Innovation Fund

Call for Large-Scale projects 2021 – Award Criteria

Uwe Lutzen, Gianluca Tondi - CINEA C4 Team leaders

Maria Velkova - DG CLIMA Deputy Head of Unit

Christophe Dehout- CINEA A1 Senior Financial Engineer

Forms

Part A:

- Administrative information and bugdet + includes GHG indicators

Part B:

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

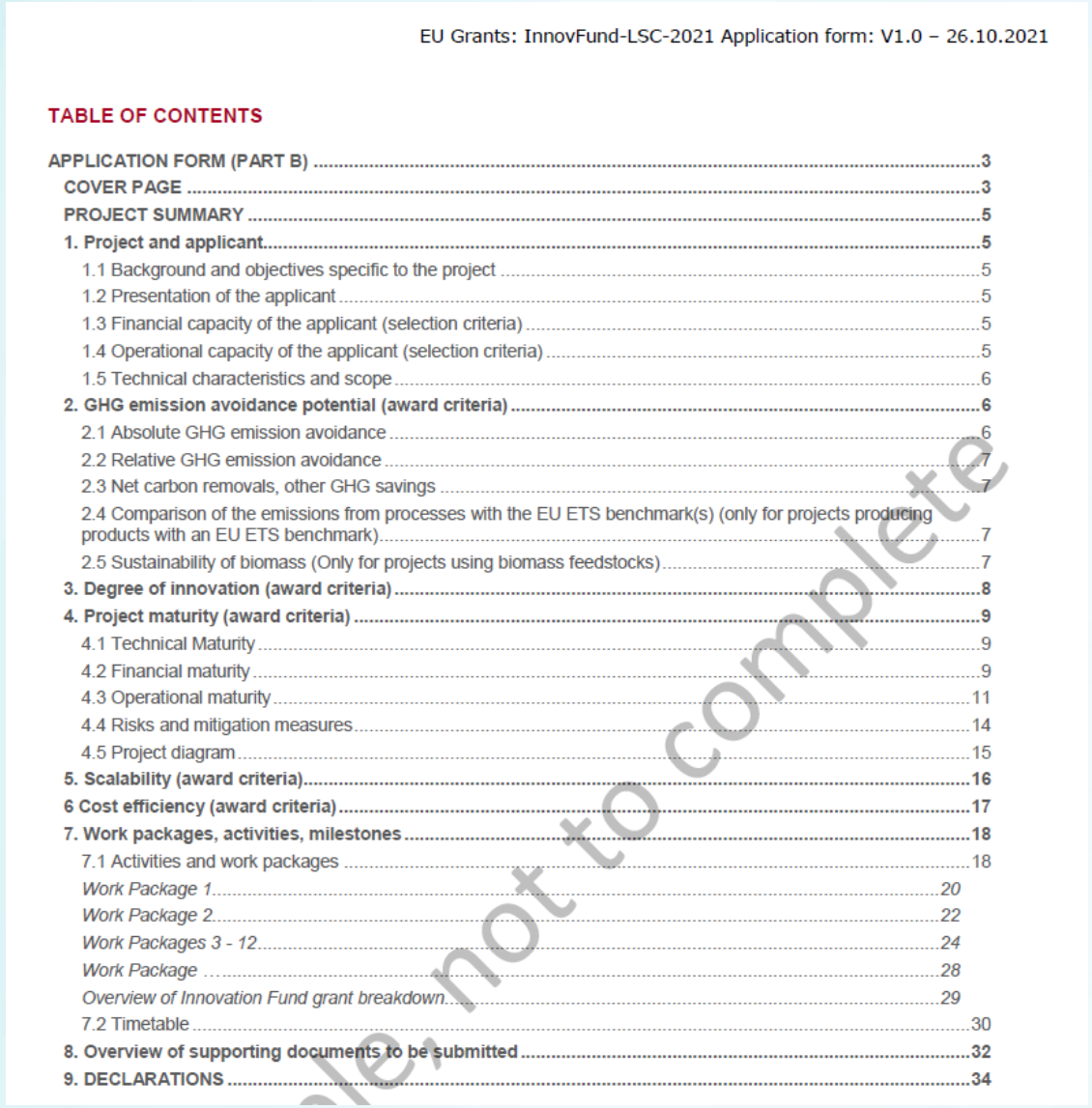


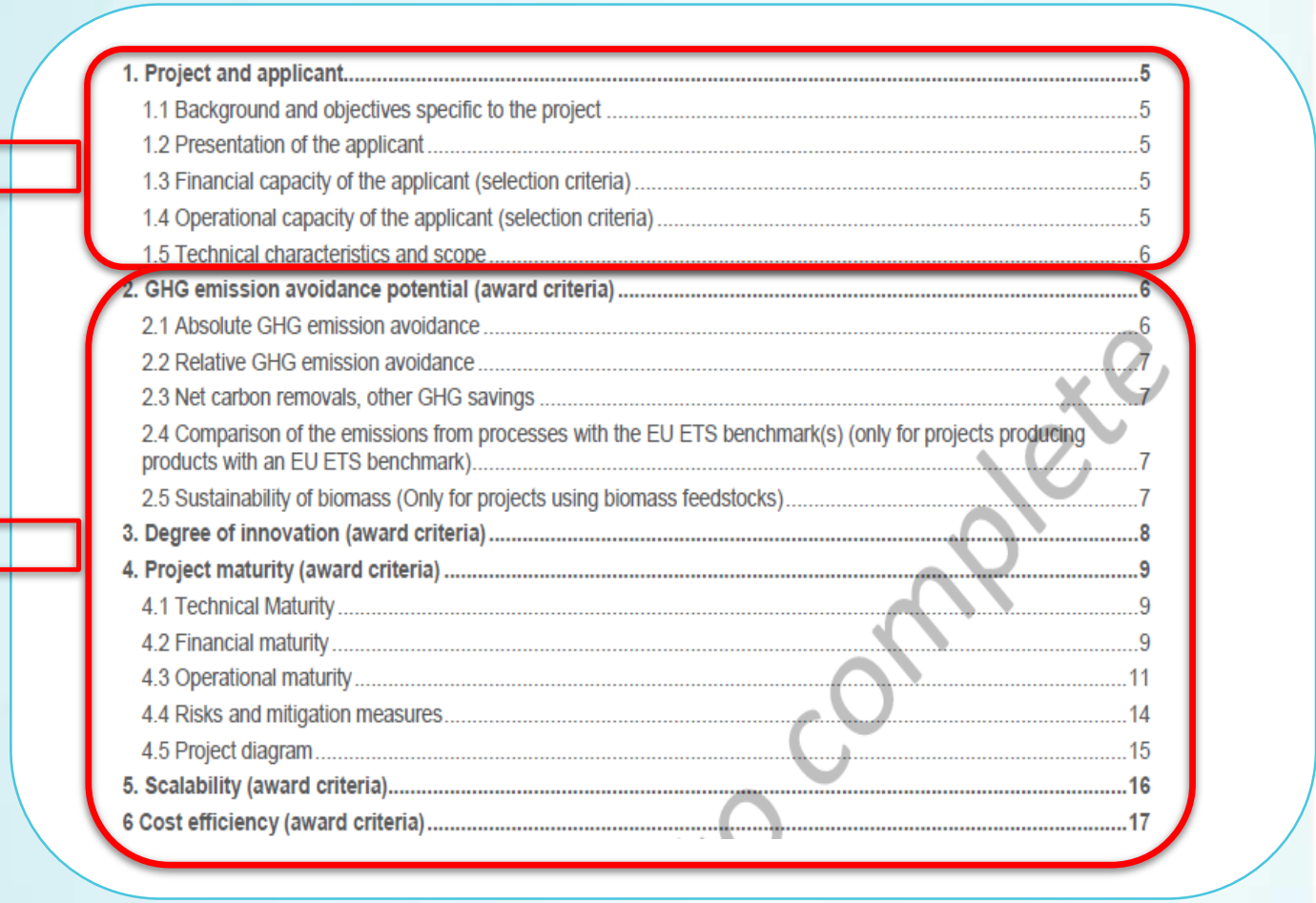
TABLE OF CONTENTS

European Commission

Part B

Introduction and selection criteria + technical scope of the proposal

Award criteria

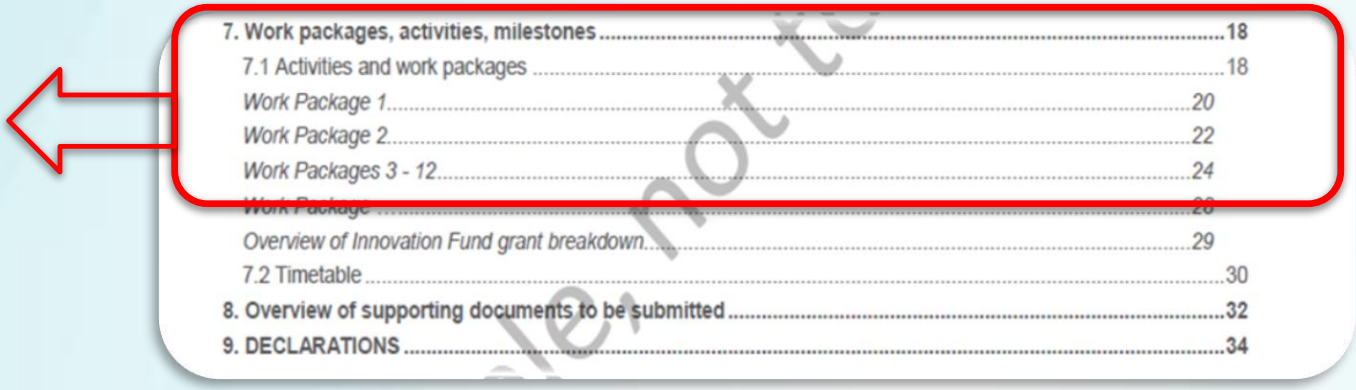


