INNOVATION FUND TECHNICAL WORKSHOP 12 MARCH 2020

ON PROJECT INNOVATION, MATURITY AND SCALABILITY SELECTION CRITERIA, PROJECT DEVELOPMENT ASSISTANCE AND KNOWLEDGE SHARING

Agenda

1. Overview of selection criteria and process

2. Degree of innovation

3. Project maturity and due diligence

4. Scalability

5. Project development assistance (PDA)
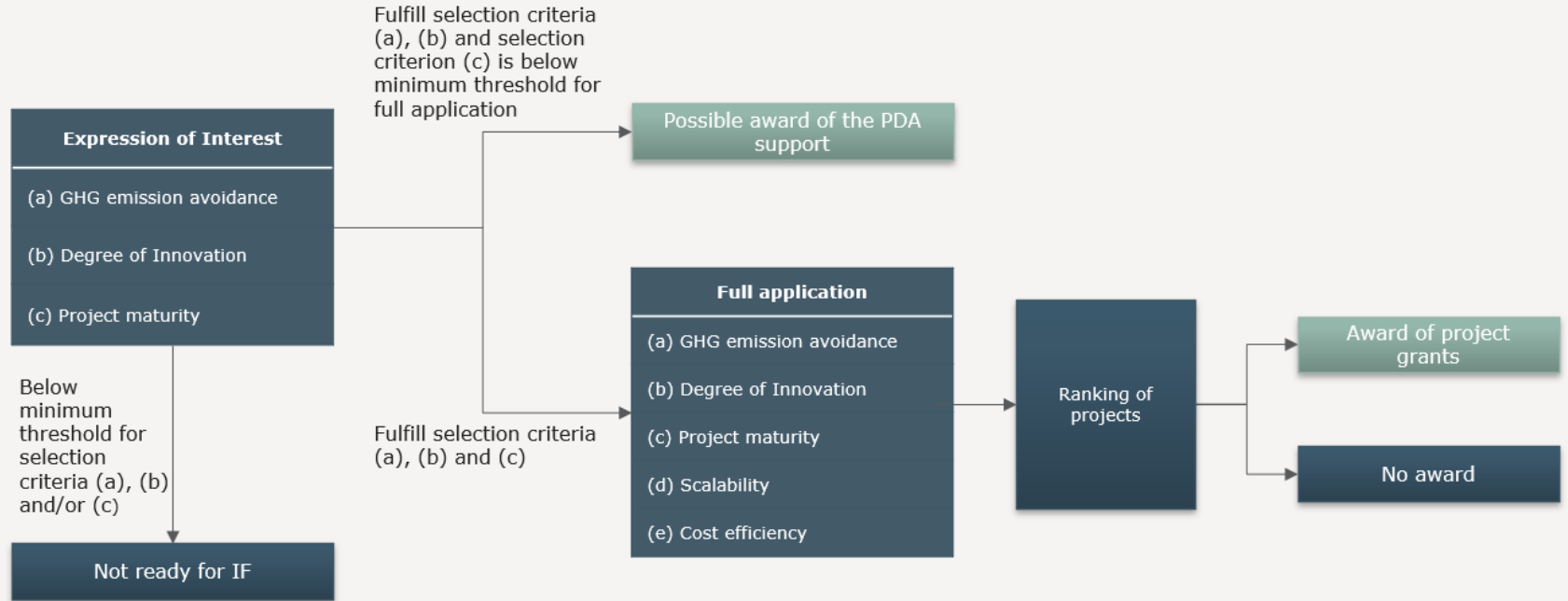
6. Knowledge sharing

COWI

Overview of selection criteria and process

COWI

Overview of selection criteria

Selection Criteria	EOI	Full Application (FA)
Effectiveness of GHG avoidance	Quantitative assessment (ready for IF / not ready for IF)	Quantitative assessment (score as input to ranking)
Degree of innovation	Qualitative assessment with thresholds (ready for IF / not ready for IF)	Qualitative assessment (how much beyond the state of the art) and Quantitative assessment (contribution to 2050 GHG avoidance) (score as input to ranking)
Project maturity	Quantitative assessment with thresholds (ready for Full Application/ recommended for PDA/ not ready for IF)	Quantitative assessment (score as input to ranking)
Scalability	Not included at EOI stage	Quantitative assessment (score as input to ranking)
Cost efficiency	Not included at EOI stage	Quantitative assessment (EUR/tCO2 avoided) (score as input to ranking)

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Overview of selection process

Expression of Interest

(a) GHG emission avoidance

(b) Degree of Innovation

(c) Project maturity

Below minimum threshold for selection criteria (a), (b) and/or (c)

Not ready for IF

Fulfill selection criteria (a), (b) and selection criterion (c) is below minimum threshold for full application

Possible award of the PDA support

Fulfill selection criteria (a), (b) and (c)

Full application

(a) GHG emission avoidance

(b) Degree of Innovation

(c) Project maturity

(d) Scalability

(e) Cost efficiency

Ranking of projects

Award of project grants

No award

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Degree of innovation
(EOI and Full Application)

