

Invitation to second market dialogue CCUS Fund

The Danish Energy Agency

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1 Introduction

The Danish Energy Agency (DEA) invites potential Bidders and relevant market operators to participate in the second round of market dialogue on the deployment of the CCUS fund.

With the Danish Climate Agreement for Energy and Industry of 22 June 2020¹, a majority in the Danish Parliament decided that carbon capture, utilisation, and storage are important elements in achieving Denmark's climate policy objectives. The decision prompted the establishment of a technology-neutral and market-based fund (the CCUS funds) of DKK 16 billion, which is scheduled for deployment between 2025-2048. The Danish Energy Agency (DEA) is responsible for deploying the CCUS fund.

The CCUS fund will be deployed in two phases. This second market dialogue and the DEA's assumptions and considerations mentioned below concerns only the first phase. Information regarding the second phase will be published later. The first phase of the CCUS fund will be implemented by deploying funding with a focus on carbon capture facilities. The funding will be deployed for the purpose of capturing CO₂ emitted from incineration plants relating to energy intensive industries, waste incineration and electricity and district heating plants.²

Furthermore, the funding strives to realize CO₂ reductions of 0.4 million tonnes CO₂/year³ (MTA) from 2025. The carbon dioxide reductions must count as reductions in Denmark's National Inventory Report. The fund shall cover the costs of capture, transport, and permanent storage of CO2. Bidders are therefore assumed to be responsible for the whole value chain. The deployment of the first phase of the fund supports that CO₂ capture, transportation, and storage are established simultaneously. This is necessary to ensure the coherence of the value chain for capture, transportation, and storage in order to realise the required reductions by 2025.

This market dialogue will provide an opportunity for the market and potential Bidders to submit written feedback, input, and recommendations regarding the main elements of the tender.

During the first round of market dialogue, potential Bidders and market operators gave input to the DEA under the following headlines:

Design of tender

- The quantity of CO₂ expected to be captured
- The duration of the Contracting Period
- The expected timeline for capture, transport, and storage of CO₂
- Additional income opportunities
- The number of point sources allowed to be included in an Offer
- The implications of the heating demand from seasonal variations
- The implications of the responsibility for the entire CCS value chain

¹ https://fm.dk/media/18085/klimaaftale-for-energi-og-industri-mv-2020.pdf
²https://kefm.dk/Media/637750803075155837/Faktaark_Tilskudspuljer%20til%20fangst%20og%20lagring%20af%20CO%E2%82%82_V02.

pdf *https://kefm.dk/Media/637750803075155837/Faktaark_Tilskudspuljer%20til%20fangst%20og%20lagring%20af%20CO%E2%82%82_V02. ndf



The CCS market

- The imperfections in the Danish and international carbon capture, transportation, and storage market
- The eligibility of point sources and the administration of combinations of fossil and biogenic CO2
- The utilisation of CO₂ for Power-to-X
- The volatility of EUA price development

Regulations and funding

- The Danish Heat Supply Act ("Lov om varmeforsyning")
- A Danish subsea CO₂ storage licence and permit
- The overlap between the CCUS fund and other on-going funding programmes

Tender procedure

- The cost of the Tendering Procedure
- The tender timeline and authority approvals

2 Current assumptions and considerations

The DEA will notify the CCUS fund to the European Commission as an aid scheme in accordance with the procedure prescribed by Article 108 of the Treaty on the Functioning of the European Union. The deployment of the fund is dependent on the Commission's prior approval. In continuation, the Tender Material may also be subject to change as part of the Negotiation Procedure.

The purpose of the second market dialogue is to present the DEA's <u>current working hypotheses</u> for the deployment of the first phase of the CCUS fund. Thus, all aspects of the assumptions and considerations presented in this document may be subject to change. The current state of design of the CCUS fund includes input from the first round of market dialogue held between November 2021 – February 2022. The DEA also wishes to emphasize that no determinations and decisions have been made with respect to e.g., the legal framework and structure of the deployment of the funds and the foreseen bidding process.

