



Les financements européens pour la Décarbonation de l'industrie

Innovation Fund, RFCS, Horizon Europe



Ordre du jour

- **Innovation fund : présentation du programme, retour d'expérience et 3ème appel à projet**
- **Partenariats Clean Steel et Processes4Planet**
- **Research Fund for Coal and Steel : présentation du programme et retour d'expérience**
- **Les opportunités pour la décarbonation dans Horizon Europe**
- **Les opportunités pour la décarbonation dans d'autres programmes**
- **Soutien à la participation**

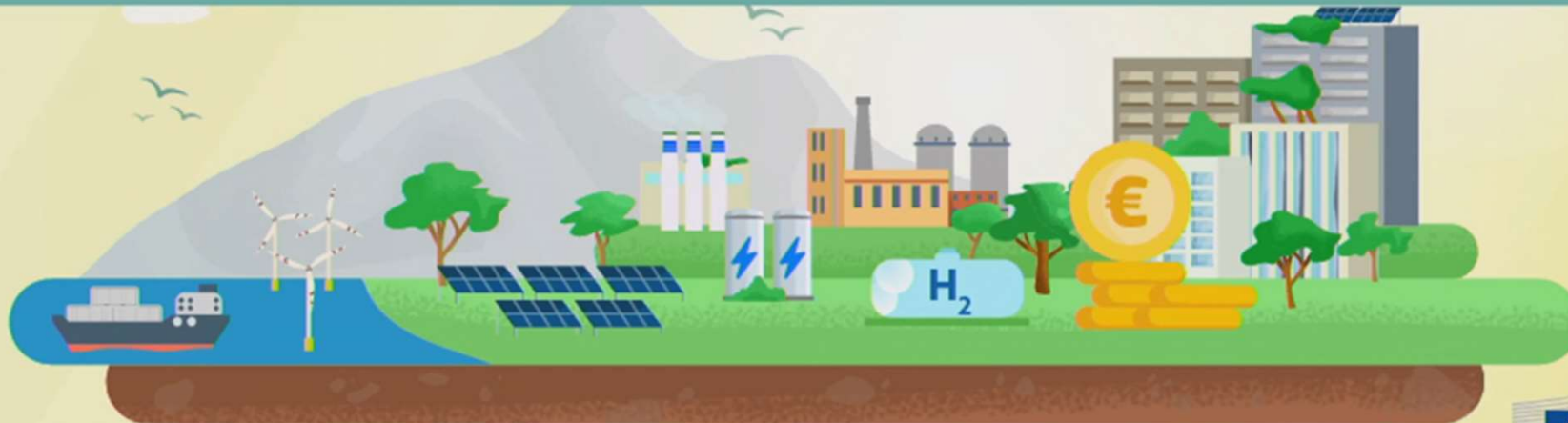


Innovation Fund

PCN France

<https://www.linkedin.com/company/91064273>

Fabien DELAFALIZE MTE / DGEC





Presentation Innovation Fund

Third call for small-scale projects (SSC2022) |

4 April 2023





Innovation Fund: introduction

Carla Benauges, Policy officer, DG CLIMA

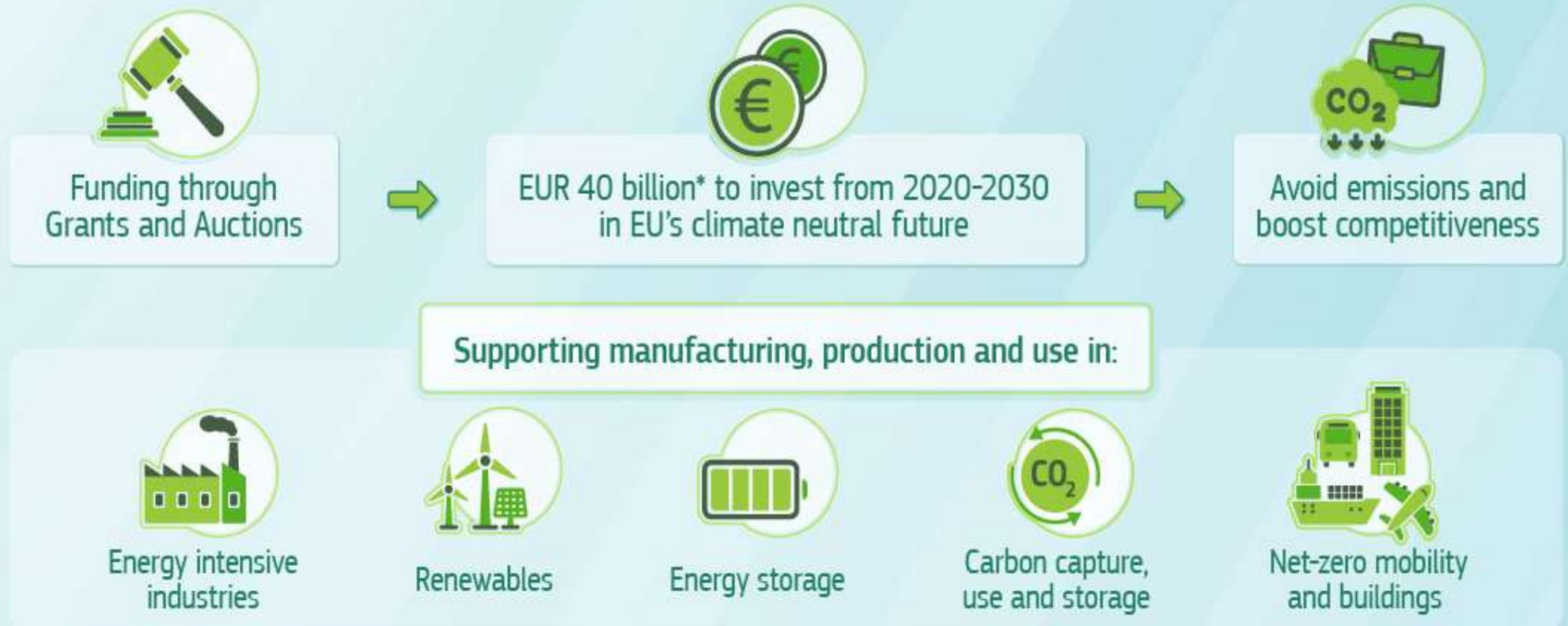
Innovation Fund Video



INNOVATION FUND

Deployment of net-zero and innovative technologies

Funded by: EU Emissions Trading System



Innovation Fund governance

- Policy and priorities definition
- Call design definition
- Selection Decision
- EIB coordination

