

INNOVATION FUND WEBINAR

How to submit a full application for the second stage
of the first call for large-scale projects

15 April - 10.00 CEST



Agenda

INNOVATION FUND
First call for large-scale projects

10:00 – 10:10
Introduction

10:10 – 11:05

2nd stage criteria

- Project maturity
- Relevant costs
- Cost efficiency

11:05 – 12:00

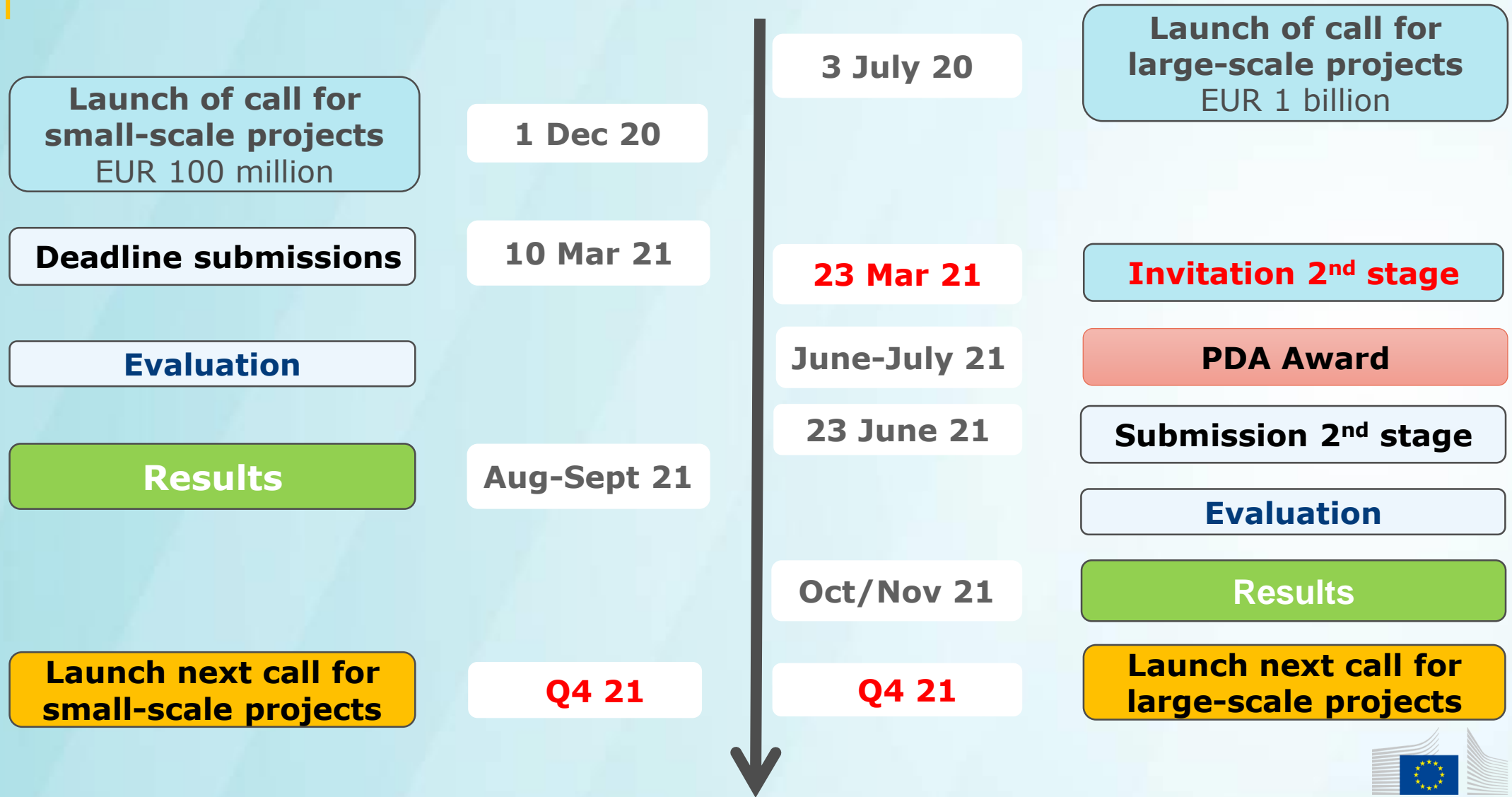
2nd stage criteria

- Degree of innovation
- Scalability – Knowledge Sharing
- GHG emissions

12:00 – 12:30
Application form explained

12:30 - 12:40
Conclusions

Calendar



Next workshop on 28 April

INNOVATION FUND
First call for large-scale projects

Call for large-scale projects

- Overview of applications in second stage
- Lessons learnt from first stage

Call for small-scale projects

- Overview of applications
- Applicants' survey

Outlook to second calls in Q4 2021

FAQs

2nd stage criteria

Project maturity, relevant costs and cost efficiency



Technical Maturity – key considerations

Similar to the 1st stage, but more details required

Feasibility study

Technical feasibility
to deliver the
expected output and
GHG emissions
avoidance

Strong focus on risks
and their mitigation

- Provide information in line with the table of contents indicated in section 8 of the application form. Highlight and explain any changes compared to your first stage submission.
- Follow the structure in application form
- Highlight and explain any changes compared to the first stage submission
- Underpin your presentation with evidence
- Attach any technical due diligence report if available
- Fill in the risk matrix in section 4.4 of the application form
- Focus on major technical risks, be convincing with their mitigation
- Underpin your analysis with the feasibility study and provide the risk heat map.

Operational Maturity – key considerations

Similar to the 1st stage, but more details required

Project implementation plan

The plan for implementing the project must be sufficiently developed, comprehensive and realistic.

Strong focus on risks and their mitigation

- Provide detailed information in line with the table of contents indicated in section 8 of the application form. Do not forget to highlight and explain any changes compared to your first stage submission.
- Follow the structure in application form
- Highlight and explain any changes compared to the first stage submission
- Be as detailed as possible, this is your actual project planning document
- Be precise with your project milestones and how you get there
- Underpin your presentation with evidence
- Attach any relevant due diligence report if available
- Fill in the risk matrix in section 4.4 of the application form
- Focus on major operational risks, be convincing with their mitigation
- Underpin your analysis with the project implementation plan and provide the risk heat map.

Financial Maturity – key considerations

Much deeper financial analysis compared to the 1st stage

Business plan

- Provide information in line with the table of contents indicated in section 8 of the application form. Do not forget to highlight and explain any changes compared to your first stage submission.

new

Financial Model

- See related slides and instructions. Follow the template.

Is your project financially ready to reach financial close within 4 years and succeed?

- Follow the structure in application form
- Highlight and explain any changes compared to the first stage submission
- Provide evidence, e.g. binding letters of support/MoU/terms of agreement with project funders and/or suppliers/off-takers signed at board level
- Attach any financial due diligence report if available

Strong focus on risks and their mitigation

- Fill in the risk matrix in section 4.4 of the application form
- Focus on major financial risks, be convincing with their mitigation
- Underpin your analysis with the business plan and provide the risk heat map.

Financial Maturity – key considerations

Objective: assess the project's business and financial viability

Credibility of the project business plan

- Value of the innovation, market access, competitive position
- Financial projections and assumptions, contracts with project parties
- Financial viability with the Innovation Fund grant
- Level of detail and consistency of the financial information. **The Financial Model Summary Sheet needs to be filled as a minimum.**

Soundness of the financing plan

- Funding sources to cover the project's needs and at each milestone
- Steps to reach financial close
- Support / commitment from shareholders and other project funders

Understanding of project financial risks

- Risks to financial viability: potential impact and mitigation measures
- Risks to financing plan: ability to reach completion and contingency funding

Updates to the Relevant costs methodology

Overview

- Greater clarity applied to all methodologies, including around key terms, to help applicants understand what should be taken into account in their calculations.

Key terms in a new Glossary

- **CAPEX** now fully defined across: (a) Construction costs; (b) Site infrastructure costs; (c) Development costs; and, (d) Intangible assets.
- **OPEX** – O&M; Replacement costs; Decommissioning costs (if in first 10 years).
- **Revenues** - All sources of revenues generated by the project, excluding operational benefits and external benefits outside the project boundary.
- **Operational Benefits** - Any revenue received by the project from the sale of EU ETS allowances for reductions in CO₂ emissions, preferential tariffs or feed-in premia, or other market-wide regulatory support programmes.

