Evaluation of the tendering process and quality control of the Danish Energy Agency's draft for an evaluation scheme of the implementation effects of the CCUS Fund

Energistyrelsen

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## 1 Introduction

In January 2023 the European Commission announced that the CCUS Fund was in compliance with the EU state aid legislation. The Danish Energy Agency (the DEA) allocates the CCUS Fund through public tenders.

It was a requirement, that the Danish Energy Agency (the DEA) submitted an evaluation plan to be able to evaluate the effects of the first CCUS Fund tender. It was further required, that an independent organisation conducted a total of three evaluation reports, of which this report is the first. The purpose of this report is dual:

Firstly, this report is required to review the first tender of subsidies from the CCUS Fund. It must be reviewed whether the tender documents and the conducted tender process:

- complied with the principles stated in Danish procurement law.
- supported the purpose of the tender and the CCUS Fund.

Secondly, the purpose is to review the evaluation design and control the quality of the implementation effects of the first CCUS Fund tender as described in the DEA's evaluation plan, which has already been approved by the EU Commission. Special attention will be on the described methodology for evaluating the outcome and fulfillment of the objectives of the purpose of the CCUS Fund, and whether the state aid has had a real incentive effect on the recipient. If there are methodological or other critical weaknesses in the evaluation design, the evaluation plan must be updated with the relevant adjustments.

Figure 1: Description of method in evaluation of design

Are DEA's methodology Does the Danish Energy and criteria suitable for Is the available data Has the state aid Agency's (DEA) evaluation assessing the suitable as input for scheme had an design meet EU's formal achievement of the evaluation model? incentive effect? objectives of the CCUS requirements? Fund?

The review and this evaluation report have been executed by BDO Statsautoriseret Revisionsaktieselskab (BDO).

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## 2 Summary

This section is a summary of the review and the evaluation report.

The DEA has conducted and completed the first tender of subsidies from the CCUS Fund. This first tender included a contract on subsidy for Carbon Capture, Transport and Storage (CCS), which was signed with Ørsted Bioenergy and Thermal Power A/S. This contract constitutes the contractual basis for the first CCS project under the CCUS Fund, in which Ørsted Bioenergy and Thermal Power A/S is committed to establish a CCS value chain and capture 0.43 MTA CO<sub>2</sub> per year from 2026. The conclusion of the contract with Ørsted Bioenergy and Thermal Power A/S ensures, if the contract is complied with and correctly executed, that the DEA achieves the primary objectives for the tender of the contract on subsidy for CCS.

This report reviews the tender of the the contract on subsidy for CCS by reviewing the tender documents (section 4.1), which constituted the basis of the first tender, and the conducted tender process (section 4.2). The remarks from the review are analysed (section 4.3), and it is assessed whether the tender of the the contract on subsidy for CCS complied with the principles stated in Danish procurement law and/or supported the purpose of the tender and the CCUS Fund.

The DEA also developed the required evaluation plan regarding the quality of the implementation effects of the first CCUS Fund tender, which has been approved by the EU Commission. The evaluation plan sets the framework for evaluating the results of the first tender of subsidies from the first CCUS Fund tender. This report reviews the evaluation plan (section 5), and it is assessed whether the evaluation plan is suitable to evaluate the effects of the tender of the contract on subsidy for CCS.

The main focus of this report is the possible infringements or areas of improvements in the tender and the evaluation plan. The elements where the DEA complies with Danish procurement law and therefore, the recommendations from the EU Commission regarding evaluation of state aid will not necessarily be highligted og emphasized.

## 3 The CCUS Fund and its purpose

The background for the tender and evaluation design, which is the subject of this external quality assurance, should be understood in the context of the CCUS Fund launched in the political agreement "Klimaaftale for energi og industry mv. 2020" ("Climate change agreement for energy and industry, etc. 2020").

The overall purpose of the CCUS Fund by the DEA is to strengthen the framework for CCS in Denmark to meet the objectives of the Paris Agreement, EU goals and the Danish 70 percent reduction goal of 2030. In order to reduce the national level of  $CO_2$  emissions, the fund is providing subsidy for the development of a value chain for carbon capture, transport and storage in Denmark. Within some sectors, such as waste management, heat and power plant, and heavy industry, CCS can be an instrument in reducing  $CO_2$  emissions as the technology of renewable energy and green technology is not mature enough to reduce all emissions and in the long term, and to contribute to the Danish government's goal of a 110 percent emission reduction by 2050.

Studies have shown that the Danish underground has a large potential regarding storage of CO<sub>2</sub>, estimated to be between 12-22 billion T CO<sub>2</sub>, which correspond to 500 years of Denmark's total amount of emissions, leaving room for an international market of storage of carbon in the Danish underground.

#### 3.1 FUNDING

CCS is still immature to operate under market conditions as a market of a certain size is needed, before it can outweigh the large investments involved in developing a value chain from capture to storage or utilisation of the CO<sub>2</sub>. The ambition is that CCS will be an established market with private and economic incentives from quotes and taxes in the long term. Since the market is expected to be dependent on governmental support in the coming years and to meet the objectives listed above, the fund is dedicating DKK 16 billion to providing state aid for carbon capture, storage, and utilisation projects.

The state aid of the CCUS Fund is granted through two rounds of tenders. It is expected that the two tenders will capture 0.9 MTA emissions per year from 2030. The first tender will contribute 0.43 MTA from 2026 and 20 years ahead. DKK 8,2 billion have been allocated to this first tender regarding the CCUS Fund.

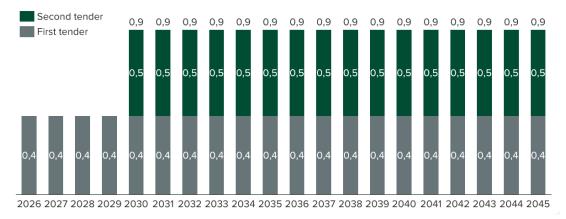


Figure 2: CO₂ emissions captured per year by the CCUS Funds

#### 3.2 FIRST TENDER

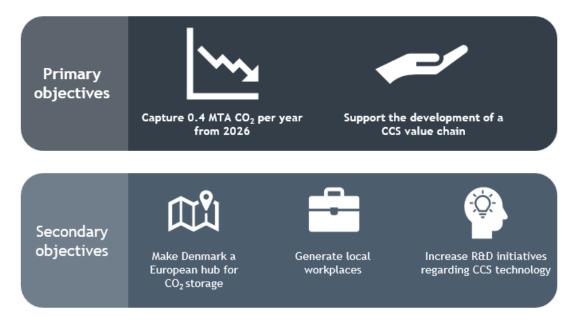
The first tender was published June 2022 as a negotiated procedure in accordance with the Danish Procurement Act after a previously cancelled procedure.

I/S Vestforbrænding, Ørsted Bioenergy and Thermal Power A/S and Aalborg Portland A/S were prequalified for the tender process. The tender process was concluded in May 2023, where the DEA awarded the contract to Ørsted Bioenergy and Thermal Power A/S.

The contract obligated Ørsted Bioenergy and Thermal Power A/S to capture and storage 0.43 MTA  $CO_2$  from 2026 and 20 years ahead.

The primary and secondary objectives of the first tender were:

Figure 3: Objectives of the first CCUS Fund tender



## 4 Assessment of the first tender

The purpose of this section is to assess whether the tender documents and the conducted tender process regarding the tender for the contract on subsidy for CCS:

- complied with the principles stated in Danish procurement law.
- supported the purpose of the tender and the CCUS Fund.

The assessment is conducted through a review of the tender documents in section 4.1 below, of which each document which has been included in the tender, is reviewed. Subsequently, the tender process is assessed in section 4.2 below, where each step of the planned and actual tender process conducted by the DEA is reviewed.

Remarks are given to elements in the tender documents and in tender process, which did not comply with the principles stated in Danish procurement law and/or did not support the purpose of the tender and the CCUS Fund. Remarks which:

- Highly likely or likely either did not comply with the principles stated in Danish procurement law and/or negate the purpose of the procurement and the CCUS Fund are rated as 1. Critical or 2. High.
- May or possibly may either not comply with the principles stated in Danish procurement law and/or negate the purpose of the procurement and the CCUS Fund are rated as 3. Middle or 4. Low.

Only remarks rated Critical or High are stated in this report. The remarks rated Middle or Low are given to the DEA as recommendations for internal use. Selected proposals for optimisation and improvement of the tender documents are also presented below.

The remarks from sections 4.1 and 4.2 are transferred to section 4.3, in which they are assessed in terms of how the combined tender frame consisting of the tender documents and the conducted tender process complied with the principles stated in Danish procurement law and/or supported the purpose of the tender and the CCUS Fund.

#### 4.1 TENDER DOCUMENTS

#### 4.1.1 Overall consistency in the tender documents

The structure of the tender documents is assessed as being consistent and comprehensible in overall terms, and the purpose of each document can be deduced from the overall structure.

Further, the tender documents are clearly divided into documents related to the tender and contract documents.

#### 4.1.2 Tender specifications

The tender specifications describe the overall tender process and the structure of the tender. The tender specifications appear complete and contain all relevant information. It is also noted that the tender specifications contain information, which is often neglected by contracting entities, e.g.:

- Reason for the choice of procedure (negotiated procedure).
- Grounds as to why the contract is not divided into lots.

#### Expected time schedule for the tender procedure

The time schedule provided in the tender specification, section 4, constitutes and represents the main time shedule according to which the tenderers are presented. The tender specifications are published with the contract notice<sup>1</sup>, and hence, the time schedule was public for both applicants in the prequalification and the subsequent tenders.

<sup>&</sup>lt;sup>1</sup> OJ S 111/2022 10/06/2022, Contract notice

The structure, content and design of the time schedule do not imply any remarks in itself. However, it is noted that the time schedule is modified by the DEA in the subsequent tender process as the DEA is altering/delaying the tender proces (see section 4.2.5 below).

The modification of the time shedule in the tender specifications and the inferred prolonged tender process may have discouraged the participation of potential applicants or tenderers in the tender procedure, as:

- The time schedule is published for applicants and tenderers
- Economic operators have clearly stated in the market dialouge with the DEA (cf. section 4.2.2 below) that the expected time schedule was limiting their potential participation. Especially, as it is noted that the economic operators states that the time schedule is too tight for a complete tender.