**DG
CLIMA**



- Evaluation
- Grant Preparation
- Project Implementation
- Programme Reporting
- Feedback and policy recommendation to CLIMA

CINEA



- MS reps
- Stakeholders
- Advise EC on programme design and operation
- MS consulted on pre-selected proposals

IFEG



- Technical support to CLIMA
- GHG methodologies and tools

**JRC / ICF /
Fraunhofer**



- Allowances monetisation
- Asset management
- Project Development Assistance

EIB




















Innovation Fund past calls

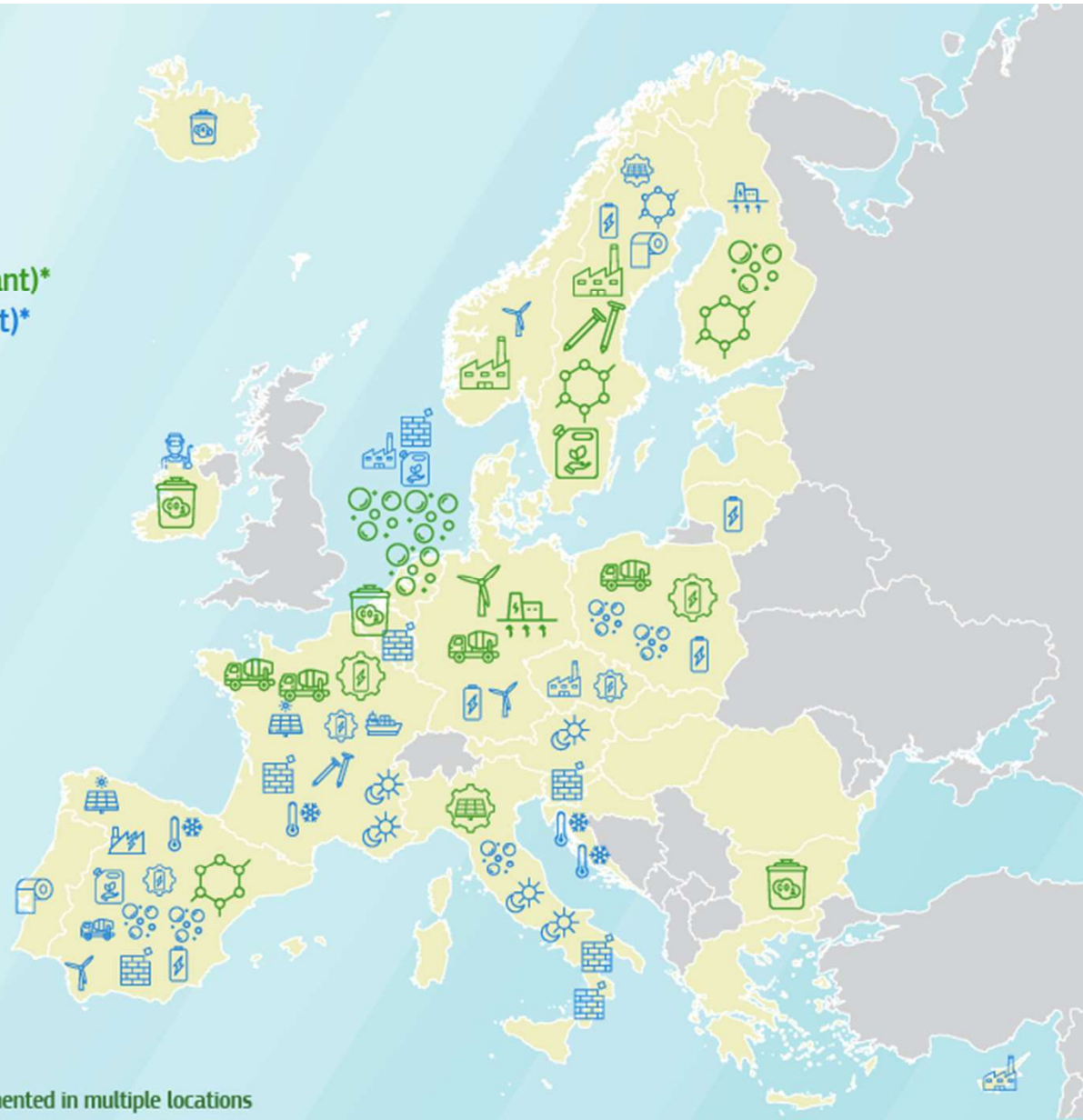
LSC 2020	SSC 2020	LSC 2021	SSC 2021	LSC 2021
<p>Funding EUR 1 billion</p> <p>Two stages 311 and 70 applicants</p> <p>7 granted projects</p>	<p>Funding EUR 100 million</p> <p>Single stage 232 applicants</p> <p>30 granted projects</p>	<p>Funding EUR 1.5 billion</p> <p>Single stage 139 applicants</p> <p>16 granted projects</p>	<p>Funding EUR 100 million</p> <p>Single stage 66 applicants</p> <p>17 awarded projects</p>	<p>Funding EUR 3 billion</p> <p>Single stage 239 applicants</p> <p>On-going evaluation</p>

Innovation Fund project portfolio

Green: Large-scale projects (23 awarded or pre-selected for grant)*

Blue: Small-scale projects (47 awarded or pre-selected for grant)*

- | | |
|--|---|
|  Biofuels and biorefineries |  Other energy storage |
|  Chemicals |  Geothermal energy |
|  CO ₂ transport and storage |  Pulp and paper |
|  Hydrogen |  Refineries |
|  Intra-day electricity storage |  Renewable heating/cooling |
|  Iron and steel |  Solar energy |
|  Non-ferrous metals |  Wind energy |
|  Glass, ceramics and construction material |  Cement and lime |
|  Manufacturing of components for renewable energy |  Use of renewable energy outside Annex 1 |
|  Manufacturing of components for energy storage |  Other energy intensive industries |



*The number of symbols is higher than the number of projects, as some projects are implemented in multiple locations

