

Appendix A3: Technical Due Diligence for RES Technologies

1. Technical Scope

RES Technologies

This section sets out guidance for assessing the project sponsor's response, taking information from application forms B, C and E. The project will be assessed through a review of the sponsor's responses to the application forms together with an analysis of the supporting documentation.

The project proposal must demonstrate that the project:

- has taken full account of the impacts of the technology and processes associated with the plant, infrastructure and utilities proposed for the project with reference to the sub-category indicated in the application;
- has taken full account of the impacts of where innovation is to be employed in the project, and of the approach to be taken to mitigate any risks associated with its use;
- is based on sound design and construction techniques with regard to safety, reliability and technical performance;
- is expected to operate as intended and appears likely to meet its proposed output; and
- is technically viable.

The responses given will be used by the EIB to reach an overall conclusion on the credibility of the technical aspects of the sponsor's application and hence, the deliverability of the project. This overall conclusion will take the form of a qualitative judgement by the EIB on the reasonableness and deliverability of the sponsor's project.

Issues for the Commission to consider: *(This should contain a summary of the main issues, if any, which arise from the EIB's due diligence review and which should be included in the project report)*

Assessor judgement: *(This should summarise the overall assessment of the project following completion of the due diligence).*

Assessor:

Date:

App. Form Ref.	Due Diligence Prompt
B/C	Does the information provided demonstrate that the project falls into the sub-category indicated in its application? Does it meet the definition for the sub-category in Part A.II of Annex I of the NER300 Decision? Does it demonstrate that the project meets the requirement to be innovative?
B	Does the information provided support the assertion that the project meets the minimum size threshold for the relevant sub-category in Part A.II of Annex I of the NER300 Decision?
B	If the project is below the eligible size threshold, confirm that it carries a derogation from Paragraph 1 of Article 6 of the NER300 Decision.
B	<p>Does the information provided demonstrate that the project sponsor has taken full account of the impacts of the technology and processes associated with the plant, infrastructure and utilities proposed for the project? For example:</p> <p>has the project sponsor demonstrated an understanding of how the proposed technologies and processes will be integrated?</p> <ul style="list-style-type: none"> • have the detailed characteristics of the specific renewable energy resources to be used been taken into account in the project design? • have changes in scale compared to previous testing or experience of the technology been taken into account?
B/E	Does the information provided demonstrate that the project sponsor has taken full account of the impacts of where innovation is to be employed in the project and the approach to be taken to mitigate any risks associated with its use? For example, have extra risks to project operation been identified based on previous experience with the technology and appropriate design choices made to mitigate these risks?
B/E	Confirm that the project will be based on sound design and construction techniques with regard to safety, reliability and technical performance. Considering the project proposal as a whole, does it provide comfort that appropriate standards for the design and construction of the project are being proposed?

App. Form Ref.	Due Diligence Prompt
B	<p>Confirm whether the project is expected to operate as intended and appears likely to meet its proposed output, based on the proposed design and the evidence provided in relation to previous testing and experience with the technology. The assessment should consider, for example:</p> <p>from the evidence provided, are the assumptions made on the availability and characteristics of the renewable energy resources reasonable?</p> <ul style="list-style-type: none"> • does the proposed design and operation of the project fully reflect these energy resource assumptions? <p>is the proposed conversion of input energy to output energy realistic, based on the design proposed, applicable physical/chemical/thermodynamic limits, and previous experience/testing of the technology?</p> <ul style="list-style-type: none"> • for the bioenergy sub-categories, does the mass balance for the process appear to be complete and realistic?
B/E	<p>Confirm whether each section of the project appears likely to be reliable, based on the proposed design, operating and maintenance proposals and the evidence provided in relation to previous testing and experience with the technology</p>
B	<p>If applicable, confirm whether existing assets are suitable for reuse.</p>

2. Implementation

RES Technologies

This section sets out guidance for assessing the project sponsor's responses, taking information from application forms B and D. The project sponsor will be assessed through a review of their responses to the application forms together with an analysis of the supporting documentation.

