



Innovation Fund (INNOVFUND)

Relevant Costs Methodology

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HISTORY OF CHANGES		
Version	Publication date	Changes
<u>1.0</u>	01.11.2022	<ul style="list-style-type: none"> ▪ Initial version
<u>2.0</u>	01.03.2023	<ul style="list-style-type: none"> ▪ New section for Small-Scale Call (SSC); updated glossary
<u>3.0</u>	01.11.2023	<ul style="list-style-type: none"> ▪ Deletion of the “levelised cost” methodology and reduction to two methodologies (“no reference plant” and “reference plant”) ▪ no reference plant” becomes the default methodology, ▪ Deletion of the decision tree ▪ Alignment of the methodologies for Large, Medium and Small scale topics ▪ Simplification of the WACC computation with default beta and default Equity Risk Premium proposed Definition of Capex used for Relevant Cost computation and multi-phase projects
3.1	15.12.2023	<ul style="list-style-type: none"> ▪ Clarification on computation of revenues and cost before entry into operation ▪ Change in wording on Relevant Cost computation during operation ▪ Clarification on public support

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1. Background

The [Commission Delegated Regulation \(EU\) 2019/856](#) of 26 February 2019, defines Relevant Costs in Article 5(1), as follows:

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.

The net extra costs shall be calculated as the difference between (i) the best estimate of economic costs (covering investment and operation) and economic revenues and operational benefits, and (ii) the best estimate of the economic costs and revenues and operational benefits of a project using a conventional technology with the same capacity in terms of effective production of the analogous final product.

The Commission may also decide that the Relevant Costs shall be the net extra costs, calculated as the difference between the best estimate of (i) the economic costs (covering investment and operation) and (ii) the economic revenues and operational benefits.

The latter methodology described in the article above will be referred to in this document as the “No reference Plant” methodology while the former methodology (where the calculation includes a comparison with a conventional technology) will be referred to in this document as the “Reference Plant” methodology.

2. Relevant Costs methodologies

As mentioned in the background section, two Relevant Costs methodologies exist to compute the Relevant Costs of a Project which constitute the basis for calculating the Innovation Fund Grant: the No Reference Plant (Option 1) and the Reference Plant (Option 2) methodologies. The No Reference Plant methodology is the default option to use. Only under the specific conditions set out in this document may the Reference Plant methodology be used as a fall back option.

These methodologies apply to all sizes of Projects (small-scale, medium-scale or large-scale Projects) and to all topics as defined in the Innovation Fund calls for proposals (except to the Innovation Fund auction calls).

2.1 Description of the methodologies

2.1.1 Option 1 – The No reference Plant

Option 1 is the default option and corresponds to the provision of the Innovation Fund Delegated Regulation which defines *the Relevant Costs as the net extra costs, calculated as the difference between the best estimate of (i) the economic costs (covering investment and operation) and (ii) the economic revenues and operational benefits*".

More specifically, the Relevant Costs shall be calculated using the best estimate of the undiscounted total Project capital expenditure (CAPEX) and the Net Present Value (NPV)¹ of the Project Revenues, Operational Benefits, Maintenance CAPEX, and Operational Costs (OPEX), arising over the first ten years of the Project's operation. This is the default methodology for all Projects.

2.1.2 Option 2 – The Reference plant methodology

Option 2 is the fall back option and corresponds to the provision of the Innovation Fund Delegated Regulation which defines *the Relevant Costs as the difference between (i) the best estimate of economic costs (covering investment and operation) and economic revenues and operational benefits, and (ii) the best estimate of the economic costs and revenues and operational benefits of a project using a conventional technology with the same capacity in terms of effective production of the analogous final product*.

This methodology compares the Project CAPEX and the NPV of the Project Revenues, Operational Benefits, Maintenance CAPEX and OPEX arising over the first ten years of operation to those of a Reference Plant or unit of the same size and output using a conventional technology.

This fall back methodology may only be used if:

- The Innovation Fund Project relates to the building and operation of a new plant/unit. In the case of modification of an existing plant/unit (for instance building or transforming a part of the existing installation), applicants shall use the No Reference Plant methodology and consider the incremental step to the existing production process as the Innovation Fund Project;
- The reference plant/unit has the similar characteristics in terms of capacity and output as the Innovation Fund Project;

¹ Net Present Value (NPV) is the difference between the present value (PV) of cash inflows and present value of cash outflows given a specific discount rate.