1. Innovation Fund contribution to the European Green Deal



Cleaning our Energy system



Making transport sustainable for all



Renovating buildings



Transforming our economies and societies



Working with nature to protect our planet and health



Leading the third industrial revolution



Boosting global climate action

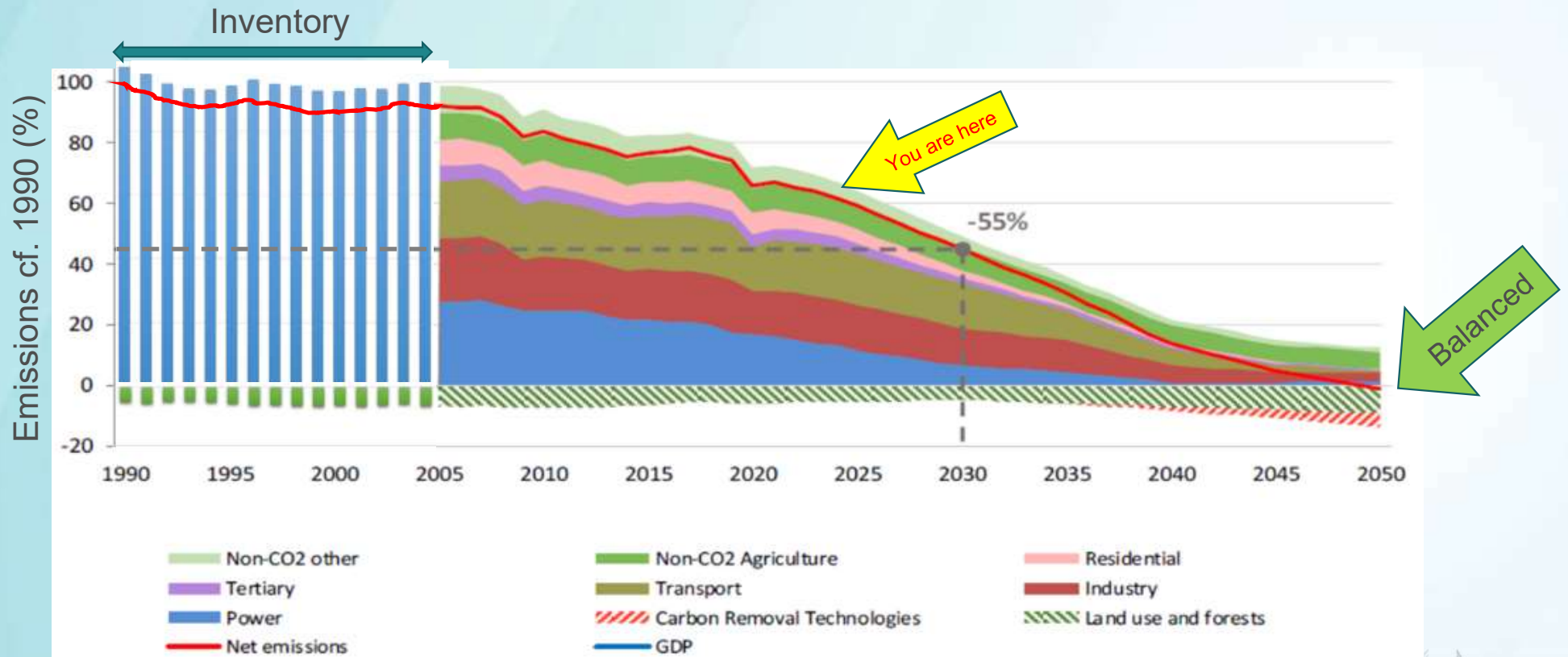
- The Innovation Fund focuses on **highly innovative technologies** and **flagship large-scale demonstration or first-of-a-projects** within EU, in NO and IC that can deliver significant GHG emission reductions.

- **Innovative technologies in “hard to abate” sectors** are needed to reach carbon neutrality.

- The Innovation Fund has awarded projects on green hydrogen, CC(U)S, PtX, negative emissions amongst others – that **must be demonstrated by 2030** so that they can be **mainstreamed and help achieve climate neutrality by 2050**.

- **Around 200 Mt CO₂eq of GHG abatement** expected under combined 1st and 2nd large-scale calls and 1st small-scale call

Pathway to climate neutrality



Innovation Fund contribution to the European Green Deal

- To make the IF even better suited for the task, the **revision of the IF** was part of proposal for **revised ETS Directive under “Fit for 55” package** – trilogues are currently ongoing on the following issues on a number of issues, among which:
 - **Increased number of allowances from ETS to fund the IF**
 - New instrument to provide support to projects proposed: **competitive bidding and (carbon) contracts for difference** – currently under preparation
- Other improvements could be made in the revised Delegated Act in 2023 (e.g. improving outlook for medium-sized projects)
- The work is on-going to **broaden the portfolio of instruments** under the Innovation Fund via financial instruments (**InvestEU** and partnership with the **Breakthrough Energy Catalyst**)

2. Innovation Fund and the REPowerEU Plan

REPowerEU chapter in revised recovery and resilience plans

Synergies and complementarities with **cohesion policy**

New call under **Connecting Europe Facility**

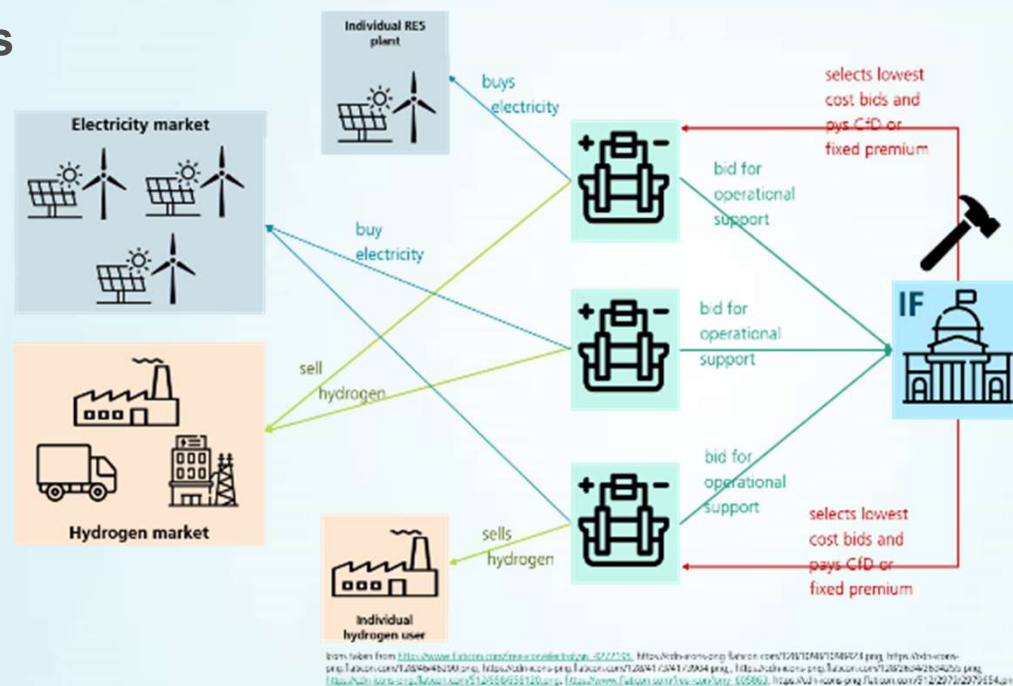
Enhanced transfer possibility of cohesion policy and EAFRD to RRF

Innovation Fund

- 1) **accelerating the deployment,**
- 2) **dedicated REPowerEU topics**
- 3) **new tool of C(C)fD**

Competitive bidding and EU Hydrogen Bank

- Following the proposal for the **revision of the ETS Directive**, the Commission has been working on **developing auction mechanisms**
- Multiple advantages are expected.
- **First auctions will focus on renewable hydrogen production and hydrogen-based production processes.**
- **“EU Hydrogen Bank”** announced in this year’s **State of the Union address**.
- Auctions under the umbrella of the Innovation Fund are currently considered as a main implementation option for the **domestic side of the “EU Hydrogen Bank”**. International side is also under development.