Key principles for relevant costs

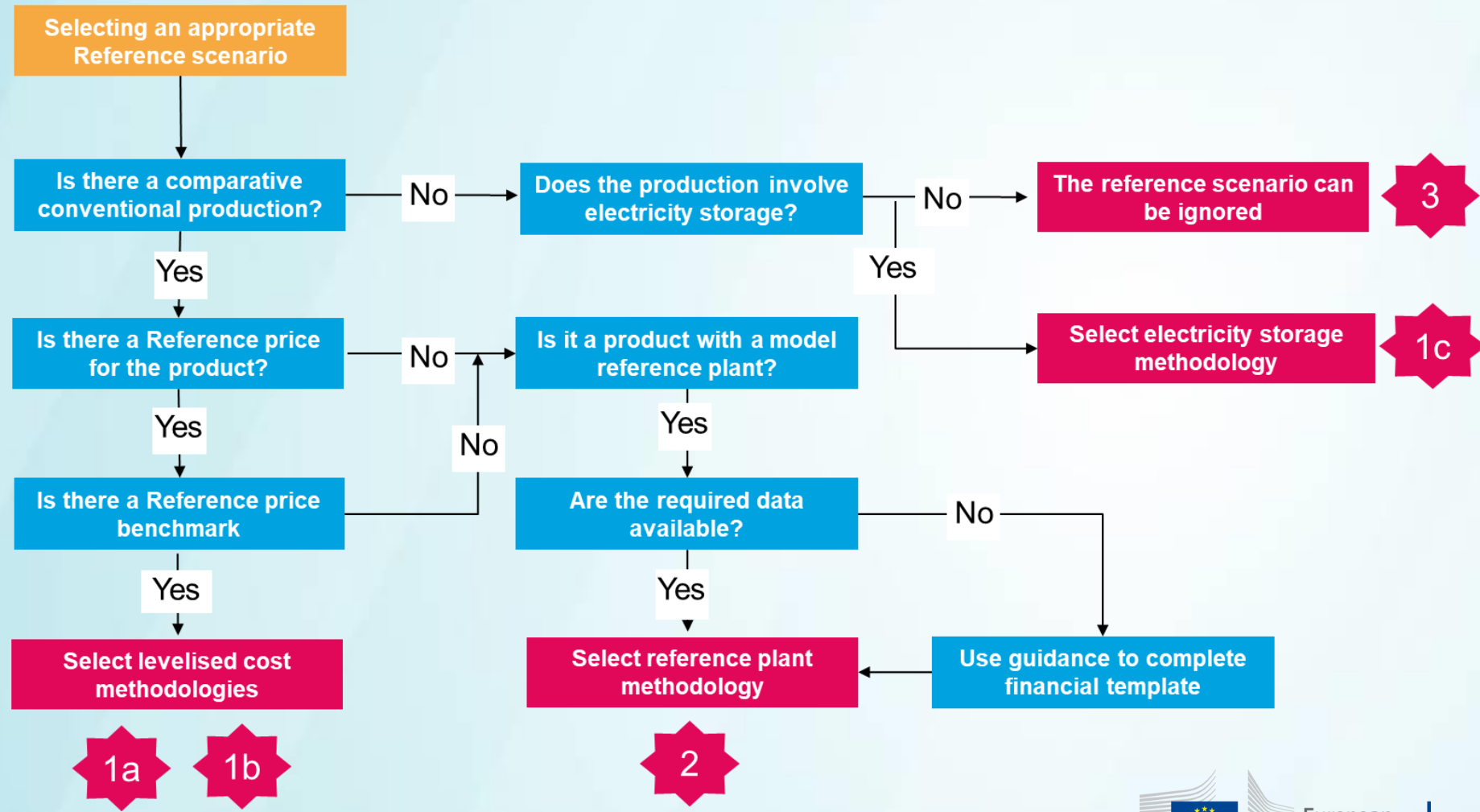
Scope of relevant costs & methodologies to use

- **Relevant costs are “additional costs”** borne by applicants as a result of the application of the innovative technology related to GHG emissions avoidance.
- For most projects, you should calculate relevant costs based on the **difference between the levelised cost of producing an output unit with the new technology, compared to the cost of producing a reference product using its current market price (“Reference price”)**.
- The **“fall-back” option** for you to use is a reference plant.
- In **exceptional circumstances** there will be no reference scenario to compare your project with.

Decision tree ensures applicants select the right relevant cost methodology

Applicants can use only one relevant cost methodology

1a 1b 1c
 Refer to Levelised Cost Models:
 Energy - 1a (LCOE)
 Products - 1b (LCOP)
 Electricity storage - 1c (LCOS)



Key principles for relevant costs

Levelised Cost methodology (Option 1)

- **“Default” methodology** for applicants
- General principle is to establish an identifiable final product and existence of a product Reference price
- Levelised unit cost is cost of one unit of production over the full lifetime of a project. Note that financing costs are captured by the WACC.
- **Suitable for most projects using different variants of the methodology:**
 - Energy/electricity generation (Option 1a)
 - Product manufacture from energy intensive industries (Option 1b)
 - Manufacture of innovative renewable or storage technology components from a new production facility (Option 1b)
 - Electricity storage (Option 1c)

Key principles for relevant costs

Reference plant methodology (Option 2)

- **“Fall back” methodology** for applicants
- Existence of a Reference Plant (i.e. ETS benchmark installation in the case of industrial products or fossil fuel equivalent for renewable electricity/heat)
- Reliable Reference Plant cost data essential
- Project CAPEX, Revenues and Operational Benefits compared to the best estimate of the same parameters of a Reference Plant using conventional technology and with similar product and similar location to the project, where applicable

Key principles for relevant costs

No reference plant methodology (Option 3)

- **“Last resort” methodology** for applicants
- Situations where:
 - No comparable conventional Reference plant exists – either in the EU (i.e. an EU ETS benchmark installation for industrial products) or globally; and,
 - No reference product exists
- Relevant costs are derived from cost data, Revenues and any Operational Benefits from the planned project.

Key principles for relevant costs

Clarification on prices

- **Carbon price/allowance assumptions:** Average price of 2019 and 2020 to be used, which was 24.81 EUR/t.
- **Indexation/inflation assumptions:** Average of 2019 and 2020 to be used. Harmonised Indices of Consumer Prices (HICP) has been updated in Annex B.

Mandatory exclusions

- The following costs must be excluded from all relevant costs calculations:
 - **Terminal value** assumptions beyond the asset lifetime.
 - **Write down of existing (old) technologies** (i.e. stranded assets) that result from the project being supported.

Levelised Cost methodology: LCOE (Option 1a)

Key principles

- Applies Levelised Cost of Energy (LCOE) approach to determine the project's 'price'
- Generates the project/product unit costs, which is then compared to the Reference price
- Mimics long-term forward pricing forecasts used for project funding

Reference

- Reference price is the long-term market price for either power or heat

Approach

- LCOE = [present value of the costs over the full project lifetime]/discounted number energy units produced (MWh) over the full project lifetime

$$LCOE \left[\frac{\text{€}}{\text{MWh}} \right] = \frac{\text{Investment cost} + \sum_n^N \frac{O\&M \text{ cost}}{(1+r)^n} + \sum_n^N \frac{\text{Fuel cost}}{(1+r)^n}}{\sum_n^N \frac{Elec_{Produced}}{(1+r)^n}}$$

Where: r = discount rate (WACC)
 n = the year
 N = lifetime

Correction for 10-years OPEX to be applied in separate step (see next slide)

NB: no fuel cost in most renewables projects

OPEX adjustment to the Levelised Costs

Rationale

- To be in line with the IF Delegated Regulation, the share of OPEX after 10 years has to be excluded from the relevant costs calculation.

Approach

- The approach is to estimate the share of the project's discounted OPEX beyond 10 years out of the sum of CAPEX and discounted OPEX over the project lifetime ('discounted costs'). To derive the relevant cost, use this percentage to adjust the discounted costs of the project and of the reference scenario (see steps 8 and 9 on p.21).
- The applicant should verify the effect of the NPV of the difference between the OPEX of the project and of the pre-dominant conventional technology for the remaining lifetime after 10 years of operation.
- In case of a significant impact on the relevant costs, given a reliable estimate of the OPEX for the pre-dominant conventional technology, a more detailed calculation should be applied for the OPEX adjustment.

Levelised Cost methodology – LCOP (Option 1b)

Key principles

- Use a similar approach to the LCOE approach
- Calculates fixed nominal unit price (over full project lifetime) that would need to be paid for the innovative product in order to justify the investment to build the project (Levelised Cost of Product), including its cost of funding.