Scope of Contract

The winning Bidder must deliver capture, transport, and permanent storage of CO_2 . Thus, the winning Bidder is responsible for the establishment and operation of one fully integrated value chain, including agreements with relevant subcontractors, such as transport and storage operators.

Furthermore, the CO_2 sequestration must qualify as emission reductions in the Danish National Greenhouse Gas inventory report (in Danish: Det Danske Nationale Drivhusgasregnskab), as described in the Danish Climate Act, Section 1, on domestic emissions. Thus, the carbon emissions must be included in the Danish National Greenhouse Gas inventory report, or be deducted in the Danish, national greenhouse gas accounts by future use of carbon capture and storage. Accordingly, utilisation of CO_2 will not be included in the Contract.



Furthermore, the winning Bidder shall document the quantity of stored CO_2 and that the storage complies with the applicable rules, including the Requirements of the Directive 2009/31/EC (EU's CCS Directive).

CCUS based on biogas, pyrolysis or direct air capture are referred to the separate fund agreed in the Finance Act of 2022 (FL22⁴).

One Contract to be awarded

For the first phase of the fund one Contract will be offered for the capture, transport, and storage of a minimum of 0.4 MTA CO_2 from 2026. The subsidy during the first phase cannot be split between several contracts with a quantity of less than 0.4 MTA CO_2 . Bidders, that wish to apply for a subsidy for projects with a quantity potential below 0.4 MTA CO_2 , are encouraged to establish a cooperation with other entities that collectively can fulfil the requirement of minimum 0.4 MTA CO_2 .

Capture and storage from 2025

The winning Bidder must deliver capture and storage of a minimum of 0.4 MTA CO_2 from 2026. Meaning that only Offers, that guarantee the annual capture of a minimum of 0.4 MTA CO_2 from 2026, can be accepted for evaluation. The quantity, that the Bidder can guarantee of captured and stored CO₂ above the minimum of 0.4 MTA from 2026, is expected to form part of the evaluation. The DEA has an ambition of capture and storage of a minimum of 0.4 MTA in 2025. Thus, the quantity, that the Bidder can guarantee of captured and stored CO₂ before the end of 2025, is also expected to form part of the evaluation.

Quantity of the stored CO2

The quantity to be delivered by the winning Bidder will be the actual quantity of CO_2 stored. This means that emissions of CO_2 incurred in the full value chain until permanently stored shall not be included in the offered quantity for delivery and the subsidy to be paid.

Duration of Contract and Exit Clause

The Contract is expected to be concluded in December 2022. Furthermore, the Contract between The DEA and winning the Bidder is expected to be a 20-year operating agreement from 2025-2045. However, it is under consideration to build in a unilateral Exit Clause into the Contract that can be used by the winning Bidder e.g., at the earliest with effect from 1.1.2033 and with a minimum of 3 years notice (as illustrated in Table 1). The DEA will not receive any compensation for the winning Bidders' possible use of the Exit Clause. Table 1 illustrates the DEA's interpretation of "Ramp-up" and "Operating" years during the Contracting Period.

Table 1: Operating and actual	years of the	Contracting Period
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	2025	2026	2027	2028	2029	2030	2031	2032	2033
Operating year	Ramp-up	1	2	3	4	5	6	7	8

⁴ https://ens.dk/sites/ens.dk/files/Analyser/7e_kf22_forudsaetningsnotat_-_ccs.pdf



Payment and adjustment of subsidy

This section outlines conditions for payments made.

The fund is distributed as a payment per tonne of CO_2 delivered, (captured and permanently stored), i.e., the subsidy does not provide asset related ("CAPEX") support to projects, development, construction or similar. The winning Bidder is not remunerated by the fund for delivery of any other service or compensated for any costs other than the agreed subsidy per tonne CO_2 .

Payment profile

The fund's deployment profile is based on the political agreement (KEI2020), which determines an annual deployment profile and that the collective size of the fund is DKK 16 billion (Figure 1). Figure 1 illustrates a potential distribution between the first phase (DKK 8,3 billion illustrated by the turquoise pillars) and the second phase (DKK 7,7 billion illustrated by the dark green pillars).