3. Outlook for 2023

- Grant Agreements for the ongoing call for large-scale projects (in Q4 2023) and the second call for small-scale projects (Q2 2023)
- Launch the next call for small-scale projects and the next call for large-scale projects, involve stakeholders in discussion on topics
- Finalise the preparatory work on (C)CfDs: economic design, legal terms & conditions, governance and practical implementation aspects
- Revision of Delegated Act on the Innovation Fund to operationalise competitive bidding and make further improvements
- More support to National Contact Points
- Start preparing for evaluation (scheduled for 2025)



Retour d'expérience **WAGA Energy** sur **l'Innovation fund**



WAGA ENERGY

Création 2015

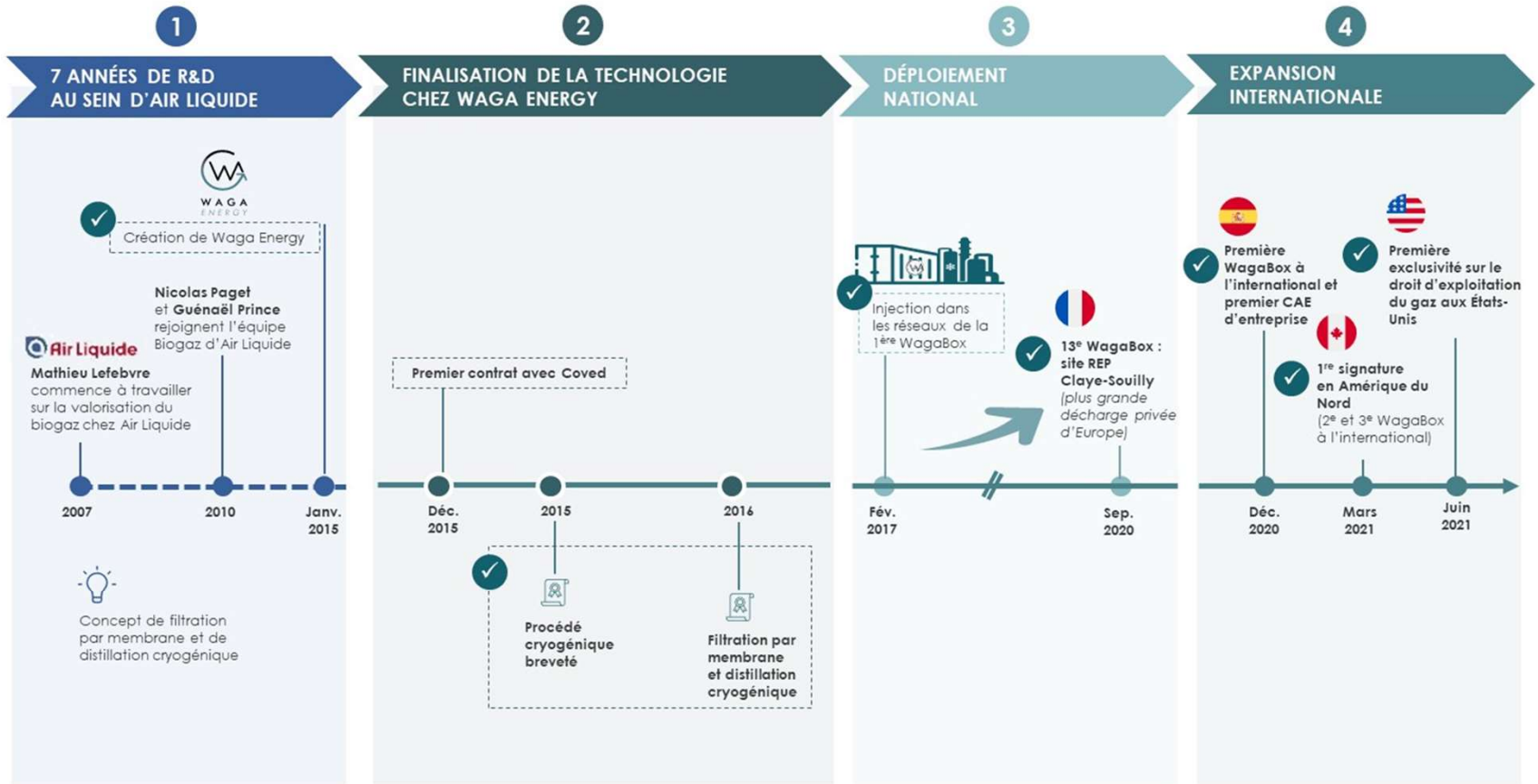
147 collaborateurs

13 WAGABOX® en fonctionnement
17 en construction

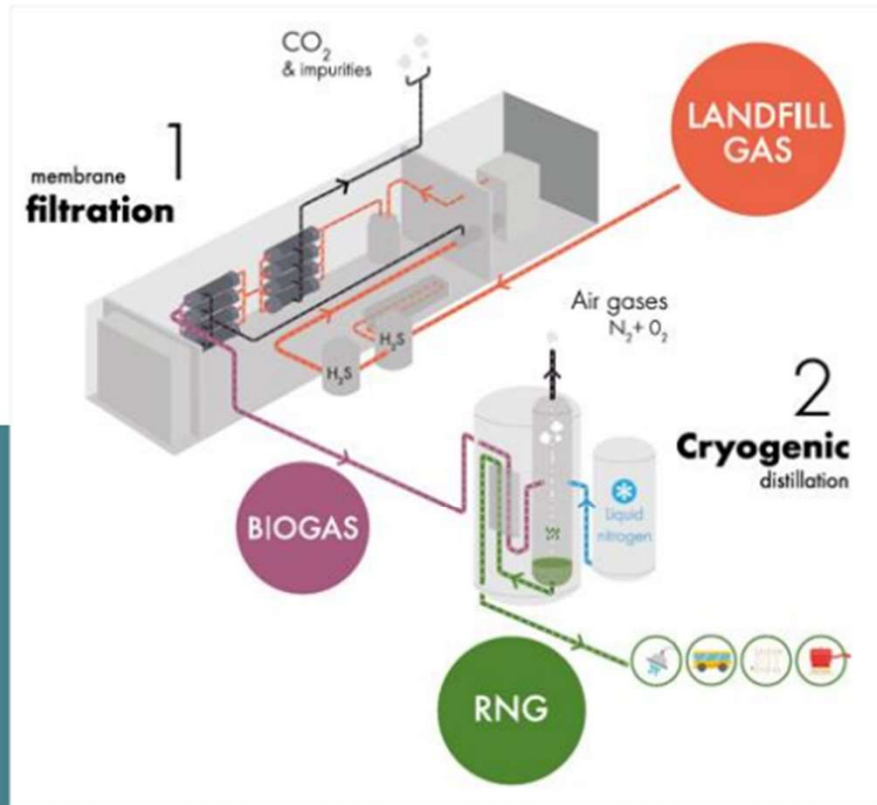
97 projets en préparation

env. 30 Mm³ de biométhane injecté dans le réseau

Empreinte internationale

UNIQUE PATENTED TECHNOLOGY COMBINING MEMBRANE FILTRATION AND CRYOGENIC DISTILLATION



6 patents worldwide
including 2 main patents

Process for the production
of biomethane from
the upgrading
of landfill biogas

Cryogenic process
for the separation of
a feed gas containing
methane and air gases

LE PROJET CAN MATA

CAN MATA PROJECT: THE FIRST NON-SUBSIDIZED BIOMETHANE PURCHASE AGREEMENT (BPA) IN EUROPE



Partenaires du projet :





Vue Nord

17/08/2022

VS



16/12/2022



16/12/2022
11:57



Bilan de l'expérience

Intérêt pour l'entreprise

Source de financement important à bas coût

Nous avons bénéficié d'une grande visibilité à l'échelle EU

Effet marketing du 'label' IFSS

Le dépôt du dossier nous a obligé à structurer le projet en amont

Possibilité de networking avec les porteurs de projet IFSS

Difficultés rencontrées

Le dépôt et le suivi du dossier sont complexes

Nous avons recruté une personne dédiée pour suivre l'IFSS

Le projet a évolué comparé au scénario initial présenté en 2021

La subvention est perçue pendant la vie du projet, il faut donc trouver des financements complémentaires.

Conseils

Faites vous accompagner par un cabinet externe si possible (en particulier pour le calcul des GHGs)

Il convient d'avoir une personne responsable de l'IFSS qui centralise l'information entre CINEA et l'entreprise