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Key principles

Assessment by evaluator based on information provided by applicant:

Extent to which technologies / products / business models in proposal projects are innovative in relation to the state-of-the-art

Extent to which projects are consistent with EU policy framework

GHG emission avoided in 2050

COWI

Suggested sub-criteria for EOI & full application

Sub-criteria	Assessment by evaluator based on information provided by applicant
Extent to which technologies / products / business models in proposal projects are innovative in relation to the state-of-the-art	Assessment of degree of innovation based on separate description of following aspects: > Extent to which technology / product / business model is beyond state of art > Quality of analysis of technology / product / business model innovation
Extent to which projects are consistent with EU policy framework	2050 emission avoidance calculation and supporting qualitative description
	Consistency with EU's long-term strategy (low/medium/high)
	Consistency with the SET plan (low/medium/high)
	Consistency with Industrial Policy Strategy from 2017 and any subsequent updates/new EU industrial policy as relevant (low/medium/high)
	Consistency with the sustainability goals (SDGs) (low/medium/high)

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Selection criterion: Degree of innovation

SLIDO questions

Question A	Which of these sub-criteria is the most important?
Choose one option	1. Extent to which technologies / products / business models in proposal projects are innovative in relation to the state-of-the-art
	2. Consistency with EU policy framework - 2050 emission avoidance calculation
	3. Consistency with EU policy framework - strategies and plans

Question B	Are there important aspects which are not covered by the sub-criteria?
	Please provide comments in text field

Question C	Are there some of the sub-criteria which are not important?
	Please provide comments in text field

COWI

Suggested sub-criteria for EOI & full application

Which of these sub-criteria is the most important?   1 2 0

Extent to which technologies / products / business models in proposal projects are innovative in relation to the state-of-the-art

56 %

Consistency with EU policy framework - 2050 emission avoidance calculation

34 %

Consistency with EU policy framework - strategies and plans

10 %

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Proposed minimum cut-offs

1) The proposed technology/product must not be commercially available

2) Projects must be consistent with a least EU's long-term strategy and the SET plan.

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SLIDO questions

Question D	**Are the minimum cut-offs appropriate?** › **The proposed technology/product must not be commercially available** › **Projects must be consistent with at least EU's long-term strategy and the SET plan**
Choose one option	1. Both are appropriate
	2. The first is appropriate - but not the second
	3. The second is appropriate - but not the first
	4. None of the two are appropriate
	Please provide comments in text field

COWI

Proposed minimum cut-offs

1) The proposed technology/product must not be commercially available

2) Projects must be consistent with a least EU's long-term strategy and the SET plan.

Are the minimum cut-offs appropriate? 1) The proposed technology/product must not be commercially available 2) Projects must be consistent with at least EU's long-term strategy and the SET plan

`1` `1` `1`

Both are appropriate
41 %

The first is appropriate - but not the second
6 %

The second is appropriate - but not the first
43 %

None of the two are appropriate
9 %

COWI

Project maturity and due diligence

(EOI and Full Application)

Key principles for project maturity

Assessment by evaluator based on information provided by applicant:

Project maturity in terms of planning, business model, financial and legal structure as well as the prospect of reaching the financial close within a predefined period of time not exceeding four years after the award decision.

Due diligence, with requirement for disclosure of supporting documents.
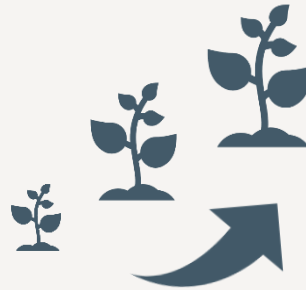
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Suggested sub-criteria for EOI stage (1 of 2)

Sub-criteria	Assessment by evaluator based on information provided by applicant
Feasibility study available	Available in good quality / available in lesser quality / not available
Business plan available	Available in good quality / available in lesser quality / not available
FEED study available	Completed / partially completed (or planned as part of project) / not available
Regulatory framework required for project	Regulatory framework required for project in place / under development / not available
Acquisition of project site	Acquired / identified but not acquired / not identified

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Suggested sub-criteria for EOI stage (2 of 2)

Sub-criteria	Assessment by evaluator based on information provided by applicant
Commitment by investors	Percentage of needed funding from investors for which conditional commitment is available in writing
Project management	Robust project management with strong track record / unclear project management /weak project management
Permits cleared	Share of necessary permits and other environmental clearance granted + 25% of share of other necessary permits applied for. Plan for permitting is clear, detailed and realistic.
Due diligence report	Technical and financial due diligence report, possibly certified by third party available / not available
Conditional final investment decision	FID and full third-party investment commitment available in writing with IF support as only (major) condition