The project must demonstrate that:

- the project programme's sequence of activities by which the project is expected to achieve its operational phase is reasonable and realistic;
- the project management organisation and capability supports the project programme;
- permitting and environmental issues are sufficiently addressed; and
- the project has identified processes in place for quality assurance and health and safety which support the project programme.

The responses given will be used by the EIB to reach an overall conclusion on the credibility of the sponsor's application and, hence, the deliverability of the project. This overall conclusion will take the form of a qualitative judgement by the EIB on the reasonableness and deliverability of the sponsor's project.

Issues for the Commission to consider: *(This should contain a summary of the main issues, if any, which arise from the EIB's due diligence review and which should be included in the project report)*

Assessor judgement: *(This should summarise the overall assessment of the project following completion of the due diligence).*

Assessor:

| Date:

App. Form Ref.	Due Diligence Prompt
B	Does the evidence provided by the project sponsor on the current state of the project and phase of design (e.g. feasibility, detailed design/FEED) support project delivery as anticipated in the project programme?
B	Is the work completed to date sufficient for this phase of design? For example, are there gaps in the work carried out to date that result in uncertainty about the ability to achieve the operational phase as anticipated in the project programme?
B	Confirm submission of a project programme.
B	<p>Does the resolution of the tasks and activities set out in the project programme submitted by the project sponsor provide assurance that there is sufficient understanding of the project's complexity? For example:</p> <ul style="list-style-type: none"> • Are there appropriate links where one task will rely on progress of another? <p>Does it include the likely requirements of all aspects of the project (e.g. supply chain, procurement, consents and financing)?</p>
B	Are the programmes complete in terms of required activities to deliver the project? For example, are there tasks missing from the programme that could materially affect the delivery timetable?
B	<p>Is the project schedule considered to be realistic and achievable (linked to a feasible time frame)? For example:</p> <ul style="list-style-type: none"> • Do task durations, particularly for tasks on the critical path, appear realistic given the nature and complexity of the work? • Has sufficient time been allowed to account for weather and ground condition risk in the construction phase? • Are critical decision points and milestones identified? Are they considered likely to be achieved on time? • Has allowance been made for commissioning, particularly of innovative technologies, and has a suitable “ramp-up” period of reduced output been included in the initial operations phase?
B	Are the time lines associated with the procurement and delivery of major capital components considered to be realistic?
B	Does the procurement and resource plan support the time lines set out in the project programme for delivery of major capital components?

App. Form Ref.	Due Diligence Prompt
B	Confirm whether the project investment decision is programmed within 24 months of Award Decision.
B	Do the activities within the project programme support the achievement of the project investment decision within 24 months?
B/D	Confirm whether all relevant national permits are anticipated within 24 months of Award Decision? Are critical activities to achieve this identified?
B	Are the consents dependent upon developing regulatory and legal frameworks, and how are these likely to impact on project delivery?
B	Do the proposed project management structure, key management personnel expertise and track record in the respective areas support the delivery of the project?
B	Are technology commercialisation, business management and financial management addressed in the project management structure? Do the proposals in these areas support project delivery?
B	Does the resource plan support achieving the operational phase as anticipated in the project programme, having regard to the complexity of the project and its current state of development?
B	Do the proposed quality management processes and procedures support project delivery? In other words, do they appear sufficiently robust and in line with good industry practice such that they will facilitate delivery of the project?
B	Do the health and safety processes, procedures and plans support project delivery? In other words, do they appear sufficiently robust and in line with good industry practice, such that they will facilitate delivery of the project?

