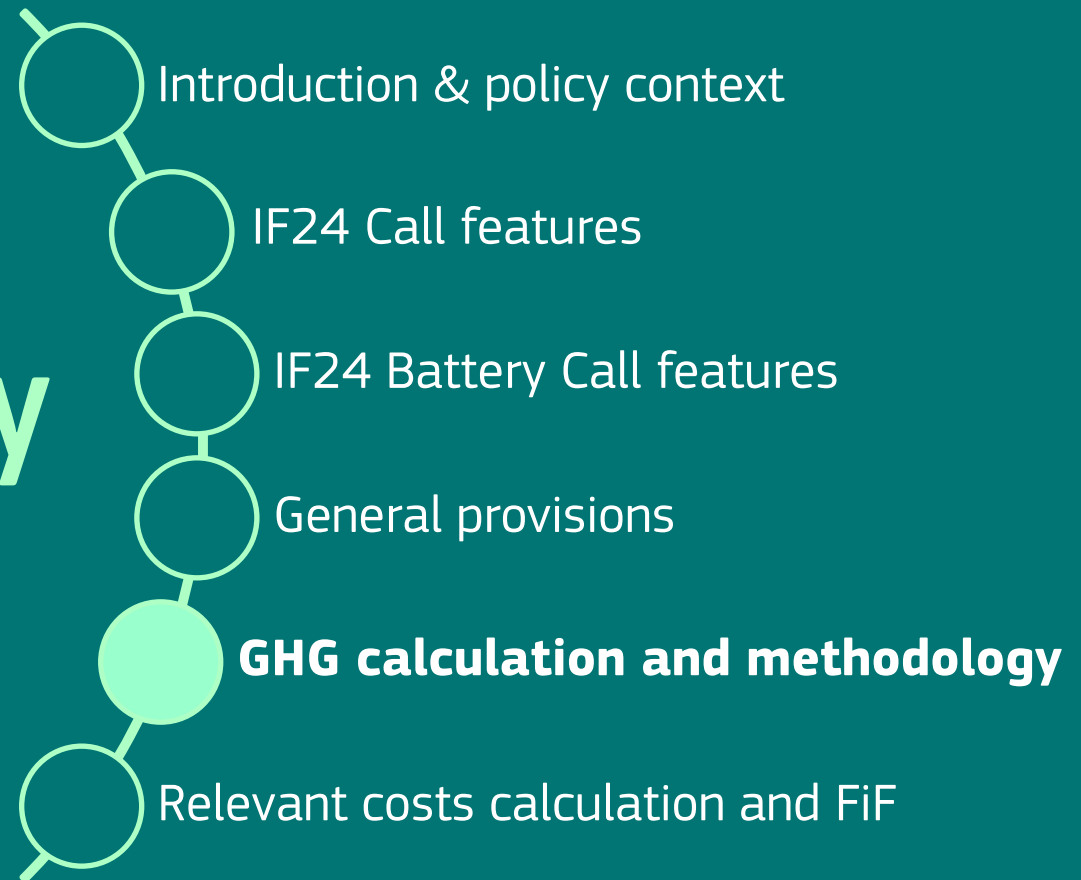


GHG calculation and methodology

Joao SERRANO GOMES, *Policy Officer*
DG CLIMA - Low Carbon Solutions (II):
Research & Low Carbon Technology Deployment



GHG methodology overview

Purpose:

- GHG impact forms a critical criterion in awarding funding, prioritising projects that demonstrate substantial, measurable, and verifiable reductions
- It incentivises the adoption of innovative technologies and practices that deliver emissions reductions beyond business-as-usual scenarios
- Provides a standardised framework to quantify greenhouse gas (GHG) emission reductions achieved by projects

Core Concepts:

- **Absolute Emission Avoidance:** Total GHG reduction achieved by a project compared to a baseline
- **Relative Emission Avoidance:** GHG reduction as a percentage of emissions in a reference scenario



GHG methodology overview (cont.)

