

APPENDIX 4

SOLUTION DESCRIPTION

Contract on subsidy for carbon capture, transport,
and storage

Danish Energy Agency

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Instructions for tenderers

Appendix 4 shall contain the Tenderer's solution description.

The Tenderer shall complete the solution description in accordance with the instructions and guidance text in this Appendix 4 and submit the solution description as a part of the Tenderer's Offer.

The solution description shall contain the Tenderer's responses to and description of how the Tenderer complies with the project description and the requirements, as specified in Appendix 3, Requirements specification.

The Tenderer should create sub-appendices to the solution description in accordance with the guidance text stated herein and when deemed appropriate by the Tenderer. The sub-appendices to be delivered is specified below.

If relevant, the Tenderer should ensure that there is a clearly identifiable and traceable reference to the sub-appendices.

The Tenderer should make use of references to relevant standards, certifications, verifications, and similar documentation, as appropriate.

The Tenderer's responses to the overall solution description, the Financial Requirements, the Technical Requirements, and the Operational Requirements are included in the evaluation of Offers as specified in Appendix A, Offer evaluation.

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Overview of sub-appendices to be delivered

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Overall solution description

Instruction

The Tenderer should provide an overall solution description as a complete and collective description of the entire project. The description should include, although not limited to, relevant illustrations, verbal descriptions of the entire value chain, applied technology and systems, operational processes describing how the Tenderer eventually will operate the entire system.

Sub-appendices

The Tenderer should provide:

- *The overall solution description in sub-appendix 4.A, "Overall solution description"*

Requirement R-1

Milestone Plan.

Instruction

The Tenderer shall as its answer to R-1 provide the following:

- *A draft Milestone Plan*

The draft Milestone Plan shall include what is described in R-1 in Appendix 3, Requirements specification and Appendix 5, Time schedules.

The Tenderer should as its answer to R-1 provide the following:

- *An example of the Milestone Plan report*

The example of the Milestone plan report should include what is described in R-1 of Appendix 3, Requirement specification

Sub-appendices

The Tenderer should provide:

- *The draft Milestone Plan in Appendix 5, Time schedules,*
- *The example of Milestone Plan report in sub-appendix 4.B, "Milestone Plan Report"*

Requirement R-2

Authority Approval Plan.

Instruction

The Tenderer shall as its answer to R-2 provide the following:

- *A draft Authority Approval Plan.*

The draft Authority Approval Plan shall include what is described in R-2 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- *The draft Authority Approval Plan in sub-appendix 4.C, "Authority Approval Plan".*

Requirement R-3

Risk Management Plan.

Instruction

The Tenderer shall as its answer to R-3 provide the following:

- *A draft Risk Management Plan*
- *A draft Risk assessment plan*
- *A draft Risk assessment matrix*
- *A draft Risk log*

The draft Risk Management Plan shall include a description of a chosen risk management framework and approach.

The Tenderer's draft Risk Management Plan, draft Risk assessment plan, draft Risk assessment matrix, and draft Risk log shall include what is described in R-3 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- *The draft Risk Management Plan in sub-appendix 4.DD, "Risk Management Plan"*
- *The draft Risk assessment plan in sub-appendix 4.D, "Risk assessment plan"*
- *The draft risk assessment matrix in sub-appendix 4.E, "Risk assessment matrix"*
- *The draft Risk log in sub-appendix 4.F, "Risk log"*

Requirement R-4

QHSE Plan.

Instruction

The Tenderer shall as its answer to R-4 provide the following:

- *A draft QHSE Plan*

The draft QHSE Plan shall include what is described in R-4 of Appendix 3, Requirements specification.

The tenderer should as its answer to R-4 provide the following:

- *A draft QHSE log*
- *A draft Inspection Procedure*
- *Headlines for the QHSE report*

The draft QHSE log, draft Inspection Procedure, and headlines for the QHSE report should include what is described in R-4 of Appendix 3, Requirements specification.

The Tenderer should provide documentation of relevant management system in the form of certificates, if relevant.

Sub-appendices

The Tenderer should provide:

- *The draft QHSE Plan in sub-appendix 4.G, “QHSE Plan”*
- *The draft QHSE log in sub-appendix 4.H, “QHSE log”*
- *The draft Inspection Procedure in sub-appendix 4.I, “Inspection Procedure”*
- *The headlines for the QHSE report in sub-appendix 4.J, “QHSE report”*

Requirement R-5

Knowledge Sharing Plan.

Instruction

The Tenderer shall as its answer to R-5 provide the following:

- *A draft Knowledge Sharing Plan*

The draft Knowledge Sharing Plan shall include what is described in R-5 of Appendix 3, Requirements specification.

The Tenderer should as its answer to R-5 provide the following:

- *An example of the Knowledge sharing summary report specifically headlines and KPI’s.*

The Tenderer’s example of the Knowledge sharing summary report should include what is described in R-5 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- *The draft Knowledge Sharing Plan in sub-appendix 4.K, “Knowledge Sharing Plan”*
- *The example of the Knowledge sharing summary report in sub-appendix 4.L, “Knowledge sharing summary report”.*

Requirement R-6

Public Engagement Plan.

Instruction

The Tenderer shall as its answer to R-6 provide the following:

- A draft Public Engagement Plan.

The draft Public Engagement Plan shall include what is described in R-6 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- The draft Public Engagement Plan in sub-appendix 4.M, "Public Engagement Plan".