Reference

- Reliant on market price benchmarks for reference products

Approach

$$LCOP \left[\frac{\text{€}}{\text{Product}} \right] = \frac{\text{Investment cost} + \sum_n^N \frac{\text{O\&M cost}}{(1+r)^n} + \sum_n^N \frac{\text{Fuel cost, Materials cost etc}}{(1+r)^n}}{\sum_n^N \frac{\text{Units}_{\text{Produced}}}{(1+r)^n}}$$

Where:

r = discount rate (WACC)

n = the year

N = lifetime

Correction for 10-years OPEX to be applied in separate step

LCOP – Hypothetical project example

Industrial facility producing a substitute ceramic product with lower emission process

Objective: Calculate discounted cost per unit of production using Levelised Cost of Product

- **Step 1:** Establish the total CAPEX and OPEX of the project
 - Key inputs which applicants need to consider include:
 - Upfront costs of construction (CAPEX);
 - Fixed OPEX & Variable OPEX for the full project lifetime
 - Production (number of units produced by project)
 - Indexation
 - Operational Benefits: Carbon allowances sold (based on 25% emissions reduction, with revenues reducing OPEX. Overall impact reduced relevant cost by 4%)
 - Public support (not applicable in this example)
- **Step 2:** Reduce the OPEX by any Operational Benefits

LCOP hypothetical project - Key inputs (1)

Key inputs

Capacity	100,000	tpa
Reference product price	100.0	EUR/ton
Premium/(reduction) to reference	0.0	EUR/ton
Date of financial close	31-Dec-20	
Construction cost	25,000	EURk
Construction duration	1	years
Project lifetime	20	years
	Construction	Year 1
Production ramp up	0.00%	100.00%
Indexation	2.00%	

LCOP hypothetical project - Key inputs (2)

Key
inputs

Benefits		
other state aid received towards construction costs	0	EURk
state aid subsidies received annually	0.00	EUR/ton
carbon allowances sold	2,660	Tons/year
carbon price	25	EUR/ton
Operating costs - variable		
O&M and other variable costs	10	EUR/ton
feedstock	50	EUR/ton
total	60	EUR/ton
Operating costs - fixed		
fixed opex	1,500	EURk/year
Operating costs - total	7,500	EURk/year
Lifecycle		
occasional lifecycle costs	0	EUR/ton
lifecycle cost frequency - once every...	10	years

LCOP hypothetical project – use of WACC

- **Step 3:** Determine the number of units forecast to be produced by the project over the lifetime of the project
- **Step 4:** Discount the OPEX and units produced over the project lifetime using the WACC (see table)*
- **Step 5:** Divide the CAPEX plus Present Value of the OPEX (the “total Discounted costs”) by the total discounted Units produced over the full project lifetime (the “Levelised cost”)

WACC calculation		
Cost of equity		14.0%
Cost of debt		4.0%
Equity percentage		40.0%
Debt percentage		60.0%
Corporation tax rate		28.0%
WACC		7.33%

**Done in order to reflect a flat nominal price of production for the term of the plant operation as per Levelised Cost calculation norms*

LCOP hypothetical project – cost difference

- **Step 6:** Establish the difference between the:
 - a) Reference product price (100 EUR/ton); and
 - b) **Levelised cost calculated for new product (115.88 EUR/ton) = 15.88 EUR/ton**

Discount rate	7.33%	
Discounted costs	111,527	
Production discounted	962,398	
Discounted cost per ton	115.88	EUR/ton
Comparable unit cost	100	EUR/ton
Difference	15.88	EUR/ton

LCOP hypothetical project – relevant cost

- **Step 7:** Multiply the cost difference (EUR15.88/ton) by the discounted units produced over the full project lifetime
- **Step 8:** Calculate percentage of Discounted costs that the discounted OPEX after 10 years of operation represents
- **Step 9:** Multiply difference by 1-OPEX % past 10 years to derive the **relevant cost = EUR 10.8m**
- **Step 10:** Apply IF’s 60% maximum intervention rate to relevant cost to derive project’s **maximum grant award level = EUR 6.5m**

<i>Subtract OPEX percentage after 10 years</i>		
End date	31 Dec 31	
Opex beyond 10 years NPV	32,510	EURk
Percentage of discounted costs	29.15%	
Cost gap	11.25	EUR/ton
Lifetime discounted production	962,398	tons
Relevant Cost	10,831	EURk
Maximum IF grant	6,499	EURk

Levelised Cost methodology – LCOS (Option 1c)

Key principles

- Follows similar methodology to LCOE/LCOP but incorporates revenue streams from each specific storage ‘use case’ to determine the reference ‘market price’
- Quantifies the discounted cost per unit of discharged electricity for a specific storage technology and application over the project lifetime.
- Accounts for all capital and ongoing costs affecting the lifetime cost of discharging stored electricity in order to derive the relevant costs of the project

Reference

- ‘Market price’ derived by using current market prices and achievable volume for each service in the particular Member State market

Approach

$$LCOS \left[\frac{\text{€}}{\text{MWh}} \right] = \frac{\text{Investment cost} + \sum_n^N \frac{O\&M \text{ cost}}{(1+r)^n} + \sum_n^N \frac{\text{Charging cost}}{(1+r)^n}}{\sum_n^N \frac{Elec_{Discharged}}{(1+r)^n}}$$

Where:

r = discount rate (WACC)

n = the year

N = lifetime

Correction for 10-years OPEX to be applied in separate step

Financial Model Summary Sheet * new *

Purpose & use

- **As part of Application Form B, applicants must complete a Financial Model Summary Sheet (FMSS)**
- This ensures that financial information is collected in a **standardised template**
- **FMSS is available to download from the Funding and Tenders Portal**
- Applicants must complete the FMSS using the assumptions and financial projections from their **own financial model**

Financial Model Summary Sheet

5 elements to complete using data from your financial model

1. Project timing

2. Funding sources

3. Profit & Loss

Project name - Model inputs		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Year		31/12/2021	31/12/2022	31/12/2023	31/12/2024	31/12/2025	31/12/2026	31/12/2027	31/12/2028	31/12/2029	31/12/2030	31/12/2031	31/12/2032	31/12/2033	31/12/2034	31/12/2035
Period End																
Project Name	Project name															
Model Start Date	15-Mar-21															
Financial figures unit	EUR															
1 Project timing																
General		Unit														
Corporate tax rate	€	25.0%														
Development & Construction		Unit														
Financial close	Date	15-Mar-21														
Construction Start Date	Date	15-Mar-21														
Construction Period	Months	-														
Commercial Operation Date	Date	15-Mar-21														
2 Funding sources (*)																
Construction funding sources		€														
Innovation Fund grant (during construction)	#DIV/0!	-														
Equity	#DIV/0!	-														
Shareholder loan	#DIV/0!	-														
Senior debt	#DIV/0!	-														
Junior debt	#DIV/0!	-														
[Other]	#DIV/0!	-														
[Other subsidy for construction costs]	#DIV/0!	-														
Total funding	####	-														
3 Profit & loss																
Revenues		Total														
(*) Total revenues of the project		-														
Plus: sale of CO2 emission allowances		-														
(*) Sale of CO2 emission allowances		-														
(*) [Other]		-														
Plus: Innovation Fund grant disbursed during operations		-														
(*) IF grant disbursement during operations		-														
Plus: other OPEX subsidies (for example SDE**)		-														
(*) [Other subsidy 1]		-														
(*) [Other subsidy 2]		-														
(*) [Other subsidy 3]		-														
Less: operating expenses		-														
(-) total OPEX of the project		-														
Less: SG&A and other costs		-														
(-) SG&A and other costs		-														
Less: depreciation & amortisation		-														
(-) Depreciation & amortisation		-														
Less: tax		-														
(-) P&L tax		-														
Less: other P&L items		-														
(-) Other items		-														

Financial Model Summary Sheet

5 elements to complete using data from your financial model

4. Cash flow statement

5. Balance sheet

Project name - Model inputs

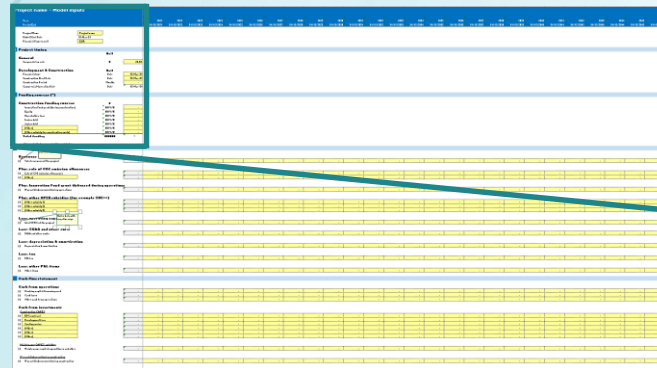
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Period End	31/12/2021	31/12/2022	31/12/2023	31/12/2024	31/12/2025	31/12/2026	31/12/2027	31/12/2028	31/12/2029	31/12/2030	31/12/2031	31/12/2032	31/12/2033	31/12/2034	31/12/2035
4 Cash flow statement															
Cash from operations															
(-) Working capital financing need															
(-) Cash taxes															
(-) Other cash from operations															
Cash from investments															
Construction CAPEX															
(-) EPC contract															
(-) Development fee															
(-) Construction															
(-) [Other]															
(-) [Other]															
(-) [Other]															
Maintenance CAPEX and other															
(-) Maintenance capital expenditure and other															
If grant disbursed during construction															
(*) If grant disbursement during construction															
Other grants related to construction															
(*) Other grants															
Cash flow from financing															
New equity															
(*) Equity issue															
(*) Shareholder loan drawdown															
Senior debt issue															
(*) Senior debt drawdown															
(*) [Other]															
(*) [Other]															
Junior debt issue															
(*) Junior debt drawdown															
(*) [Other]															
(*) [Other]															
Equity distribution															
(-) Dividend															
(-) Shareholder loan principal repayment															
(-) Shareholder loan interest															
Senior debt service															
(-) Principal repayment senior debt															
(-) Interest repayment senior debt															
(-) [Floor and other]															
Junior debt service															
(-) Principal repayment junior debt															
(-) Interest repayment junior debt															
(-) [Floor and other]															
Other cash flow from financing															
(*) Financing floor, interest, accounts and other															
5 Balance sheet															
Current assets															
Existing cash															
Other current assets															
Non-current assets															
Net property plant and equipment															
Intangible fixed assets															
Other non-current assets															
Current liabilities															
Current liabilities															
Non-current liabilities															
Junior debt outstanding															
Senior debt outstanding															
Other non-current liabilities															
Equity															
Equity															
[Shareholder loan and other equity]															