- The Reference Plant complies with the European Union environmental standards and with EU legislation, including the EU ETS benchmark for industrial products where relevant²;
- Applicants 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. These documents should include the description of assumptions underlying the financial data and calculations (notably for the WACC, price, volumes, inflation rate used to calculate projected revenues, CAPEX, OPEX, Maintenance Capex), where relevant supported by quotes from (potential) suppliers and customers and by external market studies if available;
- A complete and detailed set of verifiable financial projections including CAPEX, Revenues, Operational Benefits, Maintenance CAPEX, and Operational Costs (OPEX) for the Reference Plant is added to the applicant detailed financial model.

2.2 Selection of the appropriate relevant cost methodology

In order to harmonize the Relevant Costs calculation among applicants, the “default” methodology is **Option 1**: the No Reference Plant methodology, that should be suitable for all Projects.

In situations where a Reference Plant can be defined as described in section 2.1.2 above, applicants may use **Option 2**: the Reference plant methodology. In this “fall back” methodology, the Project costs and revenues are compared to the CAPEX, OPEX, Maintenance CAPEX and revenues of a plant/unit with conventional technology complying with European Union environmental standards and with EU legislation, including the EU ETS benchmarks for industrial products (where relevant).

Applicants will need to decide whether or not to apply the default methodology of Option 1. When choosing Option 2, applicants will have to demonstrate that the conditions for using the reference plant methodology listed in section 2.1.2 apply and ensure the traceability and transparency of the calculations. The applicants must demonstrate that they fulfill these conditions and justify the choice of Option 2 in the specific box on Cost Efficiency in the Application Form Part B.

If the data is not fully available and/or the estimated values for the reference plant cannot be justified in full transparency, applicants must use the “no reference plant” methodology.

Insufficient demonstration that the conditions for the use of the Reference Plant methodology are satisfied will be penalized during the evaluation and may lead to a score below the threshold for the quality of the Cost Efficiency ratio.

² A product benchmark is based on the average GHG emissions of the best performing 10% of the installations producing that product in the EU and EEA-EFTA states. Applicants should refer to: Commission Implementing Regulation (EU) 2021/447 of 12 March 2021 determining revised benchmark values for free allocation of emission allowances for the period from 2021 to 2025 pursuant to Article 10a(2) of Directive 2003/87/EC of the European Parliament and of the Council. Available at: https://eur-lex.europa.eu/eli/reg_impl/2021/447.

3. Calculation of relevant costs

3.1 The No reference plant methodology [Option 1]

Under the “No Reference” methodology, the Relevant Costs are calculated as follows:

$$\text{Relevant Costs} = \text{CAPEX} + \text{PV of OPEX} + \text{PV of Maintenance CAPEX} - \text{PV of Operational Benefits} - \text{PV of Revenues}$$

where PV stands for Present Value.

See Glossary in Appendix 1 for a definition of CAPEX, OPEX, Maintenance CAPEX, Operational Benefits and Revenues.

CAPEX : Project Capital Expenditure incurred before the Entry into Operation of the Project

PV of OPEX : Present Value of Project Operational Expenditure

PV of Maintenance CAPEX : Present Value of Project Maintenance CAPEX incurred after the Entry into Operation of the Project

PV of Operational Benefits : Present Value of Project Operational Benefits

PV of Revenues : Present Value of Project Revenues

This methodology derives the Relevant Costs from the best estimate of the total CAPEX and the NPV of Revenues, OPEX, maintenance CAPEX and Operational Benefits arising during construction and over the **first ten years of operation after the project's entry into operation**³. The PV (and hence the NPV) should be computed using the Weighted Average Cost of Capital (WACC) described in section 3.4.3 below.

Any additional revenues of the project (for example in the form of monetisation of the by-products value(s)) or cost savings must also be included in the calculation.

Applicants should pay attention to the parameters described in section 3.4 Parameters applicable to Relevant Cost methodologies below and justify in detail the scope and computation of the revenues and costs in their Business Plan, own detailed financial model and application form Part B.

All these documents are mandatory and will form an integral part of the application.