Methodology Components:

- Comparison of project and reference scenarios over a 10-year operational period
- Inclusion of direct and lifecycle emissions for comprehensive assessment
- Sector-specific calculation guidelines for consistency and transparency

Key Requirements:

- Monitoring, reporting, and verification to ensure credible and measurable GHG reductions

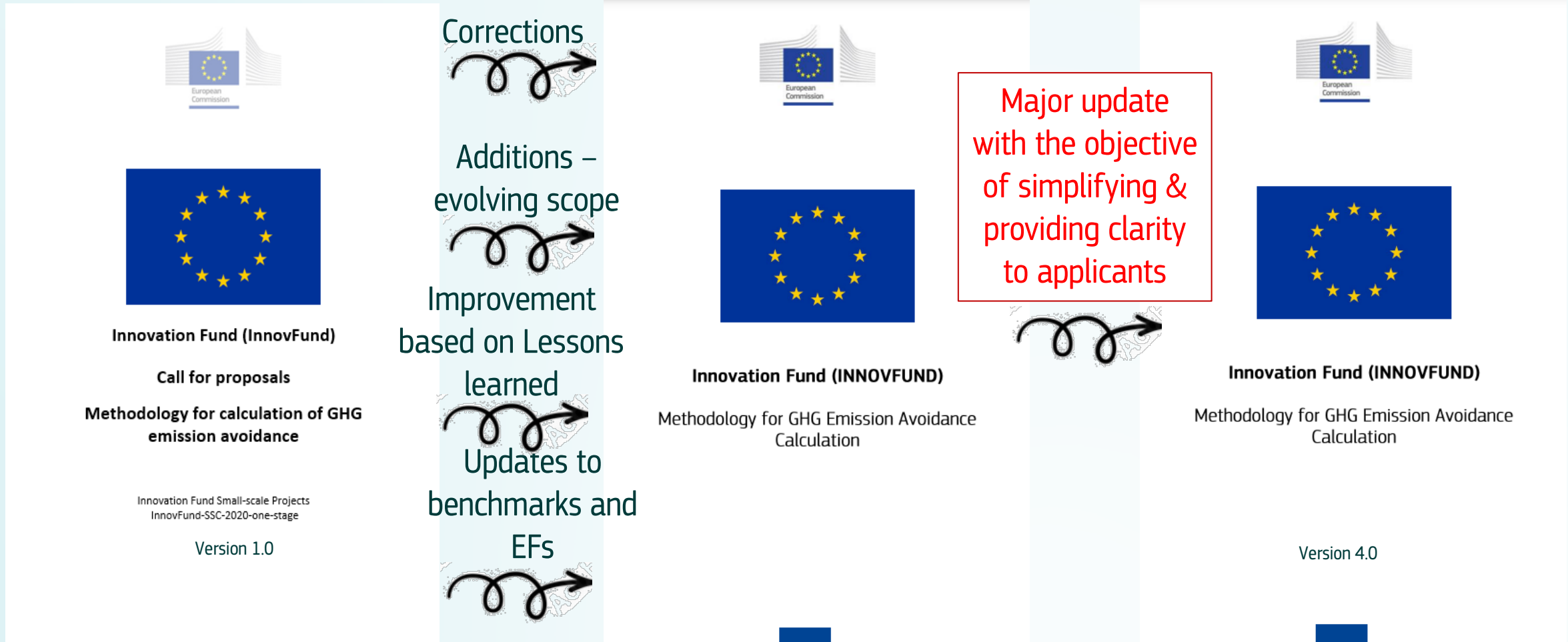


Evolution of the GHG methodology

1st large-scale call open
3 July 2020

From small-scale call 2020 to IF23
Call

5th call (IF24 Call) open
3 December 2024



Stakeholder input

Survey on the application process

May-June 2024

1 Introduction

You have been identified as a key stakeholder to gather feedback on the **fourth Innovation Fund call for proposals, also called IF23 Call**. We would be grateful if you could provide feedback on your experience through the application process. Your feedback will be used to improve future applications and shape the next Innovation Fund calls for proposals.

The survey will be open until **05 June 2024**.

The contributions to this survey are anonymous, and they are not linked to project names and application forms. Survey contributions and analysis will not be shared with the proposal evaluators. Following the feedback received in the similar past surveys, a number of improvements were already done in the application process.

