The evaluation summary report is shared only with the applicant
Thank you!

Contact INEA
@inea_eu
inea@ec.europa.eu
INEA-Innovationfund-calls@ec.europa.eu
www.ec.europa.eu/inea

Funding and Tenders Portal
https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home
Second stage award criteria

- Overview
  - Christian Holzleitner

- Degree of Innovation
  - Maria Velkova

- Project maturity
  - Christian

- Scalability
  - Melina Boneva

- Cost efficiency
  - Jonathan Lonsdale
  - Gregor Paterson Jones
Second-stage award criteria

- GHG emissions avoidance
- Degree of innovation
- Project maturity
- Scalability
- Cost efficiency

- More detailed calculations
- Additional assessment
- More detailed requests
- Qualitative
- Quantitative
**GHG emission avoidance**

**Second stage**

**Additional requirements for second stage**

- **Industrial projects**: More detailed consideration of GHG emissions from inputs
- **RES projects**: Inclusion of GHG emissions from inputs
- **Storage projects**: On-site emissions of fugitive GHGs and from additional energy use
Degree of innovation

First stage

Test 1

Project goes beyond state-of-the-art

Innovative activity or product

Not currently offered by existing suppliers

Distinctive expected outcomes

More advanced than previous demonstrations

Innovative application of technical solutions

Applied in new sector/different usage field

System integration

New circular business model
<table>
<thead>
<tr>
<th>Incremental innovation</th>
<th>First stage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test 2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Does the project go beyond incremental innovation?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Degree of innovation</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Only minor changes to existing products, processes or business models</td>
<td></td>
</tr>
<tr>
<td>No substantially new knowledge or technology</td>
<td></td>
</tr>
<tr>
<td>Low uncertainty</td>
<td></td>
</tr>
</tbody>
</table>
Degree of innovation

First stage

Both tests

Guided by climate neutrality objective

Long-term strategy (2050)

Integrated SET Plan

Circular economy Action Plan
Degree of innovation

- Intermediate
- Strong
- Very strong
- Breakthrough

... considering additional assessment criteria

- Energy efficiency and circularity
- Use of electricity from renewable origin
- Friendliness to the grid
- Land impact: biomass feedstocks
- Net carbon removals

Second stage
Degree of innovation

Energy efficiency and circularity

- **Energy and resource** efficiency, incl. impact on water
- **Durability**, functionality, modularity, easy disassembly or repair
- **Recovery** of materials and energy from waste and waste water
- **Substitution** of raw materials with secondary raw materials and by-products
- **New reusable**, recyclable or compostable materials
- **Reuse**, repair, refurbishing, repurposing and remanufacturing of end of life products
Degree of innovation

Using electricity from renewable origin

- **Direct connection** to renewable electricity production not connected to the grid
- Wind electricity delivered by the grid, that would otherwise be *curtailed*
- **Hydroelectricity that has insufficient demand** in the region
- Renewable electricity with a **PPA**:  
  - from a particular renewable energy installation(s)  
  - the power used at any time should not exceed the power that is being generated  
  - the grid connection does not pass a zone of grid congestion
Q&A
Project maturity – mandatory documents

**Feasibility study**
- Technology description (incl. TRL)
- Technical readiness on project site
- Results of testing at previous scale

**Business plan**
- Business model & targeted market
- Revenues and costs, including first rough estimate of relevant costs
- Financial plan and structuring
- Commitment of investors and public support

**Implementation plan**
- Project milestones and timing
- Description of required permits, strategy for permitting procedures
- Public acceptance
- Status/plan of contracts with suppliers and off-take contracts
### Project maturity – stronger minimum requirements

<table>
<thead>
<tr>
<th>Technical maturity</th>
<th>Financial maturity</th>
<th>Operational maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated mandatory documents</td>
<td>Updated mandatory documents</td>
<td>Updated mandatory documents</td>
</tr>
<tr>
<td>Feasibility study</td>
<td>Business plan</td>
<td>Project implementation plan</td>
</tr>
</tbody>
</table>