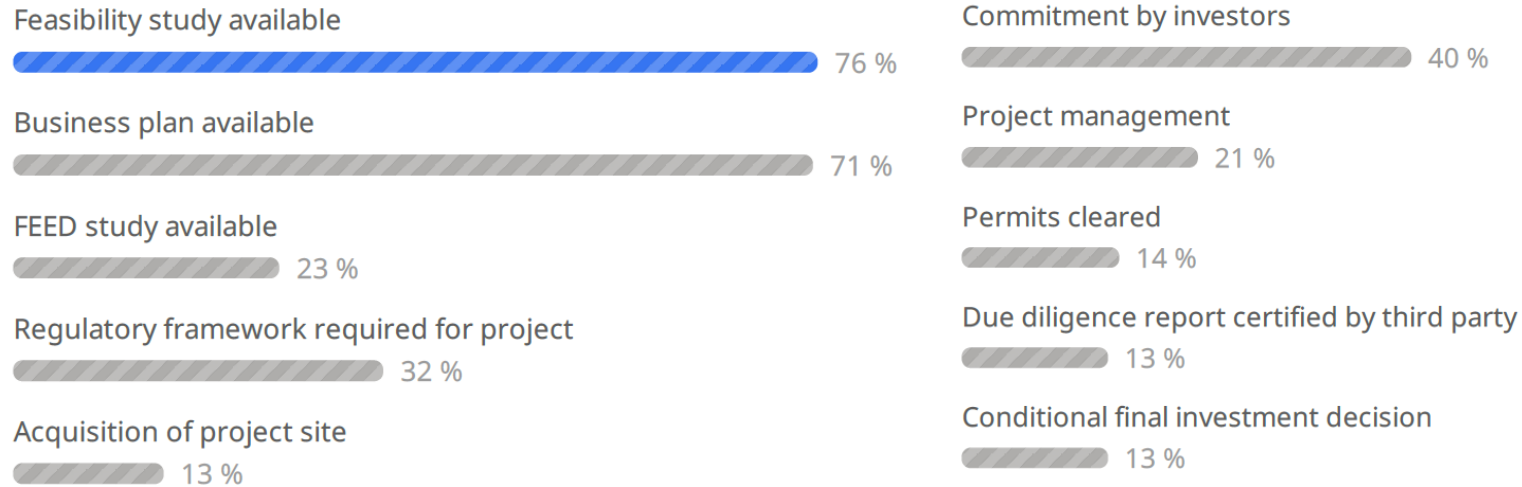**COWI**

SLIDO questions

Question A	Which of these sub-criteria at the EOI stage are the most important?
Choose three or more options option	Feasibility study available
	Business plan available
	FEED study available
	Regulatory framework required for project
	Acquisition of project site
	Commitment by investors
	Project management
	Permits cleared
	Due diligence report certified by third party
	Conditional final investment decision

COWI

Suggested sub-criteria for EOI stage

Which of these sub-criteria at the EOI stage are the most important? `1` `1` `2`

Feasibility study available
76 %

Business plan available
71 %

FEED study available
23 %

Regulatory framework required for project
32 %

Acquisition of project site
13 %

Commitment by investors
40 %

Project management
21 %

Permits cleared
14 %

Due diligence report certified by third party
13 %

Conditional final investment decision
13 %

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Selection criterion: Project maturity and due diligence

SLIDO questions

Question B	Are there important aspects which are not covered by the sub-criteria?
	Please provide comments in text field

Question C	Are there some of the sub-criteria which are not important?
	Please provide comments in text field

Question D	Can any of the sub-criteria be shifted to second stage applications, in order to lighten the EOI application?
	Please provide comments in text field

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Minimum cut-offs at EOI stage

For proceeding to Full Application

> An assessment by the evaluators based on the information provided by the applicant confirms that project is likely to reach financial close within four years.

For recommending the project for PDA support
(subject to further assessment by the EIB)

> The projects should as a minimum have a feasibility study and an indicative business plan, and these should be of sufficient quality.

> Further, PDA support needs to be identified as relevant for the project by evaluators (i.e. that the PDA can lead to improved maturity of the project).

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Selection criterion: Project maturity and due diligence

SLIDO questions

Question E	**Is the minimum cut-off for proceeding to Full Application appropriate?** › **Project is likely to reach financial close within four years (assessment by the evaluators based on the information provided by the applicant)**
Choose one option	1. Yes
	2. No
	Please provide comments in text field

Question F	**Are the minimum cut-offs for recommending the project for PDA support appropriate?** › **Project has a feasibility study and an indicative business plan (both of sufficient quality)** › **PDA can lead to improved maturity of the project**
Choose one option	1. Yes
	2. No
	Please provide comments in text field

COWI

Minimum cut-offs at EOI stage – For proceeding to Full Application

> An assessment by the evaluators based on the information provided by the applicant confirms that project is likely to reach financial close within four years.

Is the minimum cut-off for proceeding to Full Application appropriate? (Project is likely to reach financial close within four years - assessment by the evaluators based on the information provided by the applicant)

`0` `9` `0`

Yes
91 %

No
9 %

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Minimum cut-offs at EOI stage - For recommending the project for PDA support

> › The projects should as a minimum have a feasibility study and an indicative business plan, and these should be of sufficient quality.
>
> › Further, PDA support needs to be identified as relevant for the project by evaluators (i.e. that the PDA can lead to improved maturity of the project).