European Commission

Part B

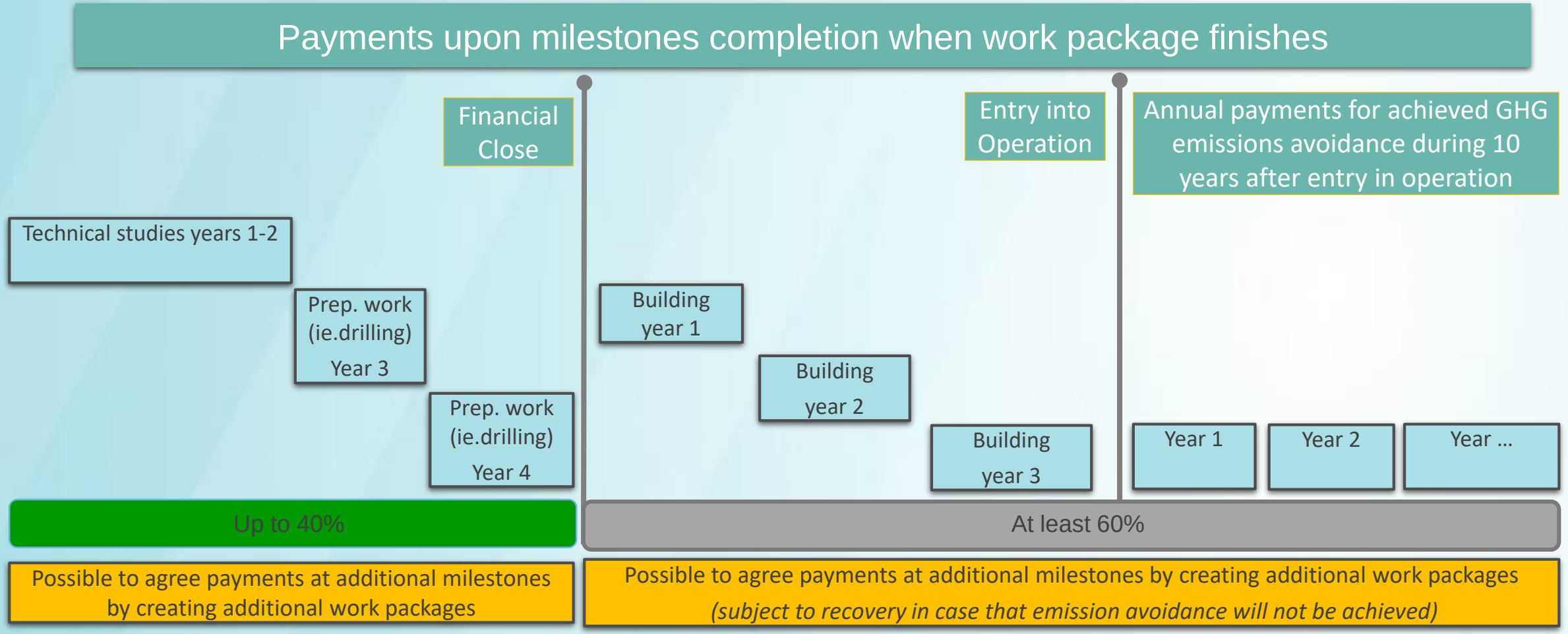
Include full details of proposal's work packages (WP):

- Template included in part B
- Grant disbursment 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



European Commission

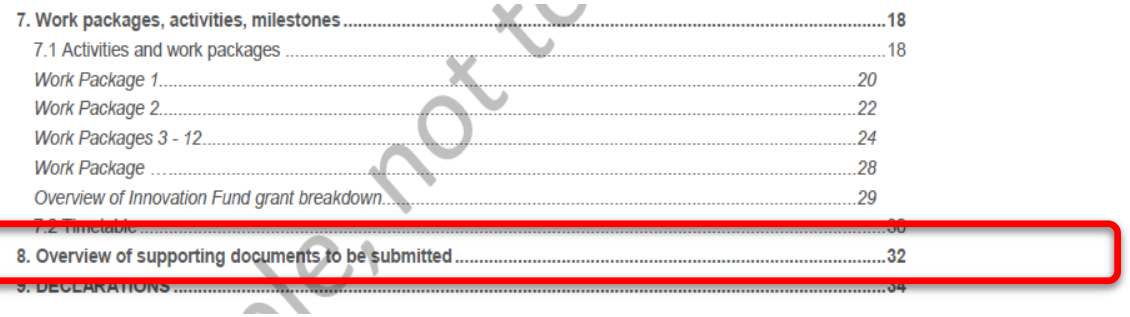
Example of work package set up



European Commission

Part B | Annexes

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



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;
- Detailed financial model sheets
- Operational capacity of applicant.

Optional:

- any existing due diligence report;