Il convient d'attendre que le projet soit assez avancé dans son développement avant de déposer le dossier



The new Small-Scale call> Key Features

Maria Alfayate, CINEA Deputy Head of Unit C4

2022 small-scale projects call: key features



Launch 30 March 2023
Deadline 19 Sept. 2023
Results Q4 2023



€ 100 Million for grants
+
Project Development Assistance



https://cinea.ec.europa.eu/funding-opportunities/calls-proposals/innovation-fund-third-small-scale-call-projects_en

AWARD CRITERIA

Degree of innovation

GHG emission avoidance*

Project maturity

Scalability

Cost efficiency

+bonus points. Net carbon removals and other GHG emission savings, additional RES electricity

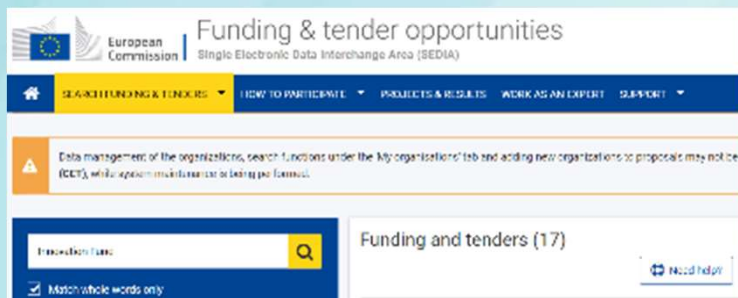
GRANT DISTRIBUTION

LUMP-SUM contribution

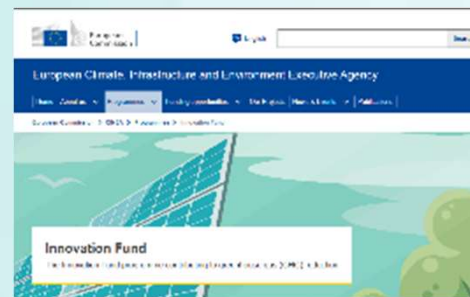
grant up to 60% of relevant costs

- up to 40% of grant at financial close
- remaining amount of at least 60% after financial close
- generally, at least 10% after Entry into operation.

Call text and tutorials



Call text available in the [funding and tender portal](#)



[CINEA website](#)



AD-hoc tutorial to support applicants:

- Where to find information
- How to apply
- Financial information file
- GHG methodology

What will be funded?

- The Innovation Fund focuses on **highly innovative technologies** and **flagship projects** within Europe and at National level that can bring on significant GHG emission reductions. It is about **sharing the risk** with project promoters to help with the **commercial-scale demonstration or first-of-a-kind** commercial projects.
- We aim to finance a **project pipeline** of a wide range of innovative technologies in all eligible sectors and Member States, Norway and Iceland. **Sectoral and geographical balance** is an objective for the whole timeframe of the programme.
- At the same time, the projects need to **be sufficiently mature in terms of planning, business model as well as financial and legal structure.**
- The fund supports also **cross-cutting projects** on innovative low-carbon solutions that lead to emission reductions in multiple sectors, for example, through industrial symbiosis.

Award Criteria

DEGREE OF INNOVATION

Innovation beyond state of the art (see Annex 1 of call text) at European or national level.