Are the minimum cut-offs for recommending the project for PDA support appropriate? (Project has a feasibility study and an indicative business plan; PDA can lead to improved maturity of the project)

0 8 2

Yes
95 %

No
5 %

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Suggested sub-criteria for Full Application

Sub-criteria	Assessment by evaluator based on information provided by applicant
Nine EOI sub-criteria (ref. EOI slide, minus due diligence)	Quantitative assessment as during EOI. *(The due diligence report is no longer included here, as becomes a full-fledge part of the evaluation at full application stage)*
Due Diligence Assessment (ref. next slides)	Further assessment of project maturity based on a due diligence report prepared by a third party - or similar information provided by the applicant in the Application Forms.

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Selection criterion: Project maturity and due diligence

SLIDO questions

Question G	Should Due Diligence be treated as a sub-criterion in itself or shall it serve to underpin the evaluation of the other sub-criteria?
Choose one option	1. Yes - also a separate sub-criteria
	2. No - only to underpin the evaluation of the other sub-criteria
	Please provide comments in text field

COWI

Suggested sub-criteria for Full Application

Sub-criteria	Assessment by evaluator based on information provided by applicant
EOI sub-criteria	Quantitative assessment as during EOI.
Due Diligence Assessment	Further assessment of project maturity based on a due diligence report prepared by a third party - or similar information provided by the applicant in the Application Forms.

Should Due Diligence be treated as a sub-criterion in itself or shall it serve to underpin the evaluation of the other sub-criteria? 0 9 9

Yes - also a separate sub-criteria

34 %

No - only to underpin the evaluation of the other sub-criteria

66 %

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Key principles for Due Diligence

> A due diligence assessment is a complete assessment of a project covering technical scope, costs, financing, implementation, operational, environmental impact, and procurement procedures.

> At the Full Application stage, a due diligence assessment will contribute to ensure that projects are evaluated based on comprehensive and relevant information and subsequently selected on the basis of objective and transparent criteria.

> To ensure transparent and robust evaluation, applicants will be asked to provide a due diligence report, either produced by itself or by a third party.

> The evaluators will review and assess the content of the due diligence report and this information will provide input to the scoring of the selection criteria.

COWI

Suggested approach for Due Diligence

Process for due diligence at the full application stage:

› To ensure transparent and robust evaluation, applicants will be asked to provide a due diligence report, either produced by itself or by a third party.

› The evaluators will review and assess the content of the due diligence report and this information will provide input to the scoring of the selection criteria.

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Minimum requirements for Due Diligence

Technical due diligence
› Is the project likely to be technically viable, based on assessment of technical scope, plans for project implementation, plans for project operation, assessed costs and benefits, analysis of regulatory steps that are necessary for commercial operation, risk assessment and mitigation plans

Financial due diligence
› Is the project fundable/bankable, based on project financial model, financial standing of project sponsors, expected revenues and costs, project financing plan and financial structure

Environmental due diligence
› Are environmental impacts during construction and operation adequately identified and their risks assessed and mitigated, are necessary environmental permits clearly identified and a clear strategy for obtaining them outlined

Project management due diligence
› Is the project organization and management sufficiently strong, are implementation plan, procurement procedures, commercial agreements, contractual risk mitigants (warranties & insurances) sufficiently developed

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Selection criterion: Project maturity and due diligence

SLIDO questions

Question H	Could the due diligence assessment be performed by the applicant itself or should it be mandatory to submit a due diligence report certified by a third party?
Choose one option	It should be mandatory to submit a due diligence report prepared by a certified third party
	The applicants should have the option to provide similar information as an integrated part of the Application Forms
	Please provide comments in text field

COWI

Due Diligence

Could the due diligence assessment be performed by the applicant itself or should it be mandatory to submit a due diligence report certified by a third party?   `0` `9` `1`

It should be mandatory to submit a due diligence report prepared by a certified third party

27 %

The applicants should have the option to provide similar information as an integrated part of the Application Form

73 %

…but a third party due diligence will be scored higher

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Scalability
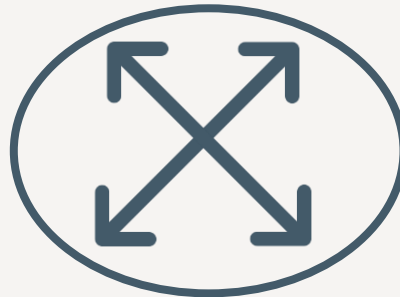## (Full Application only)

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Key principles

Assessment by evaluator based on information provided by applicant:

Technical and market potential
for widespread application or replication, or future cost reductions

- at the project level
- for the technology / product towards 2050

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Suggested sub-criteria for full application

Sub-criteria		Assessment by evaluator based on information provided by applicant
Scalability at the project level	Scale of demonstration	Immediate scalability opportunities based on results of IF project based on sector coupling, cluster, or scaling the project at same/adjacent site
Scalability of technology/ product towards 2050	Sectors	Applicable in large or multiple sectors before and after 2050 / large or multiple sectors 2030 - 2050 / site specific or small sector
	Regions	Potential is global / EU / national
	Synergies	Supply chain for project well established / partly established / not established
	Production cost in 2050 compared to current level	Expected unit cost reduction of more than 50% / 20-50% / Less than 20%
	Resource limitation	No resource limitation / resource limitation after 2050 / resource limitation before 2050
	Knowledge sharing plan	Approach to knowledge sharing is high quality / medium quality / low quality