The subsidy will be paid per tonne CO_2 captured and stored. A fixed baseline subsidy per tonne CO_2 will be offered for the Contracting Period. The Price per tonne CO_2 will be adjusted throughout the Contracting Period to reflect inflation, and the subsidy will be adjusted in line with the development of the CO_2 allowance prices (EUA) as described below. Furthermore, an adjustment will be made based on a regular review in accordance with European State Aid Rules, including, among other factors, changes in CO_2 tax and potential income streams (e.g., certificates for negative emissions). Penalties for non-compliance will apply.

Payment of the subsidy will be made as an annual payment based on the actual delivery of capture and storage of CO₂. The annual payment will continue throughout the Contracting Period, with the potential last payment in 2045.

Annual adjustment of subsidy

The payment will be adjusted annually to reflect inflation with a simple price index adjustment as published by Statistics Denmark (nettoprisindeks, NPI) and to reflect EUA price fluctuations using a Contract for Difference (CfD) mechanism. The NPI-adjustment will be applied in all cases regardless. The CfD-



adjustment, on the other hand, will depend on the specific fraction of fossil respectively biogenic origin of the captured and stored CO₂.

By a 100% percent fossil CO_2 composition, the regulation mechanism will provide the largest subsidy adjustment. By a 100% percent biogenic CO_2 composition, the regulation mechanism will provide no subsidy adjustment. Only the bidder's quota-covered fossil CO_2 emissions will be included in the adjustment mechanism. Furthermore, the Bidder is expected to make use of the specified EUA price assumptions, that will be presented in the Tender Material, when making a Bid. If the price of an EUA develops differently from the baseline scenario (see footnote 6), it will give rise to an adjusted subsidy. For every DKK 1/tonne, that the EUA price is higher than the base scenario, the subsidy will be reduced by DKK 1/tonne multiplied by the share of quota-covered fossil in the captured and stored CO_2 .

A similar adjustment also applies, if the EUA price becomes lower than the base scenario. However, no further subsidy will be paid than the maximum allocated subsidy for each year of the Contract. The relationship between the adjustment and the winning Bidder's share of quota-covered fossil CO_2 is illustrated in Figure 1.

Figure 2: The relationship between the adjustment and the selected Bidders' share of quota-covered fossil CO₂



The Price per tonne is adjusted annually as follows:

Inflation index: The Price per tonne is adjusted to reflect inflation using the net-price index published by Statistics Denmark (nettoprisindeks⁵)

EUA price⁶: The Price per tonne is adjusted to reflect the spread between the baseline (specified in the Tender Documents for every contracting year) and the actual price:

Price Adjusted = Price - Share of emissions subject to $EUA * (EUA baseline_n - EUA actual_n)$

⁵ Here, the relevant index is inserted, with which the Ministry of Finance regulates the fund ⁶ https://www.ft.dk/samling/20201/lovforslag/L239/spm/31/svar/1813007/2454771.pdf



Where:

- Price Adjusted is the price per tonne used to calculate the payment
- Price is the price per tonne offered by the Bidder adjusted for inflation
- Share of emissions subject to EUA is the proportion of the total quantity of CO₂ which would have required allowances (free or purchased) if released into the atmosphere compared to the total quantity captured in year n
- EUA baseline_n is the allowance price forecast for year *n* provided by the DEA in the Tender Documents for every contracting year
- EUA actual_n is the actual average allowance price for year *n*, as determined by the simple average of the daily settlement price for the one year forward EUA prices for delivery in December of the year for which the subsidy is granted

The Contract will furthermore be reviewed annually to ensure that the subsidy is within the limit of State Aid Rules⁷. If framework conditions have changed so that the winning Bidder receives a higher-thanpermitted subsidy according to the regulation, the subsidy will be reduced to reflect the change in conditions. Favourable changes in framework conditions (specific new value streams or savings) could e.g., be the introduction of CO₂ taxation or the emergence of a certificate market for negative emissions based on storage of biogenic CO₂. These are, for now, deemed too speculative to be implemented in the same way as the EUA CfD-mechanism (as specified above). However, relevant corrections will be made later and continuously to ensure that the subsidy is within the limit of the beforementioned State Aid Rules. Reference is also made to the description of the principle of "open books" below.