Disclaimer | Intro | **Fin Model Summary Inputs** | Fin Model Summary Sheet | Summary Chart | Model Report

Financial Model Summary Sheet

Approach for applicants

- Fill **only yellow cells** in the FMSS with the projected data coming from **your own financial model**
- Ensure that the data inserted in the FMSS is **consistent with the data used for the relevant cost calculation sheet**



Project name - Model inputs			
Year			
Period End			
Project Name		Project name	
Model Start Date		15-Mar-21	
Financial figures unit		EUR	
1 Project timing			
			Unit
General			
Corporate tax rate		%	25.0%
Development & Construction			Unit
Financial close		Date	15-Mar-21
Construction Start Date		Date	15-Mar-21
Construction Period		Months	-
Commercial Operation Date		Date	15-Mar-21
2 Funding sources (*)			
			%
Construction funding sources			
Innovation Fund grant (during construction)		#DIV/0!	-
Equity		#DIV/0!	-
Shareholder loan		#DIV/0!	-
Senior debt		#DIV/0!	-
Junior debt		#DIV/0!	-
[Other]		#DIV/0!	-
[Other subsidy for construction costs]		#DIV/0!	-
Total funding		#DIV/0!	-
<i>(*)expected to be secured at financial close</i>			

Financial Model Summary Sheet

Approach for applicants continued....

- **Fill the expected funding uses and sources** associated with project construction and operation
- Funding sources should correspond to the **total financing package expected to be secured at financial close**
- As per instructions on the input sheet, insert the amount of the Innovation Fund grant amount **expected to be disbursed during construction and the projected grant disbursement profile during operations**, in line with the project milestones
- Any grant disbursed **prior** to construction should be recorded as a reduction in development costs

Financial Model Summary Sheet

Key issues to consider around inputs

- Applicants need to be aware of the following when developing their model:
 - **All data in the FMSS must be consistent with the relevant cost calculation**
 - Information provided in the FMSS is the **minimum required** and you are encouraged to provide additional details from sheets coming directly from your financial model or your full financial models should be appended
 - Full financial models, where provided, should follow good practice and be easy to read and reference
 - Links between relevant cost inputs/calculations and financial model inputs should be clearly marked
 - Errors or an incomplete FMSS indicates a lack of financial maturity
- Applicants can download a **fully developed financial model example** from the Funding and Tenders Portal. It also contains **good practices** for you to follow to help you to develop your financial models and complete the IF Summary Sheet.

Financial Model Summary Sheet

Summary Sheet outputs

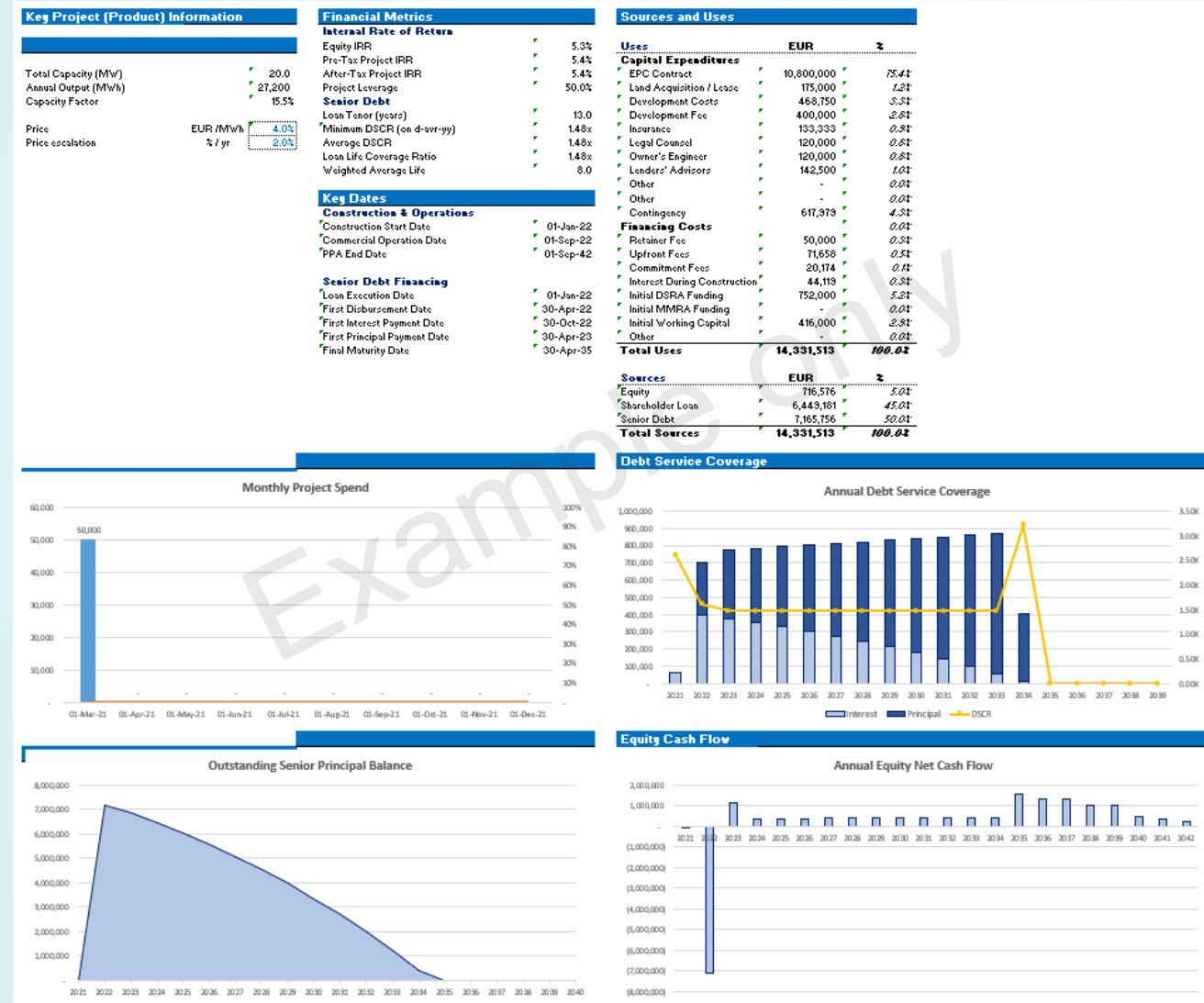
Your data generates:

1. Summary Chart

- Profit & Loss
- Balance Sheet
- Cash Flow Statement
- IRR Analysis

2. Model Report

- Income statement, Balance sheet, Cash Flow Statement, Key Ratios



Cost Efficiency

**Relevant costs less contribution
by project applicant**

=

**Absolute GHG emission
avoidance**

During 10 years after entry into operation

**Maximum grant is 60% of total
relevant costs**

**Applicants that choose not to
apply for the maximum grant
may be more competitive in
their sector when ranked
against other applicants in
'cost per unit performance'
metric**

THANK YOU!

2nd stage criteria

Degree of innovation – section on Knowledge sharing –
and scalability



Degree of innovation

From intermediate to breakthrough innovation

- State-of-the-art
- *How the project will go beyond*: plant design, operating approach, construction, performance, quality, reliability, availability, maintenance, economics

Contribution to other EU policy objectives

- Energy efficiency *
- Circularity economy *
- Use of electricity from renewable origin
- Net carbon removals *
- Additional GHG emission savings *

Is the project applying best practices?
Can it perform even better?