Hence, the modification can be perceived as a modification of a fundamental element, cf. sections 24 (1)(37) and 134 (1)(3) of the Danish Procurement Act.

#### 4.1.3 Appendix A - The evaluation of offers (award criteria and evaluation method)

Appendix A constitutes the basis for evaluation of the tenders. The appendix describes the evaluation model and method, including the award criteria and sub-criterias.

The below remarks regarding Appendix A relate to whether the described evaluation model is sufficiently determined and described in the tender material and whether the evaluation method is transparent and compliant with the principle of equal treatment, cf. section 160 of the Danish Procurement Act.

#### Overall evaluation model

The overall evaluation model is described, and consistencies between the award criteria and the sub-criteria are determined and sufficiently described. Appendix A appears to be comprehensible with a clear structure.

#### Correlation between the sub-criterion Project Maturity and the elements requested in Appendix 3

Section 1.1.2. of Appendix A describes the sub-criterion Project Maturity and the sub-sub-criteria: Financial Maturity, Technical Maturity and Operational Maturity. For each of the sub-sub-criteria Appendix A describes the:

- requirements specified in Appendix 3 that are relevant to the individual sub-sub-criterion.
- elements which will be evaluated as positive, if present in the tenderer's response.

Appendix 3 describes each of the requirements and the deliverables which the tenderer should include in the response to each requirement.

Thus, the overall setup of the tender is: Appendix 3 describes what should be delivered as part of the tender and Appendix A describes how the fulfilement of requirement stated in Appendix 3 are evaluated.

A comparative analysis of Appendix 3 and Appendix A shows a lack of correlation between the delivarebles requested and the elements which will be evaluated as positive. This appears in two different types of instances:

- Deliverables requested by a requirement in Appendix 3 are not mentioned in the relevant sub-criterion. Hence, no evaluation can be conducted of the specific delivarable requested.
- Elements stated to be evaluated as positive in Appendix A do not relate to any requirements or delivarables in Appendix 3.

Both instances are likely not in compliance with the principle of transparency and may therefore be disregarded by the Danish Complaints Board for Public Procurement.

Examples of such instances of lacking correlation are given below for each sub-sub-criteria.

#### • Financial Maturity

Appendix A states that Financial Maturity is assessed based on the tenderer's Business Plan (R-12) and the Financing Plan (R-11). It is further stated that it will be evaluated as positive if the tenderer's response shows a high degree of:

- "- resilience to the identified variations and risks
- financial feasibility, including documented access to the necessary funding."

The content of both of the above elements (resilience and financial feasability) refer to elements in the requested Financing Plan (R-11). Consequently, it is not specified which elements of the Business Plan (R-12) would be evaluated as positive. Therefore, there is no basis for an evaluation of the Business Plan (R-12), and therefore, the evaluation method regarding the Financial Maturity is presumably not considered to be sufficiently transparent.

#### Technical Maturity

Technical Maturity is assessed based on the tenderer's Draft Technical Design (R-13) and the Draft Test and Commissioning Plan (R-14). It is further stated that it will be evaluated as positive, if the tenderer's response shows a high degree of:

- "- technological readiness and maturity (proven technology)
- technical feasibility of all major components
- robustness in the Value Chain within the project's operational environment
- understanding of the project and related technical risks and proposed mitigation measures"

The content and wording of all of the above elements (readiness, maturity, feasibility, value chain and risks) refer to elements of the requested delivarable Draft Technical Design (R-13). Consequently, it is not specified which elements of the Draft Test and Commissioning Plan (R-14) would be evaluated as positive. Therefore, there is no basis for an evaluation of the business plan (R-12), and therefore, the evaluation method regarding the Technical Maturity is presumably not considered sufficient transparent.

### Operational Maturity

It is stated that the tenderer's response to the operational requirements will be evaluated as positive if:

"...

- the Tenderer's strategy for a successful COD of the project, including project management, securing key supply contracts, and project's implementation risks and proposed mitigation measures shows a high degree of resilience

..."

The content of the above element and wording (COD, project management and key supply contracts) is not linked to any of the requirements or delivarebles in Appendix 3, which are to be answered or submitted in the tender, cf. the table in Appendix 3, page 8.

COD is mentioned in specific requirements, which the tenderer is not requested to answer in the tender (R-7, R-15 and R-19).

Project management and key supply contracts are not required to be stated in any relevant requirements or deliverables.

#### Depth of the evaluation method for Project Maturity

Overall, the evaluation methods for each sub-sub-criteria under Project Maturity described in Appendix A, are considered to be lacking sufficient depth in comparison with the data and deliveries which are requested from the tenderers.

The requirements of Appendix 3 list several deliverables, which are mentioned or referred to either superficially or not at all in Appendix A.

#### Example of superficially mentioned deliverables

The tenderers are required to deliver:

- o Draft Authority Approval Plan (R-2)
- Draft Risk Management Plan (R-3)
- o Draft QHSE Plan (R-4)
- Draft Construction Interface Procedure (R-10)

For each of the deliverables, the requirements of Appendix 3 further elaborate on the elements which should be included in the tenderer's response.

The evaluation method of all of the above-stated deliverables are bundled in one sentence in Appendix A, section 1.1.2., under the sub-sub-criterion Operational Maturity. It is stated that it will be evaluated as positive if:

"... the Tenderer's Authority Approval Plan, the Risk Management Plan, the QHSE Plan, and the Construction Interface Procedure shows a high degree of maturity and coherence with the Draft Milestone Plan."

The above evaluation method for the specific deliverables can, compared with the amount of data and information that are required from the tenderer regarding each of the deliverables, be considered as non-sufficient and hence, risk not being sufficiently transparent. Further, it is unclear whether some factors outweigh others and how the degree of maturity and coherence are precisely evaluated.

#### Example of not mentioned deliverables

The tenderers are required to deliver:

- o Report on CO<sub>2</sub> production subject to the EU ETS (R-18)
- o Draft CO<sub>2</sub> Origin Verification Plan (R-19)

These deliverables are not mentioned or referred to in Appendix A. Hence, no evaluation can be conducted on the basis of these deliverables.

The lack of depth in parts of the evaluation method implies a risk of lack of transparency or risk of lack of compliance with the principle of equal treatment.

### Mathematical describtion of the evaluation method for Subsidy

The sub-criterion Subsidy is evaluated based on the Offered Rate plus a calculated risk premium (the "Evaluation Amount"). Points for sub-criterion "Subsidy" are calculated as given in the evaluation method described in Appendix A, section 2.1.

The described evaluation method has two deficiencies:

#### • The financial framework

The evaluation method is based on a comparative method where a financial framework is established based on the tender with the lowest Evaluation Amount. The calculation of the financial framework is described as follows:

"The financial framework is lowest Evaluation Amount + 75%."

The purpose of the financial framework is to add an additional sum of 75% of the lowest Evaluation Amount to the lowest Evaluation Amount. Hence, the financial framework should constitute a total of 1.75 times the lowest Evaluation Amount.

However, the evaluation method is mathematically ambiguous compared to the desired purpose.

Mathematical calculation in accordance with the stated evaluation method will result in a sum equal to the lowest Evaluation Amount plus 0.75. Hence, a lowest Evaluation Amount of DKK 100 would mathematically result in a financial framework of DKK 100.75 and not the intended DKK 175.

To ensure that the calculation of the financial framework is mathematically correctly specified, it could have been given in a formula like either:

Financial framework = Evaluation Amount +  $(75\% \cdot \text{lowest Evaluation Amount})$ 

Or

Financial framework = lowest Evaluation Amount · 175%

The faulty mathematical description of the financial framework may constitute a lack of transparency. Further, as the DEA has evaluated the tenders in alignment with the intended purpose of the financial framework and not as it is mathematically stated, the evaluation may imply a risk of violating the principle of equal treatment.

#### The gradient

Appendix A, section 2.1, depicts the formula for how points are calculated based on linear interpolation. This is depicted in a formula with various variables, including "gradient".

The gradient is defined as: "... the addition to the lowest Evaluation Amount, on which the financial framework is based".

However, this definition is not clear, as the term "the addition" is ambiguous due to the faulty mathematical description of the financial framework. The term can both refer to the percentage value or the norminal value, and thereby renders the evaluation method as non-transparent.

#### 4.1.4 Appendix 3 - Requirements specification

Appendix 3 states the DEA's project description and requirement specification. The requirements of the appendix state the deliverables which should be delivered:

- By the tenderer as part of the tender. Furthermore, the requirements sets the conditions of each of the delivarables.
- By the supsequent supplier and the condition for these.

The below remarks relate to the structure of Appendix 3 and the transparency of the document. The lack of transparency and clarity of the requirements may entail unpredicted issues in the evaluation regarding the tenderer's compliance with the requirements.

#### Minimum requirements

Appendix 3 states four minimum requirements which must be fulfilled by the tenderer, for tenders to be taken into consideration. The tender documents do not indicate how the tenderer should respond to or indicate the fulfilment of the minimum requirements.

#### MR-1

Minimum requirement MR-1 states: "The Operator shall establish and operate the Value Chain."

The Value Chain is described in Appendix 3, but only in a "version" and thereby as an example. Hence, it is not predefined which elements the value chain consists of, and when "establishment" and "operation" are conducted by the tenderer.

Examples on the ambiguity:

- Establish How much control is the tenderer required to perform of the construction of the CO<sub>2</sub> capture plant? Can an already built CO<sub>2</sub> capture plant be bought from a third party, for instance?
- Operate Can parts of the Value Chain be sourced to a sub-contractor or subsidiary company? Is the tenderer operating the complete Value chain, if the tenderer operates the land and sea transport, but port facilities are operated by a third party?

Due to this ambiguity, the stated minimum requirement can be perceived as not objectively ascertainable. A not objectively ascertainable minimum requirement is implying a risk of violating the principles of equal treatment and transparency.

#### Minimum requirements as contractual provisions

The minimum requirements are referring to obligations, which are to be fulfilled in the contract period, and hence, not as a part of the tender. Hence, fulfilment of the minimum requirements cannot be evaluated at the tender deadline. The tender is thereby in compliance with the minimum requirements so far, that the tenderer does not state any specific reservation to the minimum requirements. E.g.,

- MR-1 states: "The Operator shall establish and operate the Value Chain.". The fulfilment of this will
  only be achieved and hence proved by the winning tenderer and subsequent supplier, given that
  only the supplier shall execute this minimum requirement. The fulfilment can further only be
  evaluated when the value chain is in operation.
- MR-2 states: "The Operator must obtain all certificates, approvals, and permits necessary to
  establish and operate the Value Chain.". The fulfilment of this will only be achieved and hence
  proved by the winning tenderer and subsequent supplier, given that only the supplier shall obtain
  these certificates, approvals, and permits. The fulfilment can further only be evaluated when the
  obtainment of the certificates, approvals, and permits are necessary.