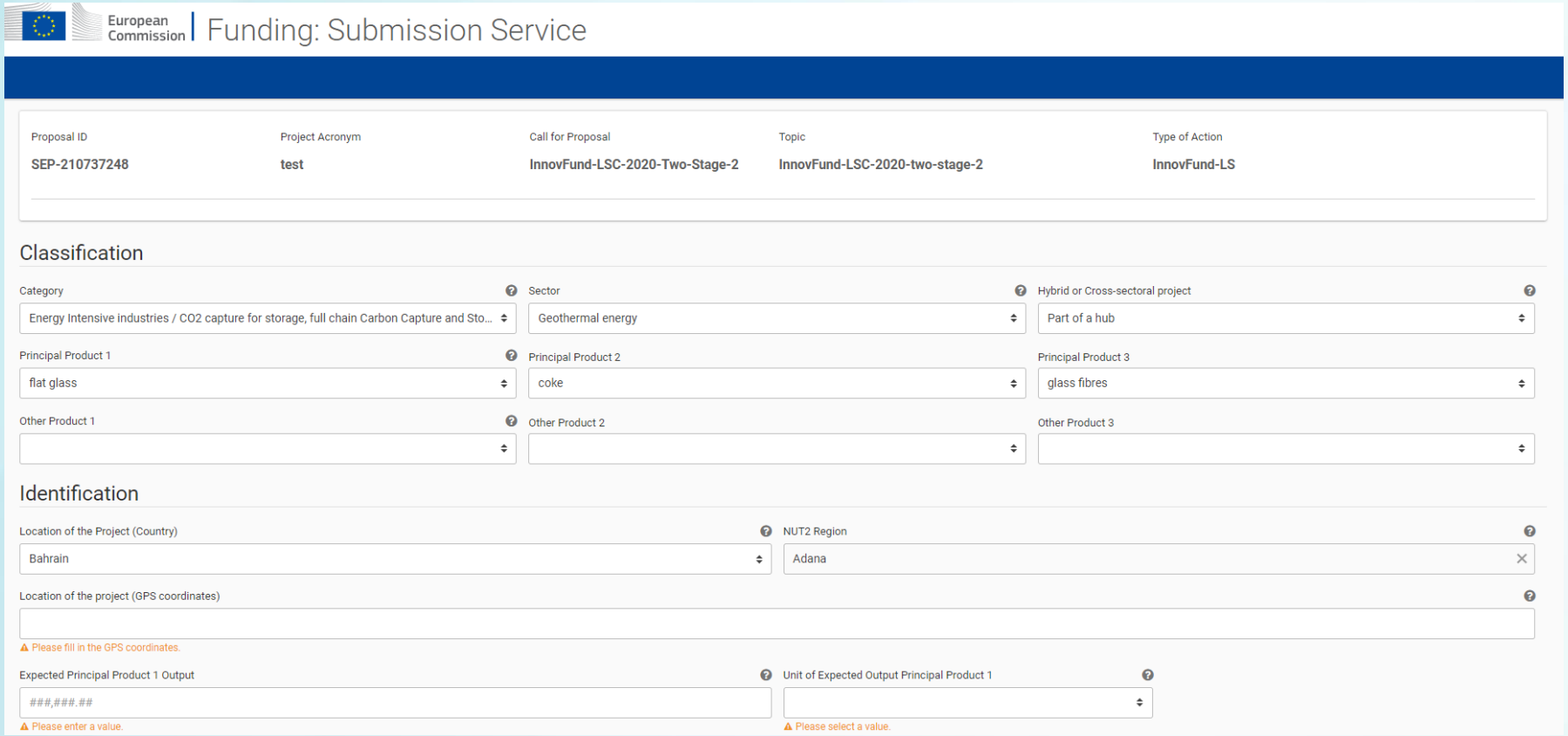
Page limit:

- 70 pages for part B
- 200 pages for FS + BP + PIP + KS
- 50 pages for operational capacity

European Commission

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

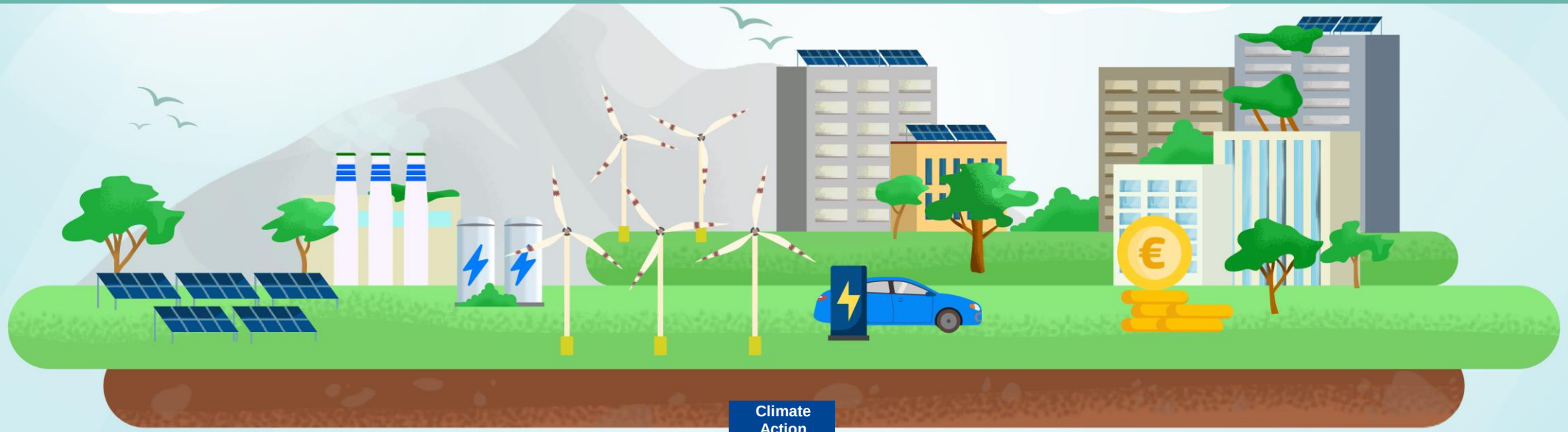


European Commission

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

Award criteria - GHG emission avoidance



GHG emission avoidance criterion

Sub-criteria	Scoring: 0 to 5
Absolute emission avoidance	Depending on calculation result: within the sector
Relative emission avoidance	Depending on calculation result
• Quality and credibility of the calculations • Potential to deliver net carbon removals • Other GHG savings	• Expert assessment • Depending on the calculation • Depending on the calculation

New

European Commission

GHG emission avoidance calculation

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 factors are fixed for the 10 years of calculation and for the period of monitoring and reporting