* *substantiate claims with calculation integrated as a separate tab in the GHG emission excel sheet*

Scalability – market potential for widespread application

Project level and regional economy impact

- Further expansion at project site and other sites
- Regional economy impact, including sector coupling, and cooperation with other regional actors; impacts on economic growth and jobs at regional level
- Knowledge-sharing plan and activities planned to promote the results and maximise the impact

Sector impact

- Extent to which the technology of the project can be applied within the sector *
- Expected cost reductions
- Resource constraints and how they can be overcome

Economy-wide

- Extent to which the technology of the project can be applied across the economy *
- Potential to create new value chains or reinforce existing ones
- Contribution to development of strategic autonomy in industrial supply chains

Consider **short / medium term** and **long-term** impacts

Knowledge sharing goals

- ✓ de-risking innovative low-carbon technologies with regard to wide-scale commercialisation
- ✓ acceleration of deployment
- ✓ increasing the undertaking of, and confidence in these technologies by the wider public
- ✓ maintenance of a competitive market for the post-demonstration deployment of the technologies

Knowledge sharing activities

Beneficiaries

- Knowledge-sharing reporting
- Own knowledge-sharing activities
- Proactive and systematic public communication

CINEA

- information, communication and promotion actions
- organise specific seminars, workshops or, where appropriate, other types of activities to facilitate exchanges of experience, knowledge and best practices as regards the design, preparation and implementation of projects

Knowledge sharing in practice

- Knowledge-sharing is an obligation of the grant award: failure to comply means that the grant award may be adjusted
 - But no obligation to disclose if risk of reverse engineering/ability to obtain patent
 - Knowledge-sharing will start after grant signature, i.e. includes the periods to financial close and to entry into operation
- ➡ [See draft Knowledge-sharing template](#)
- Knowledge-sharing plan: possibility for beneficiaries to do more than the minimum obligation

The knowledge-sharing plan shall set the objectives, key messaging, target audiences, communication channels, social media plan, and relevant indicators for monitoring and follow up of own knowledge-sharing activities

➡ Check also the presentations and recording from the preparatory event: [From NER 300 to the Innovation Fund: knowledge-sharing for innovative clean tech projects](#)

2nd stage criteria

GHG emission avoidance

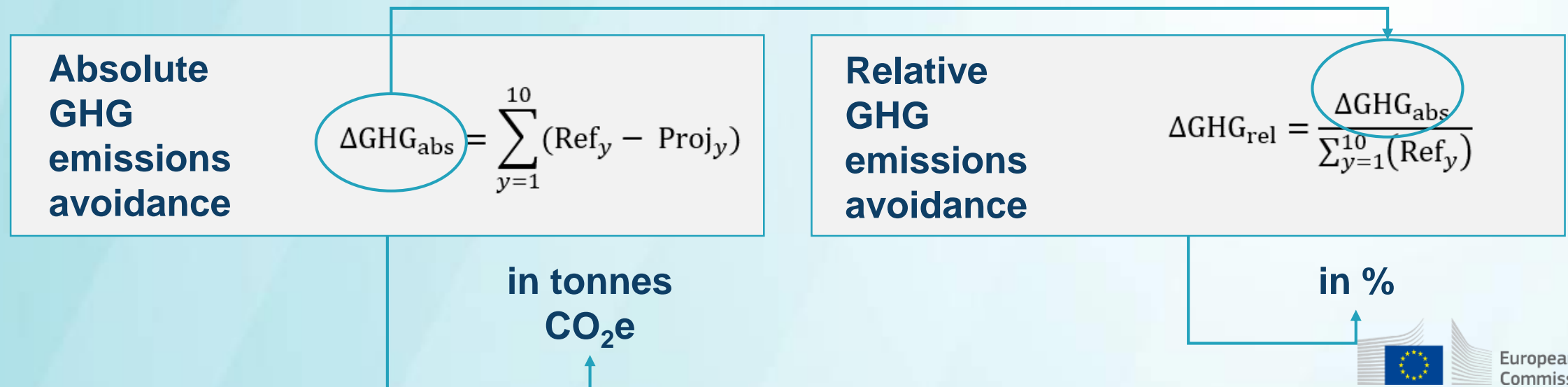


Recap of the GHG emission avoidance methodologies

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 (incl. for the period of monitoring and reporting)



What changes in the second stage in relation to the first stage?

Additional emissions sources included in the boundaries of the calculation

$$\Delta\text{GHG}_{\text{abs}} =$$

$$\text{EII:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{inputs},y} + \text{Ref}_{\text{processes},y} + \text{Ref}_{\text{products},y} + \text{Ref}_{\text{use}} + \text{Ref}_{\text{EoL}} - (\text{Proj}_{\text{inputs},y} + \text{Proj}_{\text{processes},y} + \text{Proj}_{\text{products},y} + \text{Proj}_{\text{use}} + \text{Proj}_{\text{EoL}}) \right)$$

De minimis inputs restricted to <10% of the total emissions



$$\text{CCS:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{release},y} - (\text{Proj}_{\text{capture},y} + \text{Proj}_{\text{transport pipeline},y} + \text{Proj}_{\text{injection},y} + \text{Proj}_{\text{transport},y}) \right)$$

$$\text{RES:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{grid or heat},y} - \text{Proj}_{\text{bio},y} \right)$$

$$\text{ES:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{energy},y} + \text{Ref}_{\text{services},y} - \text{Proj}_{\text{energy},y} \right)$$

First Stage
Equations

What changes in the second stage in relation to the first stage?

Additional emissions sources included in the boundaries of the calculation

$$\Delta\text{GHG}_{\text{abs}} =$$

$$\text{EII:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{inputs},y} + \text{Ref}_{\text{processes},y} + \text{Ref}_{\text{products},y} + \text{Ref}_{\text{use}} + \text{Ref}_{\text{EoL}} - (\text{Proj}_{\text{inputs},y} + \text{Proj}_{\text{processes},y} + \text{Proj}_{\text{products},y} + \text{Proj}_{\text{use}} + \text{Proj}_{\text{EoL}}) \right)$$

De minimis inputs restricted to <5% of the total emissions

$$\text{CCS:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{release},y} - (\text{Proj}_{\text{capture},y} + \text{Proj}_{\text{transport pipeline},y} + \text{Proj}_{\text{injection},y} + \text{Proj}_{\text{transport},y}) \right) \quad \leftarrow \text{No changes in the second stage}$$

$$\text{RES:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{grid or heat},y} - (\text{Proj}_{\text{bio},y} + \text{Proj}_{\text{geo},y} + \text{Proj}_{\text{on-site},y}) \right)$$

$$\text{ES:} = \sum_{y=1}^{10} \left(\text{Ref}_{\text{energy},y} + \text{Ref}_{\text{services},y} - (\text{Proj}_{\text{energy},y} + \text{Proj}_{\text{on-site},y}) \right)$$

**Second Stage
Equations**

Annex C updated for clarity but no changes in substance

1) On the **choice of sector for manufacturing facilities** for components (section 1.2.);

- Main option: quantify emission avoidance during use phase as described under renewable energy resp. energy storage, any emission reductions in the manufacturing process may be presented separately for Degree of Innovation;
- Alternatively, if the main reduction in emissions is due to the manufacturing process, the applicant can choose EII;
- In any case: the sector choice should match the methodology choice: RES (apply section 4), ES (apply section 5), EII sector (apply section 2)

2) How emissions associated with **transport of raw materials and inputs** are treated in EII (section 2.2.)

- In general: not necessary to account for emissions associated with transport of raw materials and inputs, transport of intermediate products between sites within the project boundary or distribution of final products in order to align with how EU ETS benchmarks are calculated
- Exceptions: transport of CO₂ or waste; replacing products with physically different products (but the same function)

3) When the possibility of virtual storage can be used for EII, section 2.2.2.4;

4) The calculation of **relative emission avoidance** when innovation concerns only part of a plant, section 2.3: it is possible to consider only this part for the calculation of the GHG_{rel} if it is technically feasible to convert the entire plant with the new technology;

5) The format of the **monitoring plan**: the plan should be integrated in the GHG emissions calculation tool;

6) The **contractual requirements** for manufacturing plants for components for energy storage: highlighting the requirement in a separate section 5.1.1.1.

Updated reference to the applicable EU act for product benchmarks for second stage in section 2: 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.

New tool for EII projects and new tabs to support your applications

The updates to the tools have been motivated by the common mistake observed and inspired by the practices

The screenshot shows a spreadsheet with columns A, B, C, D, and E. Row 10 is titled 'Using the spreadsheet'. Row 12 contains the text 'The cells are color-coded to guide the user. Captions are on the sheets where data entry is required.' Row 14 is a legend titled 'Colour code' with four entries: 'Enter data' (blue), 'Calculated data' (green), 'Select an option' (yellow), and 'Please provide additional information' (grey). Row 20 is titled 'Structure'. Row 22 contains the text 'The spreadsheet is divided into tabs according to its contents and purposes'. Below the text is a row of tabs: 'Overview', 'Summary', 'Reference emissions', 'Project emissions', 'Conversion factors', 'Assumptions', 'Checklist', 'Example GHG', 'Degree of Innovation', and 'Scalability'. The 'Overview' tab is highlighted with an orange box, and the 'Degree of Innovation' and 'Scalability' tabs are highlighted with a red box.

Tabs updated or revised

New tabs!