Hence, the status as minimum requirements do not give any further effect compared with ordinary requirements. But the status as minimum requirements include a stricter approach in terms of interpretation.

Therefore, it is recommended that such requirements are incorporated in the tender documents as contractual provisions (and thereby as ordinary requirements) instead of as minimum requirements. This will impose the same level of contractual obligation on the supplier and give the DEA the same contractual leverage and security. But the risk of ambiguous minimum requirements is limited, and the risk of violation of the principles of equal treatment and transparency is equally minimised.

Further, the DEA can modify to a certain degree contractual provisions during the tender process, as the contractual provisions can be considered requirements. Reservations by the tenderers to these contractual provisions can still be rejected at the BAFO by the DEA.

#### Content of the deliverables

The requirements R-1, R-3, R-4, R-5, R-6, R-10, R-12, R-13 and R-14 are all indicating content, which shall be part of the deliverables. E.g., R-3 indicates the elements with the following wording:

"As a minimum, the Risk Management Plan shall establish the framework to address risks related to:  $\dots$ "

The remaining listed requirements have the same or similar wording with reference to the specific content of deliverables in each requirement.

The wording and use of the term "as a minimum" and "shall" can indicate that this requirement for content has the status of a minimum requirement. An interpretation where the information regarding the requirement methodology in the tender specifications and the division of the minimum requirements and requirements in Appendix 3 are considered, indicate that this is not the intention of the DEA.

However, the used wording causes ambiguity, which may be considered as a violation of the principles of equal treatment and transparency.

Even if the wording is not considered to categorise the requirements for the content as minimum requirements, it can be seen as formal requirements for the tender. Hence, a tender, which does not include the listed content in the tender at BAFO, will be considered non-compliant with the requirements, and therefore, the tender should be rejected, cf. the tender specifications, section 6.3 below.

#### Wording and formal requirements

To ensure that the requirements or the requirements for the content of the deliverables are not considered minimum requirements or formal requirements, it is recommended that wording regarding the content of the deliverables - which are delivered

- as a part of the tender are softened by using e.g. "should" instead of "shall", which imply that the inclusion of the content is optional. Further, it is recommended that the wording is linked with the wording in the evaluation method in Appendix A, so that the tenderer's inclusion of the stated content can be evaluated positively.
- after contract signing are maintained, given that the requirements after Contract signing constitutes a contractual provision.

#### Modified R-1

The DEA modifies the requirement R-1 during the tender process, including the deliverables included in R-1. The tenderer is required to deliver a Draft Master Milestone Plan with the modification, and an additional Draft Detailed Milestone Plan is required.

Consequently, Appendix A, section 1.1.2.3, regarding evaluation of Operational Maturity is modified, as the reference to the Draft Milestone Plan is pluralised. Operational Maturity is hereby evaluated based on both Draft Master Milestone Plan and Draft Detailed Milestone Plan, whereby the evaluation basis is expanded.

The modification of R-1 and the subsequent modification of the evaluation method in Appendix A can likely be considered a modification of fundamental elements. The modification implies a significant risk of violating the principles of equal treatment and transparency, as the evaluation method and criteria Operational Maturity is extended.

#### 4.1.5 Contract on subsidy for carbon capture, transport and storage

The contract is a standard delivery contract, which is considered comprehensive in relation to all relevant conditions regarding the subsidy for carbon capture, transport and storage. The below remarks are observations, which can improve the commercial incentives and joint value of the Contract.

#### **Sub-suppliers**

Provisions regarding the tenderer's sub-suppliers are outlined in the Contract, clause 5.5. The provision imposes several restrictions and conditions on the suppliers' relations with sup-suppliers.

Appendix 2 defines a sub-supplier as an: "entity contributing to the Operator's performance of the Contract.".

This is a very comprehensive definition, whereby all third parties delivering to the supplier can be assessed as subsuppliers.

To ensure that the supplier is exempt from indifferent liability and reporting to the DEA with limited influence of the delivery, the definition of sub-suppliers could be limited to either:

• Entities which deliver services, goods or works in connection with the contract with a value above a certain percentage of the contract value

or

• Entities which deliver central or decisive services, goods or works in connection with the contract. Such central or decisive services, goods or works could be further defined, e.g., as services, goods or works where sourcing from entities would entail delays in the milestone plan.

#### Performance and Warranty Guarantee

To ensure the operator's due and punctual performance of the contract, the supplier is required to ensure that an unconditional and irrevocable on-demand performance and warranty guarantee are issued by a guarantor in favour of the DEA. Such performance and warranty guarantees impose costs for the supplier, which will be included in the suppliers' offered rates.

The supplier is not receiving payments before 2026, after the first potential quantities of  $CO_2$  are delivered as a part of the Ramp-Up Quantity. The safety represented by the performance and warranty guarantee are thereby not useful before 2026.

The presence of the performance and warranty guarantee before 2026 are thereby only in favour of the guarantor, who is receiving the related costs.

Removing the performance and warranty guarantee in the period before 2026 will reduce costs and enable the supplier to reduce the Offered Rate and thereby increase the captured quantity of  $CO_2$ .

#### 4.2 TENDERING PROCESS

#### 4.2.1 Choice of procedure

The DEA chose to conduct the procedure as a negotiated procedure. The choice is justified in the tender specifications based on the following grounds:

- The needs of the DEA cannot be met without adaptation of solutions already available
- The contract includes design or innovative solutions
- The contract cannot be awarded without prior negotiation due to the special circumstances related to its nature and complexity, its legal and financial aspects and the associated risks
- the DEA cannot define the technical specifications with sufficient precision by reference to a standard, etc.

These grounds are assessed as sufficient, and a negotiated procedure can be applied for this contract.

The stated grounds specifically emphasise design and innovative solutions as well as the DEA's lack of ability to define technical specifications. Based on these grounds, the DEA could have chosen other and more properly suited alternative procedures as a competetive dialogue or an innovation partnership.

The use of these alternative procedures is expected to require a longer tender process and an increased workload for the DEA. But if the above stated reasons for using the negotiated procedure are valid, the use of the alternative procedures would entail the following positive effects.

#### Multiple solutions

When using a negotiated procedure the contracting authorities shall identify the subject matter of the procurement. This is done by the DEA, which has defined the project and the envisioned value chain in the tender documents.

The alternative procedures have a broader focus on the needs of the contracting entity and/or the purpose of the tender. This opens the tender process for more alternative solutions suggested by the economic operators, where some may not have been anticipated by the contracting entity.

#### Entry barriers

As it will be noted further below in section 4.2.2, the tender contains economic entry barriers for the economic operators. By using alternative procedures aiming at a more partnership-based approach to the contract, these entry barriers could be alleviated. The entry barriers imposed by e.g.:

- The amount of necessary data and reports (which are requested in Appendix 3), both in the tender process and in the contract, could be continuously adapted and adjusted, when the DEA developed the solutions with the economic operators in a competitive dialogue.
- The payment schedule and high capital expenditures in early stages could be alleviated, if the DEA during
  the tender procedure was able to adapt the payments to the specific solution developed in an innovative
  partnership. However, it is noted by the DEA that an altered approach to the payment schedule with the
  intent to levitate the barriers caused by capital expenditures could require a modification of the current
  legislative basis for the CCUS Fund.

#### More diverse competition

In the more need-driven alternative procedures, the contracting entity can develop the requirements through dialouge/negotiations with the economic operators during the tender process.

Therefore, the requirements are not set at the start of the tender process. A more diverse range of economic operators can therefore be interested in participation, as they are not discouraged by an already defined set of requirements.

#### 4.2.2 Market dialouge

The DEA conducted a market dialogue prior to the tender process. The market dialogue was conducted in multiple rounds.

The first round of market dialogue was conducted with selected economic operators in November 2021. The selected economic operators were invited to a meeting with the DEA.

Second round of market dialogue was based on a prior information notice<sup>2</sup> and conducted in January-February 2022. In this round the economic operators were invited to forward written inputs and statements.

Third round of market dialogue was also based on a prior information notice<sup>3</sup> and conducted in March 2022. In the third round the economic operators were invited to forward additional written inputs and statements.

The market dialogue is documented, and the documentation does not give any grounds to assume that the conducted market dialogue contradicts with the legislative framework, e.g., section 39 of the Danish Procurement Act.

#### Structure of the market dialogue process

The first round of market dialogue was conducted with economic operators who were selected by the DEA. The selection was not based on any prior notices or a call for competition. Therefore, the participating economic operators were all known by the DEA in advance.

By this approach, the DEA risks:

• Absence of alternative solutions and economic operators

<sup>&</sup>lt;sup>2</sup> OJ S 13/2022 19/01/2022, Prior information notice

<sup>&</sup>lt;sup>3</sup> OJ S 46/2022 07/03/2022, Prior information notice

 To be locked in certain solutions or structures (like contract types) before a wider market dialogue is conducted.

The tender is set for the DEA in a new and untested market. Therefore, it is recommended that the first round of market dialogue is conducted with a prior call for competition to ensure that the DEA can select a diverse set of economic operators for a more detailed subsequent market dialogue.

#### Content of the market dialogue meetings

Minutes from the first round of market dialogue states the elements which the DEA has conferred with the economic operators.

It can be deduced from the minutes that different elements have been conferred with the different economic operators. This does not constitute a legal issue and is possibly caused by the different economic operators' different interests and agendas. It is, however, recommended, that the topics prepared and pushed by the DEA in the market dialogue are conferred with all participating economic operators to ensure complete feedback from the economic operators.

#### Responses from the market dialogue

The following responses from the market dialogue gives rise to remarks:

#### Time schedule

The written feedback from the economic operators in the second and third round of market dialogue contains several and clear indications from the economic operators, that the planned time schedule is not realistic or practically feasible. This critique covers both the planned time schedule regarding the tender process and the period from contract signing to operation. The planned time schedule was not altered, and the overall planned time schedule was later used in the tender documents published with the contract notice<sup>4</sup>.