* **NEW**: consider the ongoing InnovFund projects

GHG EMISSIONS AVOIDANCE

- **Absolute** emissions avoidance (*compared to sector depending on median avoidance*)
- **Relative** emissions avoidance
- **Quality and credibility** of the calculation and minimum requirements*

PROJECT MATURITY

- Technical maturity
- Financial maturity
- Operational maturity

SCALABILITY

***NEW** : one criterion looking at

- Scalability in terms of efficiency gains
- Scalability in terms of further technology or solutions deployment
- Quality and extent of the knowledge sharing

COST EFFICIENCY

- Cost efficiency ratio (i.e. the EU contribution requested per tCO₂ avoided)*
- Quality and credibility of the cost calculation

CASCADE APPROACH – CONSEQUENCES ON THE NUMBER OF PROJECTS ANALYSED

1. Check **eligibility** and **admissibility**

(if all requirements are not met, the evaluation is stopped)

2. Assess **Degree of Innovation** criterion

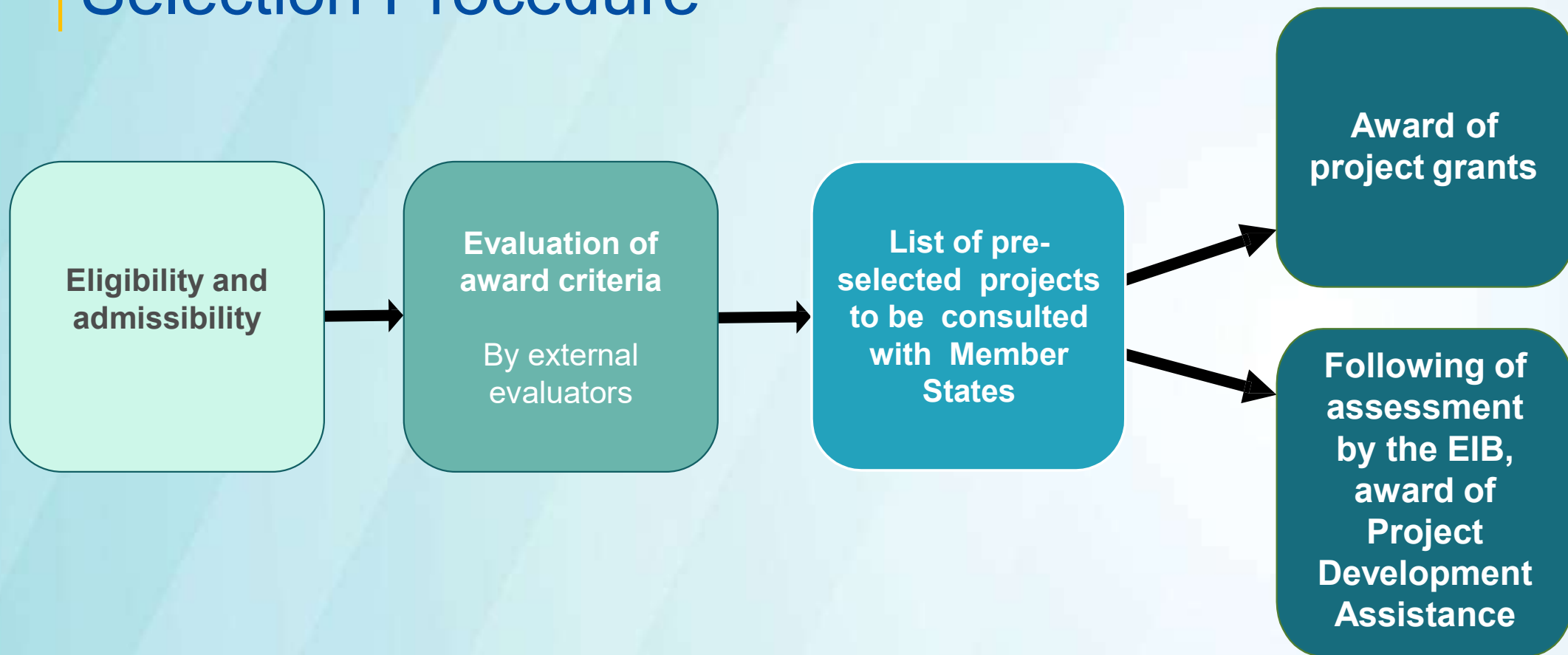
(if the score is below threshold, the evaluation is stopped)

3. Assess **GHG Emissions Avoidance** and **Project Maturity** criteria

(if all requirements are not met or score is below threshold, the evaluation is stopped)

4. Assess **Scalability** and **Cost efficiency** criteria

Selection Procedure



Some recommendations

- Read carefully the call documents and understand well the requirements (including the admissibility and eligibility ones)
- Get familiar with and follow the call methodologies and guidance (GHG and relevant costs)
- Before submitting, please check consistency between different parts and documents of your application
- Help is available:
 - CINEA website and video tutorials
 - Lessons learned and info-day recordings
 - FAQ
 - National contact points
 - Innovation Fund helpdesk
 - IT helpdesk



The new Small-Scale call > Looking in-depth into the award criteria

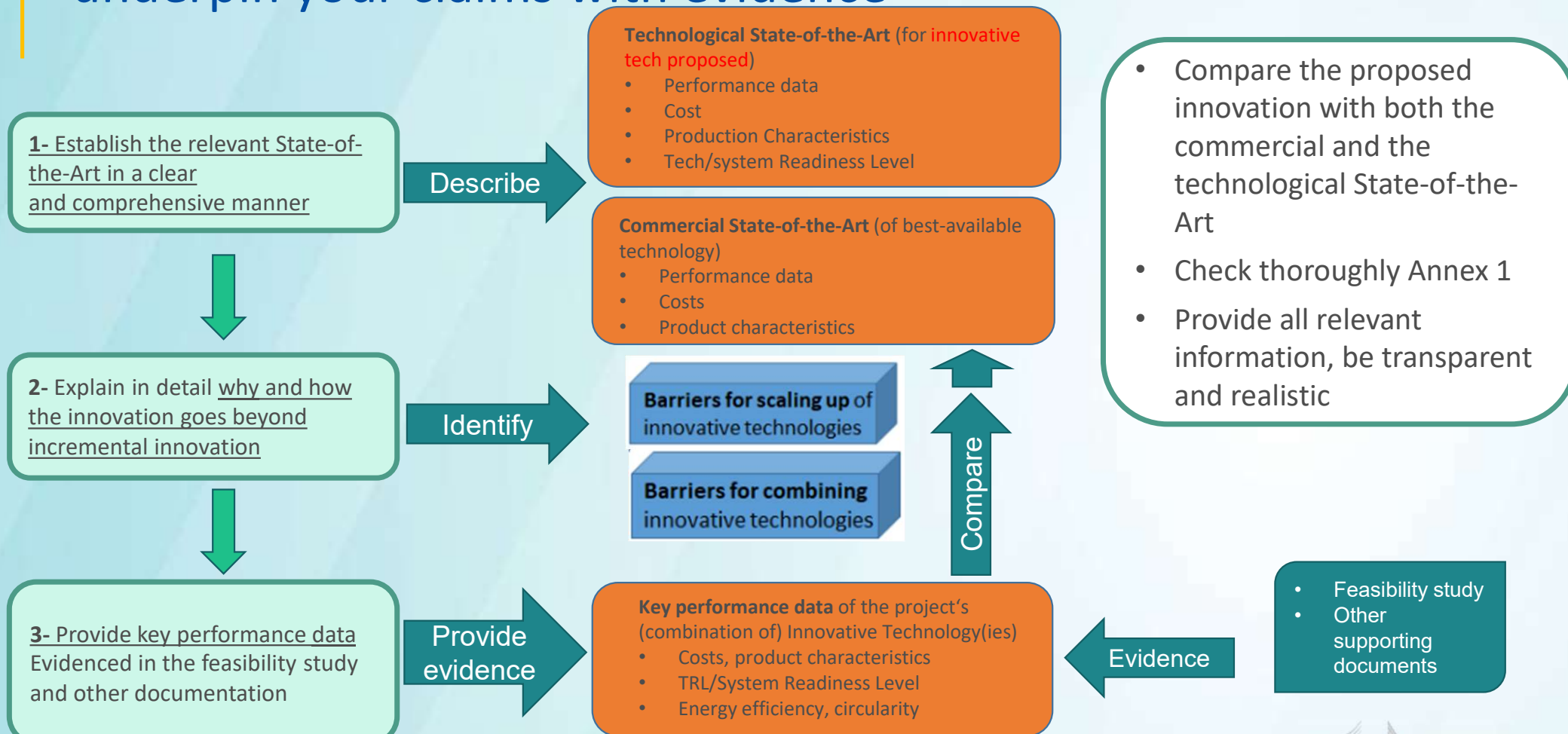
Maria Alfayate & Christophe Dehout, CINEA