The principle of "open books"

The DEA wishes to apply the "Open Book"-principle (In Danish: "åben bog-princippet") during the Tender and Contracting Period, implying that the Negotiation and the entire Contracting Period will take place under full transparency of the Bidder's cost structure. The reason, for applying the Open Book principle, is to promote the DEA's wish of a collaborative behaviour between the DEA and the Bidder through financial transparency. The expected outcome should be a fair combined Price for the Bidder, efficient subsidy allocation for the DEA, and possible performance improvements for both Parties during the Contracting Period.

The procedure entails that the Bidder presents its expected cost structure and combined business case (e.g., subcontractors, costs, revenue, risk premiums, taxes, and incentives) for constructing and operating the entire value chain into one combined Price. Subsequently (during the Contracting Period), adjustments to the combined Price could be made to accommodate for actual costs of constructing and operating the entire value chain during the Contracting Period, while observing the agreed maximum payment (specified below). Explicitly, the DEA wishes to state that it is expected that the Bidder not only presents the cost structures of its own works, but also the subcontractors.

⁷ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12008E107&from=EN



Maximum payment

The winning Bidder cannot receive a payment exceeding the allocated annual subsidy. The DEA will specify the maximum available subsidy amount per year in the Contracting Period (see Figure 3). No unused subsidy shall be transferred to a following year.

Minimum delivery and guaranteed delivery

The maximum annual allocated subsidy (see Figure 3) does not exempt the winning Bidder from delivering the Contracted Quantity in any given year. If a situation occurs, where the adjusted price times the Contracted Quantity exceeds the annual allocated subsidy, the winning Bidder shall deliver the Contracted Quantity for a payment not exceeding the annual allocation.

Penalties

The DEA shall reduce the payment if the winning Bidder fails to meet the specified Requirements:

Failure to meet Contracted Minimum Quantity: The winning Bidder shall deliver a minimum of 0.4 MTA CO₂ from 2026 until the termination of the Contract. Failure to meet the Contracted Minimum Quantity in any given year will be penalised by reducing the payment with a given percentage depending on the lack of performance, not linearly but in the shape of an s-curve (See Table 2). As an example, if the winning Bidder only delivers 99% of the Contracted Minimum Quantity, the winning Bidder will receive 98,5% of the subsidy amount per tonne for the full quantity delivered. Similarly, delivery of 80% of the Contracted Minimum Quantity will result in payment of 80% of the subsidy per tonne for the full quantity delivered.



Table 2: Regulation for underperformance of Minimum Quantity during the Contracting Period

Quantity equal or lower than contracted Minimum Quantity (tonne)	Subsidy payment for lower quantity (% of agreed subsidy amount DKK/tonne)
100%	100,0%
99%	98,5%
95%	97,0%
90%	94,0%
85%	88,0%
80%	80,0%
75%	72,0%
70%	64,0%
65%	55,5%
60%	46,5%
55%	37,5%
50%	30,5%
45%	23,5%
40%	17,5%
35%	13,5%
30%	9,5%
25%	6,5%
20%	4,5%
15%	3,0%
10%	2,0%
5%	1,1%

Failure to meet the Contracted Additional Quantity: The Bidder can propose an annual delivered quantity of CO₂ above the minimum quantity of 0.4 MTA CO₂ from 2026 and until end of Contract. The winning Bidder shall be penalised for delivering a quantity lower than Contracted Additional Quantity by reducing the payment for that year with a penalty of a given amount. The penalty is linearly increased up to the maximum difference of 200.000 tonne for underperformance in one particular year (See Table 3). The penalty can be incurred in subsequent years with underperformance as well. As an example, if the winning Bidder offers to deliver an additional 100.000 tonne pr. year (500.000 tonne in total), but only delivers 50.000 additional tonne, the winning Bidder shall have its payment reduced by a penalty of 25 mio. DKK in that year. If the winning Bidder in the subsequent year delivers 0 additional tonnes, the payment will be reduced by a penalty of 50 mio. DKK in that year.