The European Commission, DG CLIMA, has contracted ICF to provide support services for the launch and implementation of the IF23 call for proposals with the objective to improve the call methodologies, procedures and award criteria. As part of this, ICF will process the answers to the questionnaire. To proceed with the survey please confirm that you consent to your data being used, as outlined in the privacy statement.

Should you have any questions or comments, please do not hesitate to contact DG CLIMA (clima-innovation-fund@ec.europa.eu).

*

To proceed with the survey please confirm that you consent to your data being used, as outlined in the privacy statement.

[CLIMA-IF_Surveys_Privacy_Statement_2023.pdf](#)

Next

The survey included fields for suggestions on major simplification of the application process. Open for contributions between 31 May and 14 June 2023

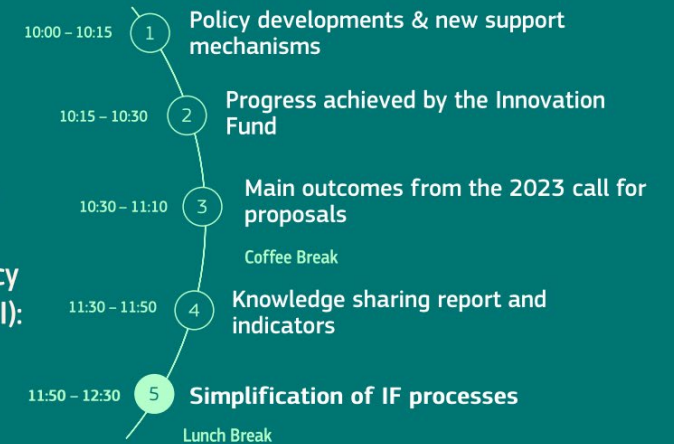
Stakeholder consultation

11 June 2024

Simplification of Innovation Fund processes

Joao Serrano Gomes - DG CLIMA, Policy Officer - C.2 - Low Carbon Solutions (II): Research & Low Carbon Technology Deployment

Laura Pereira - ICF, Energy, Climate and Sustainability Expert



Feedback received on the day through Slido and opened for 2 weeks following the event

Improvements & simplifications to the GHG methodology *Highlights*

Sli.do #IF24Call

General:

- A list of “Key steps for the calculation of the GHG emissions avoidance” has been added
- An explicit term has been added for the carbon capture credit, which was previously integrated into the term Proj
- A bioenergy sector has been created under the RES category, and bioenergy projects shall no longer apply under the EII category
- Clarification on the choice of sectors when a principal product replace more than one reference product; and for CCU/S projects
- Rules for projects manufacturing innovative technologies and their components have been clarified for all project categories



Improvements & simplifications to the GHG methodology *Highlights*

Sti.do #IF24Call

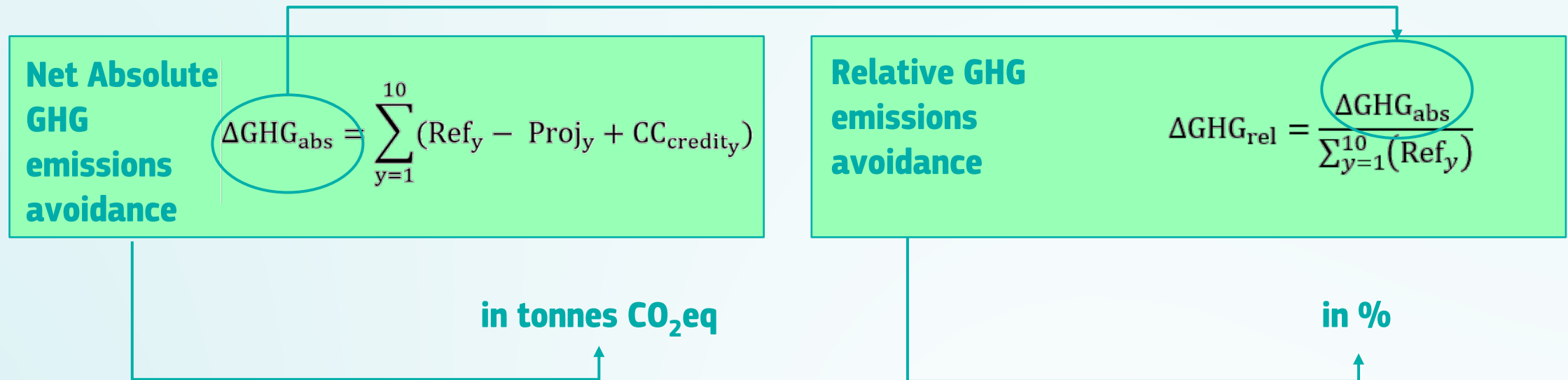
General (cont.):