Operator A:	"The proposed timeline	for such a project, with an al	location in Q4.22
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followed by project completion and startup in Q1.25 does not sound

realistic."

Operator B: "To achieve carbon storage by 2025, several prerequisites should be

met."

Operator C: "However, it should be noted that 2025 is ambitious and that the time

schedule is tight. The project needs to be run schedule-driven and hence, might have higher investment costs than a less ambitious

timeline".

Operator D: "The main concern for the Bidder in relation to being able to make an

offer is not so much related to the ambitious timeline for the Tender,

although that is a concern,"

Operator E: "it is worth noting that the timeline for delivering CCS in 2025 is very

tight."

The economic operators forward multiple reasons for their statements regarding the time schedule. The reasons were mainly focused on the fact that the CCUS Fund and the tender were the first of its kind. Hence, the economic operators needed extra time to:

 Consolidate in corporate collaboration structures, such as joint ventures and consortiums before and during prequalification.

<sup>&</sup>lt;sup>4</sup> OJ S 111/2022 10/06/2022, Contract notice

Contracts like the CCUS contract in this scale had not been tendered/purchased on the Danish/regional market before. Therefore, the economic operators were not established in such potential corporate collaboration structures before the tender.

The economic operators were also not familiar with any specific requirements of the tender for such corporate collaboration structure and the final scope of the value chain, e.g., special requirements for operation and sub-suppliers. Therefore, agreements regarding corporate collaboration structures would be hard to settle before the tender was published.

Hence, it was argued that the prequalification phase should be longer than the obligatory minimum.

Operator F: "Tidsplanen for prækvalifikation bør være minimum 3 måneder".

o Construction and establishment of the value chain.

The economic operators are not experienced with CCS projects, as most economic operators participating in the market dialogue only owned the point sources or were operating a part of the value chain. Establishing a full CCS value chain would be a new type of project, which required extra efforts regarding design and development.

Hence extra time was needed for preparation of the tenders in the tender process. Additional time was recommended to establish and construct the CCS value chain after signing the contract.

Operator G: "It is extremely difficult, and from our perspective

close to impossible, to establish full-scale capture of

CO<sub>2</sub> (CC) before the end of 2025."

Operator C: "This adds to the risk of a very tight timeline for the

project development and execution towards 2025."

Operator H: "...den skitserede udbudsproces, ambitionen om at

gennemføre den i løbet af i år,..., synes at forudsætte en samlet værdikæde, som allerede nu teknologisk og kommercielt er eller i løbet af kort tid vil være fuldt ud moden. Det er imidlertid efter INEOS' vurdering ikke tilfældet eller en realistisk forhåbning."

Establishing agreements with sub-suppliers.

The economic operators were dependent on sub-suppliers to prepare the tender and to perform the contract. A wide range of sub-suppliers were needed, and the need was dependent on the specific economic operator.

Sub-suppliers were both needed to operate specific parts of the value chain and for the delivery/construction of parts of the value (e.g., the CO<sub>2</sub> capture plant). The economic operators were dependent on agreements with or indications from their sub-contractors, before the economic operators were able to prepare and deliver full and economic realistic tenders to the DEA.

For some economic operators does that include public tendering. Hence these economic operators were bound to conduct their own tendering for components parallel to the CCUS tender.

The DEA should therefore have concluded that the economic operators did not have the sufficient time to establish the necessary agreements with sub-suppliers.

Operator I: "Tidsplanen er uændret i forhold til tidligere

udmeldinger. Vi vurderer derfor fortsat, at det er så stram en tidsplan, at markedsaktørerne ikke i tilstrækkeligt omfang har mulighed for at sikre sig de

nødvendige aftaler med underleverandører."

Operator J: "there are challenges for CCS projects to be

operational by 2025 due to the current underdeveloped CCS market: ... ● Tight delivery schedule ...It is therefore important ... that the DEA funding round 1 is awarded by end of 2022, without any delay"

Operator K: "... there are several challenges in the very tight time

schedule... Key vendors... have indicated that they require commitment already in mid-2022 to be able to guarantee that the project can be concluded in 2025. If commitment can only be given after signature of the contract by the end of 2022, this will inevitably lead to delays in commissioning of the capture and

storage operation."

Obtain authority approvals.

As it is given below, CCS projects requires several authority approvals. The economic operators indicates that the obtaining of these approvals would be an unknown factor, which could have a large impact on the time schedule.

This includes commercial risks, as a winning economic operator would be under a tight time schedule for delivery but unable to mitigate the impacts, process and time consumption related to the authority approvals.

The DEA has countered these risks with clause 6.2 of the contract, which states that non-performance due to e.g. "approvals from Danish authorities required to be able to achieve the Milestone(s)" does not constitute delay. However, this will still postpone payment of the supplier, hence, still impose a financial risk for the supplier.

Operator L: "Another risk element concerns the timeline. Carbon

Capture require environmental impact assessments including time for public hearings, as well as time for conducting public procurement, which will put a

strain on the timeline.".

Based on repetitive and consistent responses from the economic operators, it is assessed that the arguments presented by the economic operators regarding the time schedule in the market dialogue are genuine. The quantity of statements regarding this issue from the economic operators are further substantiating that the DEA was or should have been aware of this issue.

Proceeding with the planned time schedule for the tender process and the contract is therefore assessed to be contradicting the purpose of the tender process and the CCUS Fund.

It is noted that the DEA in the tender process finds it necessary to modify and extend the time schedule for the tender process. Given that the DEA due to the market dialogue is informed that economic operators may have abstained from participating due to the time schedule, the later modification can be assessed as a modification of a fundamental element, cf. section 4.1.2 above.

Even though the DEA extends the planned time schedule for the tender process, it is further noted that Aalborg Portland A/S as one of the three prequalified tenderers withdraws from the tender process partly

due to the project timeline. Subsequently so does I/S Vestforbrænding, as one of the two remaining tenderers fails to be ready with a compliant tender at the BAFO deadline. Therefore, it is evident that the time schedules imposed by the DEA had consequences for the commercial competition of the tender.

It cannot be established that extended time would have ensured better tenders, including lower offered rates of the tender. But it is viable that the tight time schedule for the tender process and construction phases of the contract has increased risks imposed on the tenderers, which has been included in the offered rates.

#### Authority approvals

As given above, obtaining authority approvals can impose a risk for the time schedule. Several economic operators emphasise further issues regarding the authority approvals, which can impact the performance of the contract.

These issues are related to the risks regarding getting the approval. The economic operators state:

- That the DEA requires the tenderers to guarantee delivery of transport and storage at a stage in the process, where no approvals are given.
- The process of preparing, submitting and obtaining the relevant authority approvals is so timeconsuming (1-2 years) that submitting a tender and signing a contract will require reservations regarding authority approvals.

#### 4.2.3 Cancelled procedure

The DEA dispatched the contract notice<sup>5</sup> for the first tender procedure for "Contract on subsidy for carbon capture, transport and storage" on 29/04/2022.

The first tender was subsequently cancelled by a notice<sup>6</sup> dispatched 03/06/2022. The DEA justifies, that the cancellation is conducted: "in order to take into account the ongoing process of providing a legal basis for municipalities and municipally owned entities to participate in the tender procedure and become the recipient of the subsidy as operator under the Contract".

The DEA was informed about these issues by the economic operators in the market dialogue<sup>89</sup>. It is not possible to determine, why the DEA did not address the issues regarding municipality-owned entities before the first tender was published.

#### 4.2.4 Prequalification

The DEA dispatched the contract notice<sup>10</sup> for the second tender procedure for "Contract on subsidy for carbon capture, transport and storage" on 07/06/2022.

Deadline for applications for prequalification was 07/07/2022, 23:59. Therefore, the deadline for application is in compliance with the regulation of minimum time limits given in section 59 of the Danish Procurement Act, even though it is on a narrow basis.

<sup>&</sup>lt;sup>5</sup> OJ S 87/2022 04/05/2022, Contract notice

<sup>&</sup>lt;sup>6</sup> OJ S 109/2022 08/06/2022, Contract award notice

<sup>&</sup>lt;sup>7</sup> Contract award notice, OJ S 109/2022 08/06/2022

<sup>&</sup>lt;sup>8</sup> Referat af markedsdialog m. Vestforbrænding version 0.2

 $<sup>^{\</sup>rm 9}$  Referat af marked sdialog m. ARC

<sup>&</sup>lt;sup>10</sup> OJ S 111/2022 10/06/2022, Contract notice

A notice<sup>11</sup> was dispatched on 01/07/2022 regarding VAT being included in estimated total value (the subsidy). The deadline for application was by this notice postponed to 01/08/2022.

#### Change notice - Subsidy is including VAT

The contract notice<sup>12</sup> stated that the estimated total value of the contract was DKK 8,168,000,000 excluding VAT, hence, the estimated total value of the contract inclusive VAT would therefore be DKK 10,210,000,000 DKK.

According to the change notice<sup>13</sup>, section II.1.5 (Estimated total value) and II.2.6 (Estimated value) are altered, so that the estimated (total) value DKK 8,168,000,000 is including VAT. This will entail that the estimated (total) value excluding VAT is reduced by 20% to DKK 6,534,400,000.

It is insignificant whether the change is substantial as the DEA postponed the deadline for applications with the change notice. A decrease of the estimated (total) value can nevertheless constitute a modification of a fundamental element, as such a significant regulation of the value can have influenced potential applicants or tenderers participation in the tender process, cf. sections 24 (1)(37) of the Danish Procurement Act.

Modifications of fundamental elements of the tender material cannot be conducted in the tender process, cf. section 134(1)(3) of the Danish Procurement Act.

The DEA addressed the issue during the tender process and states that the issue was assessed by external auditorial assistance. The external auditorial assistance concluded that the modification did not result in the above-stated effect (20% reduction) due to regulation regarding tax and VAT deductions, which significantly limited the actual reduction of the estimated (total) value.

#### Applications for prequalification

The DEA received four applications for prequalification. The following applicants were found to have complied with the minimum requirements set out in the contract notice<sup>14</sup> and were found not to be subject to any of the grounds for exclusion:

- Aalborg Portland A/S
  - o Based on the technical and professional capacity of Aalborg Portland Digital SRL
- I/S Vestforbrænding
- Ørsted Bioenergy & Thermal Power A/S
  - Based on the technical and professional capacity of Aker Carbon Capture Norway AS and Kalundborg Refinery A/S

The following applicant was found to have not complied with the minimum requirements set out in the contract notice:

• I/S Kraftvarmeværk Thisted

It was stated in the contract notice that the DEA intended to limit the number of tenderers to five.