Requirement R-10

Construction Interface Procedure.

Instruction

The Tenderer shall as its answer to R-10 provide the following:

- A draft Construction Interface Procedure

The draft Construction Interface Procedure shall include what is described in R-10 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- The draft Construction Interface Procedure in sub-appendix 4.N, "Construction Interface Procedure".

Requirement R-11

Financing Plan.

Instruction

The Tenderer shall as its answer to R-11 provide the following:

- A draft Financing Plan
- A draft Financing model summary sheet (only to be provided in case of external financing, i.e. not parent company financing)

The draft Financing Plan and if relevant, the draft Financing model summary sheet shall include what is described in R-11 of Appendix 3, Requirements specification.

The Financing Plan shall be a written description of the input data and cost calculations provided in the excel sheet of the Financing model summary sheet.

The Financing Plan shall, if relevant, provide documentation of the expected investments and funding sources.

If the Tenderer has obtained third-party validation, the Tenderer should describe the basis and scope of such validation.

Sub-appendices

The Tenderer should provide:

- *The draft Financing Plan in sub-appendix 4.O, "Financing Plan"*
- *The draft Financing model summary sheet in sub-appendix 4.P, "Financing model summary sheet"*

Requirement R-12

Business Plan.

Instruction

The Tenderer shall as its answer to R-12 provide the following:

- *A draft Business Plan*
- *A draft Business model summary sheet*

The draft Business Plan and draft Business model summary sheet shall include what is described in R-12 of Appendix 3, Requirements specification.

The Tenderer should describe the method for calculation and the validation of the consistency of the data used in the Business Plan with the input data used in the relevant cost calculation sheets in the draft Business model summary sheet.

If the Tenderer has obtained third-party validation, the Tenderer should describe the basis and scope of such validation.

Sub-appendices

The Tenderer should provide:

- *the draft Business Plan in sub-appendix 4.Q, "Business Plan"*
- *The draft Business model summary sheet in sub-appendix 4.R, "Business model summary sheet"*

Requirement R-13

Technical Design.

Instruction

The Tenderer shall as its answer to R-13 provide the following:

- *A draft Technical Design*
- *A draft Total design verification plan*

The draft Technical Design and draft Total design verification plan shall include what is described in R-13 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- *The draft Technical Design in sub-appendix 4.S, "Technical Design"*
- *The draft Total design verification plan in sub-appendix 4.T, "Total design verification plan"*

Requirement R-14

Test and Commissioning Plan.

Instruction

The Tenderer shall as its answer to R-14 provide the following:

- *A draft Test and Commissioning Plan*

The draft Test and Commissioning Plan shall include what is described in R-14 of Appendix 3, Requirements specification.

The Tenderer should as its answer to R-14 provide the following:

- *A draft Test event log*

The draft Test event log should include what is described in R-14 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- *The draft Test and Commissioning Plan in sub-appendix 4.U, "Test and Commissioning Plan"*
- *The draft Test event log in sub-appendix 4.UU, "Test event Log"*

Requirement R-18

Report on CO₂ production (subject to the EU ETS)

Instruction

If the CO₂ production is subject to the EU ETS, the Tenderer shall answer R-18, otherwise not.

The Tenderer's shall as its answer to R-18 provide the following:

- *An example of the Report on CO₂ production (subject to the EU ETS)*

The example of the Report on CO₂ production (subject to the EU ETS) shall include what is described in R-18 of Appendix 3, Requirements specification.

The example of the Report on CO₂ production (subject to the EU ETS) shall include a verified CO₂ emission report (In Danish: CO₂-udledningsrapport), documenting the actual Fraction of CO₂ production subject to the EU ETS. The verification of the CO₂ emission report shall also be included.

The example of the Report on CO₂ production shall also include a forecasted Fraction of CO₂ production (subject to the EU ETS).

Sub-appendices

The Tenderer should provide:

- *The example of the Report on CO₂ production (subject to the EU ETS) in sub-appendix 4.V, "Report on CO₂ production (subject to the EU ETS)".*

Requirement R-19

Description of the measurement system for CO₂ storage reporting.

Instruction

The Tenderer shall as its answer to R-19 provide the following:

- *A description of the Measurement system for CO₂ storage reporting*
- *An example of the Report of Delivered Quantity*

The description of the measurement system for CO₂ storage reporting and the example of the Report on Delivered Quantity shall include what is described in R-19 of Appendix 3, Requirements specification.

The description of the measurement system for CO₂ storage reporting shall include documentation of any validation and verification of the proposed measurement system for CO₂ storage reporting.

Sub-appendices

The Tenderer should provide:

- *The description of the Measurement system for CO₂ storage reporting in sub-appendix 4.W "Measurement system for CO₂ storage reporting"*
- *The example of the Report on Delivered Quantity in sub-appendix 4.X, "Report on Delivered Quantity"*

Requirement R-20

CO₂ Origin Verification Plan and Verification of origin of stored quantity of CO₂.

Instruction

The Tenderer shall as its answer to R-20 provide the following:

- *A draft CO₂ Origin Verification Plan.*

The draft CO₂ Origin Verification shall include what is described in R-20 of Appendix 3, Requirements specification.

Sub-appendices

The Tenderer should provide:

- *The CO₂ Origin Verification Plan in sub-appendix 4.Y, CO₂ Origin Verification Plan"*