COWI

Selection criterion: Scalability

SLIDO questions

Question A	Which of these sub-criteria is the most important?
Choose three options	1. Immediate scalability opportunities at the project level
	2.1 Scalability towards 2050 – Across sectors
	2.2 Scalability towards 2050 – Across regions
	2.3 Scalability towards 2050 – Supply chain available
	2.4 Scalability towards 2050 - Production cost in 2050 reduced compared to current level
	2.5 Scalability towards 2050 – No resource limitation
	2.6 Scalability towards 2050 – Knowledge sharing approach

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Suggested sub-criteria for full application

Which of these sub-criteria is the most important? `1` `0` `8`

Immediate scalability opportunities at the project level
56 %

Scalability towards 2050 – Across sectors
42 %

Scalability towards 2050 – Across regions
54 %

Scalability towards 2050 – Supply chain available
31 %

Scalability towards 2050 - Production cost in 2050 reduced compared to current level
41 %

Scalability towards 2050 – No resource limitation
29 %

Scalability towards 2050 – Knowledge sharing approach
12 %
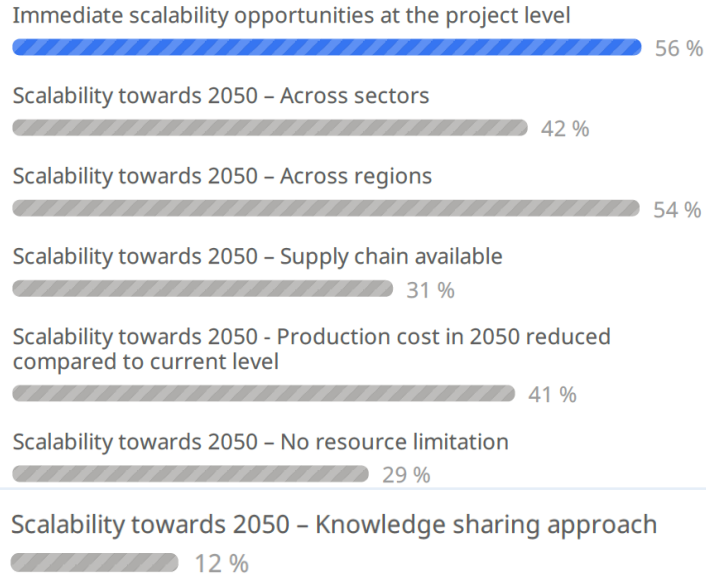
Should there be a minimum cut-off for the selection criterion scalability? (This would ensure that a project that is not scalable can not be selected for grant award even though it may have a high score on other selection criteria) `0` `8` `6`

Yes
69 %

No
31 %
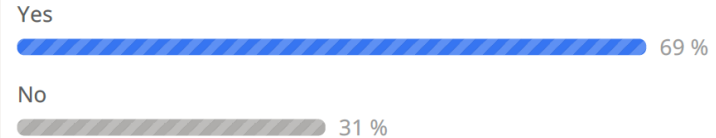
"Include requirement for a solid commercialisation roadmap"

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Selection criterion: Scalability

SLIDO questions - optional

Question B	Are there important aspects which are not covered by the sub-criteria?
	Please provide comments in text field