Absolute GHG emissions avoidance

$$\Delta GHG_{abs} = \sum_{y=1}^{10} (Ref_y - Proj_y)$$

in tonnes CO_2e

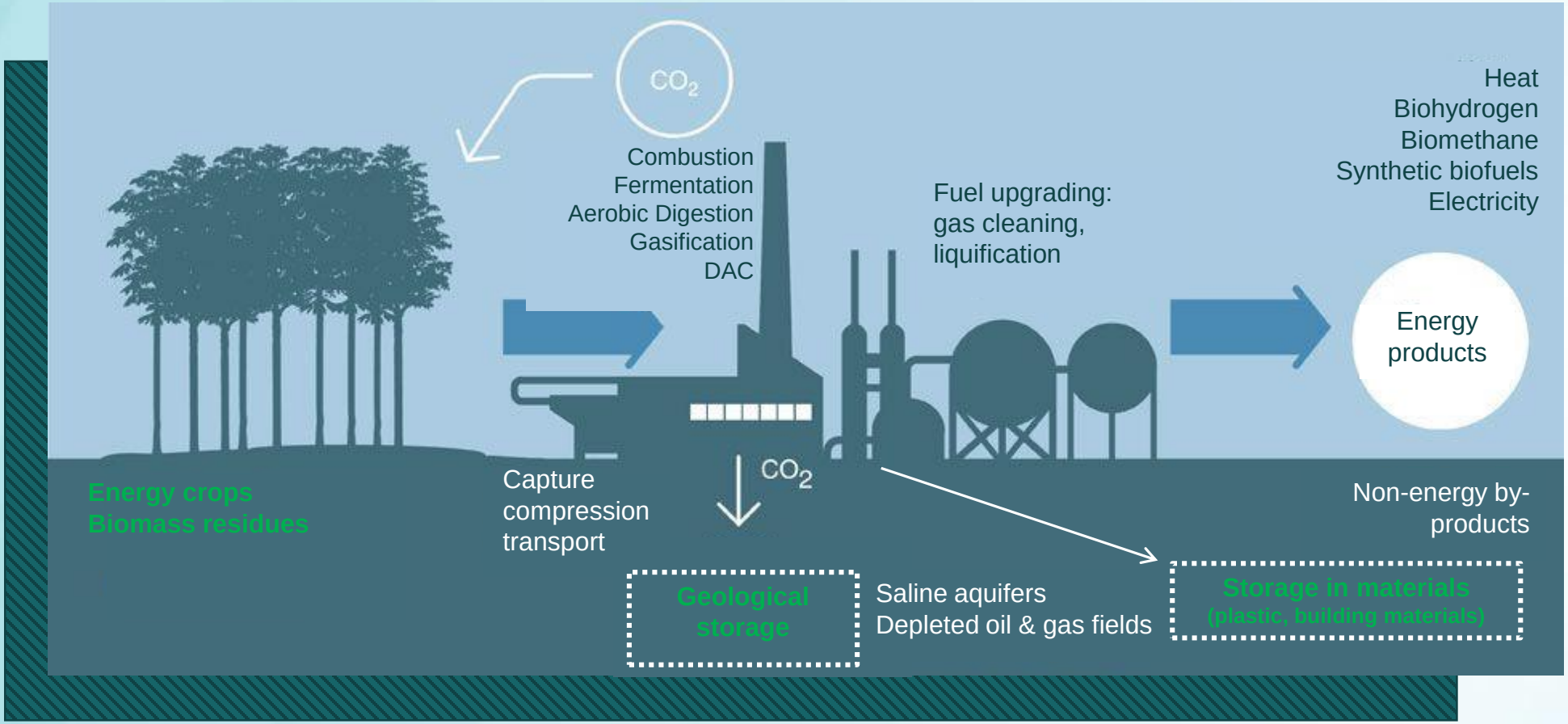
Relative GHG emissions avoidance

$$\Delta GHG_{rel} = \frac{\Delta GHG_{abs}}{\sum_{y=1}^{10} (Ref_y)}$$

in %

Net carbon removals

or negative total project emissions



European Commission

Minimum requirements

Comparison with EU ETS benchmark emissions (only for projects producing products with a EU ETS benchmark)

Calculate the GHG emissions per unit of product according to the EU ETS methodology and compare with the equivalent EU ETS benchmark(s) applicable at the time of the application and confirm that the project emissions are lower than the EU ETS benchmark emissions.

Sustainability of biomass (only for projects using biomass as feedstock)

Projects using biomass as feedstock must confirm that the biomass used will at least meet the sustainability requirements of the Renewable Energy Directive. The biomass feedstock must either be listed in Part A of Annex IX of the Directive or be certified as low indirect land use change (ILUC)-risk as defined by Commission Delegated Regulation (EU) 2019/8072.

Annex C updated for clarity (see foreword)

General

- Classification of sectors is now placed as a separate Annex E with some streamlining
- Conditions for hybrid projects have been clarified
- Rules for first-stage removed: only second-stage rules kept

RES & ES changes

- The reference scenario for renewable electricity (the expected 2030 grid mix) has been updated with the latest reference scenario for the Fit for 55 package
- The reference scenario has been changed for projects that provide dispatchable electricity
- Manufacturing of components: component's fractional contribution to the capital cost of a facility has to be considered

Not exhaustive: see Annex C for full deatils

EII changes

- Biomass feedstock that is transported over 500km needs to be accounted for
- The 'boxes' representing lifecycle stages for EII projects have been changed
- The explanation of how the process(es) box of the reference scenario should be filled out has been expanded into seven explicit cases.
- Rules have been added to give credit in the case that carbon shall be stored on a long-term (>50 years) basis in a non-geological storage context, e.g. in long lived products.
- An additional type of EII project is allowed where innovation focuses on saving of electricity with specific conditions and greenhouses gases (GHG) calculations

Calculation tools must be used
Examples available

Absolute GHG emissions by scenario and step of the process

Reference and project GHG emissions by step of the production process during the first 10 years of operation, in tCO2e.

Step	Reference emissions	Project emissions	Variation
	tCO2e	tCO2e	tCO2e
Input	-	-	-

Overview | **Summary** | Reference emissions | Project emissions | Process Diagram | Ref Conversion Factors | Proj Conversion Factors

Obligatory

Advisable

If relevant / advisable

Other GHG emission avoidance | Net carbon removals | Assumptions | Checklist | Degree of Innovation | Scalability

Only if relevant

New

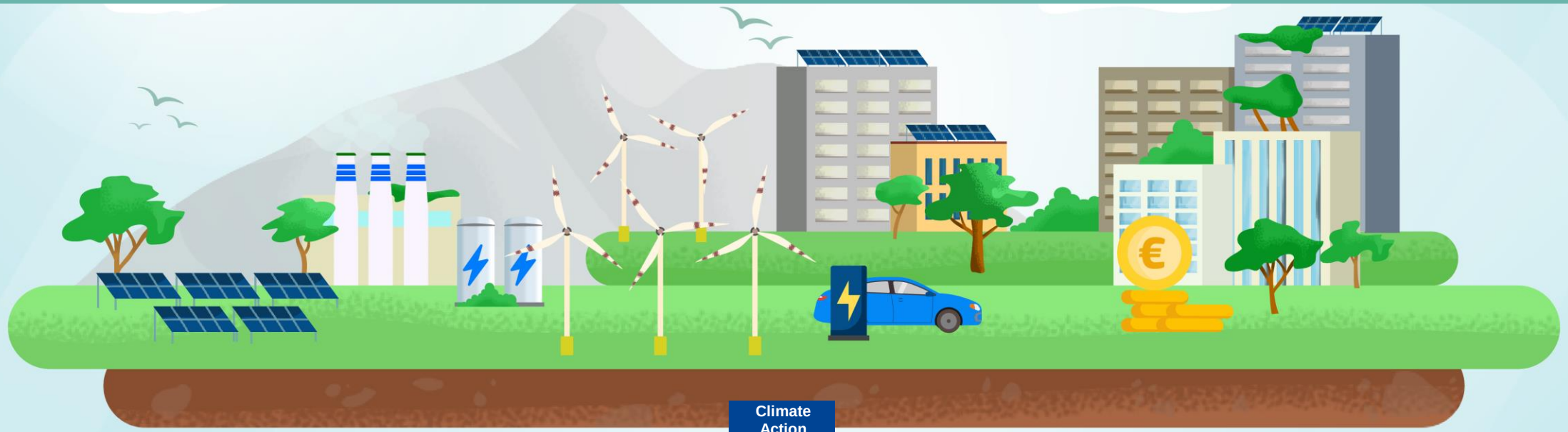
European Commission

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.