#### Additional inputs
- Due diligence questionnaire
- Key risks and mitigation measures
- Disclosure of due diligence reports by independent third party (if available)
Q&A
Scalability

Definition

- Technical and market potential for widespread application or replication, considering future cost reduction

Time horizon

- Climate neutral economy in 2050
- Transition to 2050
Scalability

Project and regional level
- Further expansion at project site, including sector coupling
- Cooperation with regional economy
- Strategy on knowledge sharing

Sector
- Potential GHG emission avoidance for sector, # installations
- Taking account of supply and demand conditions, such as expected cost reductions and resource constraints

Economy-wide
- Potential GHG emission avoidance across economy, taking into account size of the sector and potential of GHG emission avoidance in other sectors
- Impact on competitiveness and supply chains within EU
Knowledge sharing

Purpose

• To de-risk technologies and speed up their commercialisation

Confidentiality will be safeguarded

• Sharing of more detailed info within each sector but never commercially sensitive information
• Anonymisation and aggregation before sharing of information publicly

How?

• Relevant knowledge reports submitted annually: disbursement conditional on KS requirements fulfilled!
• Thematic reports produced by INEA
• Thematic meetings organised at sector level by INEA
Knowledge sharing

Minimum knowledge-sharing requirements
- Before financial close
- From financial close to entry into operation
- From entry into operation

Knowledge sharing areas
- Technical aspects, set-up, performance
- Financial aspects
- Operational aspects, project management, permitting
- Environmental impacts, health & safety
- Stakeholder engagement

Project initiated knowledge sharing
- Additional to the minimum requirements
- Communication and dissemination
- Evaluated under scalability
Cost efficiency =

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

= Absolute GHG emission avoidance
during 10 years after entry into operation (first criterion)

Contributions from private resources or public support
Calculating relevant costs

**Levelised costs**
- Comparison of levelised project costs to the market price
- Also for substitute products
- Default methodology

**Reference plant**
- Comparison of project costs to costs of reference plant
- Fall-back option

**No-reference plant**
- In case no comparable product or conventional technology exists
- "Last-resort" option
Deep dive on relevant costs:
see separate slide deck
Q&A
Small scale projects
Small scale projects

Scope and support
- Total capital expenditure (CAPEX) not exceeding €7.5mn
- Grant = max 60% of CAPEX
- PDA also possible

Selection and grant disbursement
- Single-stage application
- Same 5 award criteria but possible to simplify methodologies, in particular GHG emission avoidance
- Grant disbursement still depends on delivery of GHG emission avoidance

First call
- Launch Q4 2020 / Q1 20201
- How to best complement existing funding programs?
- How to best design simplified application and selection process?
Small scale projects: your feedback

Sample of questions:

1. What sectors to target?
2. What projects to target? (green procurement/pioneer customers?)
3. How to simplify application and evaluation, in particular GHG emission avoidance?

Questionnaire to be shared after IFEG
Q&A
Call for evaluators
Cooperation with financial sector, investors, and consultants

You bring mature and innovative projects to the Innovation Fund

You help projects to reach financial close within 4 years after award of Innovation Fund grant

You work as evaluator for the Innovation Fund

(subject to conflict-of-interest rules)
Join as project evaluator

- **Individual** evaluation
  - 5 working days during November and December
  - 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 in January 2021
  - Either in Brussels or virtually
  - Up to € 5000 compensation OR pro-bono

- **Confidentiality and conflict of interest rules apply**

Technical experts
Financial experts
Legal experts
Join as project evaluator

Please apply and don’t hesitate to share with colleagues

Register here: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/work-as-an-expert

Mention “Innovation Fund”

Send your CV to INEA-Innovationfund-calls@ec.europa.eu
Conclusions and next steps
Please continue to support us

Give feedback on today's workshop

Quick feedback on award criteria

Questionnaire on call for small-scale projects

Next events

Launch of call W4 June to W2 July

Workshop on application and FAQs H2 July

Mobilise technical and financial experts

Experts for project evaluation