Since there were three applicants who fulfilled the minimum requirements, a limitation among the applicants was not necessary. Therefore, all applicants fulfilling the minimum requirements were invited to submit tender.

<sup>&</sup>lt;sup>11</sup> OJ S 128/2022 06/07/2022, Corrigenum

<sup>&</sup>lt;sup>12</sup> OJ S 111/2022 10/06/2022, Contract notice

<sup>&</sup>lt;sup>13</sup> OJ S 128/2022 06/07/2022, Corrigenum

<sup>&</sup>lt;sup>14</sup> OJ S 111/2022 10/06/2022, Contract notice

#### 4.2.5 Tender phase

Invitations to submit tenders and letters of rejection were sent on 12/08/2022. The following tender phase consisted of a First INDicative Offer (INDO1), a subsequent revised INDicative offer (INDO2), a Best and Final Offer and intermediate negotiations.

#### INDO<sub>1</sub>

Deadline for submission of INDO1 was 07/10/2022, 13:00. Therefore, the deadline for submission of INDO1 is in compliance with the regulation of minimum time limits given in section 65 of the Danish Procurement Act.

All tenderers submitted a INDO1 before the deadline.

#### Prior negotiations

Prior negotiations were conducted with all tenderers between  $\frac{31}{10} - \frac{04}{11}{2022}$ .

#### Negotiations

Negotiations were conducted with all tenderers between 07/11 - 11/11/2022.

There are no procedural elements of the process around INDO1 and the subsequent negotiations based on INDO1 which give rise to remarks.

The expected tender schedule in the tender specifications, section 4, states that the process is expected to consist of an INDO 1 and a subsequent BAFO. The need for further indicative offers is predicted in the tender specifications, section 13.1. The need for an INDO2 was deemed necessary for the tender process at the conclusion of the negotiations based on INDO1. This decision and the following extended time schedule entailed the modification of the expected time schedule, which is assessed in section 4.1.2.

#### INDO2

Invitations to submit INDO2 were sent on 28/11/2022. Deadline for submission of INDO2 was 21/12/2022, 13:00. All tenderers submitted an INDO2 before the deadline.

#### • Prior negotiations

Prior negotiations were conducted with all tenderers between 12/01–13/01/2023.

#### Negotiations

Negotiations were conducted with all tenderers between 23/01 – 24/01/2023.

Invitations to continued negotiations were sent right after the last negotiations on 24/01/2023, 21:51. Further information regarding the continued negotiations were sent on 25/01/2023, 19:00. The tenderers were requested to submit comments before the deadline 26/01/2023, 08:00.

The process between the negotiations and the continued negotiations appears rushed, given that the tenderers are given less than two days from the invitation and less than one day from the further information are sent to prepare for the continued negotiations. Communication with the tenderers indicate that this accelerated process challenged the tenderers' ability to ensure that the right personnel resources were available.

Therefore, the execution of the continued negotiations is not considered to support an optimal tender process, nor an optimal negotiation environment.

#### Continued negotiations

Continued negotiations were conducted with I/S Vestforbrænding and Ørsted Bioenergy & Thermal Power A/S on 26/01/2023. Aalborg Portland A/S did not participate in continued negotiations. As Aalborg Portland A/S was invited to the continued negotiation, this does not constitute a legal issue.

Minutes from the negotiations and continued negotiations were sent to I/S Vestforbrænding and Ørsted Bioenergy & Thermal Power A/S on 16/02/2023. Aalborg Portland A/S did not receive the minutes from the negotiations, where Aalborg Portland A/S participated. This implies a risk of violating the principle of equal treatment.

#### Change notice - open for acceptance

A notice  $^{15}$  was dispatched on 27/01/2023 regarding the minimum time frame during which the tenderer must maintain the tender.

According to the change notice, section IV.2.6 (Minimum time frame during which the tenderer must maintain the tender) of the contract notice<sup>16</sup> is altered, so that the duration is reduced from six to four months.

A reduction of the minimum time frame can constitute a modification of a fundamental element, the reduction may have influenced potential applicants' or tenderers' participation in the tender process, cf. section 24 (1)(37) of the Danish Procurement Act.

Modifications of fundamental elements of the tender material cannot be conducted in the tender process, cf. section 134(1)(3) of the Danish Procurement Act.

#### **BAFO**

Invitations to submit BAFO were sent on 27/01/2023. Deadline for submission of BAFO was 31/03/2023, 13:00.

Aalborg Portland A/S notifies the DEA on 21/03/2023 that Aalborg Portland A/S is withdrawing from the tender due to: "... the project timeline and the adverse economic effect of not meeting the early deadlines for capture...".

I/S Vestforbrænding and Ørsted Bioenergy & Thermal Power A/S submitted a BAFO before the deadline.

#### 4.2.6 Evaluation and award

#### **Evaluation**

The DEA conducts an evaluation of the compliance of the received BAFO from I/S Vestforbrænding and Ørsted Bioenergy & Thermal Power A/S.

- BAFO from I/S Vestforbrænding was considered non-compliant with the requirements stated in the tender documents as further described below.
- BAFO from Ørsted Bioenergy & Thermal Power A/S was considered compliant with the requirements stated in the tender documents.

#### Rejection of BAFO from I/S Vestforbrænding

The BAFO was required to be a final, legally binding offer without reservations to the minimum requirements or to the general requirements concerning fundamental elements of the procurement. The submission letter from I/S Vestforbrænding stated that the BAFO was not unconditional and thereby not legally binding for I/S Vestforbrænding, and the letter contained reservations to fundamental elements of the procurement.

The reservations were related to the following issues:

- Agreements with sub-supplier was not reached in time for the BAFO deadline.
- The Danish Utility Regulator (in Danish: Forsyningstilsynet) had not confirmed or established the legal basis necessary for I/S Vestforbrænding in time for the BAFO deadline.

On 27/04/2023 I/S Vestforbrænding withdrew all reservations. No significance was given to the withdrawal at the evaluation, as it was received after the deadline for submission of BAFO. However, it is noticeably that the DEA

<sup>&</sup>lt;sup>15</sup> OJ S 23/2023 01/02/2023, Corrigendum

<sup>&</sup>lt;sup>16</sup> OJ S 111/2022 10/06/2022, Contract notice

possibly could have received two compliant tenders had the tenderers been given further time for preparing the BAFO, or the DEA had requested a further INDO before the BAFO.

The BAFO from I/S Vestforbrænding was rejected by the DEA on 15/05/2023.

#### Award of contract to Ørsted Bioenergy & Thermal Power A/S

Due to the withdrawal of Aalborg Portland A/S and the rejection of the BAFO from I/S Vestforbrænding, Ørsted Bioenergy & Thermal Power A/S had submitted the only tender compliant with the requirements stated in the tender documents.

On 04/05/2023 Ørsted Bioenergy & Thermal Power A/S was requested to submit updated documentation of the information stated in the ESPD. Additional documentation was submitted by the DEA on 09/05 and 10/05/2023.

A letter of award of contract was sent to Ørsted Bioenergy & Thermal Power A/S on 15/05/2023. A contract award notice <sup>17</sup> was dispatched on 06/06/2023.

#### Tender report

A tender report<sup>18</sup> was completed in compliance with section 174 (1) of the Danish Procurement Act. The tender report does not contain the following mandatory information:

- The contracting entity's (the DEA) address; cf. section 174 (1) (1).
- Contract value; cf. section 174 (1) (1).
- Name on the winning tenderers (Ørsted Bioenergy & Thermal Power A/S) sub-suppliers; cf. section 174 (1)
   (4) (b).
- Reason for the choice of procedure (negotiated procedure); cf. section 174 (1) (5).

It is further noted that the DEA has completed separate reports for the prequalification and for the tender phase. Information requested in section 174 (1) of the Danish Procurement Act regarding the prequalification is stated in the prequalification report, and information regarding the tender phase is stated in the tender report. It is recommended that the reports are merged to a complete tender report in compliance with section 174 (1) of the Danish Procurement Act.

#### 4.3 TENDERING FRAME

Based on the review conducted in the above sections 4.1 and 4.2, this section will give an overall assessment of the combined tendering frame consisting of the tender documents and the conducted tender process, and how the tendering frame complied with the principles stated in Danish procurement law and/or supported the purpose of the tender and the CCUS Fund.

#### 4.3.1 Compliance with the principles stated in Danish procurement law

The review of the tendering frame leads to the remarks in the below sections regarding the compliance with Danish procurement law.

#### Transparency of the evaluation model and method

Multiple elements linked to the evaluation model and method are assessed to be highly likely or likely not to comply with the principle of transparency and thereby Danish procurement law.

The sub-criterion Project Maturity is assessed to lack sufficient depth in comparison with the data and deliveries, which are requested from the tenderers. Hence, it is not possible for the tenderers to determine, which elements of the deliverables that will be evaluated as positive, which is highly likely or likely to constitute a lack of transparency.

<sup>&</sup>lt;sup>17</sup> OJ S 110/2023 09/06/2023, Contract award notice

<sup>&</sup>lt;sup>18</sup> Appendix E The DEAs Evaluation Report as approved 2 May 2023

The tenderer is requested to submit several deliverables as response to the requirements in Appendix 3. The responses, including the deliverables, are evaluated as described in Appendix A based on the elements stated to be evaluated positive in Appendix A. A deficient correlation between the deliverables requested in Appendix 3 and the elements which is stated to be evaluated as positive in Appendix A has been identified. Hereby causing a deficit where the tenderers for some of the deliverables or elements stated to be evaluated positive are unable to determine:

- which elements of the deliverable that will be evaluated as positive.
- which deliverable the elements stated to be evaluated positive in Appendix A refer to.
- whether some elements of the deliverable are more important in the evaluation than others.

The lack of correlation between the requirements in Appendix 3 and the evaluation method in Appendix A is highly likely or likely to constitute a lack of transparency.

It is further assessed that the evaluation method for the sub-criterion Subsidy is mathematical ambiguous regarding the calculation of the financial framework and the gradient used in the method. The ambiguousness of the evaluation method for the sub-criterion Subsidy is highly likely or likely to constitute a lack of transparency.