- Improved equations, rules and requirements for all project categories
- Guidance has been added relating to the emission factors to be used for heat and hydrogen as project inputs
- Guidance on the treatment of biomass-derived fuels and materials has been added
- A dedicated section for mobility projects was created, replacing former sections for aviation and maritime projects
- New section specific to the IF24 Battery, which is not applicable for IF24 Call applications



GHG emissions avoidance criteria - Principles & scope

The GHG methodology forms the **basis for scoring the “GHG emissions avoidance potential” criterion**. It informs applicants on how to estimate GHG emissions avoidance over their project's first 10 years of operation.

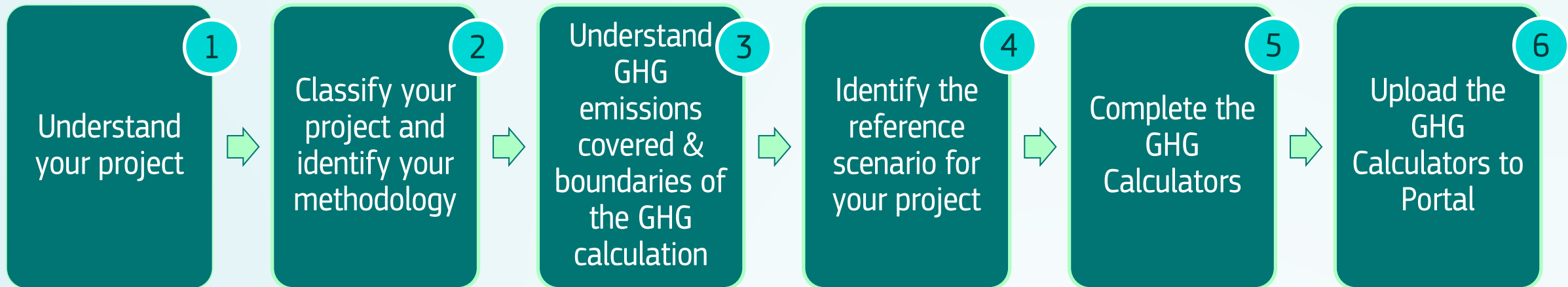


Where:

- Ref_y = GHG emissions that would occur in the absence of the project in year y
- Proj_y = GHG emissions in the project scenario in year y
- $\text{CC}_{\text{credit}_y}$ = credit for storage or utilisation of captured CO₂
- y = year of the operation of the project



Step-by-step of the GHG calculation



Project categories

The IF24 Call includes two new project categories:

- **Section 2: Energy-intensive industries**, manufacturing of electrolysers and their components
- **Section 3:** Production and use of **renewable electricity, heat and cooling**, including manufacturing of RES components
- **Section 4: Energy storage** including manufacturing of ES components
- **Section 5: Mobility**, including provision of transportation services and manufacturing of aircrafts, maritime vessels, and road transport vehicles and their components
- **Section 6: Credit for Carbon Capture and Storage or Utilisation**
- **Section 7:** Methodology for the IF24 Battery, not relevant for projects applying to the IF24 Call



New



New



Two new project categories (cont.)