A calculation tool is now available for EII projects. Applicants are strongly encouraged to use this in the second stage

Applicants will benefit from having a common and more comparable structure, but will still be able to tailor it to their operations

ETS benchmarks and other relevant emission factors already part of the database

Summary									
This is a Pivot Table. As such, changes you make to the data set are not automatically picked up by it. To update the pivot table with the applied changes to the text or numbers in your data set, you need to refresh it: (1) Click any cell inside the pivot table. (2) Right click									
Row Labels	Sum of t CO2e								
Refinputs									
Refprocesses									
Refproducts									
Refuse									
RefEoL									
Grand Total									
Reference emissions calculation									
Note: for many projects the reference emissions for processes will be based on an EU ETS benchmark, fossil fuel comparator or other natural-gas-based disaggregate process emissions, and may be no emissions in the inputs, products, use or end of life boxes. Note that there may still be input emissions									
Projected operational data									
Source	Plant / Unit	Process	Input	Output	Parameter monitored	Description of parameter	Data unit	Year 1	Year 2
Inputs [add rows and column, as needed]									
Ref _{inputs}									
Ref _{inputs}									
Ref _{inputs}									
Processes [add rows and column, as needed]									
Ref _{processes}									
Ref _{processes}									
Ref _{processes}									
Products [add rows and column, as needed]									
Ref _{products}									
Ref _{products}									

GHG emission factors, and other conversion factors for calculation of reference emissions					
Type of data	Description	Fuel / Feedstock / Product	Proposed value	Data unit	Source
Default factors					
ETS Product benchmarks	Coke-oven coke (obtained from	Coke	0.217	tCO2e / t	Commission Implement
ETS Product benchmarks	Agglomerated iron-bearing proc	Sintered ore	0.157	tCO2e / t	Commission Implement
ETS Product benchmarks	Liquid iron saturated with carbon	Hot metal	1.288	tCO2e / t	Commission Implement
ETS Product benchmarks	Anodes for aluminium electrolysis	Pre-bake anode	0.312	tCO2e / t	Commission Implement
ETS Product benchmarks	unwrought non-alloy liquid aluminium	Aluminium	1.464	tCO2e / t	Commission Implement
ETS Product benchmarks	Grey cement clinker as total clinker	Grey cement clinker	0.693	tCO2e / t	Commission Implement
ETS Product benchmarks	White cement clinker for use as	White cement clinker	0.957	tCO2e / t	Commission Implement
ETS Product benchmarks	Quicklime: calcium oxide (CaO)	Lime	0.725	tCO2e / t	Commission Implement
ETS Product benchmarks	Dolime or calcined dolomite as	Dolime	0.815	tCO2e / t	Commission Implement
ETS Product benchmarks	Mixture of calcium and magnesium	Sintered dolime	1.406	tCO2e / t	Commission Implement
ETS Product benchmarks	Float/ground/polish glass (as to	Float glass	0.399	tCO2e / t	Commission Implement
ETS Product benchmarks	Bottles of colourless glass of a	Bottles and jars of colourless gl	0.290	tCO2e / t	Commission Implement
ETS Product benchmarks	Bottles of coloured glass of a n	Bottles and jars of coloured gla	0.237	tCO2e / t	Commission Implement
ETS Product benchmarks	Melted glass for the production	Continuous filament glass fibre	0.309	tCO2e / t	Commission Implement
ETS Product benchmarks	Facing bricks with a density > 1	Facing bricks	0.106	tCO2e / t	Commission Implement
ETS Product benchmarks	Clay bricks used for flooring ac	Pavers	0.146	tCO2e / t	Commission Implement
ETS Product benchmarks	Clay roofing tiles as defined in E	Roof tiles	0.120	tCO2e / t	Commission Implement
ETS Product benchmarks	Spray-dried powder for the proc	Spray-dried powder	0.058	tCO2e / t	Commission Implement
ETS Product benchmarks	Plasters consisting of calcined	Plaster	0.047	tCO2e / t	Commission Implement
ETS Product benchmarks	Dried secondary gypsum (synth	Dried secondary gypsum	0.013	tCO2e / t	Commission Implement
ETS Product benchmarks	Short fibre kraft pulp is a wood	Short fibre kraft pulp	0.091	tCO2e / t	Commission Implement
ETS Product benchmarks	Long fibre kraft pulp is a wood	Long fibre kraft pulp	0.046	tCO2e / t	Commission Implement
ETS Product benchmarks	Sulphite pulp produced by a sulph	Sulphite pulp, thermomechanical	0.015	tCO2e / t	Commission Implement

Summary | New fields to add information on key GHG indicators, including GHG emissions intensity

Key indicators	Description	Value	Data unit
Absolute GHG emission avoidance (Δ GHGabs)	Net absolute GHG emissions avoided thanks to operation of the project during the first 10 years of operation	0	tCO2e
Relative GHG emission avoidance (Δ GHGrel)	Relative GHG emissions avoided due to operation of the project during the first 10 years of operation	0	%
GHG emissions in reference scenario (Ref)	GHG emissions that would occur in the absence of the project during the first 10 years of operation	0	tCO2e
GHG emissions in project scenario (Proj)	GHG emissions associated with the project activity and site during the first 10 years of operation	0	tCO2e
Average GHG emissions intensity of the installations to produce a unit quantity of principal product in the reference scenario, or EU ETS	Principal product 1		tCO2e / unit quantity of principal product 1 <i>[Please replace with adequate unit]</i>
	Principal product 2		tCO2e / unit quantity of principal product 2 <i>[Please replace with adequate unit]</i>
	Principal product 3		tCO2e / unit quantity of principal product 3 <i>[Please replace with adequate unit]</i>
Average GHG emissions intensity of the installations to produce a unit quantity of the principal product in the project scenario	Principal product 1		tCO2e / unit quantity of principal product 1 <i>[Please replace with adequate unit]</i>
	Principal product 2		tCO2e / unit quantity of principal product 2 <i>[Please replace with adequate unit]</i>
	Principal product 3		tCO2e / unit quantity of principal product 3 <i>[Please replace with adequate unit]</i>

Application Form B

Application Form C

Knowledge Sharing



Best practices: a structured and tidy summary table is expected to facilitate transferring results to the forms, and reduce mistakes in the calculation of reference emissions for projects with multiple products

Reference & Project emissions | Updated columns for insertion of data traceability information

Projected operational data									GHG emissions due to production in the reference scenario				Data traceability							
Source	Plant / Unit	Process	Input / Output	Parameter monitored	Description of parameter	Data unit	Year 1	Year 10	Type of data	Value	Unit / t product	t CO2e / [unit]	t CO2e	Area / Department for collection and archiving	Data source	If applicable, equipment used for monitoring, including details on accuracy and calibration	Monitoring frequency	QA/QC Procedures	Additional description of the monitoring system	Reliability
Inputs <i>[add rows and column, as needed]</i>																				
Ref _{inputs}																				
Ref _{inputs}																				
Ref _{inputs}																				
Processes <i>[add rows as needed]</i>																				
Ref _{processes}														Data traceability Provide a brief description of your monitoring plan. It may include procedures for data collection procedures (information on how the parameters are measured/calculated, aggregated, recorded, calculated, checked/reviewed and reported), as well as roles and responsibilities. You may include diagrams showing all relevant monitoring points.						
														Area / Department for collection and archiving	Data source	If applicable, equipment used for monitoring, including details on accuracy and calibration	Monitoring frequency	QA/QC Procedures	Additional description of the monitoring system	Reliability

Best practices: A clear verification trail that includes details for gathering and reviewing data and links to the original references used might secure an easier and faster assessment of the estimated operational data informed in the application. It will also ensure beneficiaries can track back the basis of the calculation to update data and to **use it as starting point for the Monitoring Plan**. Additional elements and explanations can be added in a separate tab.



Assumptions | New tab reserved to document quantitative and qualitative assumptions used in the calculations

Quantitative assumptions							
Data / Assumption	Proposed value	Data unit	Description	Basis or source of the assumption	Hyperlink to the original source, if applicable	Brief description of the monitoring plan	Area / Department responsible
<i>Example: Share of organic waste in the MSW incinerated in project</i>	0.00% %		<i>Solid waste composition</i>	<i>Conservative assumption by the applicant to avoid possible overestimation of GHG emission avoidance claims</i>			
[add or exclude rows and columns, as needed]							

Qualitative assumptions					
Data / Assumption	Description	Basis or source of the assumption	Hyperlink to the original source, if applicable	Brief description of the monitoring plan	Area / Department responsible
<i>Example: No demand for offshore service vessels</i>	<i>No demand for offshore service vessels as O&M will be performed using drones</i>	<i>Based on project planning, and best practices in year 2020.</i>	Project Planning_O&M		
[add or exclude rows and columns, as needed]					



Best practices: a transparent documentation of methods and secondary data used to extrapolate/estimate the operational data allow for a more effective review of the robustness of data adopted, e.g., whether the characteristics of the proposed plant are credible and in line with basic engineering principles, or whether these have been selected in a conservative yet accurate manner, i.e., to avoid under/over estimation?

Checklist | New tab to assist applicants prepare their submission in line with the best practices

The document has been built based on the experience gathered from the 1st stage of the LSC, the common mistakes identified as well as the best practices followed by applicants. This tab is reserved for applicants to self-assess whether they are following the best practices in calculating and presenting GHG emission avoidance in order to eliminate possible mistakes.