Award Criteria - Degree of Innovation

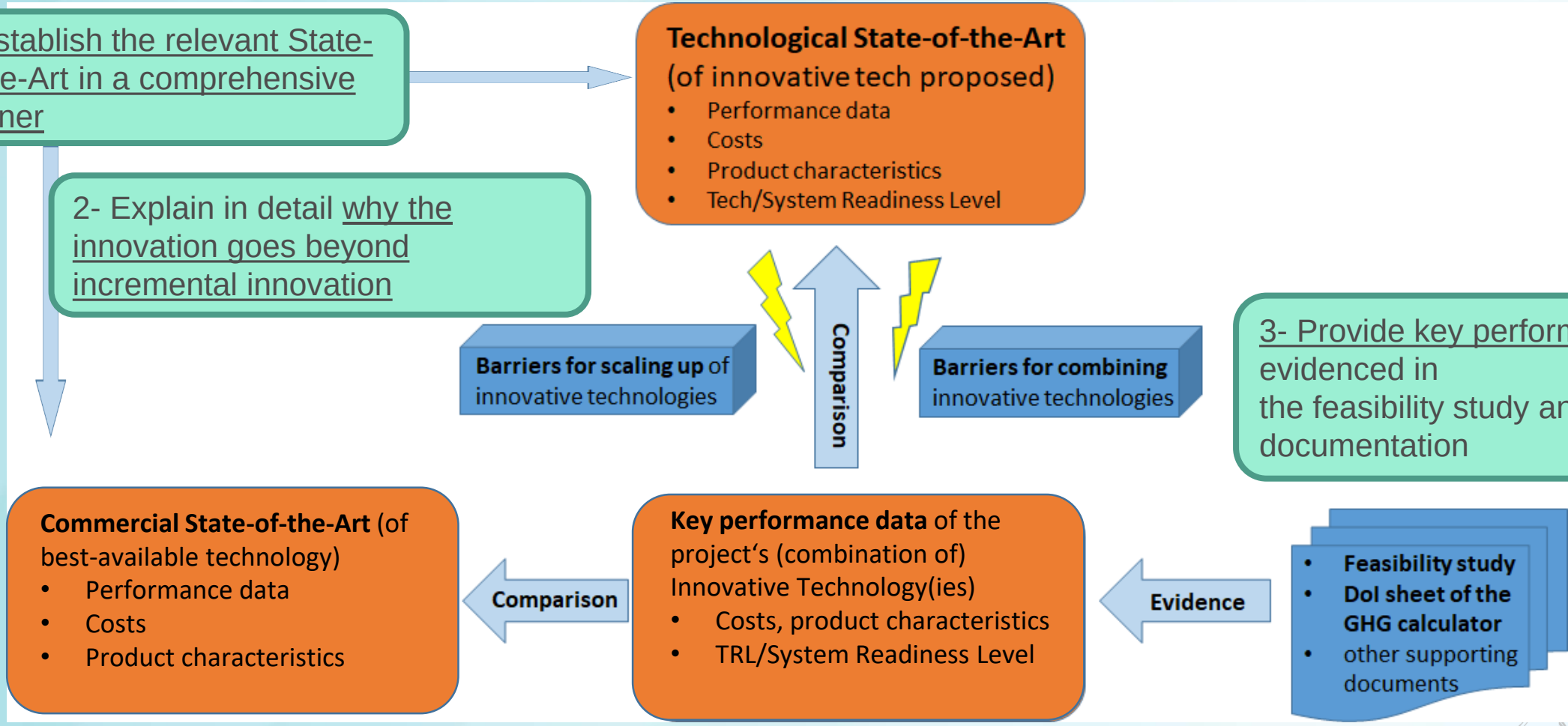


Degree of Innovation (DoI)

Two sub-criteria:

- **Innovation in relation to the state-of-the-art**
- **Contribution to further EU policy objectives**

Degree of innovation



Degree of Innovation: sub-criterion "Contribution to further EU policy objectives"

- **Call text logic:** support projects contributing to further EU policy objectives for a climate-neutral economy, specifically on **energy efficiency**, **circular economy**, **deployment of renewable electricity**.

Assess how the project's innovation will contribute Further EU policy objectives:

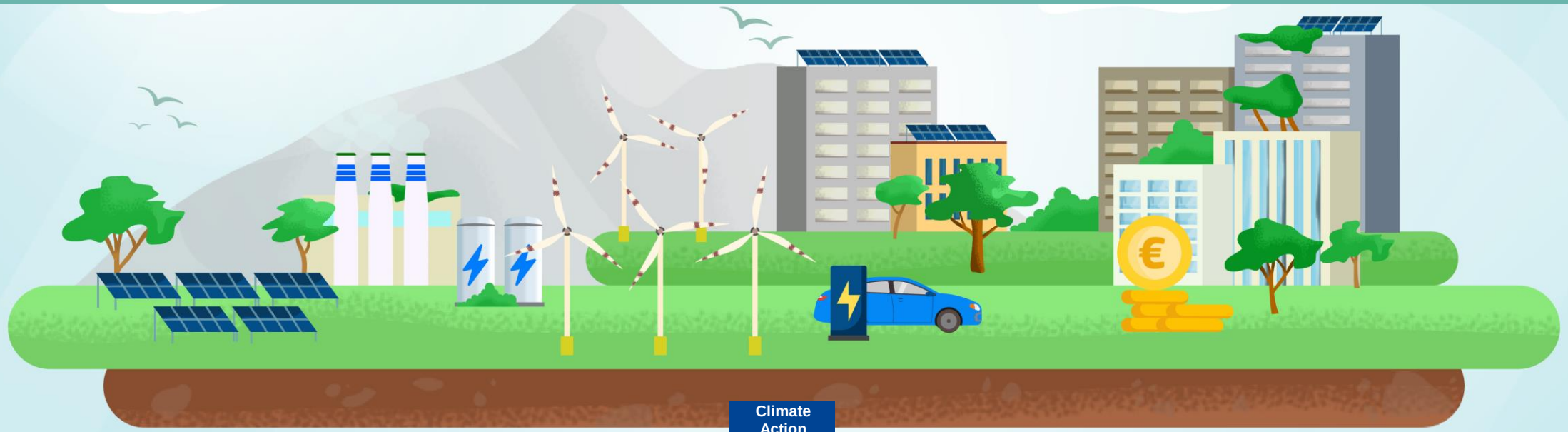
- **Energy efficiency**
- **Circular economy**
- **Deployment of renewable electricity**

Refer to Annex D.2 and D.3 to the call text

Check also Excel file GHG calculators, tab "Degree of Innovation"

European Commission

Award criteria - Project maturity



Project maturity

Three sub-criteria:

- **Technical maturity**
- **Financial maturity**
- **Operational maturity**

Technical Maturity – key points

Objective: assess the technical maturity of the proposed projects

Technical feasibility to deliver the expected output and GHG emissions avoidance

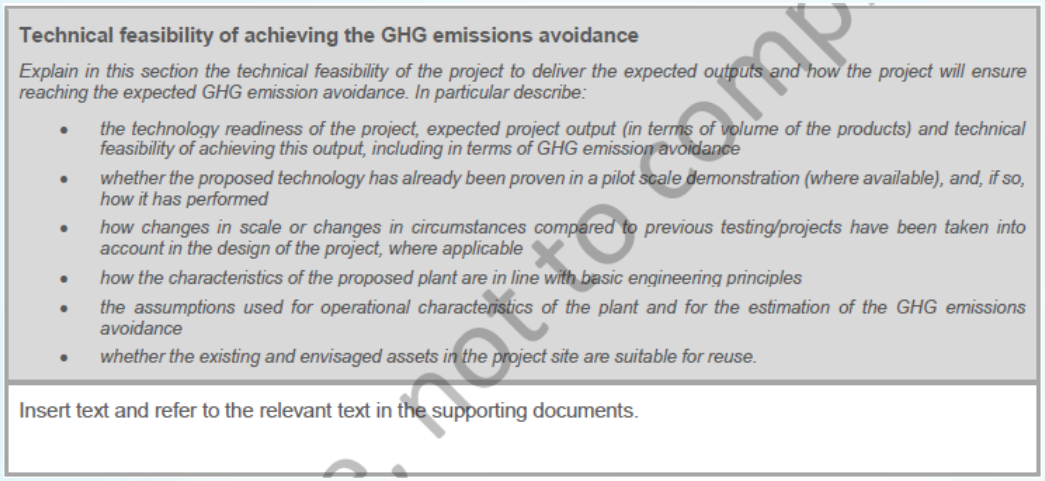
Technology risks and proposed mitigation measures

- **Application form, Part B, sections:**
  - 4.1 (technical maturity)
  - 4.4 (risks and mitigation measures)
  - 1.5 (technical characteristics and scope)
- Feasibility study (mandatory annex)
- Any existing technical due diligence report (optional)

Technical Maturity

Technical feasibility to deliver the expected output and GHG emissions avoidance

Follow the guidance provided in the Application form, section 4.1



Technical feasibility of achieving the GHG emissions avoidance

Explain in this section the technical feasibility of the project to deliver the expected outputs and how the project will ensure reaching the expected GHG emission avoidance. In particular describe:

- *the technology readiness of the project, expected project output (in terms of volume of the products) and technical feasibility of achieving this output, including in terms of GHG emission avoidance*
- *whether the proposed technology has already been proven in a pilot scale demonstration (where available), and, if so, how it has performed*
- *how changes in scale or changes in circumstances compared to previous testing/projects have been taken into account in the design of the project, where applicable*
- *how the characteristics of the proposed plant are in line with basic engineering principles*
- *the assumptions used for operational characteristics of the plant and for the estimation of the GHG emissions avoidance*
- *whether the existing and envisaged assets in the project site are suitable for reuse.*

Insert text and refer to the relevant text in the supporting documents.