3.2 The Reference plant methodology [Option 2]

The methodology derives the Relevant Costs from the difference in CAPEX, Net Present Value (NPV) of the OPEX, maintenance CAPEX, Revenues and Operational Benefits arising during construction and over the first ten years of operation after the project's entry into operation between the Project and the Reference Plant:

$$\text{Relevant Costs} = \text{IF Project CAPEX} - \text{Reference plant CAPEX}$$

³ The glossary of the call text defines entry into operation as “The moment in the project development cycle where all elements and systems required for operation of the project have been tested and activities resulting in effective avoidance of greenhouse gas emissions have commenced.”

+ (PV of IF Project OPEX and Maintenance CAPEX - PV of Reference Plant OPEX and Maintenance CAPEX)

- (PV IF Project Operational Benefits – PV of Reference Plant Operational Benefits)
- (PV of IF Project Revenues – PV of Reference Plant Revenues)

See Glossary in Appendix 1 for the definition of CAPEX, OPEX, Maintenance CAPEX, Operational Benefits and Revenues.

The PV (and hence the NPV) for the Reference Plant should be computed using a WACC that will be different than the one for the Project (see sections 3.2.1 and 3.4.3 below for more details).

Any additional revenues of the project (for example in the form of monetisation of the by-products value(s)) or cost savings also need to be included in the calculation.

Applicants should pay attention to the parameters described in section 3.4 Parameters applicable to Relevant Cost methodologies below and justify in detail the scope and computation of the revenues and costs in the Project business plan, the application form part B, the reference plant documents and the applicant own detailed financial model which should include all computation details for both the Project and the reference plant. All these documents are mandatory and will form an integral part of the application.

3.2.1 WACCs to be used in the Reference Plant methodology

In addition to the conditions governing the selection of the Reference plant described in section 2.1.2, applicants need to make specific assumptions with respect to the WACC for the reference plant to enable a robust calculation of Relevant Costs under the Reference plant methodology.

WACC for the (innovative) Project: Project WACC should follow the guidelines laid down in section 3.4.3.

WACC for the Reference Plant: same guidelines as for Project WACC except for the following:

- For cost of debt, applicants should use levels generally assumed for the sector; and,
- For cost of equity, applicants should remove any “Innovation Premium” assumed in the calculation of the cost of equity for the (proposed innovative) Project.

For the leverage, applicants should use the same gearing ratio as for the Project.

3.3 “Detailed budget table / Relevant Costs calculator/Financial Information File (FIF) template” to calculate Relevant Costs

The Relevant Costs are calculated automatically once the appropriate cells in the “detailed budget table/Relevant Costs calculator/Financial Information File (FIF)” Excel file are filled out.

This template is available via the “Funding and Tenders Portal” and its use is mandatory for all applicants. Changes to the formulas or the sheets of the FIF are not allowed.

The FIF contains amongst others the following information:

(1) Financial Model Summary Sheet including a summary overview of the financial projections including revenues, OPEX and CAPEX, as well as key elements of the Profit & Loss Account and balance sheet and cash flow statements. If a Project anticipates to

generate OPEX savings during operation (for example lower fuel or heat consumption), these should be appropriately reflected in the projections;

(2) table with Innovation Fund grant breakdown per work package and beneficiary/affiliated entity;

(3) Relevant Costs computation based on the selected Relevant Costs methodology;

(4) cost efficiency calculation; and

(5) input/transfer sheet as a support for manually entering the corresponding data/indicators in the Application Form Part C.

3.4 Parameters applicable to Relevant Cost methodologies

Applicants must pay attention to the following parameters as further detailed below to enable a robust calculation of Relevant Costs:

- Project boundaries and contingencies;
- Financial projections (including revenues, CAPEX, maintenance CAPEX and OPEX);
- Project WACC (discount rate);
- Carbon price and EU ETS allowances;
- Indexation/inflation;
- By-products;
- Decommissioning costs;
- Parameters excluded from relevant cost calculation.

3.4.1 Project boundaries and contingencies

All Projects will have an identifiable product or more (final or intermediary) products which are the output of the project (captured CO₂ is also an output). All CAPEX, OPEX, revenues and operational benefits taken into account in the project's financial model and business plan must be linked to this product/these products. If the product uses intermediary products or goods produced by installations which are not part of the investment items, then only their purchase price can be taken into account as project costs.