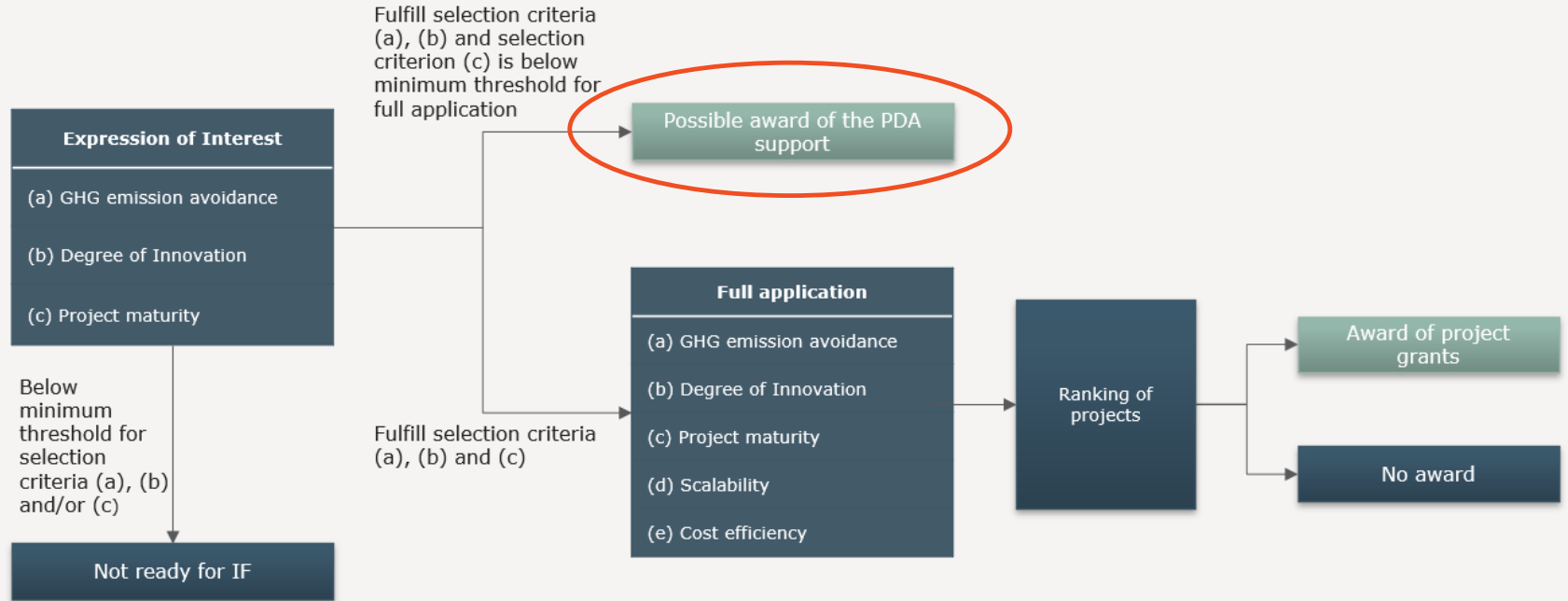| Question C	Are there some of the sub-criteria which are not important?
	Please provide comments in text field

Question D	Should there be a minimum cut-off for the selection criterion scalability? This would ensure that a project that is not scalable can not be selected for grant award even though it may have a high score on other selection criteria
Choose one option	1. Yes - there should be a minimum cut off for scalability
	2. No - there should not be a minimum cut off for scalability
	If Yes, please specify

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Project development assistance (PDA)

COWI

The role of PDA

Expression of Interest

(a) GHG emission avoidance

(b) Degree of Innovation

(c) Project maturity

Below minimum threshold for selection criteria (a), (b) and/or (c)

Not ready for IF

Fulfill selection criteria (a), (b) and selection criterion (c) is below minimum threshold for full application

Possible award of the PDA support

Fulfill selection criteria (a), (b) and (c)

Full application

(a) GHG emission avoidance

(b) Degree of Innovation

(c) Project maturity

(d) Scalability

(e) Cost efficiency

Ranking of projects

Award of project grants

No award

COWI

Key principles

› For promising projects in the EOI stage yet not sufficiently mature

› PDA process is a preparatory stage for a future IF call for EOIs

› PDA may be provided to projects identified as relevant i.e. where the PDA support may improve the project maturity (but PDA cannot solve all project problems)

› PDA will be subtracted from future grant awards

› Available for large and small projects

› Independently run by EIB subject to further decision-making process.

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PDA can contribute

> Improvement and development of a project documentation, or of components of the project design, with a view to ensuring the maturity of the project (i.e. preparation of FEED study elements)

> Assessment of the feasibility of the project (including market research, technology assessment, or the technical and economic Due Diligence where missing)

> Advice on the financial and legal structure of the project (i.e. off-take contract preparation)

> Capacity building of the project proponent (i.e. MRV system implementation)

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Proposed types of PDA

Technical	Financial	Legal
> Preparation for FEED Study	> Capital structure	> Process management
> Third-party due diligence report	> Debt and risk allocation	> Procurement advisory
> Independent technology assessment	> Innovative financial instruments	> Contract preparation
> GHG reduction potential assessment	> Market research	> Insurability of innovative process
> MRV systems design	> Strategy development and planning	
> E&S appraisal	> Early-stage investor outreach	
> EIA	> Financial modelling	
> Certification processes	> Financial mechanism design	

COWI

Project Development Assistance (PDA)
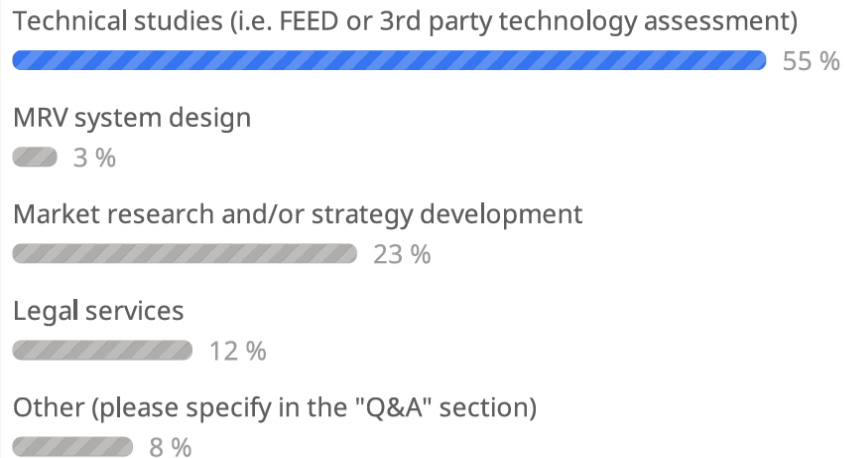
SLIDO questions