Guiding principle / key questions to reply:

- Explain the degree of technology readiness of the proposed solution and the technical feasibility of delivering the expected output (e.g. in terms of volume of the products) and, ultimately, achieving the GHG emissions avoidance within its operational environment. In particular:
  - Whether the proposed technology has already been proven in a pilot scale demonstration
  - The characteristics of the proposed plant: are they credible and in line with basic engineering principles?
  - Present clearly the assumptions used for operational characteristics of the plant and ultimately for for the estimation of the expected outputs: have these been selected in a conservative yet accurate manner, i.e. to avoid under/over estimation of the estimated GHG emissions avoidance?
  - Clear reference to relevant parts of the Feasibility study and other supporting documents.

Technical Maturity

Technology risks and proposed mitigation measures

Follow the guidance provided in the Application form, section 4.1

Technical risks and proposed risk mitigation measures *Describe key risks identified in relation to the technology, the proposed risk mitigation measures and why they are suitable. All risks identified should also be summarised in section 4.4.*
Insert text and refer to the relevant text in the supporting documents.

Guiding principle / key questions to reply:

- Describe key risks identified in relation to the proposed technology, proposed risk mitigation measures and why they are suitable
- Focus on major technical risks
- Moreover, risks identified should be summarised in the risk matrix (section 4.4 application form)
- Underpin your analysis with the feasibility study and provide the risk heat map.

Key risks and mitigation measures

Please list here the risks identified in previous sections that could jeopardise the success of the project. Assess their likelihood and potential impact. Explain how each of them will be mitigated and who is responsible (risk owner). Ensure consistency with previous sections.

Risk number (no.)	Project Phase (Award to FC, FC to Entry into Operation, Operation)	Risk type (Technical, Financial, Operational)	Description of risk (text)	Cause of risk (text)	Consequence rating on a 5-point scale (5: very significant – 1: insignificant)	Likelihood rating on a 5-point scale (5: very likely – 1: very unlikely)	Proposed risk-mitigation measures	Risk owner

European Commission

Technical Maturity

Feasibility study

- The feasibility study is a **Mandatory annex**: it should include information in line with the table of contents indicated in section 8 of the application form:
  - Project description (background information, objectives, expected project outputs, innovation)
  - Location analysis and strategic overlook (site, site plans, stakeholders involvement and acceptance)
  - Technical maturity assessment (technology readiness, feasibility of achieving project outputs)
  - GHG avoidance and key consumptions figures
  - Sustainability of the proposed solution
  - Techno-economic feasibility
  - Risks and mitigation measures (including heat map)

Operational Maturity – key points

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

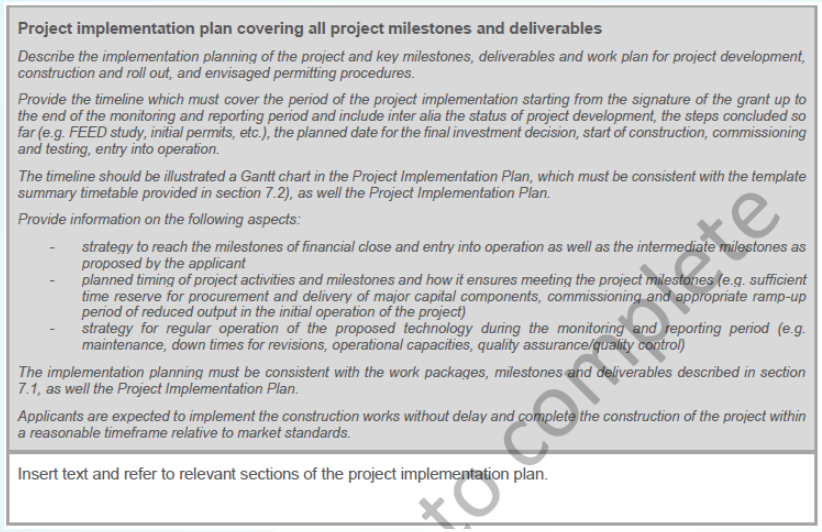
- **Project implementation plan covering all project milestones and deliverables**
- **Project management team and project organisation**
- **Permits, Rights, Licences and Regulatory Procedures**
- **Ensuring public acceptance of the project**
- **Operational risks and proposed mitigation measures**

- **Application form, Part B, sections:**
  - 4.3 - Operational maturity
  - 4.4 - Risks and mitigation measures
  - 4.5 - Project Diagram
  - 7.1 - Activities and work Packages
  - 7.2 - Timetable
- Project Implementation Plan - mandatory annex
- Any existing due diligence report (optional)

Operational Maturity

Credibility and level of detail of project implementation plan covering all project milestones & related deliverables

Follow the guidance provided in the Application form, section 4.3



Project implementation plan covering all project milestones and deliverables

Describe the implementation planning of the project and key milestones, deliverables and work plan for project development, construction and roll out, and envisaged permitting procedures.

Provide the timeline which must cover the period of the project implementation starting from the signature of the grant up to the end of the monitoring and reporting period and include inter alia the status of project development, the steps concluded so far (e.g. FEED study, initial permits, etc.), the planned date for the final investment decision, start of construction, commissioning and testing, entry into operation.

The timeline should be illustrated a Gantt chart in the Project Implementation Plan, which must be consistent with the template summary timetable provided in section 7.2), as well the Project Implementation Plan.

Provide information on the following aspects:

- *strategy to reach the milestones of financial close and entry into operation as well as the intermediate milestones as proposed by the applicant*
- *planned timing of project activities and milestones and how it ensures meeting the project milestones (e.g. sufficient time reserve for procurement and delivery of major capital components, commissioning and appropriate ramp-up period of reduced output in the initial operation of the project)*
- *strategy for regular operation of the proposed technology during the monitoring and reporting period (e.g. maintenance, down times for revisions, operational capacities, quality assurance/quality control)*

The implementation planning must be consistent with the work packages, milestones and deliverables described in section 7.1, as well the Project Implementation Plan.

Applicants are expected to implement the construction works without delay and complete the construction of the project within a reasonable timeframe relative to market standards.

Insert text and refer to relevant sections of the project implementation plan.

to complete

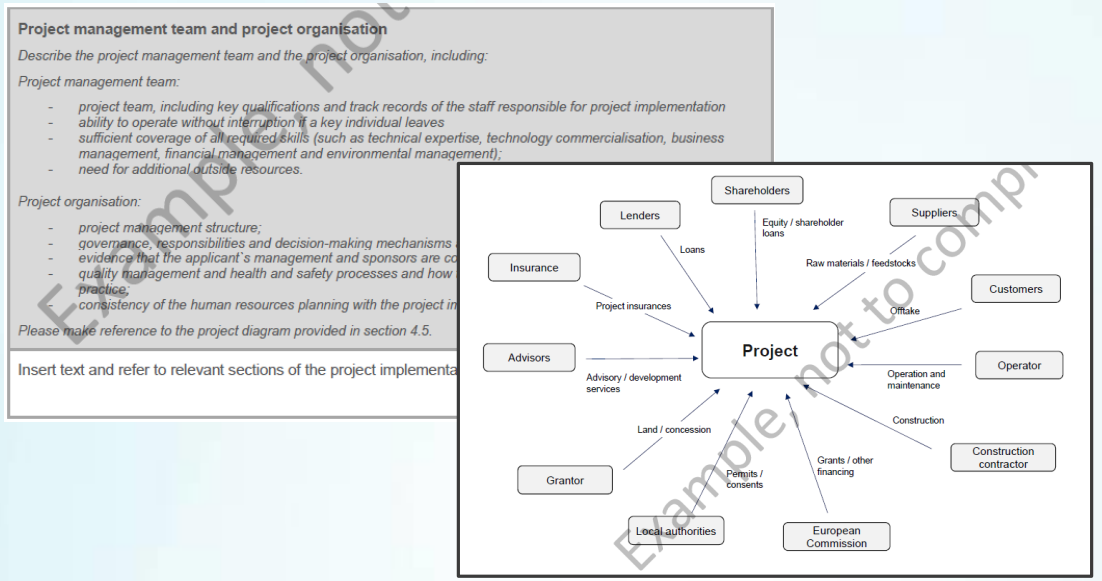
Guiding principle / key questions to reply:

- Project **milestones** must include at least financial close, entry into operation and annual reporting after the entry into operation (guidance provided in Annex F to the call text).
- Provide **timeline** from signature of the grant up to the end of the operation period; **check consistency** with summary timetable in section 7.2 and Gantt chart provided in the Project Implementation Plan.
- **key aspects**: strategy to reach milestones of financial close and entry into operation; ensure timing of planned activities during plant construction; regular operation of the technology during operation period
- implementation planning **consistent** with work packages, milestones and deliverables described in **section 7.1**, as well the Project Implementation Plan.