When a Project relates to building or transforming part of an existing installation, only the CAPEX of this part may be taken into account entirely for the Relevant Costs calculations. Only the contribution of this partial process/installation to the overall operational cost of the full process/installation may be used in the calculations. The revenues that can be used are the ones generated by the incremental investment, not those of the overall existing process and the logic applied must be the same as the one used for the calculation of GHG emissions (i.e. capturing what has changed with the proposed Project).

For example, for a carbon capture Project, applicants must use as input for the FIF the CAPEX of the capture Project, its dedicated operational cost (including Maintenance CAPEX as specified above) and the Project revenues related to the carbon capture Project (such as avoided purchase of EU ETS allowances (EUA), sale of excess of free EUA, any green premium for the base product of the existing plant to which the capture unit is added).

Applicants are allowed to include contingencies in their CAPEX and OPEX. However, robust justification will be required from applicants as to why these contingencies are required, why they are at the level proposed, and how they will be allocated. This justification can be presented in the form of a deterministic calculation supported by a benchmark or previous experience which must be referenced, or a probabilistic calculation which must be accompanied by a summary of the calculation method. The soundness of this justification will be taken into account in the evaluation of the Project's financial maturity.

3.4.2 Financial projections

Key data inputs are based on standard financial indicators which applicants are required to provide when filling in the FIF.

In addition, applicants are required to provide their own detailed financial model (mandatory) which should include all detailed financial assumptions - derived among others from feasibility studies, preliminary contract terms, market analysis and other evidence based on the status of the Project to date - as well as Project financial statements, return computation, and sensitivity analysis. The projections of the applicant's own detailed financial model must be consistent with those used in the FIF to derive the calculation of Relevant Costs. If the applicants chose the reference plant methodology, they should add in their own detailed financial model the same type of information for the reference plant as for the innovative project, by inserting separate sheets with the detailed computations.

The details of which elements of CAPEX are eligible for the calculation of the Relevant Costs can be found in the Glossary of this document and in the sheet "1.Intro & definitions" of the FIF.

Applicants must separate in their financial model Maintenance CAPEX from CAPEX. For the purposes of the Relevant Costs calculation, Maintenance CAPEX can only be incurred after the Project's Entry into Operation and are discounted alongside OPEX.

Only expenses incurred after grant signature or exceptionally for duly justified reasons after the first day of the month following the proposal submission date are eligible for the calculation of the Relevant Costs (please refer to article 10 of the Call for proposals).

CAPEX taken into account in the Relevant Costs calculations should therefore include costs incurred or to be incurred before Project entry into operation and should be connected with the development and construction of the Project.

For Projects with multiple phases (meaning several "entry into operation" dates linked to successive phases, for example for manufacturing Projects), the Entry into Operation will consequently be the entry into operation of the last phase of the Project.

This means that all CAPEX projected after entry into operation should in principle be treated as Maintenance CAPEX (i.e. in connection with replacement of key equipment implementation of periodic system updates, or other significant one-off purchases that are likely to occur periodically throughout the Project lifetime) and should be included in the calculation separately as Maintenance CAPEX. In the Relevant Costs calculation, Maintenance CAPEX is discounted alongside OPEX.

3.4.3 Project WACC

The minimum project return is represented through the Weighted Average Cost of Capital (WACC) of the project. This is the blended cost of capital of the project depending on the ratio of equity and debt in the project. It is calculated using the following formula:

$$WACC = E/V * Re + D/V * Rd * (1 - Td)^4$$

- Re = cost of equity
- Rd = cost of debt
- E/V = equity portion of total capital (Equity over total Value), as expected at financial close⁵, and which must exclude public funding sources
- D/V = debt portion of total capital (Debt over total Value), as expected at financial close
- Td = marginal tax rate prevailing in the country of the Project

The WACC is applied to discount future income and cost streams over the project lifetime to make them comparable. The WACC is an important mechanism to help reflect overall “project risks”. The WACC level also underpins the assessment of projects profitability by external evaluators and must therefore be realistic. For example, using a very low WACC level - more in line with a company WACC - for a high-risk project is likely to be challenged by evaluators.

To ensure equal treatment between projects, applicants must follow the methodology provided in this section to derive the project WACC and are not allowed to use their own corporate or company WACC.