Question A	What are the most important types of PDA that the project will benefit from?
Choose one option	1. Technical studies (i.e. FEED or 3rd party technology assessment)
	2. MRV system design
	3. Market research and/or strategy development
	4. Legal services
	5. Other
	If "Other" please specify from list of proposed PDA types

Question B	Should independent (third-party) due diligence be eligible for PDA?
Choose one option	1. Yes
	2. No
	Please provide comments in text field

COWI

Types of PDA

What are the most important types of PDA that the project will benefit from?   `0` `7` `7`

Technical studies (i.e. FEED or 3rd party technology assessment)
55 %

MRV system design
3 %

Market research and/or strategy development
23 %

Legal services
12 %

Other (please specify in the "Q&A" section)
8 %

Should independent (third-party) due diligence be eligible for PDA?   `0` `6` `9`

Yes
81 %

No
19 %

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Envisaged PDA process

Envisaged process:

- o Long-list of recommended PDA-relevant/ready projects proposed by INEA

- o Shortlist proposed by the EIB after its analysis

- o Final award decision rests with the Commission

> Once recommended for PDA, project may be offered an interview and additional documentation prior to award

> After PDA, project will need to re-apply for next IF call

> Minimum project maturity score for PDA under development

COWI

SLIDO questions

Question C	PDA award will be tailor-made to specific project needs and reserved for projects where it can really contribute towards maturity. Should the minimum requirements for entering the list of recommended PDA-relevant/ready projects be any of the following:
Choose one option	1. Any innovative project with feasibility study and a business plan
	2. Mostly for EOIs with higher maturity scores
	Please provide comments in text field

COWI

Minimum requirements for PDA

PDA award will be tailor-made to specific project needs and reserved for projects where it can really contribute towards maturity. Should the minimum requirements for entering the list of recommended PDA-relevant/ready projects be any of the following:

0 8 2

Any innovative project with feasibility study and a business plan

67 %

Mostly for EOIs with higher maturity scores

33 %

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Knowledge sharing

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Key principles

The Delegated Regulation requires that grant agreements are conditional on agreement on knowledge sharing.

The project proponent is to submit a knowledge sharing plan at the full application stage covering the full project cycle.

Knowledge sharing requirements are critical to:
- safeguard the public interest, to respect non-disclosure of commercially sensitive information and to facilitate a fast penetration in the market of the demonstrated technologies.
- lower risks in bridging the transition to large-scale production of innovative technologies and to facilitate acceleration of deployment

Knowledge sharing requirements are to be defined drawing on existing experience and lessons learned from NER300 process

COWI

NER300 and lessons learned

Reflecting NER300 Decision and Award Decisions

Knowledge sharing started as of entry of operation, only

Two levels of relevant knowledge sharing collected and shared, defined by the level of sensitivity:

› Level 1: could be shared with all projects of the same technology category and any other project that has agreed to share the same level of knowledge

› Level 2: knowledge of general interest could be shared with a wider technology community (MS, researchers, NGOs, international organisations and other projects).

Further, the Commission can summarise and disseminate collected Level 2 knowledge and can aggregate Level 1 relevant knowledge and disseminate it when it was seen to contribute to the overall goals of the knowledge sharing mechanism.

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NER300 and lessons learned

The relevant knowledge sections included:

- › General Project details
- › Technical set-up and performance
- › Cost levels
- › Project management
- › Environmental impact
- › Health and safety

Reports had to be submitted on annual basis and the provided information should cover relevant knowledge attained during the preceding operative year.

Ensuring knowledge sharing among relevant technologies is a challenge when there are few projects within the same technology category.

Need for adjustments and simplifications to make knowledge sharing more meaningful – but how?