The Award Criteria

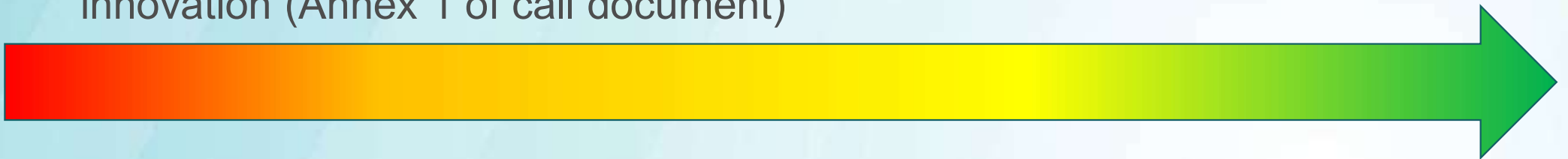
- Degree of Innovation
- GHG emission avoidance
- Project Maturity: Technical, Financial and Operational maturity
- Scalability
- Cost Efficiency

Degree of Innovation Criterion (DoI): Be exhaustive and underpin your claims with evidence



Degree of Innovation

The Innovation Fund aims to support projects that go beyond incremental innovation (Annex 1 of call document)



Incremental innovation, the degree of innovation is very low since only minor changes or improvements are made to existing products, processes or business models, projects which will deliver only incremental innovation **will not be retained.**

Intermediate or strong degree of innovation is present in new or considerably changed technologies or processes or business models for the production or delivery of existing or new products or services

Very strong or breakthrough degree of innovation is present in completely new technologies or processes or business models or completely new products or services, which substitute existing products or business models

How to make your proposal successful

- Clearly describe the innovation in the individual elements of the proposed solution and, if relevant, of their combination and their respective degrees of innovation
- Clearly describe the state of the art as a benchmark against which the assessment of the innovation(s) is made (include geographical reference point)
- Evaluators need to be convinced by the application, so substantiate well the performance advancements compared to state-of-the-art solution, provide credible performance data. Consideration of innovation needs to take into account at least plant design; operating approach; construction; performance; reliability & availability; maintenance and economics.

GHG emissions saving criteria

Application of the GHG methodology

- To support applicants quantifying GHG emissions avoidance potential over the first 10 years of operation
- To form the basis of the scoring for the “GHG emission avoidance potential” criterion and cost efficiency
- To serve as KPI for project monitoring and disbursements of grants
- To inform on requirements for knowledge-sharing purposes

Selection criteria

Projects will be selected based on:

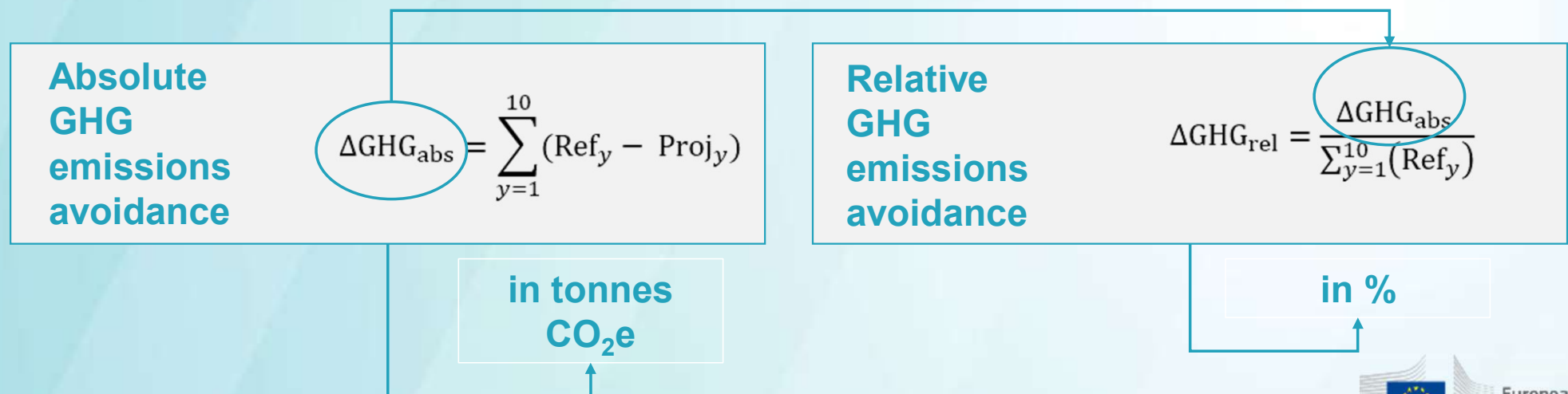
1. Potential of greenhouse gas emissions avoidance
2. *Degree of innovation*
3. *Project viability and maturity*
4. Scalability
5. Cost efficiency (cost per unit of performance)