Table 1. Main parameters and instructions to calculate the project WACC

Item	Definition
Cost of equity (Re)	$Re = Rf + (\beta * ERP) + IP$, where Rf = risk free rate β = beta of the project ERP = Equity risk premium ⁶ IP = Innovation Premium
Risk-Free Rate (Rf)	Risk-Free Rate is the theoretical interest rate that a zero-risk investment will achieve. Applicants are required to select a value from the Table 2 in Appendix 2. This value corresponds to the monthly average over the last ten years of the ten-year Government bond rate of the country where the project will be implemented.
Equity Risk Premium (ERP)	Equity risk premium is by default 6% ⁷ and reflects European ERP. If applicants wish to use, instead, an ERP value as set out in Table 2 in Appendix 2, they must explain their choice in the Business Plan when detailing the assumptions of the WACC. ⁸
Beta (β)	Beta value is by default 1. This value is also compulsory for the following sectors: manufacturing, sustainable aviation fuel, energy storage and any other sector not listed in Table 1 in Appendix 2. For the sectors listed in Table 1, applicants can use the beta

⁴ This is a nominal discount rate calculation (cost of debt and cost of equity already take into account inflation).

⁵ Applicants need to present their projected capital structure at financial close (i.e. as agreed by the project funders), in line with the financial information provided in the Financial Model Summary Inputs sheet.

⁶ Additional return over the risk-free rate requested by investors to invest in the stock market.

⁷ Kroll (ex Duff & Phelps), June 8, 2023

⁸ Unjustified choice of ERP may be penalized during the evaluation and may lead to a lower score for the quality of the cost efficiency ratio.

	value listed in that Table , if they explain their choice in the Business Plan when detailing the assumptions of the WACC ⁹ .
Innovation premium (IP)	<p>Applicants should take into consideration a further equity premium to reflect the risks associated with highly innovative projects, leading to minimum project returns that go beyond the conventional sector WACC.</p> <p>For transparency across applicants, a notional “Innovation Premium” of 3% should be applied as a default value. Applicants are free to increase or decrease this level, with justification - however the upper bound is 4% and the lower bound is 2%.</p> <p>To the extent possible, applicants should quantify the perceived risks and use this to justify any deviation from the default “Innovation Premium”.</p>
Cost of debt	<i>$Rd = \text{base rate} + \text{credit spread}$</i>
Base Rate	Applicants should use swap rates consistent with the average maturity of the project debt. Please take into account that, even if swap rates can be negative, banks will not lend money at negative rates, as most credit facility agreements will contain a ‘zero floor’ which provides that, if the base rate is negative, it is deemed to be zero for the purposes of calculating interest under the agreement.
Credit Spread	<p>The margin should be based on terms expected by debt providers and justified by the project risks, projected cash flows and in line with loan/debt market standards. Applicants should provide appropriate documentation for their chosen cost of debt.</p> <p>If a reference is not available for the particular technology, a premium over an established technology debt margin can be used and should be justified.</p>
Other elements of WACC	
Value of capital (V)	Total value of capital (equity plus debt). This does not include any EU or state aid used in the project financing plan.
Debt portion of total capital (D/V)	<p>Applicants should take the D/V ratio (i.e. proportion of debt relative to the sum of equity and debt injected to finance the project) they contemplate and expect to be achievable for the project at the Financial close as implied by their projected financing plan and reflected in the Financial Model Summary Input Sheet.</p> <p>If the financing plan envisages to raise debt, equity or equity linked instruments at parent company level and inject it into the project, or to raise debt at project level with a mother company/corporate guarantee or use inter-company debt or bridge loan to equity, this has to be treated as equity, not as debt in the D/V ratio.</p> <p>Applicants should not add any grant to the numerator of this D/V ratio.</p>
Equity portion of total capital (E/V)	<p>Financing sources provided by existing shareholders or external equity investors including shareholder loans or other equity-like instruments should be treated as equity.</p> <p>Applicants should not add any grant to the numerator of this E/V ratio.</p>

3.4.4 Carbon price and EU ETS allowances

Projects in sectors regulated by the EU ETS Directive that reduce their GHG emissions compared to the reference plant or reference product will, in most cases, benefit from revenues from the sale of the free allocation of EU ETS allowances that they will receive and do not need to surrender because of the reduced emissions below the applicable

⁹ Unjustified choice of Beta may be penalized during the evaluation and may lead to a lower score for the quality of the cost efficiency ratio

benchmark(s). Revenues from the sale of excess allowances need to be included in the Relevant Cost calculation as Operational Benefits.

