

# Technical Maturity

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# Technical Maturity

Technical feasibility to deliver the expected output and GHG emissions avoidance

Technology risks and proposed mitigation measures

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

- Section 0: technical characteristics and scope / technology scope
- 3.1 (technical maturity)
- 3.4 (risk management)
- Feasibility study (mandatory annex)
- Any existing technical due diligence report (optional)

# Technical Maturity – technical feasibility

## 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).
- In particular:
  - Has the technology already been proven in a pilot scale demonstration?
  - Are the characteristics of the proposed plant credible and in line with basic engineering principles?
  - Provide robust and credible assumptions used for operational characteristics of the plant and estimation of the expected outputs
  - Provide clear reference to relevant parts of the Feasibility study and other supporting documents.

### Technical feasibility

Explain 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 of the supporting documents.

# Technical Maturity - risks

## Guiding principle / key questions to reply:

- Describe key risks identified in relation to the proposed technology/process,
- Describe the proposed risk mitigation measures and explain why they are suitable
- Moreover, risks identified should be summarised in the risk table (section 3.4 application form)
- Underpin your analysis with the feasibility study and provide the risk heat map

### 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.*

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

### Critical risks and risk management strategy

*List critical risks, uncertainties or difficulties related to the implementation of your project, and your measures/strategy for addressing them.*

*Indicate for each risk (in the description) the impact and the likelihood that the risk will materialise (high, medium, low), even after taking into account the mitigating measures.*

**Note:** *Uncertainties and unexpected events occur in all organisations, even if very well-run. The risk analysis will help you to predict issues that could delay or hinder project activities. A good risk management strategy is essential for good project management.*

Risk No	Description	Work package No	Proposed risk-mitigation measures

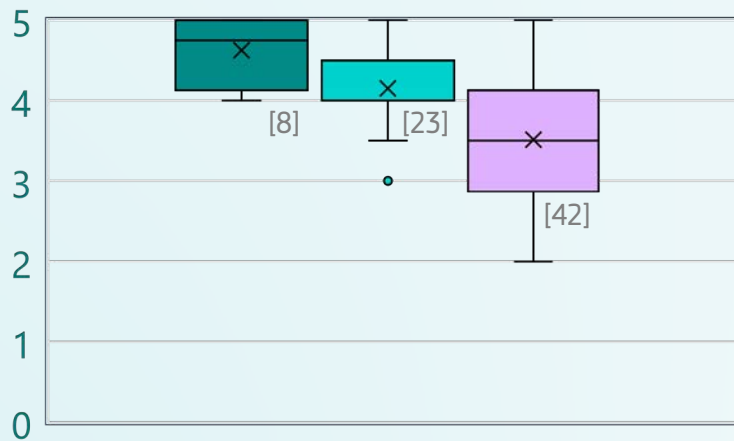
# Feasibility study

- The feasibility study should include information in line with the minimum content indicated in section 5 of the call text:
  - Project description (background information, objectives, resource and feedstock availability and yield potential, expected project outputs, innovation)
  - Location analysis and strategic overlook (site, site plans, stakeholders' involvement and acceptance)
  - Technical maturity assessment (technology readiness, technology process, suppliers of technology, feasibility of achieving project outputs)
  - GHG avoidance and key consumptions figures
  - Environmental and socio-economic impacts and mitigation measures
  - Techno-economic feasibility
  - Risks and mitigation measures (including heat map)