App. Form Ref.	Due Diligence Prompt
Governance	
B	<p>The project sponsor is required to provide details of a proposed senior management structure including senior project management and integrations roles and include brief CVs of key staff who will be responsible for the project.</p> <p>When assessing the project sponsor's response, the EIB should consider the following criteria:</p> <p>Does the structure provided identify the key positions and lines of communication with explanation of communication and methodology of the structure to provide confidence that the proposed project will be successfully developed and delivered?</p> <p>Has the project sponsor provided CVs for key individuals with appropriate levels of qualifications, management experience and sufficient relevant experience in a project of similar type to that proposed?</p>
B	<p>The project sponsor is required to provide details of external advisors (legal, financial and technical) including the extent to which they intend to use their services.</p> <p>When assessing the project sponsor's response, the EIB should consider whether recognised advisors are identified in each area or a good argument/comments relating to alternative arrangements are provided.</p>
B	<p>If applicable, the project sponsor and funding partners are required to provide details of having worked together in the last 5 years on projects which are comparable to the proposed one.</p> <p>When assessing the project sponsor's response, the EIB should consider whether the examples provided by the project sponsor are relevant and of an appropriate scale compared to the proposed project. The examples should also include references to collaboration between multiple entities within the consortium or SPV, and evidence of successful delivery should be provided.</p>
B	<p>Where the project sponsor entities or funding partners do not have experience of working successfully together, then the project sponsor should provide details of projects which are comparable or otherwise relevant situations where they have worked successfully with other organisations within the last 5 years.</p> <p>When assessing the project sponsor's response, the EIB should consider whether the project sponsor has provided relevant examples of appropriate scale providing evidence of collaboration between multiple entities with evidence of successful delivery.</p>

App. Form Ref.	Due Diligence Prompt
B	<p>The project sponsor is required to provide an approach to implementing appropriate governance structures and aligning the interests of a number of organisations to deliver projects.</p> <p>When assessing the project sponsor’s response, the EIB should consider whether the proposed approach identifies key components of appropriate governance structures and of aligning the interests of a number of organisations to deliver projects. Are appropriate and relevant examples of past experience outlined?</p>
B	<p>The project sponsor is required to provide an approach to ensure they retain overall responsibility for delivery in light of their proposed project delivery structure.</p> <p>When assessing the project sponsor’s response, the EIB should consider whether the proposed approach identifies key components for retaining overall responsibility for delivery notwithstanding the fact that significant roles may be undertaken by other parties.</p>
B	<p>The project sponsor is required to provide an approach to ensure that effective supply chain management procedures will be in place throughout the project.</p> <p>When assessing the project sponsor’s response, the EIB should consider whether the proposed approach identifies key components required for effective supply chain management.</p>

3. Environmental Impact

The project must demonstrate that:

A3.1 Relevant Environmental Assessment

- the project sponsor has suitable previous experience in undertaking environmental work;
- all potential environmental effects (and resulting impacts) relating to the various project phases (construction, operation and decommissioning) have been identified, assessed and mitigated;
- the selected project site (or sites, where there are multiple sites related to the project) is feasible for its proposed purpose;
- constraints associated with the use of the project site for its proposed purpose have been identified and mitigated; and
- all required environmental work (including environmental studies/assessments/modelling) will be completed in sufficient time to ensure that the commercial operation of the project starts as anticipated in the project programme.

A3.2 Relevant National Permits

- all relevant national permits for the project are in place and in line with the relevant requirements under national and EU legislation; and/or
- the relevant national permits procedures are underway and the process is sufficiently advanced to ensure that the commercial operation of the project starts as anticipated in the project programme.

Issues for the Commission to consider: *(This should contain a summary of the main issues, if any, which arise from the EIB's due diligence review and which should be included in the project report)*

Assessor judgement: *(This should summarise the overall assessment of the project following completion of the due diligence – for examples, see below).*

Assessor to provide information about:

- any gaps in the understanding of potential environmental impacts relating to the various project phases and how this affects the feasibility of the project site for its proposed purpose;
- any details of the actions, including further environmental studies/assessments/modeling, which will need to be undertaken to close the gaps in the understanding of potential environmental impacts relating to the various project phases;
- any difficulties in undertaking the required environmental work (including environmental studies/assessments/modelling) to support the relevant permit applications detailed in Table A3.2.