Table 3: Regulation for underperformance of Additional Quantity during the Contracting Period

Quantity lower than contracted Additional Quantity (MT)	Penalty for lower quantity (mio. DKK) in one specific year
0.05	25
0.10	50
0.15	75
0.20	100



Failure to meet Contracted Ramp-Up Quantity end of 2025: The Bidder can offer a Contracted delivery of up to 0.4 MT CO₂ before 1 January 2026 (i.e., a Contracted Ramp-up Quantity of 200.000 tonnes in 2025). The winning Bidder shall be penalised for delivering a quantity lower than the Contracted Ramp-Up Quantity by reducing the payment with a penalty of a given amount. The penalty is linearly increased up to the maximum difference of 0.4 MT (See Table 4). As an example, if the winning Bidder offers to deliver 0.4 MT before 1. January 2026, but only delivers 0.1 MT, the winning Bidder shall have its payment reduced by a penalty of 600 mio. DKK (by having delivered 0,3 MT lower than what it was contracted to). If the winning Bidder offers to deliver 0.05 MT and fails to deliver any, the penalty will amount to 100 mio. DKK.

Table 4: Regulation for	or underperformance of	Ramp-up Quantity	during the	Contracting Period
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Quantity lower than contracted Ramp-Up Quantity (MT)	Penalty for lower quantity (mio. DKK)
0.05	100
0.10	200
0.15	300
0.20	400
0.25	500
0.30	600
0.35	700
0.40	800

The description of penalties is not an exhaustive description of the Contract Default Clauses. In the contract there will be a further regulation of the Contract Default, including the right for the DEA to terminate the Contract for cause.

Tender procedure

The DEA expects the process to be conducted as a negotiated procedure (in Danish: Udbud med Forhandling) The procedure entails that Candidates that are interested in participating in the bidding procedure must apply for Prequalification.

The elements currently under consideration for the Prequalification requirements and criteria are described later in this document. A maximum of 5 Candidates are expected to be *prequalified*.

Secondly, the prequalified Bidders are invited to submit a First Negotiation Tender (in Danish: et indledende tilbud) that will serve as the foundation for the Negotiations.

Thirdly, the Negotiation Procedure will take place. The Bidders have the possibility to adjust and optimise their Offer in accordance with e.g., the Award Criteria, potentially through one or more rounds of Negotiation. At the same time, the Bidders may propose that the DEA adjusts and optimises the specified Contract Requirements. The DEA will award the Contract on the basis of the Award Criteria, best price-quality ratio. Figure 1 provides an overview of the Tender Procedure.



Figure 3: Overview of the Tender Procedure



Prequalification Requirements and Selection Criteria

During the Prequalification, the following elements are expected to be assessed:

Minimum Requirements

- The Candidate's financial capacity
- The Candidate's documentation of plant or plants available to the candidate for the performance of the Contract shall have a total carbon emission of at least 0.4 MTA CO₂. The carbon emissions must be included in the Danish National Greenhouse Gas inventory report, or be deducted in the Danish National Greenhouse Gas inventory report by future use of carbon capture and storage

Selection Criteria (by more suitable companies than the maximum number that can be Prequalified)

- The Candidate's documentation of its supply chain management system
- The Candidate's documentation of experiences with CCS activities (carbon capture, transport, and storage), such as demonstration projects, pilot projects and research projects
- The Candidate's documentation of experiences with acquiring, establishing, modifying, expanding and/or commissioning plants

Organisation

Candidates can participate in the bidding process irrespective of whether the candidate is a single operator, the candidate relies on the technical and professional ability and/or financial and economic capacity of other entities to fulfill the suitability requirements, or the candidate is a group of operators (e.g., a consortium).

It is possible for the candidates to meet the requirement of 0,4 MTA from 2026 with one point source, a combination of point sources or a portfolio of several point sources.

If the candidate is a group of operators (e.g., a consortium), the participants of the group will be required by the DEA to undertake joint and several liability for the performance of the contract. If the candidate



relies on the economic and financial capacity of other entities in relation to the suitability requirements (regarding financial capacity), the candidate and the entities in question will be required by the DEA entity to undertake joint and several liability for the performance of the contract.