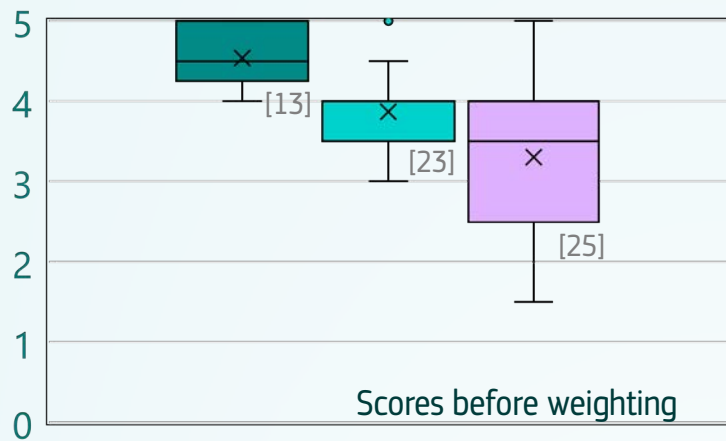
# Technical maturity

## Scores per topic LSC-2022

GENERAL



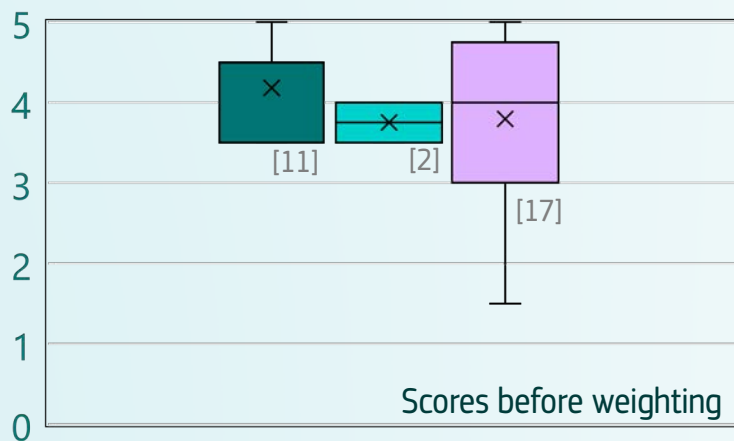
IND. -H2- ELEC



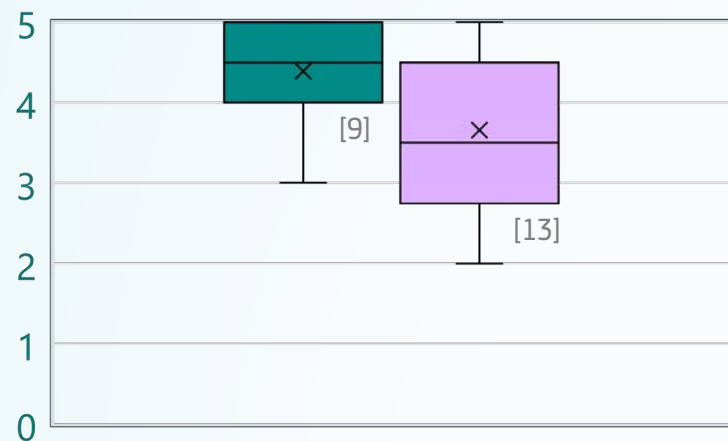
Proposals evaluated

- Pre-selected for grant preparation
- Beyond available budget
- Not meeting minimum thresholds

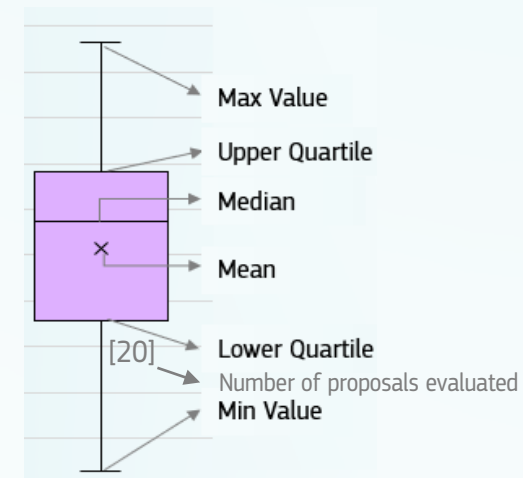
MANUFACTURING



PILOTS



How to interpret these graphs



# Lessons learned - Technical maturity

## Describe readiness level

- Actual readiness level of your technology
- Be concise
- Provide **key facts and figures**

## Identify

- Relevant data – from your previous stages: pilots / projects...
- Include all relevant critical **risks** and **mitigation** strategies

## Provide evidence ->Feasibility study, other docs

- Due diligence report
- Procurement quotes
- MoU
- Signed letters of intents/ support

Ensure **consistency** between documents:  
Feasibility study, business plan, GHG calculations

Resubmissions are welcome, especially when TRL is improving