Assessor to provide information about:

- any outstanding permits for the project to be issued;
- details of likely dates any outstanding permits will be issued;
- any difficulties identified with obtaining outstanding permits.

Assessor :

Date :

A3.1 Relevant Environmental Assessment	
App. Form Ref.	Due Diligence Prompt
D	Does the project sponsor have suitable previous experience in undertaking environmental work?
D	Are there any gaps in the understanding of potential environmental impacts relating to the various project phases such that it affects the feasibility of the project site for its proposed purpose?
D	Have all actions (including further environmental studies/assessments/modelling which may need to be undertaken to close gaps in the understanding of potential environmental impacts of all project phases and which may affect the feasibility of the project site for its proposed purpose) been identified?
D	Is the required environmental work to support the relevant permit applications appropriate, and are the timetables for completion consistent with the relevant permit application details in Table A5.2?
A3.2 Relevant National Permits	
D	Have all relevant national permits required for the construction and operation of the project under all applicable or anticipated EU and national legislation been identified?
D	Have all relevant national permits been issued?
D	What outstanding permits are to be issued and probability/timing of expected permit approval?
D	Are there any issues with non-transposition of legislation in respect of permitting requirements for a type of project?

Please refer to the following for background (note that social assessment is not part of the assessment). In case of doubt as to the consistency of any principle contained in the following documents with the requirements of the NER 300, please refer to the Commission.

EIB Statement of Environmental and Social Principles and Standards (Press release):

<http://www.eib.org/infocentre/press/news/all/eib-statement-of-environmental-and-social-principles-and-standards.htm>

EIB Statement of Environmental and Social Principles and Standards:

http://www.eib.org/attachments/strategies/eib_statement_esps_en.pdf

EIB Transparency Policy:

<http://www.eib.org/infocentre/publications/all/eib-transparency-policy.htm>

General guidance documents:

Environmental and Social Practices Handbook:

<http://www.eib.org/infocentre/publications/all/environmental-and-social-practices-handbook.htm>

Sourcebook on EU Environmental Law:

<http://www.eib.org/infocentre/publications/all/sourcebook-on-eu-environmental-law.htm>

4. Costs

RES Technologies

This section sets out guidance for assessing the project sponsor's responses, taking information from application forms B and C. The project sponsor will be assessed through a review of their responses to the application forms together with an analysis of the supporting documentation.

The project must demonstrate that:

- project costs have been correctly allocated in accordance with Article 3 of the NER300 Decision.

The responses given will be used by the EIB to reach an overall conclusion on the credibility of the sponsor's application and hence, the deliverability of the project. This overall conclusion will take the form of a qualitative judgement by the EIB on the reasonableness and deliverability of the sponsor's project.

Issues for the Commission to consider: *(This should contain a summary of the main issues, if any, which arise from the EIB's due diligence review and which should be included in the project report)*

Assessor judgement: *(This should summarise the overall assessment of the project following completion of the due diligence).*

Assessor:

Date:

App. Form Ref.	Due Diligence Prompt
C	Confirm that the project has submitted information in accordance with the application form.
B/C	Are the investment costs associated with the project correctly identified (i.e. do they represent the extra costs compared to a conventional plant)? Has the project sponsor justified these costs by comparison with a reference plant?
B/C	Are the operating costs and benefits associated with the project correctly identified (i.e. do they represent the extra costs compared to a conventional plant)? Has the project sponsor justified these by comparison with a reference plant?
C	Has the project sponsor confirmed who will take responsibility for cost deviations and/or that contracted prices are being used?
C	Confirm whether the project sponsor has appropriately estimated costs commensurate with the phase and type of project and that the cost breakdown detail is appropriate to the amount of funding requested. For example, do the costs appear to be in line with current market costs for similar items?
C	Confirm that the costs detailed have been supported with a clear indication of their status (e.g. under contract, budgetary estimates) and that supporting information has been provided to justify these costs. Where costs are not under contract, has an adequate explanation been provided of how cost deviations will be managed? Do the contingencies allowed for appear appropriate given the level of cost uncertainty?

