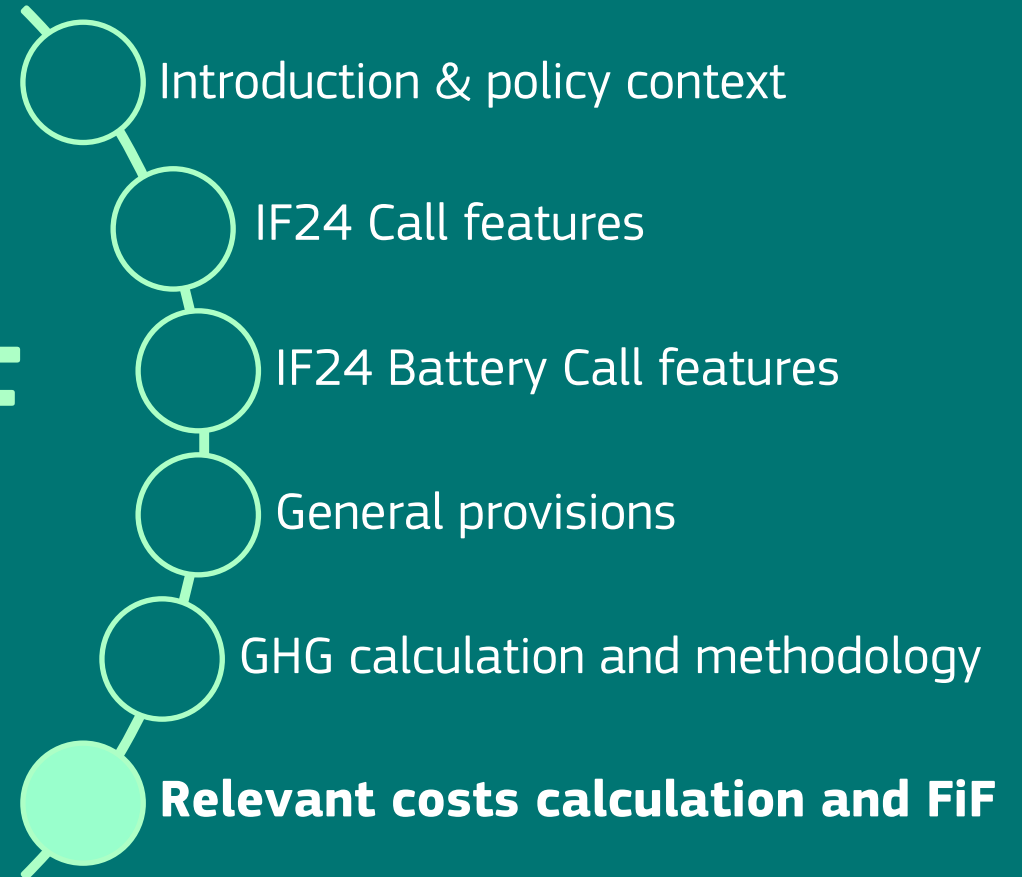


Relevant cost calculation and FiF

Alexandre COBBAERT, *Senior Financial Engineer*
CINEA - Financial Engineering, Business Intelligence &
IT Unit



Relevant Cost: What has changed since the IF23 Call?



New

- Further guidance specific to maritime and aviation projects
 - Two examples in the RC methodology guidance for projects which produce or install innovative technology (e.g., engine or equipment) into a new or retrofitted ship or plane
 - Projects using financial leases to fund the construction of newbuilt ships or planes
- Clarification on maintenance CAPEX
- Clarification on possibility to combine sheets from detailed financial model and Financial information File (FIF)
- Clarification on the calculation of Relevant Costs if entry into operation date does not coincide with the start of a calendar year
- Update of Appendix with support data materials for the WACC calculation



Key principles: Definitions

Relevant costs (“RC”) = *The Relevant Costs shall be the net extra costs that are borne by the project proponent as a result of the application of the innovative technology related to the reduction or avoidance of the greenhouse gas emissions.*

CAPEX

Construction costs, site infrastructure costs, development costs and intangible assets of the project (please refer to glossary in RC guidance document) - not discounted

OPEX

Operation and Maintenance cost, decommissioning costs (if in the first 10 years), they do not include depreciation cost of CAPEX! - discounted

Operational benefits

Any revenue received by the project from the sale of EU ETS free allowances for reductions in CO₂ emissions, sale of CO₂ as final product, or monetization of CO₂ certificates due to reduction of CO₂ - discounted

Discount rate

Discount rate used for NPV calculations is the Weighted Average Cost of Capital (WACC) of the project



Key principles: Which methodology should applicants use?

No reference plant: default methodology, recommended for all projects

Reference plant: “fall-back” option if the project fulfils the following conditions:

- The project relates to the construction of a completely new plant/unit. Add-ons to existing **or new** installations must use the No Reference Plant Methodology
- The reference plant has the similar characteristics (output, capacity) as the Project plant
- The reference plant complies with the European Union environmental standards and with EU legislation, including the EU ETS benchmark for industrial products where relevant
- Applicants must provide documents necessary to assess the credibility of the financial and technical data of the reference plant, such as: proof of planning of such a (reference) plant/unit as an alternative to the project, formal board documents, financial reports, internal business plans or studies
- A complete and detailed set of verifiable financial projections is added to the Applicant’s detailed financial model (mandatory)



Key principles:

General assumptions applicable to all methodologies (1)

Carbon price and OPEX inflation

- **Carbon price:** applicants are asked to justify the carbon prices that they consider appropriate over the entire project lifetime
- **OPEX inflation:** applicants are free to provide their best estimate of OPEX taking account of inflation with the justification for the assumptions taken