Checklist for self-assessment of accordance with best practices

		Yes / No / NA
1	Alignment with the methodology Have the GHG calculations been submitted in an excel sheet that mirrors the GHG methodology, using the same terminology for GHG emission sources and activities within the scope of the given sector? (Please note that an excel template now exists also for energy intensive industries.) Any deviations are explained clearly and justified.	
2	Alignment with the methodology Have ONLY emissions inside the scope of the IF GHG avoidance criteria been considered for the final emissions calculation? (GHG savings that could be claimed under the Degree of Innovation criterion should be indicated separately, see next point.)	
3	Alignment with the methodology In case the project presents benefits which are out of the scope of the IF GHG emission avoidance criterion, has an excel-based calculation of these additional benefits with respect to GHG emission avoidance, energy and resource efficiency been provided? Does the calculation of the additional GHG emission avoidance follow the logic of the IF GHG emission avoidance methodology and the corresponding guidance? Have you presented the additional calculations in the separate tab 'Degree of innovation'? Have you referred to the excel file/tabs, when presenting the additional benefits under the degree of innovation criterion in Application Form B?	
4	Alignment with the methodology Have sufficient data and explanations to fully explain the project, its boundaries and its interactions with other installations been provided? Have the data used and methods adopted to estimate the GHG emissions and emission factors been documented in a transparent manner, creating a clear verification trail? Have you provided information sources and hyperlinks to the original reference in the application files?	
5	Alignment with the methodology Has the application been updated to take into account further details required in the second stage?	
6	Alignment with the methodology Have the principal product(s) and the reference products they substitute been identified? Do the principal product(s) represent the main objective of the project? Are the principal product(s) all in the same sector?	
7	Alignment with the methodology For projects with multiple products, have ONLY the GHG emissions attributed to the chosen "principal products" been considered in the reference emissions when calculating the RELATIVE GHG emission avoidance? (please note that whilst all emissions in the reference scenario shall be considered for the absolute avoidance calculation, ONLY emissions of PRINCIPAL PRODUCTS in the reference scenario shall be considered for the relative avoidance calculation)	

Checklist | New tab to assist applicants prepare their submission in line with the best practices

Alignment with IF methodology

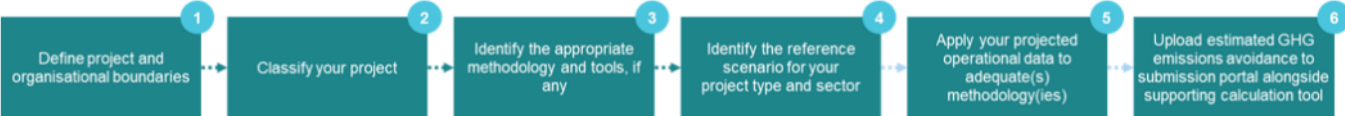
Transparency and robustness

Consistency and clarity

Have the GHG calculations been submitted in an excel that mirrors the GHG methodology, using the same terminology for GHG emission sources and activities within the scope of the given sector?
Have ONLY emissions inside the scope of the IF GHG avoidance criteria been considered for the final emissions calculation? (GHG savings that could be claimed under the DoI criterion shall be indicated separately)
In case the project presents benefits which are out of the scope of the IF GHG emission avoidance criterion, has an excel-based calculation of these additional benefits with respect to GHG emission avoidance, energy and resource efficiency been provided? Does the calculation of the additional GHG emission avoidance follow the logic of the IF GHG emission avoidance methodology and the corresponding guidance? Have you presented the additional calculations in the separate tab 'Degree of innovation'? Have you referred to the excel file/tabs, when presenting the additional benefits under the degree of innovation criterion in Application Form B?
Have sufficient data and explanations to fully explain the project, its boundaries and its interactions with other installations been provided? Have the data used and methods adopted to estimate the GHG emissions and emission factors been documented in a transparent manner, creating a clear verification trail? Have you provided information sources and hyperlinks to the original reference in the application files?
Has the application been updated to take into account further details required in the second stage?
Have the principal product(s) and the reference products they substitute been identified? Do the principal product(s) represent the main objective of the project? Are the principal product(s) all in the same sector?
For projects with multiple products, have ONLY the GHG emissions attributed to the chosen “principal products” been considered in the reference emissions when calculating the RELATIVE GHG emission avoidance? (please note that whilst all emissions in the reference scenario shall be considered for the absolute avoidance calculation, ONLY emissions of PRINCIPAL PRODUCTS in the reference scenario shall be considered for the relative avoidance calculation)
In case an EU ETS benchmark is used, are these values up to date?
Have each adopted assumption been disaggregated (i.e. in easily verifiable units) and with their rationale (i.e. the basis of the calculation) properly referenced and/or any data sources used?
Have projected operational data been backed by robust evidence or, if estimated/extrapolated, linked to the assumptions table? Are the conversions sufficiently visible so they can be easily reviewed and the robustness of the assumptions checked? Are the characteristics of the proposed plant credible and in line with basic engineering principles, e.g. heat and mass balance? Where assumptions have been applied for operational characteristics and KPIs used, have these been selected in a conservative yet accurate manner, i.e. to avoid under/over estimation?
For EII, has the applicant considered the emissions in all steps (inputs - processes - products - use - eol) for the calculation of relative emission avoidance? (When there is no change in emissions in a step, these can be disregarded for the absolute emission avoidance calculation but have to be considered in the relative emission avoidance)
Has a clean, tidy and organised excel with different colour codes (in order to visually differentiate cells with input data, comment and calculations) been provided? Have the calculations of the reference and project emissions been presented in different tabs to facilitate internal and external review of the calculations?
Have any double-counted emissions or avoidance/reduction been adequately disregarded from the calculations?
In case the relative emissions avoidance exceeded 100%, have you checked whether ONLY the GHG emissions attributed to the chosen “principal products” been considered in the reference emissions in your calculation?
Have absolute and relative emissions for the full 10 years of operation and, in the case of EII projects, the EU ETS benchmark used (if applicable) been objectively and visibly declared in the Application Form B? Are these values declared also consistent with the values indicated in the excel sheet?
For EII, has the process diagram in figure 2.1 of the methodology been properly filled in? Have any “zero” values inserted in any of the fields been properly justified?
For projects using feedstock of biogenic origin: have sufficient assurance that the biomass supplied will meet the sustainability requirements of the recast Renewable Energy Directive (RED II) and that will originate from feedstock with a low risk of causing indirect land-use change been provided?

Examples | Hypothetical examples are now available to illustrate the use of the tool for each project category

Large Scale projects: Example of calculation of GHG emission avoidance (EII) - methanol (Version 1.0 - 18 March 2021)



Context of project and organisational boundaries
 The project foresees the construction of a biomass gasifier and electrolyser to feed a methanol synthesis unit. The plant will use biomethane as the main gasifier feed, plus grid electricity and a fossil natural gas boiler for heat. The syngas from the gasifier will be complemented in the methanol synthesiser feed. The projected production is 100,000 t methanol per year once the facility reaches full capacity (projected for year 3). The reference scenario for methanol production is given in the GHG avoidance methodology - an emission factor of 82.5 gCO₂e/MJ may be used. The project scenario includes several inputs, several processes, and end of life emissions from disposal of the methanol. There are no additional non-principal products or changes in in-use emissions.

Classification
 Category: Energy Intensive Industry
 Sector: Chemicals
 Product: organic basic chemicals (methanol)

IF Methodology
 EII, Section 2 of IF LSC GHG Methodology

Reference scenario
 As stated in the GHG avoidance methodology for the energy intensive industries, the reference scenario for methanol may be based on the estimated GHG intensity of production of methanol from natural gas, given in the methodology as 82.5 gCO₂e/MJ. There is no ETS benchmark for standalone methanol production. The ETS refinery benchmarks include methanol production units but these refinery sub-units are not relevant for the IF.

Application of projected operational

Tab "Reference emissions":

	Sum of t CO ₂ e
Refinputs	-
Refprocesses	1,518,618.8
Refproducts	-
Refuse	-
RefEoL	-
Grand Total	1,518,618.8

Projected operational data																	GHG emissions due to production in the reference						
Source	Plant / Unit	Process	Input	Output	Parameter monitored	Description of parameter	Data unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Type of data	Value	Unit / t product	t CO ₂ e / [unit]	t CO ₂ e	C
Processes [add rows and column, as needed]																							
Ref _{processes}	Methanol plant	Methanol production	Natural gas	Methanol	Methanol output	Tonnes of methanol produced	tonnes	50,000	75,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	Other natural-gas-based fossil defaults	19.90	GJ	0.0825	1,518,619	Th all en hir rel
																					19		

Degree of Innovation & Scalability | New tabs embedded to facilitate calculation of selected figures to be reported under the two criterion

Degree of Innovation:

- 1) the degree to which the project goes beyond incremental innovation on a scale from intermediate to breakthrough innovation; and
- 2) The contribution of the project to further EU objectives for a climate-neutral economy:
 - (a) Energy efficiency as a main objective of the EU and the first building block of the Long-term Strategy;
 - (b) Circularity as a further essential part of a wider transformation of industry towards climate neutrality and long-term competitiveness;
 - (c) Contribution to deployment of renewable electricity. Projects that propose to use electricity from the grid must demonstrate whether they are using electricity of renewable origin and whether they are adding to the renewable deployment;
 - (d) Potential to deliver net carbon removals;
 - (e) Other GHG savings from emissions sources not included within the boundaries of the Innovation Fund methodology.