Operational Maturity

Relevance & track record of project management/team and soundness of the project organisation

Follow the guidance provided in the Application form, section 4.3 and 4,5



Project management team and project organisation

Describe the project management team and the project organisation, including:

Project management team:

- *project team, including key qualifications and track records of the staff responsible for project implementation*
- *ability to operate without interruption if a key individual leaves*
- *sufficient coverage of all required skills (such as technical expertise, technology commercialisation, business management, financial management and environmental management);*
- *need for additional outside resources.*

Project organisation:

- *project management structure;*
- *governance, responsibilities and decision-making mechanisms*
- *evidence that the applicant's management and sponsors are co*
- *quality management and health and safety processes and how*
- *practice;*
- *consistency of the human resources planning with the project in*

Please make reference to the project diagram provided in section 4.5.

Insert text and refer to relevant sections of the project implementa

Guiding principle / key questions to reply:

- Project management team, e.g.: key qualifications and track record; sufficient coverage of all necessary skills; provide justifications on the need for additional outside resources
- Project organisation, e.g. project management structure; governance, responsibilities and decision-making mechanisms and processes within the consortium; quality management, health and safety
- Provide a project diagram visualising the involved actors and organisation of the project (Section 4.5).
- Make reference to relevant parts of the Project Implementation Plan.

Operational Maturity

State of play and credibility of the plan for obtaining required permits, IPR or licences and other regulatory procedures

Follow the guidance provided in the Application form, section 4.3

Permits, Rights, Licences and Regulatory Procedures
Describe in detail the regulatory framework impacting the project, any intellectual property rights or licence and other relevant regulatory procedures, relevant permitting processes needed (including permits related to environmental impacts), permits obtained and still needed and the plan for obtaining them.
Include a timeline indicating the relevant permit application dates, expected reception dates and measures planned to ensure timely granting.
Insert text and refer to relevant sections of the project implementation plan.

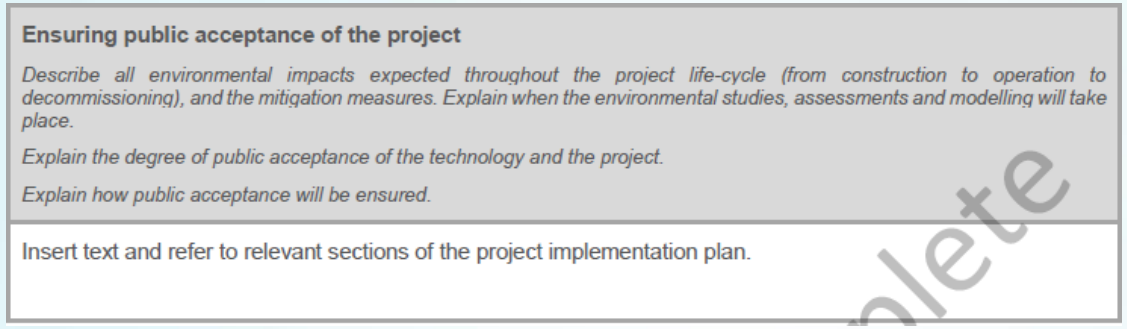
Guiding principle / key questions to reply:

- Key aspects to be covered: detailed analysis of the regulatory framework; any intellectual property rights or licence; other relevant regulatory procedures; relevant permitting processes needed (including permits related to environmental impacts);
- State of play: description of permits already obtained and still needed and the plan for obtaining them, including timeline indicating the relevant permit application dates, expected reception dates and measures planned to ensure timely granting
- Make reference to relevant parts of the Project Implementation Plan.

Operational Maturity

Soundness of the strategy for ensuring public acceptance

Follow the guidance provided in the Application form, section 4.3



Ensuring public acceptance of the project

Describe all environmental impacts expected throughout the project life-cycle (from construction to operation to decommissioning), and the mitigation measures. Explain when the environmental studies, assessments and modelling will take place.

Explain the degree of public acceptance of the technology and the project.

Explain how public acceptance will be ensured.

Insert text and refer to relevant sections of the project implementation plan.

Guiding principle / key questions to reply:

- Detailed description of all environmental impacts expected throughout the whole project life-cycle (from construction to operation to decommissioning), and associated mitigation measures;
- Degree of public acceptance of the technology and the project.
- Clear and specific strategy on how public acceptance will be ensured (please do not limit to generic explanations of the issue).
- Make reference to relevant parts of the Project Implementation Plan.

Operational Maturity

Project implementation risks and credibility of proposed mitigation measures

Follow the guidance provided in the Application form, section 4.3

Operational risks and proposed mitigation measures *Detailed description of the project's operational risks and the proposed risk mitigation measures. Include all known risks associated with construction, project design, operation and decommissioning, relevant to the project technology, category and sector.* *Explain how risks (including timing, weather conditions, commissioning conditions, unexpected or undesired events) are taken into account in the project planning and strategy and the proposed mitigation measures.* *Description of measures proposed to handle any potential forced outages (e.g. power plant, capture or separation plant, compression plant, transportation, energy or CO_2 storage site) and operational interdependencies of all parts along the project value chain.* *All identified risks should also be summarised in section 4.4.*
Insert text and refer to relevant sections of the project implementation plan.

Guiding principle / key questions to reply:

- Describe key project implementation risks (e.g. related to construction, project design, operation & decommissioning)
- Propose convincing risk mitigation measures and explain in detail why they are suitable
- Summarise the identified risks in the risk matrix in section 4.4 of the application form
- Underpin your analysis with the Project implementation Plan, in particular the risk heat map.

Key risks and mitigation measures

Please list here the risks identified in previous sections that could jeopardise the success of the project. Assess their likelihood and potential impact. Explain how each of them will be mitigated and who is responsible (risk owner). Ensure consistency with previous sections.

Risk number (no.)	Project Phase (Award to FC, FC to Entry into Operation, Operation)	Risk type (Technical, Financial, Operational)	Description of risk (text)	Cause of risk (text)	Consequence rating on a 5-point scale (5: very significant – 1: insignificant)	Likelihood rating on a 5-point scale (5: very likely – 1: very unlikely)	Proposed risk-mitigation measures	Risk owner

European Commission

Operational Maturity

Project Implementation Plan

- The **Project Implementation Plan** is a **Mandatory annex**: it should include information in line with the table of contents indicated in section 8 of the application form:
  - Project work plan (Work packages descriptions, time schedule, deliverables, milestones)
  - Gantt chart covering the duration of the project from grant signature to the end of monitoring period
  - Project management team and structure (project organisation, team, governance, HSE).
  - Framework conditions (status/plan for permit, licences, authorisations, regulatory procedures, e.g. in tabular format)
  - Environmental impacts and public acceptance
  - Risks and mitigation measures (including heat map)

Financial Maturity – key points

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

- **Project business plan and profitability**
- **Soundness of the financing plan**
- **Commitment of project funders**
- **Understanding of project financial risks**

Financial Maturity – key points

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

Relevant sections of the proposal and relevant annexes

- **Application form, Part B, sections:**

  4.2 (Financial maturity)

  4.4 (Risks and mitigation measures)