An evaluation method which implies a risk of not complying with the principle of transparency may be disregarded by the Danish Complaints Board for Public Procurement.

The DEA did not conduct a full evaluation, as only Ørsted Bioenergy & Thermal Power A/S submitted a compliant BAFO. Hence, the execution of the evaluation method was not realised.

#### Ambiguity in requirements and minimum requirements

In continuation of the remarks regarding Appendix 3, the wording and structure of parts of the requirements and minimum requirements are assessed highly likely or likely not to comply with the principle of transparency and thereby Danish procurement law.

Several requirements specifies the content of the deliverables, which are to be submitted by the tenderer as response to the requirement. By the use of the wording "as a minimum" and "shall", the specified content can be interpreted as mandatory content, and hence, causing the requirement/required content of the delivarables to be a minimum or formal requirement, in contrary to the requirement methodology in the tender specification, section 6. This ambiguity of the requirements is highly likely or likely to constitute a lack of transparency.

Further, the wording and formulation of the minimum requirements (specified by MR-1) can be perceived as not objectively ascertainable. A not objectively ascertainable minimum requirement is highly likely or likely to constitute a lack of transparency.

#### Modification of fundamental elements

Two implemented modifications are assessed to highly likely or likely constitute modifications of fundamental elements and thereby not comply with Danish procurement law.

The expected time schedule in the tender specifications is modified by the DEA in the tender process, as the DEA is altering/delaying the tender process. Several economic operators indicated in the market dialogue that the time schedule (and thereby the expected time schedule in the tender specifications) was limiting their potential participation in the tender process. The modification may therefore highly likely or likely be perceived as a modification of a fundamental element.

The modification of the requirement R-1 during the tender process entails modifications of elements in the subsub-criterion Operational Maturity and hereby the evaluation method. An evaluation method constitutes a fundamental element in a tender, and the modification can therefore highly likely or likely be perceived as a modification of a fundamental element.

#### 4.3.2 Purpose of the tender and the CCUS Fund

The purpose of the tender is to support the objectives stated in section 3.2 above, Figure 3. The review of the tendering frame leads to the remarks in the below sections regarding the support of the purpose of the tender and the CCUS Fund.

#### Time schedules

The time schedules set for both the tender process and the subsequent contract are assessed not to adequately support the overall purpose of the tender and the CCUS Fund due to the below remarks.

Repetitive and consistent responses from the economic operators in the market dialogue genuinely indicate that both time schedules impede the economic operators' possibilities to consolidate in corporate collaborations, construct and establish the value chain, conclude agreements with sub-suppliers and obtain authority approvals. Proceeding with the time schedules is therefore assessed to contradict the purpose of the tender process or the CCUS Fund, as it likely excludes multiple economic operators' participation in the tender process and thereby does not support the full potential regarding R&D initiatives regarding CCS technology or fully strengthen the framework for CCS in Denmark.

Though the requirements for deadlines of the Danish Procurement Act are complied with in the time schedules, the time schedule is assessed not to support an optimal execution of the tender. This is due to an overall impression that the tender process is rushed with no specific regard to the indications or requests from the economic operators before the tender process and/or from tenderers during the tender process. This is specifically noticeable in the conducted negotiation meetings regarding INDO 2, where negotiations and continued negotiations are conducted in a quick succession.

Further, tenderer Aalborg Portland A/S withdraws from the tender process partly due to project timeline and tenderer I/S Vestforbrænding fails to be ready with a compliant tender at the BAFO deadline, but however slightly after the BAFO deadline. Therefore, two out of three tenderers are out of the tender process and the competition due to the time schedules, and the rushed time schedules are therefore assessed not to support an optimal execution of the tender.

#### Economic entry barriers

Besides the entry barriers set up for the economic operators by the time schedules, there are further economic entry barriers in the tendering frame, which are assessed not to support the overall purpose of the tender and the CCUS Fund.

The structure of the contract and the payment plan state that the supplier is only receiving the first subsidies when the first  $CO_2$  is captured and stored. Therefore, it is necessary for the tenderers (later the supplier) to pay for all capital expendidures in the establishment and construction of the value chain and further a period of operation, before the first subsidies are transferred. This imposes a massive economic and upfront cost on the supplier, which is assessed to be only achievable for the most established and economically most solid economic operators. The distribution of liability in the establishment phase and payment plan is therefore likely to exclude multiple economic operators from participation in the tender process and does therefore not strengthen the framework for CCS in Denmark.

The supplier is further required to ensure that a performance and warranty guarantee is issued by a guarantor in favour of the DEA. These guarantees impose further financial costs on the supplier, which can only be covered by a higher offered rate for the CO<sub>2</sub>. The guarantees do not represent a value for the DEA before the subsidies are transferred, and therefore, the issuing of such guarantees before the first transfer of subsidies does not support the overall purpose of the tender and the CCUS Fund.

# 5 Inspection of the evaluation design

The purpose of this chapter is to assess the evaluation design and the evaluation plan that describes how the DEA will evaluate the fulfilment of the primary and secondary objectives to the first CCUS Fund tender for contract on subsidy for CCS.

The assessment covers four main topics:

- 1. Does the evaluation plan follow the recommendations set out by the EU commission regarding state aid evaluation?
- 2. Are the primary and secondary objectives suited to assess the impact of the state aid?
- 3. Does the DEA have the necessary data to assess the primary and secondary objectives in the future?
- 4. Desk research as to indicate whether state aid is necessary to achieve the purpose set out in the CCUS tender

# 5.1 ASSESSMENT IN RELATION TO EU'S RECOMMENDATIONS REGARDING STATE AID EVALUATION

The assessment has been carried out in accordance with the recommendations issued by the European Commission in the context of state aid, which can be found in the following documents:

- Common methodology for state aid evaluation (CMSAE)
- Energy State Aid: A toolbox on Counterfactal impact Evaluation (ESATB)
- Retningslinjer for statsstøtte til klima, miljøbeskyttelse og energi 2022 (RSKME)

The recommendations made by the EU Commission are not formal requirements, and the assessment has been carried out by the external quality assurance by grouping the recommendations into four main categories:

- General
- Indirect
- Direct
- Proportionality

The assessment was carried out based on the evaluation plan provided by the DEA.

The Evaluation plan for the tender for contract on subsidy for CCS, has already been approved by the EU Commission. So, within each category the assessment has evaluated how close the DEA has come to fulfilling the recommendations. This has been the case with most of the recommendations within the forementioned documents. In the instances where the DEA has not fulfilled the recommendations the assessment has included recommendations of whether the DEA should amend the evaluation plan or just be mindful of the recommendation in future evaluation plans.

#### 5.1.1 General requirements

General requirements consist of issues regarding formalities, stakeholders, publicity, control group and the evaluation body.

#### Control group

A number of objectives in the evaluation plan are to be evaluated against a control group. The control group is used to evaluate whether state aid gave the incentive for establishing a CCUS project, or whether the market

would undertake such projects without being given any type of aid. The DEA has in the evaluation plan given a detailed description of the tenderers who are included in the control group.

The selected control group consists of two prequalified tenderers, I/S Vestforbrænding and Aalborg Portland A/S, who did not win the tender. They are both emitting at least 0.4 MTA CO<sub>2</sub>, are relying on CCS as a technology to reduce their emissions, have shown interest in the tender and have the technical and financial capacity to undertake a high-risk project like a CCS project. The two companies operate in different sectors which influences the amount of ETA quotas the two companies will have to purchase, which again impacts the business case behind a CCUS project.

As part of the analysis into whether the two companies are relevant in a control group, the DEA has analysed whether higher ETA quota-prices could have an impact on the financial incentives on the two companies. This is based on the assumption that higher future ETA quota prices could potentially make it financially viable to undertake a CCUS project without receiving any type of aid. The DEA's analysis has shown that the two companies would still require state aid in order for it to be financially sound for them to undertake a CCUS project.

The DEA has not made any other analyses into other potential significant systematic differences between the beneficiary and the control group, which might have an impact on the decision to undertake a CCUS Project.

It has been assessed with the DEA, which agrees that different quota prices would be a significant factor for the two companies to decide whether or not to undertake the task of implementing a CCUS project, and as such is a relevant criteria in order to evaluate whether the two companies are relevant for the control group.

During the tender process, there were several companies which expressed an interest in bidding during the market dialogue. Some of these companies ended up not bidding, which could in part be because they felt that the timeline for the tender and the implementation period was rushed, did not give them enough time to form a consortium, or because legislation was not in place at the time of the tender. By limiting the focus group to the companies who were prequalified for the tender, the DEA might be missing out on potential candidates for the control group, had the companies had more time to eliminate stumbling blocks in the way of getting prequalified. In the tender material, the DEA had the option of prequalifying a maximum number of 5 tenderers, which would then have been potential candidates for the focus group.

Given the rushed tender and timeline for the project, it is the assessment that the DEA inadvertently might have decreased the number of companies within the focus group. Therefore, we recommend that the DEA with regards to future evaluation plans is mindful of whether the tendering process and the timeline might have an impact on which companies are considered for potential focus groups.

#### Structure

The DEA fulfils the majority of the recommendations set out by the EU Commission regarding the structure off an evaluation plan. However, in order to make the structure in the evaluation plan more intuitive and explicit for the reader, and to show that all parameters of the evaluation plan have been answered, it is recommended that the DEA uses headings recommended by the EU Commission. This will create a structure of the document, which allows the reader to more easily conclude that all recommended topics has been answered.

The assessment recommends that the DEA structures future evaluation plans with headlines following the recommended structure within the European Commission's template.

#### The evaluation body

According to the document 'Common methodology for state aid evaluation (CMSAE)', it should be ensured that the body conducting the evaluation is independent and with expertise. To ensure this, the evaluation plan should describe how it is secured that the independent consultancy firm have the skills to be rigorous, impartial and transparent. The DEA has not put forth the requirements and competences needed by the future external evaluation body within the evaluation plan.

This issue has been discussed with the DEA and it is recommended that this is added to the evaluation plan, which the DEA agrees with.

#### **Publicity**

According to the recommendations of the CMSAE document, the evaluation plan and the evaluation report should be made public. The DEA has already described how they are going to publish the final evaluation report on its website, but there is no mention of how the evaluation plan will be published.