Scalability:

- 1) Scalability at the level of the project and the regional economy, including:
 - (a) Plans for further expansion at project site and the possible project's technology transfer to other sites,
 - (b) Cooperation with other actors of the regional economy,
 - (c) Impacts on regional economic growth and jobs,
 - (d) Quality and extent of the knowledge-sharing plan.
- 2) Scalability at the level of the sector, including:
 - (a) Extent to which the technology of the project can be applied within the sector and the expected emissions avoidance,
 - (b) Expected cost reductions and resource constraints.
- 3) Economy-wide scalability, including:
 - (a) Extent to which the technology of the project can be applied across the economy
 - (b) Potential to create new value chains or reinforce existing ones in Europe.

Third party verification of the GHG emission calculation

see AFB 8. Overview of supporting documents

- The verification shall be specific to the calculations submitted in the excel sheet and ascertain that it is correct, complete and done in accordance with the methodology in Annex C.
- Verification companies/organisations must be accredited verifiers according to Commission Implementing Regulation (EU) 2018/20672 or according to standards ISO 14065, ISO 14064-2 and ISO 14064-3.

THANK YOU!



Innovation Fund Call for Large-Scale Projects

Second Stage Application Process and Application Forms

Robert Goodchild. Head of Unit. CINEA



Content

- Where to apply?
- Application Forms
- Tips

Process

- Through funding and tenders portal.
 - Specific link sent to each of the 70 invited applicants.



Process

The screenshot displays the top navigation bar with links for SEARCH FUNDING & TENDERS, HOW TO PARTICIPATE, PROJECTS & RESULTS, WORK AS AN EXPERT, and SUPPORT. Below the navigation is a blue header for 'Innovation Fund (INNOVFUND)'. Two warning banners are present: one about a portal outage on April 7th and another about IT Helpdesk operations during COVID-19. The main content area is split into two columns. The left column has tabs for GRANTS and TENDERS, with a 'Programming period' dropdown set to 2021-2027. A blue bar at the bottom of this column is labeled 'Innovation Fund (INNOVFUND)'. The right column is titled 'Helpdesk & Support Services' and lists four services: IT Helpdesk (highlighted with a red box), Europe Direct, Participant Validation Service, and Innovation Fund (INNOVFUND) Helpdesk (also highlighted with a red box).

Support in the
funding &
tender portal



Forms

Part A:

- similar to first stage call + includes GHG indicators

Part B:

- Limit = 70 pages
- Incorporates new award criteria and work packages details
- Prepare document outside portal and then upload it

#InnovationFund

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Part B

Explain changes compared to first stage



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- **Acceptable changes:**
 - Changes to the project implementation plan due to project advancement
 - Changes to the business plan due to market evolution or regulatory framework changes
 - Submission of a more advanced or detailed feasibility study or due diligence report
- **Unacceptable changes:**
 - Substantial changes to the substance or nature of the project (e.g. with regard to the technological solution to be deployed) that may call into question the outcome of the first-stage evaluation
 - EU contribution change by more than 50%

Part B

Introduction and selection criteria + technical scope of the proposal

Award criteria

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Part B

Include full details of proposal's work packages (WP):

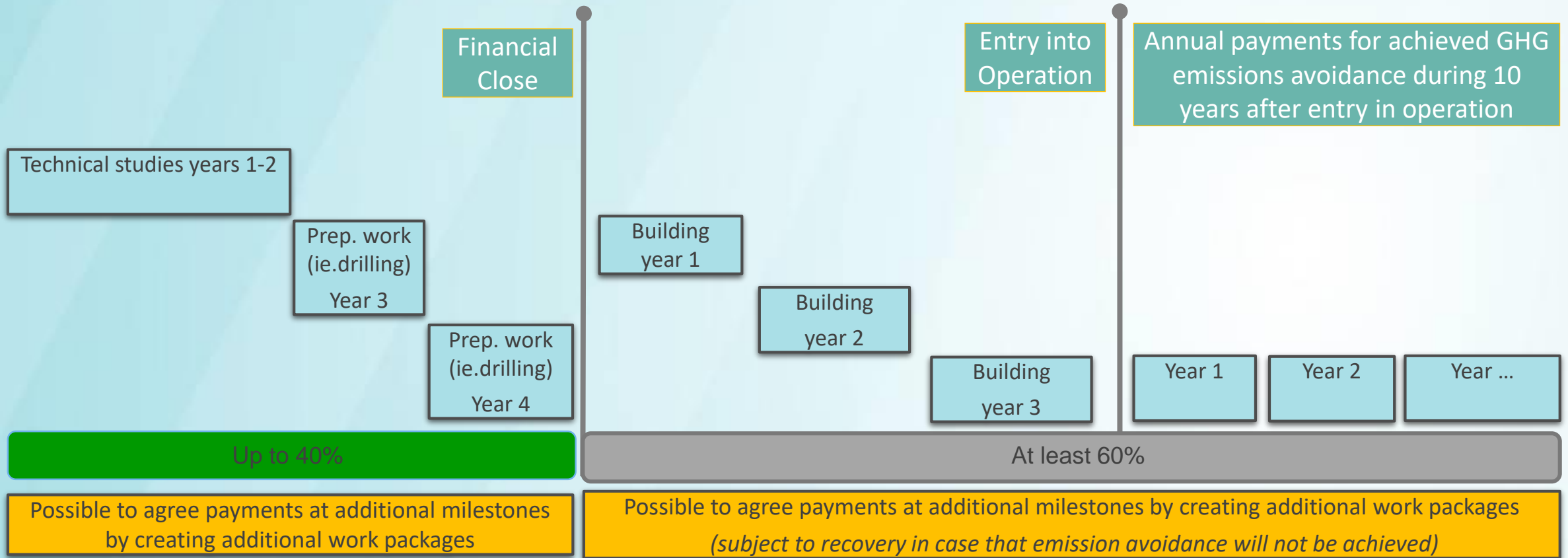
- Template included in part B
- Grant disbursement based on lump sums = payment when WP completed
- Payment must be proportionate to effort in WP
- Applicants to provide sufficient detail to allow good monitoring and management of the project
- After entry into operation, reporting must be annual i.e. one work package per year



7. Work packages, activities, milestones	18
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Example of work package set up

Payments upon milestones completion when work package finishes



Part B | Annexes

Section 8 of part B lists supporting documents and their expected content

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○○●○○

Mandatory (eligibility criterion):

- GHG emission calculation;
- Third party verification of GHG emission calculation;
- Feasibility study (FS);
- Business plan (BP);
- Project Implementation Plan (PIP);
- Knowledge sharing (KS) plan;
- Relevant costs calculation;
- Financial model summary sheet;
- Audit statement on relevant costs;
- Operational capacity of applicant.

○○●○○

Optional:


- any existing due diligence report;
- detailed financial model sheets

○○●○○

Page limit: 200 pages for FS + BP + PIP + KS

Part C

- Electronic form in the funding and tender portal
- Indicators information consistent with information provided in part B and other annexes to the proposal
- If contradiction, information in part B takes precedence

 European Commission | Funding: Submission Service

Proposal ID	Project Acronym	Call for Proposal	Topic	Type of Action
SEP-210737248	test	InnovFund-LSC-2020-Two-Stage-2	InnovFund-LSC-2020-two-stage-2	InnovFund-LS

Classification

Category	Sector	Hybrid or Cross-sectoral project
Energy Intensive industries / CO2 capture for storage, full chain Carbon Capture and Sto...	Geothermal energy	Part of a hub
Principal Product 1	Principal Product 2	Principal Product 3
flat glass	coke	glass fibres
Other Product 1	Other Product 2	Other Product 3


Identification

Location of the Project (Country)	NUT2 Region
Bahrain	Adana
Location of the project (GPS coordinates)	
▲ Please fill in the GPS coordinates.	
Expected Principal Product 1 Output	Unit of Expected Output Principal Product 1
###,###,##	
▲ Please enter a value.	
▲ Please select a value.	

Tips

- Read all documents and guidance carefully
- Submit well in advance of deadline. You can adapt before deadline.
- Part B:
 - Clarity of information more important than quantity
 - Cross-reference to annexes clearly
 - Ensure information in different docs are consistent
 - Use requested font size
- Respect page limits
- Consult FAQ section in the Funding & Tenders portal

Tips

- Watch the application process presentation from the first stage webinar here 
- Support is available in case of IT/portal issues → <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/helpdesks/contact-form>
- Support is available in case of questions related to the call → <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/contact-program;programCode=INNOVFUND;callType=>



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