Applicants should assume carbon prices as they consider appropriate over the entire Project lifetime, explaining why they have chosen to follow this approach in the application form and/or Business Plan. The carbon price projected over time must be consistently stated in the FIF.

While installations could theoretically hold onto the excess allowances for sale later, for the purposes of the Relevant Cost calculation, the excess allowances are assumed to be sold in the year received. Similarly, applicants should include as OPEX savings of the Project any savings made from the need to buy a smaller amount of EU ETS allowances due to the lower emissions of the proposed Project.

If, in addition, applicants are expecting to generate revenues from the sale of CO₂ as a final product or by-product for commercial use, irrespective of whether this will lead to saved EU ETS allowances or not, these revenues should also be included as operational benefits.

Finally, if applicants are expecting to generate revenues from the sale of carbon removal certificates, these revenues should also be included as operational benefits.

3.4.5 Indexation/inflation

Indexation refers to the adjustment of OPEX, sale price to the forecast inflation over the project lifetime. Applicants are free to provide their best estimates of indexed OPEX and sale price, including inflation, with a clear breakdown of the different components and justification for the assumptions used for inflation.

3.4.6 By-products and savings

If the project anticipates to generate additional revenues by selling by-products (such as heat or biochar) or services (for instance, waste gate fees) derived from the innovative production process, the corresponding value generated should be considered as a "revenue from by-products" in the "Fin Model Summary Inputs" sheet of the FIF.

If the production process will reduce costs through more efficient use of energy/heat for example, the corresponding value of cost savings should be encoded as "OPEX savings" in the "Fin Model Summary Inputs" sheet of the FIF and will have the effect of reducing OPEX in the Relevant Costs calculation.

3.4.7 Decommissioning costs

If decommissioning costs of the assets of the project arise during the first 10-year period, they may be taken into account as part of the Relevant Costs calculation. Cost estimates will vary from project to project and therefore need to be accurately accounted for in the calculation. Applicants will have to justify both the presence and the amount of these costs.

3.4.8 Parameters excluded from Relevant Costs calculation

The two Relevant Costs methodologies derive the Relevant Costs from the best estimate of the CAPEX and the Net Present Value of Revenues, OPEX, Maintenance Capex and Operational Benefits arising over the first ten years of operation. These terms are defined in the glossary of this guidance.

Any other components should be excluded from the Relevant Costs calculation. Examples of such excluded components are presented in the list below. This list of examples should be considered as non-exhaustive.

- *Public support*

Additional public support can take the form of support from other EU funding programmes or State aid. In terms of State aid, applicants should notably include in the numerator of the cost efficiency ratio any State aid in the form of grants, contracts for difference, and feed-in tariffs they have received, requested or are planning to request if they have been included in the applicant's financial model and the FIF. Any aforementioned public support which has already been secured must always be included in the detailed financial model and the FIF. Public support during the operational period should also be included in the financial on a non discounted basis. These aforementioned forms of State Aid are excluded from the Relevant Cost computation.

As opposed to this, State Aid provided in the form of fiscal or parafiscal measures or tariff reduction (for example, exemption of payment of levy/tax on power prices) will not be included in the numerator of the cost efficiency ratio but should be included in the projections of the financial model and may also impact the Relevant Costs computation. Applicants should describe clearly and in detail in the business plan how these State Aid measures are taken into account in their cost assumptions.

- *Terminal value*

Terminal value of assets must not be taken into account in the Relevant Costs calculation. The exclusion of terminal value is consistent with the fact that the Project IRR is computed over the Project lifetime.

- *Write-off of existing (old) assets or technologies*

It is recognized that some applicants may have to replace old technology that is not fully depreciated. For the purposes of calculating the Relevant Costs and regardless of the Relevant Costs methodology selected, any write-off cost associated with the replacement of existing technologies should be excluded.

- *Costs incurred before submission of the application*

As stated in section 3.4.2 Financial projections, only costs incurred after grant signature or exceptionally for duly justified reasons after the first day of the month following the proposal submission date are eligible for the calculation of the Relevant Costs (please refer to article 10 of the Call for proposals). Any expenses incurred before the first day of the month following the proposal submission date must not be included in the Relevant Costs calculation.