  4.5 (Project diagram)

  7 Work packages, activities, milestones

- Mandatory annexes : Business Plan (including support documents and financial statements of the project shareholders), Financial Model Summary Sheet, Applicant's Financial Model (xls)

- Any existing due diligence report (optional)

Financial Maturity

Business Model => Business Plan

- Credibility of the business model and business plan :
  - Describe the proposed project business model, including the project competitive advantage, targeted market(s) and products, barriers to entry and how it addresses market gaps
  - Fully describe and substantiate the main revenues and cost assumptions (CAPEX and OPEX). Include a detailed breakdown and description of prices and volumes assumed (attach any available due diligence)
  - Describe the strategy to secure key contracts with off-takers, key suppliers, construction contractors… Where available, provide contractual evidence for example letters of support, indicative terms from MoU's,..
  - Justify the cost contingencies assumed and ensure that they are in line with market practice in your sector

Financial Maturity

Business Plan => Financial Model

- Robustness of the cash flow projections and project profitability
  - Ensure that the financial projections are coherent with the assumptions of the business plan and across the other application documents
  - Fill in the Financial Model Summary Sheet and make sure the data are coherent with your own financial model and the figures used in the Relevant Cost calculation template
  - Describe project returns over the entire project lifetime with/without the grant and compare it to the WACC
  - Ensure that assumptions used for WACC adequately reflect the project risks

Financial Maturity

Soundness of Financing Plan

- Project Financial Close must be reached 4 years after signing of the Grant Agreement

  ⇒ justify the planned date for Financial Close, clearly describe the work packages, milestones and deliverables up to that date and explain how the project will be financially prepared to enter into operation as expected

- Demonstrate financial viability of your project. Does the financing plan cover construction costs and potential negative operational cash flows?

- If you assume to raise external debt in your financing plan, justify the key terms and that it is in line with market standards. Ensure that the level of debt assumed is supported with stable cash flows to be demonstrated by long-term off-take contracts. If possible, letters from banks substantiating the conditions is always a plus.

- Describe the funding structure including an organizational chart highlighting the main legal entities and where the debt (if any) will be raised (will it be recourse/non recourse?)

- Make sure that grant disbursement is in line with the call text

Financial Maturity

Commitment of project funders

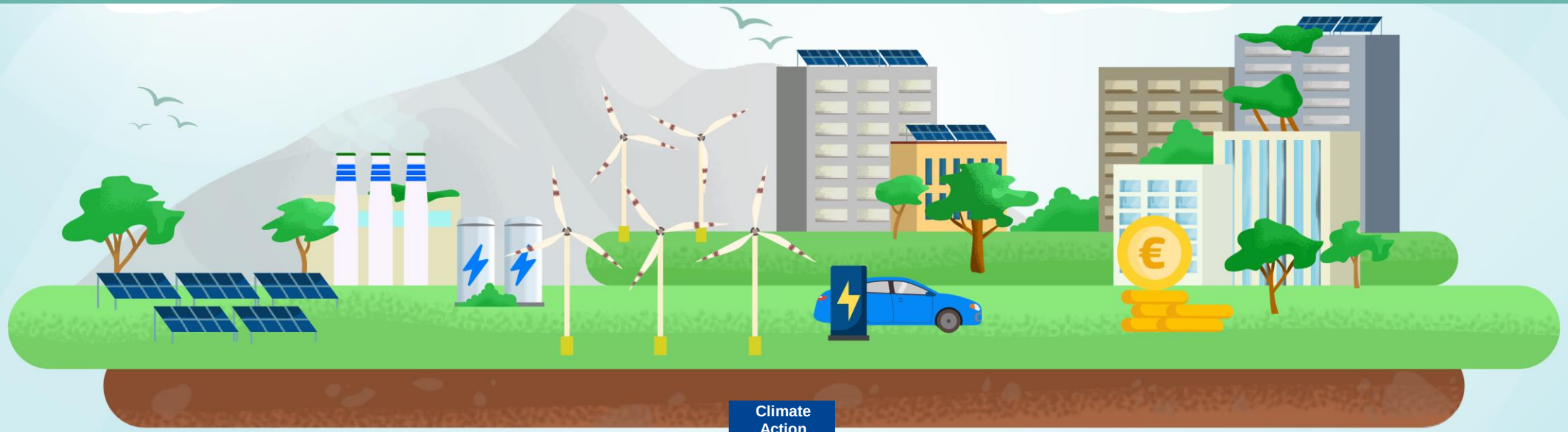
- Describe the state-of-play, nature, level and conditions of support provided by project funders.
- Provide corresponding evidence like letters of interest/support, letters of approval from funders/shareholders or board confirming the support of the financing plan.
- Support from other sources including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

Financial Maturity

Business and financial risks

- Provide a description of the main business and financial risks with the appropriate mitigation measures.
- Underpin your analysis with the business plan and provide a risk heat map.
- Describe contingency planning and/or contingency funding to cover downside scenarios like lower green price premium, sales growth or lower than. anticipated price increase, higher construction cost, absence of additional grant
- Fill in the risk matrix in section 4.4 of the application form part B.

Award criteria – Scalability



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

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

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

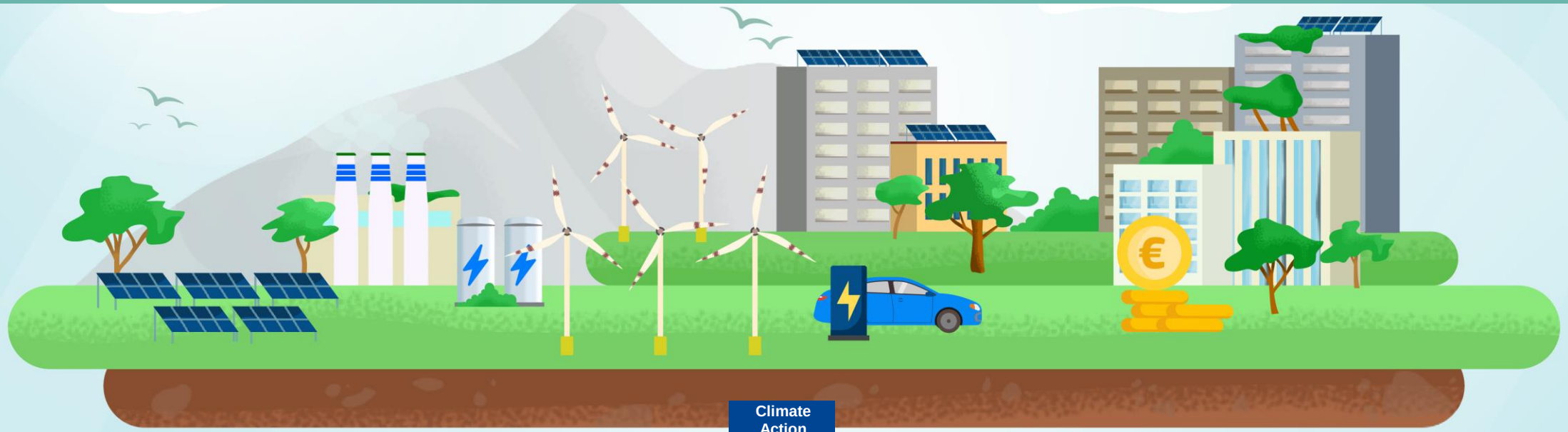
- Knowledge-sharing is an obligation of the grant award: failure to comply means that the grant award may be adjusted
- But no obligation to disclose if risk of reverse engineering/ability to obtain patent
- Knowledge-sharing will start after grant signature, i.e. includes the periods to financial close 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

Award criteria - cost efficiency



Cost Efficiency

Grant amount

=

Absolute GHG emission avoidance

During 10 years after entry into operation

Maximum grant is 60% of total relevant costs

Applicants which choose not to apply for the maximum grant may be more competitive when ranked against other applicants in cost efficiency

- Application form Part B section 6 and Relevant Cost Template (Mandatory Annex)