COWI

Suggested approach

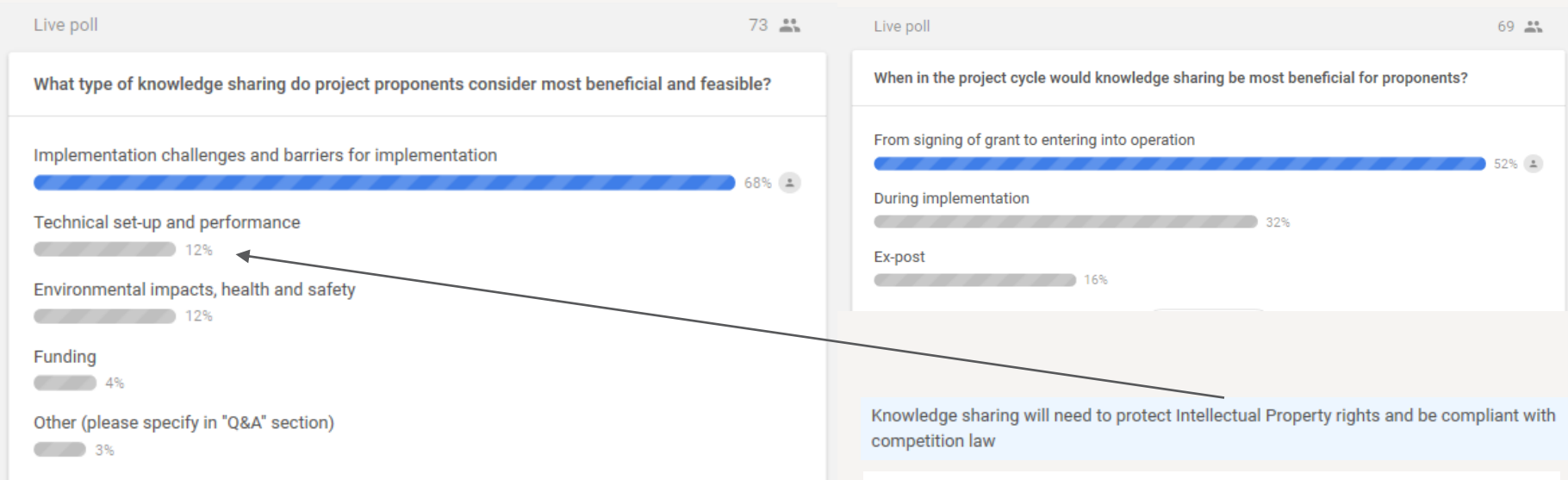|	
Objective	• Ensure de-risking with regard to scaling up to commercial sizes; • Acceleration of the deployment; • Increasing the undertaking of and the confidence in low-carbon technologies and processes by the wider public; and • Maintenance of a competitive market for post-demonstration deployment of innovative low-carbon technologies and processes
General knowledge categories	• Progress and challenges ahead of financial close and entry into operation [NEW] • Technical set-up and performance • Cost levels • Project management • Environmental impact • Health and safety • Additional category specific information
Two-level approach defined by the level of sensitivity	Level 1 knowledge to be shared with all projects of same technology category
	Level 2 knowledge of general interest is to be shared with a wider technology community: MS, researchers, NGOs, international organisations and other projects
	Other projects (funded by other EU programmes) which may agree to share relevant knowledge on terms similar to those receiving funding from the Innovation Fund, can be invited to and involved in the knowledge sharing
	Knowledge to be disseminated is to be aggregated and anonymized at both levels

Suggested approach

Cover the full project cycle	Knowledge sharing to start from grant award to facilitate sharing of important qualitative knowledge on challenges met and strategies for overcoming them in the critical phase between grant award and financial close as well as between financial close and start of operation.
Meaningful knowledge sharing within the respective technologies and industries	Focus on qualitative reporting linked to implementation challenges and barriers for implementation, including how proponents will approach and address these, thereby establishing a closer link to project maturity as well as scalability through preventive action.
	Arrange for relevant clustering of technology groups (if relevant cross-sectoral, as many issues may be of generic nature rather than technology specific) allowing for better knowledge sharing among a sufficient number of project proponents and stakeholders.
	Arrange for other ways of performing information, communication and promotion actions (e.g. seminars, workshops to facilitate exchanges of experiences and best practices).

COWI

SLIDO questions

Question A	What type of knowledge sharing do project proponents consider most beneficial and feasible?
Choose one option	1. Technical set-up and performance
	2. Implementation challenges and barriers for implementation
	3. Environmental impacts, health and safety
	4. Funding
	5. Other
	Please provide comments in text field

Question B	When in the project cycle would knowledge sharing be most beneficial for proponents?
Choose one option	1. From signing of grant to entering into operation
	2. During implementation
	3. Ex-post

COWI

Feedbacks on knowledge sharing

Live poll	73 👥

What type of knowledge sharing do project proponents consider most beneficial and feasible?

Implementation challenges and barriers for implementation
████████████████████ 68% 👤

Technical set-up and performance
████ 12%

Environmental impacts, health and safety
████ 12%

Funding
██ 4%

Other (please specify in "Q&A" section)
██ 3%

Live poll	69 👥

When in the project cycle would knowledge sharing be most beneficial for proponents?

From signing of grant to entering into operation
████████████████ 52% 👤

During implementation
██████████ 32%

Ex-post
████ 16%

Knowledge sharing will need to protect Intellectual Property rights and be compliant with competition law

Knowledge sharing should apply to areas relevant for other projects that could follow up - i.e. lessons learned, barriers, permitting etc. not costs, revenues...

COWI

Knowledge sharing

SLIDO questions

Question C	**How to ensure knowledge sharing among relevant technologies?** **A key challenge for knowledge sharing is not having a sufficient number of projects within the same technology or product category to allow knowledge sharing between similar projects.**
Choose one option	1. Clustering of technology groups
	2. Cross-sectoral groups focusing on generic themes (e.g. permitting, public consultations, regulatory issues)
	3. Other ways of performing information, communication and promotion actions (e.g. seminars, workshops to facilitate exchanges of experiences and best practices)
	Please provide comments in text field

COWI

Feedbacks on knowledge sharing