The lack of publishing of the evaluation plan has been assessed and discussed with the DEA. The DEA has given consent and expressed that they will publish the plan on their website.

With consent from the DEA to publish the evaluation plan on their website, the assessment has not resulted in other comments on this matter.

#### Stakeholders

According to the CMSAE involvement of the relevant stakeholders should be described in the evaluation plan. However, the DEA has not made a specification of who the relevant stakeholders are and listed them in the evaluation plan.

Instead, the DEA has tasked Ørsted with holding bi-annual meetings until 2030 for relevant stakeholders, thereby keeping the stakeholders informed about the project.

This issue has been discussed with the DEA, which have indicated that there will be focus on this issue in the future.

It is recommended that in future evaluation plans, there will be a heightened focus on identifying the relevant stakeholders and specifying how they are to be informed.

#### 5.1.2 Recommendations regarding Direct and Indirect Objectives

The EU Commission's recommendations regarding the Direct and Indirect Objectives focus on evaluating whether the primary and secondary objectives are achieved as well as evaluating how state aid might have a negative effect on competition and trade.

#### Positive and negative effects of the state aid

The recommendations from the European Commission on state aid state that the evaluation plan is an important tool to understand whether the state aid has the desired effect and whether the positive effects outweigh the negative effects.

It is the view of the assessment, which the current result indicators listed in the evaluation plan are biased towards, primarily looking at positive effects and not giving the same attention to possible negative effects of the state aid. By not fully exploring the potential negative effect, it diminishes the DEA's ability to assess whether the positive effects outweigh the negative effects, and thus, whether state aid is the right option.

In the discussions on this topic with the DEA, it has been assessed that the DEA in the future should put more emphasis on results indicators that can contribute to understanding the negative effects as well as the positive effects.

It has also been assessed that the DEA could improve the structure of the evaluation plan when it comes to creating an overview of the positive and negative effects. In the evaluation plan for the first CCUS Fund tender the DEA could more explicitly indicate what was deemed positive and negative effects, by respectively grouping these under positive effects and negative effects headlines. The DEA has made a note of this, and headlines will be incorporated in future evaluation plans.

Based on the DEA indication that it will focus on both positive and negative effects throughout future evaluation plans, implement headlines and the fact that the EU Commission has approved the evaluation plan, other recommendations have not been assessed regarding the first CCUS Fund tender evaluation plan.

#### 5.1.3 Proportionality

The EU Commission's recommendations regarding proportionality focusses on whether the state aid given is a proportional amount, is reevaluated if the grant period is long and should examine whether the assumptions behind the state aid are fulfilled, specifically the necessity of giving the state aid.

#### Intentions and considerations behind result indicators

With regards to proportionality, it has been discussed with the DEA which intentions and considerations are behind the chosen result indicators measuring proportionality and the effect of the state aid.

The DEA explained that their biggest concerns were regarding:

- 1) the relatively long period of providing state aid, 20 years.
- 2) whether the market for CCS was mature enough to create a certain level of competition throughout the tender process.

With regards to the 20-year period of state aid, the evaluation plan requires the beneficiary to deliver a yearly financial report in order to secure that the state aid does not result in overcompensation of the beneficiary with regards to the cost accrued by the beneficiary.

The beneficiary is also required to deliver an annual report detailing adjustment to the state aid based on new income streams or reduced cost, thus lowering the amount given in state aid. In the contract with Ørsted, there has been given some incentive to optimise costs and earnings of the CCS-project. The contract has an economic incentive for Ørsted if they can achieve efficiency improvements, which will decrease the level of state aid support, Ørsted will then be allowed to keep some of the savings.

It has been assessed that the DEA has taken initiatives to secure proportionality during the project period.

With regards to whether the market has been mature enough to create a level of competition, the DEA has used a result indicator based on the amount of BAFO submissions received during the tender.

It has been assessed and noted that the tendering process will create a competition which affects prices, and in this case with a tender process which includes several rounds of negotiation it should, in theory, drive tender prices down to the lowest level which helps to ensure that proportionality is achieved.

Based on the result indicators regarding proportionality of the evaluation plan, other comments on this matter have not been assessed.

#### 5.2 METHODOLOGY AND CRITERIA

The assessment of the evaluation plan has also been carried out with the objectives of the first CCUS Fund tender in mind, and whether the individual components are suitable for assessing the impact of the state aid.

#### **Timeline**

The CMSAE states that the evaluation plan should provide information on the precise timeline of the evaluation, which will be set in accordance with the approved duration of the scheme and should include milestones, i.e. for collecting the data, carrying out the evaluation and submitting the final report.

All the indirect effects are evaluated in 2030. The DEA has explained that the indirect effects are only measured in 2030 due to the fact that they are hard to isolate from other external factors, and over time it will be even more difficult to isolate the indirect effect from the CCS project at Ørsted from other external factors.

It has been assessed and discussed with the DEA how the indirect effects can be isolated to state aid given to the project at Ørsted. It is obviously difficult to isolate the indirect effects from other external effects, and because of

this the DEA has also in the evaluation plan indicated that it cannot make a robust conclusion when it comes to the indirect impact.

The explanation has been accepted and there are no further comments regarding this topic from the assessment.

With regards to the direct result indicators, the 0.43 MTA CO<sub>2</sub> goal is evaluated annually, based on reports delivered by the beneficiary. It has been found that this approach is sufficient to evaluate the 0.43 MTA goal.

The goal regarding "to what extent has the CCUS Fund supported value chain had a positive impact on the development of a CCS market? "is not intended to be evaluated until 2046, which is 20 years after the start of the state aid.

This issue has been assessed and discussed with the DEA, noting that not evaluating until the end of the project period leaves no room for adjustment, should the DEA find that the required results have not emerged.

The DEA has agreed with this point and will change the year of evaluating this goal to 2030. No further comments have been assessed regarding this issue.

#### **Evaluation questions**

The CMSAE states that the evaluation questions should be precise so that they can be answered quantitatively with the necessary support.

The DEA has three evaluation criteria regarding the secondary objectives:

1) To what extent has the aid supported the government policy on turning Denmark into a European hub for CO<sub>2</sub> storage?

Which is to be answered by the following questions

- a. Danish import of CO<sub>2</sub> for geological sequestration
- b. Number of commercial contracts between Danish storage providers and Danish/Union carbon capturers (baseline 2025, i.e. year one of the CCUS Fund)
- 2) To what extent has the aid supported government policy on regional job-creation?

Which is to be answered by the following question

- a. Number of jobs created in the CO<sub>2</sub> transportation and storage sectors (baseline 2025, i.e. year one of the CCUS Fund)
- 3) Has the state aid successfully supported government policy on R&D of new and innovative technologies related to CCS?

Which is to be answered by the following questions

- a. Increase/decrease in total share of research publications related to CCS (baseline 2025, i.e. year one of the CCUS Fund)
- b. R&D collaboration projects between beneficiary and other CCS actors

Many of the abovementioned questions can be answered quantitively, but it is still somewhat unclear when the DEA considers the goals to have been met.

This has been discussed with the DEA, and an example of what has been discussed is the evaluation question asking: To what extent has the aid supported the government policy on turning Denmark into a European hub for CO<sub>2</sub> storage? The DEA explains that the indicators intended to answer this question is 1) the amount of Danish import of CO<sub>2</sub> for geological sequestration and 2) the number of commercial contracts between Danish storage providers and Danish and EU carbon captures.

Ideally, the goals would have been more specific, examples could be like - the Danish import of  $CO_2$  for sequestration should annually amount to more than XX MTA  $CO_2$  or the number of commercial contracts between Danish storage providers and Danish and EU carbon capturers should exceed xx.

Setting such goals, would make it easier for the future evaluation body to conclude whether the goals of the secondary objectives had been met.

It has been acknowledged that it is difficult for the DEA to set such goals, as targets have not been set as part of the political agreements regarding the first CCUS Fund tender. It has also been acknowledged that the current evaluation criteria have been approved by the EU Commission, but it is nevertheless the recommendation that the DEA sets clear goals for the evaluation criteria on the secondary objectives and gets them approved within the political system.

## 5.3 DATA REQUIREMENTS FOR EVALUATION

#### Data to support the evaluation of primary and secondary objectives

The reporting requirement of the beneficiary as laid out in Appendix 3 has been examined – Requirements specification - in order to establish whether the data made available by the beneficiary will make the DEA capable of evaluating whether the primary and secondary objectives have been met.

Appendix 3 - Requirements specification defines a number of reports, which the beneficiary is required to deliver to the DEA. Among these reports are R8 - Financial report of the ccs activity, R9 – Financial report concerning earnings and cost in order to monitor optimisation, R18 – Report on  $CO_2$  Production, R19 – measurement system for  $CO_2$  storage reporting and finally R20 –  $CO_2$  origin verification plan.

It is assessed that these reports will enable the DEA to verify whether the primary objectives of capturing 0.43 MT  $CO_2$  have been met. The R20 report on stored  $CO_2$  is also an indicator that a value chain has been established and is being operated.

With regards to the secondary objectives, the assessment has not found any reports aimed at verifying achievement of the goals set out in the secondary objectives.

This has been discussed with the DEA, and the DEA has made the point that the evaluation will be conducted by an external party at a later date. The external party will be tasked with deciding which data to use for the evaluation. The EU Commission has recommended that "To strengthen the reliability and validity of the conclusions concerning indirect impacts, theory-based impact evaluation methods could supplement the temporal comparisons". The DEA has decided that "an assessment of the relative advantage and the possibility of using such methodologies will be included in the interim report (additional report 1) expected by 2031".

It's recommended that the DEA in connection with future evaluation plans considers which data will be required in order to measure the fulfilment of secondary objectives.

Based on the DEA's response and the fact that the EU Commission has approved the evaluation plan, the external quality assessment does not have any further remarks regarding this issue.

#### Second best parameters and methods for evaluating

The form requirement for evaluating state aid suggests that the DEA should consider a second-best evaluation method. The DEA has not been aware of this recommendation and has not received any comments from the EU Commission regarding this topic.

There are no further comments to this issue, but it is recommended that the DEA considers second-best evaluation models in future evaluation plans.

#### External factors influence on the secondary objectives

It has been assessed and discussed with the DEA that the possibility of external factors influencing the secondary objectives is making it difficult to measure the impact of the state aid.