The projections should be consistent across all application documents

Non-eligible costs (non-exhaustive)

- ! • **Financial cost** : interest expenses during construction, bank fees
- Costs incurred **before the date of submission of the application**
- ! • **Terminal value:** no value beyond the asset useful lifetime
- **Stranded assets:** write down of assets related to existing technologies are excluded
- **Decommissioning costs:** acceptable if during first ten years (e.g., for demo projects)



Key principles:

General assumptions applicable to all methodologies (2)

CAPEX



- Only CAPEX incurred **before entry into operation** are included in the relevant cost computation and are **undiscounted**



- Any expansion CAPEX incurred **after** the date of entry into operation is considered to fall outside the scope of the IF project and should be excluded from the FIF

Maintenance CAPEX



Maintenance CAPEX can be included if solely related to maintaining the Project's operational capacity, only if it is incurred **after** the date of entry into operation

- Maintenance CAPEX **will be discounted**

Methodology

1

No reference plant

Approach:

- **Default** methodology
- Compulsory for add-on projects (for example carbon capture)

Formula:

RC = best estimate of CAPEX and NPV of OPEX, Maintenance CAPEX net of Revenues and Operational Benefits of the project over a 10-year period

Relevant costs

$$= CAPEX + PV OPEX + PV Maintenance CAPEX - PV Operational Benefits - PV Revenues$$



Methodology

2

Reference plant (*)

Approach

- Establish the reference plant based on the product produced, not sector
- Check if the reference plant complies with the conditions mentioned in the Relevant Cost Guidance and notably with the European Union environmental standards and with EU legislation, including the EU ETS benchmark for industrial products where relevant
- Prepare carefully all mandatory documents including the Other annexes mentioned in the call text

() Fall-back methodology when conditions presented above are met*



Methodology

2

Reference plant (*)

Formula

Relevant Cost for the Reference Plant = A- B, where:

$A = \text{Project CAPEX} + \text{PV Project OPEX} + \text{PV Project Maintenance CAPEX} - \text{PV Project Operational Benefits} - \text{PV Project Revenues}$

And $B = \text{Ref Plant CAPEX} + \text{PV Ref plant OPEX} + \text{PV Ref Plant Maintenance CAPEX} - \text{PV Ref Plant Operational Benefits} - \text{PV Ref Plant Revenues}$

A is actually equal to the **Relevant cost** using the default methodology with the PV computed using the project WACC.

The **PV** in **B** is computed with the **Project WACC** without the project innovation risk premium and with the same leverage as the Project, cost of debt should be in line with the ones generally used in the sector.

Projects with the component B equal or extremely close to 0 may use the default methodology.

(*) *Fall-back methodology when conditions presented above are met*



Relevant Cost – General tips

- Compute the relevant cost as early as possible, using the right methodology to see if your project can get a grant
- Contingencies should always be justified
- Read carefully which costs are eligible and which are not
- Pay attention that entry into operation is based on the last phase of your project
- Ensure the coherence of data between the FIF, your own financial model and the business plan



Relevant Cost – More specific tips

- Incremental / ‘add-on’ projects: add sheets to your own detailed financial model to demonstrate the financial viability of the aggregated process/installation after integration of the IF Project
- Combine sheets of the FIF with detailed financial model: adding and merging sheets from FIF and detailed financial model is possible, but applicants must still **submit FIF and detailed financial model as two distinct mandatory documents**
- Small update to RC calculation formula in FIF: if entry into operation does not coincide with start of calendar year, FIF will automatically take the pro rata share of OPEX, revenues, and operational benefits for the 10th year of operation to ensure that a full 10-year period of operations is included



Updated



Weighted Average Cost of Capital (WACC)

Key principles

- WACC is applied to discount future revenue income and cost streams over the project lifetime to make them comparable
- Applicants should calculate a project WACC based on the project's cost of equity and cost of debt
- They should not use their corporate WACC

Formula

$$WACC = E/V * Re + D/V * Rd * (1 - Td)$$

Re = cost of equity

Rd = cost of debt

E/V = equity portion of total capital (Equity over total Value)

D/V = debt portion of total capital (Debt over total Value)

Td = Tax rate

- For the WACC computation, shareholders loans should be counted as equity as they carry exactly the same risks



Weighted Average Cost of Capital (WACC)

Approach

- **Cost of equity:**

$$Re = Rf + (\beta * ERP) + IP$$

- Rf = risk free rate
- β = beta of the project
- ERP = equity risk premium
- IP = innovation premium

- **Cost of debt:**

$$Rd = \text{base rate} + \text{credit spread}$$



Estimation

- Rf : applicants are required to use the Appendix 2 of guidance document
- Beta : proposed default value of 1 (compulsory for sectors not in the table in Appendix 2 of the RC guidance)
- ERP: proposed default value of 6%
- Innovation premium: if innovation leads to risks that go beyond the conventional sector. As default, a value of 3% should be applied, with the potential to increase it to 4% or lower it to 2% upon due justification
- Base rate: swap rates consistent with average debt maturity
- Credit spread: based on terms expected by debt providers, in line with market standards



FIF tutorial (coming soon)

<p>PAGE CONTENTS</p> <ul style="list-style-type: none"> Details Description Events Tutorials GHG Methodology videos Supporting documents 	<p>Where to find useful information (coming soon)</p>	<p>Application process</p> <p>↗</p>	<p>How to fill in PART C (coming soon)</p>	<p>Financial Information File (coming soon)</p>
	<p>Introduction to Business Plan template and lessons learned on financial maturity (coming soon)</p>	<p>The extra file for data collection (coming soon)</p>	<p>GHG methodology calculation tutorials (coming soon)</p>	



Check out:

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