5. Risk

RES Technologies

This section sets out guidance for assessing the project sponsor's responses, taking information from application forms B, C, D and E. The project sponsor will be assessed through a review of their responses to the application forms together with an analysis of the supporting documentation.

The project sponsor must demonstrate that:

- It has taken account of and has categorised the technical, commercial and financial risks.

The responses given will be used by the EIB to reach an overall conclusion on the credibility of the sponsor's application and hence, the deliverability of the project. This overall conclusion will take the form of a qualitative judgement by the EIB on the reasonableness and deliverability of the sponsor's project.

Issues for the Commission to consider: *(This should contain a summary of the main issues, if any, which arise from the EIB's due diligence review and should be included in the project report)*

Assessor judgement: *(This should summarise the overall assessment of the project following completion of the due diligence).*

Assessor:

Date:

App. Form Ref.	Due Diligence Prompt
B/E	Does the information provided demonstrate that the project sponsor has taken account of the key risks associated with the project's design, construction, operation and decommissioning?
C/E	Does the information provided demonstrate that the project sponsor has taken account of the financial risks associated with the delivery and funding of this project?
C/E	Does the information provided demonstrate that the project sponsor has taken account of the management, procurement and other commercial risks associated with the delivery of this project?
D/E	Does the information provided demonstrate that the project sponsor has taken account of the consenting risks and uncertainties associated with the delivery of this project?
E	Does the information provided demonstrate that the project sponsor has taken account of the health and safety risks associated with the delivery of this project?
E	Does the information provided demonstrate that the project sponsor has taken account of the ownership and split of the risks?
B/E	Does the information provided demonstrate that the project sponsor has identified appropriate mitigating actions?
B/E	Does the information provided demonstrate that the project sponsor has tasks and activities in the programme that will deliver the mitigation?
E	Confirm whether the risk register appears reasonable having regard to the complexity of the project and the proposed start date.

6. Operation

RES Technologies

This section sets out guidance for assessing the project sponsor's responses, taking information from application forms B and C. The project sponsor will be assessed through a review of their responses to the application forms together with an analysis of the supporting documentation.

The project must demonstrate that:

- the anticipated operating regime is realistic and therefore its expected output is likely to be achieved.

The responses given will be used to assist the EIB in reaching an overall conclusion on the credibility of the sponsor's application and hence, the deliverability of the project. This overall conclusion will take the form of a qualitative judgement by the EIB on the reasonableness and deliverability of the sponsor's project.

Issues for the Commission to consider: *(This should contain a summary of the main issues, if any, which arise from the EIB's due diligence review and which should be included in the project report)*

Assessor judgement: *(This should summarise the overall assessment of the project following completion of the due diligence).*

Assessor:

Date:

App. Form Ref.	Due Diligence Prompt
B	Confirm whether the project sponsor has submitted a comprehensive operating plan.
B/C	<p>Confirm whether the plant's reliability data appear reasonable, based on:</p> <ul style="list-style-type: none"> • Design proposed; • Data provided on previous testing carried out; • Operation and maintenance plan; and • Operating assumptions and sensitivities.
B	<p>Confirm whether the plant's output by year appears reasonable, based on:</p> <ul style="list-style-type: none"> • Design proposed; • Data provided on previous testing carried out; • Operation and maintenance plan; and • Operating assumptions and sensitivities.
B	Has the project sponsor taken into account the requirements for maintenance and the potential for forced outages?
B	Has the project sponsor considered flexible operation, minimum and maximum operating conditions?