The GHG methodology includes a dedicated section for each project category, which includes:

- Scope
- System boundaries
- Instructions on how to calculate the reference and project emissions for use in the calculation of absolute and relative GHG emissions avoidance
- Data and parameters: default values to be used, and data to be monitored for disbursement
- Additional resources: GHG Calculators, examples and video tutorials



How to determine the category

To identify the category, applicants must **choose the sector** under which the project falls. This choice may influence the score of sub-criterion “Absolute GHG emission avoidance”, as projects are compared to other projects in the same sector.

The sector is determined based on the function of the principal product or service that is the main aim of the project.

How to determine the category

Category	Energy Intensive Industries (EII), incl. carbon capture and storage (CCS) and utilisation (CCU) Renewable energy (RES) Energy storage (ES) Mobility (MOB) Buildings (BIL)	
Sector	EII → chemicals, hydrogen, manufacturing of components, etc. RES → wind, solar, manufacturing of components, etc. ES → intra-day electricity, other energy storage, manufacturing of components MOB → aviation, maritime, road transport BIL → buildings	Examples for selected categories
Product/Service	Chemicals → organic chemicals, inorganic chemicals, etc. Solar → dispatchable electricity, heating, cooling Other energy storage → hydrogen-based storage Aviation → transportation of goods and passengers	Examples for selected sectors

Please refer to the Section 1.2, Table 1.1 of GHG methodology for full list of sectors and products/services

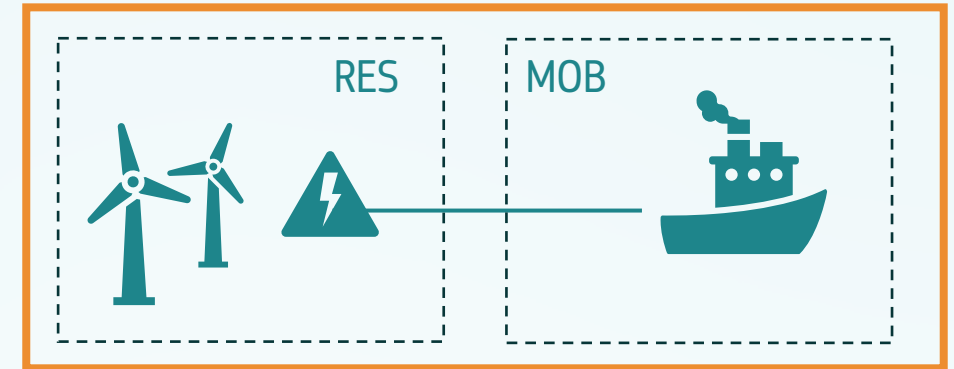


How to determine the category

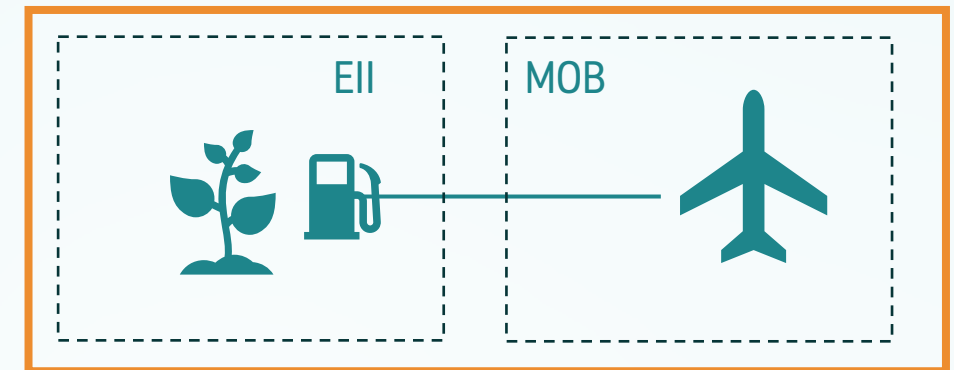
Some projects will comprise activities in more than one IF category:

- When a project combines activities related to more than one category, such as EII, RES, ES, MOB, this will be considered a hybrid project
- In such cases, the applicant shall still choose a main sector and associated principal product that best corresponds to the main aim of the project
- Specific guidance is provided in the GHG methodology for the calculation of absolute and relative emissions avoidance for such cases