Costs are considered as incurred on a certain date if on that date they have already been paid or if the obligation to pay has been established on or before that date.

In other words, costs linked to a contract concluded before the proposal submission date can be considered eligible for the Relevant Costs computation if all the following conditions are met:

- they are linked to services to be performed /equipment delivered after that date,
- they relate to invoices issued after that date, and
- the corresponding payments are made after that date

- *Financing-related Costs*

Costs linked to the financing of the project are not eligible and must be excluded from the Relevant Costs computation. A non-exhaustive list of such costs is the following: interest during construction, working capital needs, bank fees, legal fees, upfront fees, commitment fees, interest payments, additions to the maintenance reserve account or debt service reserve account.

- *Other excluded items*

VAT, taxes, royalties paid to project shareholders, communication and marketing costs of other products, or reorganization costs are also excluded from the Relevant Costs computation.

Appendix 1**Glossary**

Term	Meaning
Capital Expenditure (CAPEX)	<p>All costs as referred to below in connection with the development, construction of a project that are incurred or to be incurred before project's entry into operation exclusively in relation to the following categories:</p> <ul style="list-style-type: none"> (a) Construction costs (b) Site infrastructure costs (c) Development costs (d) Intangible assets (e) Contingencies <p><i>(For each area of capital expenditure, please see individual term definitions for their full meanings)</i></p>
Construction costs	<p>All costs and expenses incurred in connection with design, engineering, procurement, construction, commissioning and testing of the Project including exclusively:</p> <ul style="list-style-type: none"> (i) costs of employees arising directly from the construction or the acquisition of the item of property, plant and equipment; (ii) costs of site preparation; (iii) initial delivery and handling costs; (iv) installation and assembly costs; (v) costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition; (vi) certifications expenses for necessary repairs during the construction phase; (vii) expenses for removing hurdles on the site (however costs associated with replacement of existing technologies should be excluded as per section 2.3.3.2). (viii) land lease cost capitalized during construction (ix) equipment cost
Contingencies	<p>Contingencies refer to additional CAPEX and OPEX that may arise from unforeseen risks and issues occurring during project construction (e.g. increased cost of equipment) and operation (e.g. feedstock price rises), thereby impacting on original project financing projections. The contingency is typically held in reserve.</p>
Detailed budget table/Relevant Costs calculator/Financial Information File/FIF	<p>Excel file, for which the template is available for downloading from the Funding and Tenders Portal¹⁰, that must be filled out with the output of the applicant's own financial model which should include all technical and financial assumptions, Project financial statements, return computation, sensitivities. Both the FIF and the applicant's own financial model are mandatory documents for the application.</p>

¹⁰ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

Development costs	<p>All costs and expenditures incurred that are specifically required for the development activities of the project exclusively related to the following categories:</p> <ul style="list-style-type: none"> (i) permitting and environmental assessment; (ii) planning, design, engineering, start-up and testing; (iii) legal, insurance and other advisors; (iv) personnel costs; (v) professional fees and fees for environmental permits. <p>Development costs may not include costs or expenses which are not directly linked to the development of the project's activities.</p>
Financial Close	<p>The point in time in the project development cycle where all the project and financing agreements have been signed and all the required conditions contained in them have been met. Financial close may not be confused with the Final Investment Decision which is only one of the steps required for reaching the stage of Financial Close.</p>
Intangible assets	<p>Non-physical assets that hold a certain value. These include patents, trademarks, copyrights and Intellectual Property rights (IPR) that are related to the Project and purchased by the Project.</p> <p>The acquisition of intangible assets from a third party for the purposes of its use by the Project can be capitalized and included in the Intangible assets under the following conditions:</p> <ul style="list-style-type: none"> (i) the Intangible assets must be a pre-requisite for the implementation of the Project. Intangible assets that are only an option for possible future use by the Project may not be included. (ii) The valuation of the Intangible asset must be established in accordance with applicable valuation rules and be proportionate to the level of development of these intangible assets.. (iii) Both the relevance of the intangible assets for the Project and their valuation should be verified by an independent expert (iv) under no condition can a member of the Project consortium sell intangible assets at a profit to one of the companies in the Project benefiting from the Innovation Fund
Maintenance CAPEX	<p>All costs needed to replace capital items that are essential for the continued operation of a project. Maintenance CAPEX could for instance include the costs related to the replacement of key equipment or the implementation of periodic system updates.</p>
Operational Benefits	<p>Any revenue received by the project from</p> <ul style="list-style-type: none"> • the sale of EU ETS allowances for reductions in CO2 emissions • the sale of CO2 as a final product or by-product for commercial use • the monetization of the value added/certificates from reductions in GHG emissions not already captured elsewhere in the revenues or cost savings
Operational Expenditures (OPEX)	<p>All costs related to the following categories:</p>