Given the fact that the DEA has not defined the method of evaluation, this could potentially complicate the future evaluation of the secondary objectives. The DEA has acknowledged that it can be difficult to isolate external factors from the state aid with regards to the secondary objectives and has written in the evaluation plan that "the DEA is aware that estimating the indirect impacts of the aid using this approach and the indicators listed in section 4.1 will not enable robust conclusions concerning causality."

Ideally, the DEA had included an evaluation model for the secondary objectives in the evaluation plan but given that the DEA is aware of the potential difficulties coming to a robust conclusion regarding the secondary objectives and will be tasking the future external party conducting the evaluation with the assignment of developing an evaluation model, it has not caused any further comments.

#### 5.4 HAS THE STATE AID SCHEME HAD AN INCENTIVE EFFECT?

To ensure that the state aid scheme has an incentive effect, desk research has been conducted to map similar international CCUS-projects with focus on information on financial support. The purpose of this desk research is to assess whether financial support is crucial for the creation of CCUS projects.

Within Europe and around the world there are a relatively high number of CCUS projects planned or announced, according to the International Energy Agency and other sources. In order to find a comparable portfolio of CCUS projects similar to the project which the Danish Energy Agency grants state aid to, the focus has been on finding projects that are:

- 1. Within the EU
- 2. Announced to be in operation from 2026
- 3. Capture emissions and/or have a full value chain

Focus has been on projects which are going to capture emissions as well as capture and establish a value chain, because the capturing part is essential to drive the demand for a value chain of transport and storage and since multiple carbon capturing projects can benefit from the same established infrastructure.

This has narrowed the field of CCUS-projects that are comparable. Figure 4 illustrates how much emissions are expected to be reduced within the different EU Member States which has comparable projects with the CCS project in Denmark, which is expected to capture emissions from 2026. It shows that Greece is the country that is expected to capture the highest amount of emissions from 2026. The capture comes from two projects that are both financially supported by the EU.

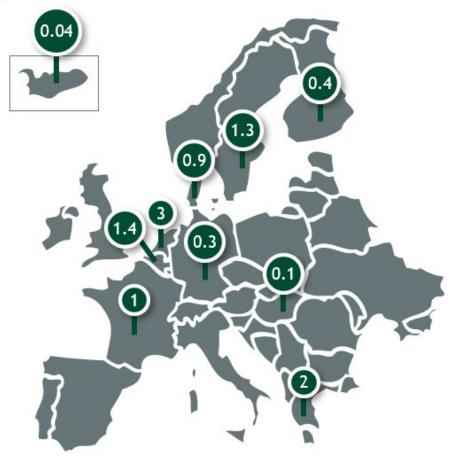


Figure 4: EU countries with emission reduction from CCS projects from 2026

Figure 5 shows which authority is providing financial support to the same CCUS projects. Looking at projects which has the same time horizon as the Danish CCS project, the overall trend is that CCUS projects are financially supported by either local authorities or the EU.

There is one project in Hungary, which is funded by a private company which uses the captured carbon as a tool to release oil from the underground and push it to the surface, a technique called enhanced oil recovery, which is illegal in Denmark.

In Denmark, a second CCUS project at the "Amager Bakke" has been announced. That project has also applied for EU funding, but currently the application has been rejected.

Figure 5: Share of CCUS projects expected in operation from 2026 in EU split on financial support from authorities



# Countries within EU with carbon capture or full value chain expected in operation from 2026



The conclusion is that without financial support from authorities or the EU, only a very small amount of carbon would be stored from 2026, and that from a method which is illegal in Denmark.

This indicates that the CCUS project would not have been established without the financial support by the DEA, thus, confirming that the state aid has an incentive towards the establishing of CCUS projects.

#### 5.5 RECOMMENDATIONS REGARDING THE EVALUATION PLAN

The overall recommendations regarding the evaluation plan which the DEA has made in order to evaluate the CCUS Fund tender is that the plan appears suitable for the purpose of evaluating whether the primary objectives are met. With regards to the secondary objectives it is recommended to the DEA to be more specific with regards to the goals set for the evaluation criteria. Even if it is worth nothing that the evaluation in its present condition has been approved by the EU Commission.

Areas have been identified where it is recommended that the DEA makes some changes to the existing evaluation plan:

- The evaluation plan should be made public
  - o The DEA has committed to publishing the evaluation plan on the DEA's website
- The DEA should define the skills needed by the future evaluation body and include this into the evaluation plan

The future evaluation body should at least possess the skillset listed below:

- Ability to be rigorous, impartial and transparent
- Experience in building evaluation models
- o Experience with external quality assessment
- o Experience with theory-based impact evaluation methods
- The evaluation of the primary objective "to what extent has the CCUS Fund supported value chain had a positive impact on the development of a CCS market?" should be conducted sooner than in 2046

- The DEA will conduct the evaluation of this primary objective in 2030
- The DEA should set clear goals for the secondary objectives and have them approved by the political system, making it easier to determine whether the goals of the secondary objectives have been met
  - o The evaluation plan contains three Indirect objectives:
    - 1. Support policy on turning Denmark into a European Hub for CO2 storage
    - 2. Support policy on creating local jobs in order to prevent the green transition from exacerbating regional disparities
    - 3. Support policy on Increased R&D effort in relation to CCS-technologies

In connection with the political agreements in the Danish Parlament on "A roadmap for the capture, transport and storage of CO2 - 14 December 2021" and "A roadmap for the storage of CO2 - 30 June 2021", a number of objectives have been determined that can be applied as a guideline for determining the objectives regarding the Indirect objectives. The CCUS projects can be seen as means to achieving the overall objectives in the aforementioned agreements.

#### Ad 1)

In relation to the objective of making Denmark a European hub for CO2 storage, the following is written in the aforementioned agreements:

- $\bullet$  "The agreement must pave the way for Denmark to assume global leadership in the capture, storage and use of CO2" <sup>19</sup>
- "The parties to the political agreement agree to realize Denmark's role as a European hub for the storage of CO2, so that the import of CO2 can be promoted, cf. the principle agreement "A roadmap for the storage of CO2 30 June 2021"  $^{20}$
- "Denmark must be able to import and export CO2 to and from abroad" 21
- "The parties to the political agreement agree that Denmark must be able to import and export  $CO_2$  to and from abroad. The parties to the agreement note that this requires the removal of a number of regulatory barriers. The contracting parties therefore agree to accede to the amendment to Londonprotokollen and the amendment to Havmiljøloven (proposed in November 2021) to enable the import and export of  $CO_2$  with selected countries" <sup>22</sup>
- "The parties to the political agreement also support the government initiating work to conclude bilateral agreements on the transport of  $CO_2$  across national borders. The parties to the political agreement agree, that agreements can be made with countries that, like Denmark, will use CCS to reduce emissions that are otherwise difficult to reduce and to achieve negative emissions"  $^{23}$

Based on the text of the agreement that forms the basis for the first tender of the CCUS fund, possible objectives to support the "Support policy on turning Denmark into a European Hub for CO2 storage" could be the following:

<sup>&</sup>lt;sup>19</sup> A roadmap for the capture, transport and storage of CO2 - 14 December 2021

<sup>&</sup>lt;sup>20</sup> A roadmap for the capture, transport and storage of CO<sub>2</sub> - 14 December 2021

 $<sup>^{\</sup>rm 21}$  A roadmap for the storage of CO2 - 30 June 2021

<sup>&</sup>lt;sup>22</sup> A roadmap for the storage of CO<sub>2</sub> - 30 June 2021

<sup>&</sup>lt;sup>23</sup> A roadmap for the storage of CO2 - 30 June 2021

- A) Have regulatory barriers in relation to whether Denmark can import, and export CO2 been removed?
- B) Has Denmark entered into bilateral agreements with other European countries on the transport of CO2 across national borders? In connection with this objective, the required number of bilateral agreements that must be concluded before 2030 should be listed.

Thereby, the evaluation of the first Indirect objective will support the original objectives that are part of the original political agreements, which form the basis behind the CCUS fund.

#### AD 2)

In relation to supporting the establishment of jobs within the capture, transport and storage of Co2, the following is written in the the agreements:

- ... "support the transition from jobs in the oil and gas industry to new green jobs in the field of CCS" 24
- "The parties to the agreement also agree on the need to develop Danish storage capacity, as this could potentially lead to the development of new green jobs in connection with the storage of CO2" <sup>25</sup>

In connection with the evaluation of the second Indirect objective "Support policy on creating local jobs in order to prevent the green transition from exacerbating regional disparities", the objective could be as follows:

C) The proportion of jobs that have been converted from the oil and gas industry to new green jobs within the capture, storage and use of CO2

#### Alternatively:

D) How many employees within the capture, storage and use of CO2 have previous experience from the oil and gas industry

To the extent that the above objectives can be quantified, it would be preferable to do so, according to the recommendations regarding evaluation plans in connection with EU state aid projects.

#### AD 3)

In relation to supporting increased research in CCS technologies, no specific objectives for research have been mentioned in the basis of the political agreements, but there has been set funds aside for research within this field.

Since in the aforementioned political agreements from the Danish Parlament doesn't mention any objectives, we would suggest to the DEA that the objective in relation to this Indirect objective be based on this specific CCUS project. The objective could therefore be:

A) The number of research projects which, based on the CCUS project between the DEA and Ørsted, are initiated in 2030.

If possible, the number of research projects should be quantified.

There has been identified areas where it is recommended, that the DEA make appropriate changes in future evaluation plans:

<sup>&</sup>lt;sup>24</sup> A roadmap for the capture, transport and storage of CO<sub>2</sub> - 14 December 2021

<sup>&</sup>lt;sup>25</sup> A roadmap for the capture, transport and storage of CO<sub>2</sub> - 14 December 2021

- It is recommended that the DEA uses the recommended structure regarding headlines, etc. for the evaluation plan made by the EU Commission
- Include in the evaluation plan an overview of who are the stakeholders and how will they be informed
- Conduct analysis on second-best evaluation methods and include this in the evaluation plan
- Structure the presentation of positive and negative effects in a way which makes it easy for the reader of the evaluation plan to get an overview of both the positive and negative effects, thus making it easier to assess whether positive effects outweigh the negative effects
- Should be careful not to limit the potential candidate pool for the control group, as different factors such as how the tender was conducted might have an influence on the candidate pool, if the DEA limits itself to only choosing companies which has submitted a tender

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