Absolute and relative GHG emissions avoidance

Absolute GHG emission avoidance is the difference between:

- the **emissions that would occur in the absence of the project (*Ref*)**, and
- the **emissions from the project activity (*Proj*)**

Timescale: 10-years. Forecasting: emission factor will be fixed for the 10 years of calculation



Technical Maturity – key points

Objective: assess the technical maturity of the proposed projects

Technical feasibility to deliver the expected output and GHG emissions avoidance

Technology risks and proposed mitigation measures

- **Application form, Part B, sections:**
 - 3.1 (technical maturity)
 - 3.4 (risk management)
 - Section 0: technical characteristics and scope / technology scope
- Feasibility study (mandatory annex)
- Any existing technical due diligence report (optional)

Technical Maturity

Feasibility study

- The feasibility study is a **Mandatory annex**: it should include information in line with the minimum content indicated in section 5 of the call text:
 - ❑ Project description (background information, objectives, expected project outputs, innovation)
 - ❑ Location analysis and strategic overlook (site, site plans, stakeholders involvement and acceptance)
 - ❑ Technical maturity assessment (technology readiness, feasibility of achieving project outputs)
 - ❑ GHG avoidance and key consumptions figures
 - ❑ Sustainability of the proposed solution
 - ❑ Techno-economic feasibility
 - ❑ Risks and mitigation measures (including heat map)



Award Criteria Part II

Financial Maturity

DEHOUT Christophe, CINEA Financial engineer

Financial Maturity – key points

Objective: assess the project capacity to reach Financial Close within 4 years

Project business plan and profitability

Soundness of the financing plan

Commitment of project funders

Understanding of project financial risks

Financial Maturity

Commitment of project funders

- Describe the state-of-play, nature, level and conditions of support provided by project funders.
- Provide corresponding evidence like letters of interest/support, letters of approval from funders/shareholders or board confirming the support of the financing plan
- Support from other sources including market mechanisms, support from Member States and status/planning for State aid clearance where relevant (provide evidence if you have, not just mention it).

The 7 golden rules of FM

1. Clearly outline project scope, legal structure (*) and potential interdependencies with other projects

2. Identify & provide effective mitigation measures for key risks

**Financial
Maturity**

6. Substantiate and justify your business assumptions

5. Give evidence of preliminary contract

4. Follow our guidance on how to calculate your project WACC

Financial Maturity

Business and financial risks

- Provide a description of the main business and financial risks with the appropriate mitigation measures
- Underpin your analysis with the business plan and provide a risk heat map
- Describe contingency planning and/or contingency funding to cover downside scenarios like lower green price premium, sales growth or lower than anticipated price increase, higher construction cost, absence of additional grant (if any)
- Fill in the risk matrix in section 3.4 of the application form part B

Operational Maturity – key points

Objective: assess the prospects of the project for its successful deployment

Project implementation plan (covering all project milestones & deliverables)

Permits, Rights, Licences and Regulatory procedures)

Ensuring public acceptance of the project

Project management team and project organisation

Operational risks and proposed mitigation measures

- **Application form, Part B, sections:**
 - 3.3 - Operational maturity
 - 3.4 - Risks and mitigation measures
 - 3.3 - Project Diagram
 - 6.1 - Work Plan
 - 6.2 – Work Packages, activities, resources and timing
 - Timetable
- Any existing due diligence report (optional)

Scalability

Objective: assess the scalability and the knowledge sharing

Scalability in terms of efficiency gains

Scalability in terms of further technology or solutions deployment

+

Quality and extent of the knowledge sharing

- Efficiency gains:
 - expected technology **cost reductions**;
 - **efficient use of resources** or other ways to address resource constraints notably in terms of **reduction of use** and **more efficient use** of critical raw materials biomass and other scarce resources, and in terms of **circularity, recycling and recyclability** of such resources.
- Scalability in terms of further technology or solutions deployment:
 - at project site and possible transfer to other sites;
 - at sector level, regionally or across the EU economy or globally;
 - + potential for technology
 - transfer beyond sector

Scalability

- Which are the related expected additional emission avoidance?
- What's the impact on economic growth and jobs?
- What's the potential to create new value chains or reinforce existing ones in Europe (development of strategic autonomy in industrial supply chains)? Is there a positive impact on competitiveness?
- For projects to a large degree dependent on subsidies, potential to become cost-competitive and financially viable over time in the absence of subsidies.

How to make your proposal successful

Cover in a **clear and exhaustive manner** all the points in the Part B and substantiate them, avoid vague statements as evaluators will be asked whether the claims you made are credible;

- underpin your claims with evidence and analysis
- be realistic in your growth expectations
- address well the resource constraints and any limiting factors for further scale-up

Cost efficiency

Requested Innovation Fund grant

Absolute GHG emission avoidance

During 10 years after entry into operation

Maximum grant is 60% of total relevant costs

Applicants choosing not to apply for the maximum grant will be more competitive when ranked against other applicants in 'cost per unit performance' metric. **However if the project will receive project specific state-aid, this must be added to the requested IF grant amount in the numerator of the formula (*)**

New

(*) provided that if the sum of the requested IF grant and project-specific state aid exceeds 60% of the relevant costs, the numerator of the cost efficiency ratio must be capped at 60% of relevant costs

JOIN AS PROJECT EVALUATOR



Technical experts



GHG experts



Financial experts



**Rapporteurs and
Quality checkers**

- **Individual evaluation**
 - To be organised fully remotely from your office or home at your best convenience
- **Consensus group**
 - Discussion with other fellow evaluators
 - Either in Brussels or virtually
- **Confidentiality and conflict of interest rules apply**

Check [CINEA website](#) for the application process!

Where to find more information?



All (past) call documents available on the Funding and Tenders Portal including:

- ✓ Guidance and calculation tools on GHG emissions and relevant costs
- ✓ Frequently asked questions

<https://europa.eu/!QB67by>



Further info, planning of new calls, recorded webinars and videos available on the IF Website:

<https://europa.eu/!rx34Dt>



Innovation Fund - YouTube

<https://bit.ly/2WxK8w7>

Thank you



https://cinea.ec.europa.eu/programmes/innovation-fund_en



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[European Climate, Infrastructure and Environment Executive Agency](#)



[CINEATube](#)



Innovation Fund PCN France

Page LinkedIn : <https://www.linkedin.com/company/91064273>

Prochain événement 20 avril 10h – 13h : Présentation approfondie du 3^{ème} call for small-scale-projects
Inscription en ligne : https://cinea.ec.europa.eu/news-events/events/innovation-fund-info-day-third-call-small-scale-projects-2023-04-20_en