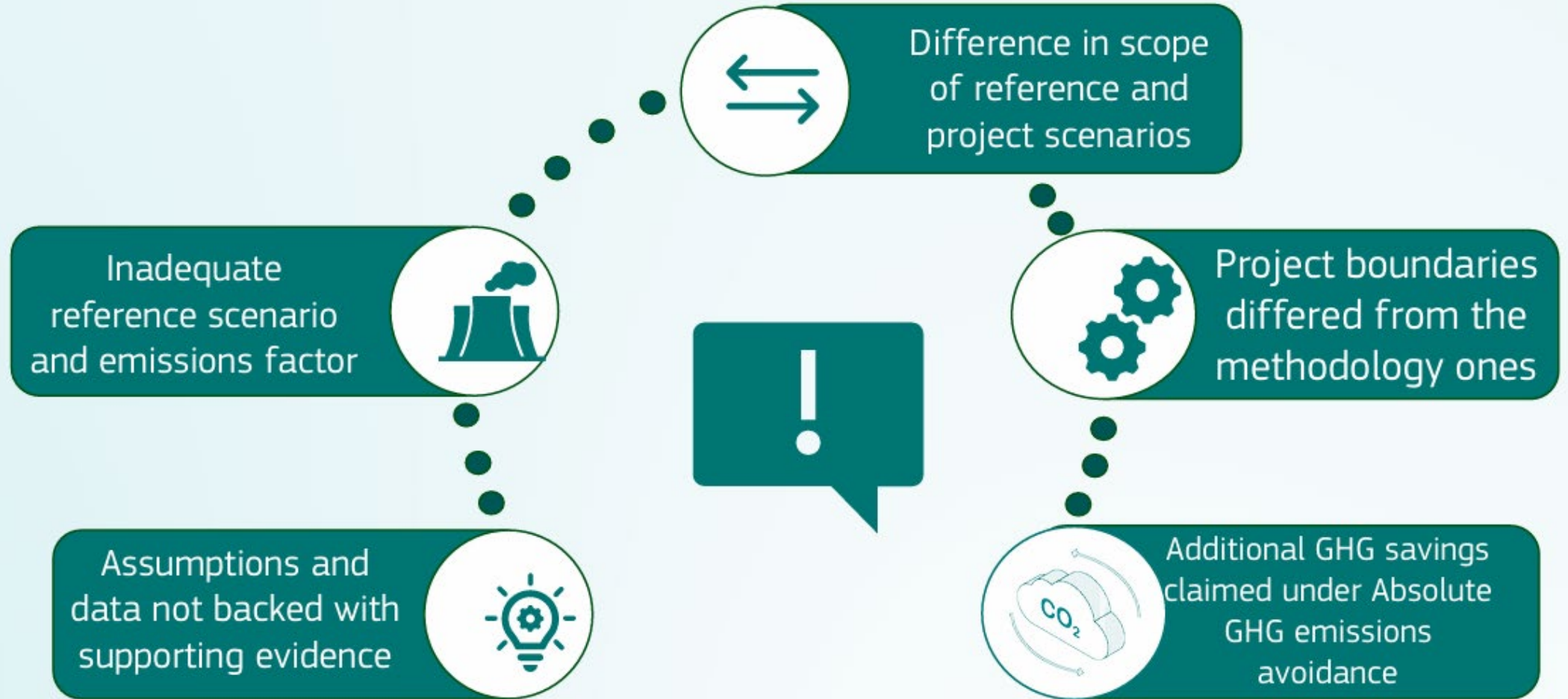
Example of Hybrid Project 1



Example of Hybrid Project 2



Most common mistakes on GHG emissions avoidance calculations



Useful material

Recordings available with overview and guidance on the GHG calculations for each project category:

- Main principles and step-by-step of the GHG calculation
- Section 2: Energy Intensive Industries (EII)
- Section 3: Renewable Energy Sources (RES)
- Section 4: Energy Storage (ES)
- Section 5: Mobility (MOB)
- Section 6: Credit for carbon capture and storage (CCS) or utilisation (CCU)
- Section 7: Batteries (BATT)