	<ul style="list-style-type: none"> — Operations and Maintenance (O&M) of a project, including, where applicable, any feedstock costs such as costs of fuel. — Decommissioning costs, provided they occur in the first ten years after entry into operation of a project. — Lease costs — R&D cost provided that these are needed to keep the innovation competitive. This necessity should be duly justified. <p>Important! Depreciation and amortization costs are not considered as OPEX!</p> <p>For full transparency, applicants must provide a detailed breakdown and justification of the OPEX.</p>
Project	All activities related to the implementation of a project for which support from the Innovation Fund is requested or provided.
Project costs	All costs carried by the entities benefiting from the Innovation Fund grant that are necessary to implement a Project.
Revenues	All sources of revenues generated by the project, excluding operational benefits and external benefits outside the project boundaries.
Reference Plant	A project using the conventional technology with similar size and output as those of the Project and which complies with Union environmental standards and with EU legislation including, where relevant, in relation to achieving the EU ETS benchmark for industrial products .
Site infrastructure costs	<p>All the costs related to the development or maintaining of the basic physical and operational components of the location of a project, including the following:</p> <ul style="list-style-type: none"> (i) the purchase of land; and (ii) expenses incurred to obtain or maintain authorization for the operation on the site (for example. license, filing, notarization or registration); (iii) Site preparation; (iv) Landscaping and environmental features; (v) Utilities; (vi) Site transportation infrastructure; (vii) Security systems and infrastructure; (viii) Communication infrastructure (ix) Drainage and sewer systems (x) Lightning; (xi) Fencing and enclosures; (xii) Waste management infrastructure; (xiii) Fire protection installations; (xiv) Accessibility <p>.</p>

Appendix 2**Support data materials for WACC calculation****Table 1 - Reference market betas (levered) for cost of equity calculation**

Industry Name	Beta
Air transport	1.25
Building Materials	1.14
Chemical (Diversified)	1.02
Chemical (Specialty)	1.12
Construction Supplies	1.19
Environmental & Waste Services	1.17
Green & Renewable Energy	0.91
Renewable hydrogen	1.02
Paper/Forest Products	0.89
Power	0.82
Shipbuilding & maritime	1.06
Steel	1.13
Transportation (excluding maritime and air transport)	1.05
Utility (General)	0.82

Source: Damodaran NYU 2023

Table 2 - Risk-Free Rate (Rf) & Equity Risk Premium (ERP) by country

Country	Risk-Free Rate ¹	Equity Risk Premium ²
Austria	0.83%	5.20%
Belgium	0.94%	5.31%
Bulgaria	1.68%	6.40%
Croatia	2.55%	6.12%
Cyprus	2.91%	6.14%

Czech Republic	1.84%	5.45%
Denmark	0.67%	5.19%
Estonia	1.60%	5.91%
Finland	0.81%	5.26%
France	0.92%	5.41%
Germany	0.48%	5.22%
Greece	4.86%	5.31%
Hungary	4.01%	7.02%
Iceland	5.22%	5.81%
Ireland	1.14%	5.36%
Italy	2.23%	6.45%
Latvia	1.23%	5.95%
Lithuania	1.04%	5.95%
Luxembourg	0.68%	5.22%
Malta	1.54%	5.91%
Netherlands	0.69%	5.21%
Norway	1.89%	5.23%
Poland	3.33%	6.02%
Portugal	2.22%	5.71%
Romania	4.59%	7.33%
Slovakia	1.11%	5.54%
Slovenia	1.48%	5.71%
Spain	1.63%	5.79%
Sweden	0.87%	5.24%

Sources:

¹ ECB 2023

² Damodaran NYU 2023