Additional resources

Excel examples on the use of the GHG Calculators:

https://cinea.ec.europa.eu/programmes/innovation-fund/tools-and-guidance_en

Video tutorials on how to fill in the GHG Calculator:

(Available soon)

https://cinea.ec.europa.eu/funding-opportunities/calls-proposals/innovation-fund-2024-call-and-battery-calls_en#tutorials

Where to find: Innovation Fund 2024 Call and Battery calls

Innovation Fund 2024 Call and Battery calls

PAGE CONTENTS

- Details
- Description
- Events
- Tutorials
- GHG Methodology videos
- Supporting documents

Details

Status OPEN

Publication date 3 December 2024

Opening date 3 December 2024

Deadline model Single-stage

Deadline date 24 April 2025, 17:00 (CEST)

Funding programme Innovation Fund (IF) (2021/2027)

Department European Climate, Infrastructure and Environment Executive Agency

Description

On 3 December 2024, the European Commission launched the **Innovation Fund 2024 Call and Battery calls**, with a total budget of €3.4 billion.

The general call for net-zero technologies worth €2.4 billion (IF24 Call) supports decarbonisation projects of different scale, as well as projects focusing on the manufacturing of components for renewable energy, energy storage, heat pumps, and hydrogen production, and pilots.

For the first time, a €1 billion call for electric vehicle battery cell manufacturing (IF24 Battery) will support projects that can produce innovative electric vehicles battery cells or deploy innovative manufacturing techniques, processes and technologies.

You can find all information and documentation related to the two calls on the [Funding & Tenders Portal](#), including the call text and application forms.

[APPLY IF24CALL](#)
[APPLY IF24BATTERY](#)

The **deadline for both calls is 24 April 2025, 17:00 CET**.

Events

To provide better guidance to applicants during the submission process, CINEA and DG CLIMA are organising an [online Info Day](#) on 17-18 December 2024. Participants will learn more about the new calls, the award criteria, and ask their questions on the Sli.do #IF24Call.

[REGISTER](#)

Tutorials

CINEA produces a series of **tutorials** to help you throughout the application process.

Where to find useful information (coming soon)	Application process	How to fill in PART C (coming soon)	Financial Information File (coming soon)
Introduction to Business Plan template and	The <i>excel file for data</i>	GHG methodology	

Monitoring, reporting and verification of performance

- **When submitting their proposal**, include a detailed monitoring plan - complete and transparent documentation of the parameters used in the GHG calculations and data sources
- **During project operation**, all measurements should be conducted with calibrated measurement equipment according to industry standards and in line with relevant EU ETS requirements, as applicable
- **At the reporting stage**, a report verified by an independent GHG verifier of the GHG emission avoidance achieved over the entire monitoring period must be provided



Frequently Asked Questions

- **Is an independent third-party verification of GHG calculation necessary at the application stage?** Although not mandatory at the application stage, a third-party verification will be required at the end of the last year of operation of a project, and will cover the emission avoidance achieved by the project
- **Under which category shall SAF producers apply: a EII or MOB (Sector Aviation)?** Applicants that intend to produce fuel that could be used in aviation, but not limited to it should apply as a EII project. Under this category, the absolute GHG emissions avoidance for SAF production are based on the savings during the use phase. To be classified as an MOB project, the user of the SAF (e.g., the airline company) should be part of the project. In such case, the applicant would also be able to claim reductions of non-CO₂ emissions
- **If the GHG methodology can be applied to my project, does it mean that I am eligible for the IF24 Call?** The call eligibility is defined by the call text, the GHG methodology does not define a project eligibility. Should your project be eligible based in the call text its GHG calculation should follow the principles and rules defined in the GHG methodology.



Important reminders

- Read the GHG Methodology carefully, consult the examples of the application of the GHG Calculation Tools available, and the tutorials
- Questions can be sent to the **helpdesk**, throughout the call window.
 - The purpose of the helpdesk is to clarify doubts related to the methodology, not to confirm if your calculation is correct
 - When addressing the helpdesk:
 - include only one question
 - no conditional questions
 - limit to 2000 characters
 - Estimated response time: 7-15 working days from receipt