Award criteria

The DEA will award the contract on the basis of the award criterion best price-quality ratio. For the evaluation of which bid offers the best price-quality ratio, the DEA expects to apply the following subcriteria where the sub-criteria *price per tonne captured, and stored* CO_2 is expected to be given the most significant weight in the evaluation:

- Price per tonne captured and stored CO₂
- Project maturity will be qualitatively evaluated based on to what extent the bid demonstrates certainty of execution of the proposed project. Documentation for project maturity should include project execution plans, permitting plans, preliminary engineering and design, procurement strategy or preliminary supplier commitment, external reviews such as third-party feasibility studies, financing plan and preliminary commitment to equity, debt and other relevant financing, risk assessment, and risk mitigation plan.
- Initial supply until end of 2025 ("Ramp-up Quantity"): Size of guaranteed quantity of CO₂ delivered from project initiation until 31st December 2025 up to 0.4 MTA.
- Quantity advantage ("Additional Quantity"): Size of guaranteed quantity of CO₂ above 0.4 MTA CO₂ from 2026 until end of Contracting Period.

Figure 4: Illustration of Award Criteria concerning Price, Ramp-up Quantity, Additional Quantity (three of the four expected Award Criteria)



Note: The Price per tonne, offered by the Bidder, is the one combined price for "Minimum quantity", "Ramp-up quantity", and "Additional quantity".

A project that is highly competitive on one Award Criterion can potentially be outperformed by projects with high performance on the other Award Criteria, dependent on the weight to be specified in the Tender.



3 Participation in the dialogue

The DEA invites the market to provide written input on questions specified in section 4 below.

The deadline for submitting written contributions to the second round of market dialogue is 18 March 2022. The written input may potentially be elaborated on in writing and/or discussed at dialogue meetings if found relevant by the DEA. The DEA may ask a limited number of market operators specific additional questions and/or invite a limited number of market operators to participate in dialogue meetings.

How to participate in the second round of market dialogue:

1. As a market operator, you must log in to Kammeradvokaten/Poul Schmith's internet-based eSourcing system (Digitale Udbud - <u>https://eu.eu-</u>

<u>supply.com/ctm/Supplier/PublicPurchase/320815/0/0?returnUrl=&b=KEFM</u>). If you do not have a login, you must first register online. A quick guide for suppliers is available here https://eu.eu-supply.com/img/brandings/ka_quickguide_en.pdf

2. Log in to the system and click "Accept". By accepting you will gain access to the material under "Documents", receive notifications and be able to submit written contributions.

3. Written contributions to the DEA should be submitted via the tab "Messaging". You can attach a PDF etc. to the message. Please note that the message will be sent to the DEA, even though Klima-, Energiog Forsyningsministeriet in the system is stated as the receiver of the message. As written contributions should be sent to the DEA via the tab "Messaging", please note that the text visible when selecting the tab "My Response" (in the Danish version: "Min besvarelse") stating that "It is not allowed to submit a response for a standalone RFT" (in the Danish version: "Det er ikke muligt at afsende en besvarelse i denne type udbud") should be ignored in regards of sending written contributions. For the sake of good order, it is noted that the "Response deadline" currently set as 31 March 2022 on the site stated in section 1.3) relates to the period in which the site in Digitale Udbud will be accessible; it does not constitute the deadline for submitting written contributions to the market dialogue. The deadline for written contributions to the market dialogue is 18 March 2022.

If there is information or elements in a written contributions which for business reasons are desired to be exempted from access to documents, the bidder is asked to state so in its response. However, irrespective of the bidder's requests for confidentiality, the DEA will be entitled and obliged to give access to documents to the extent required by law.



4 Input encouraged from the market dialogue

The DEA would like to invite the market to comment on the following:

1. Transportation and storage of CO₂

- 1.1. How does the Bidder plan to handle the pricing of transportation and storage, taking into account the need to submit a Best and Final Offer (BAFO) before the end of 2022?
- 1.2. Where is the Bidder planning on storing CO₂? (Notice that the evaluation of Offers does not take the location of the storage site into consideration)
- 1.3. With the current information available about the transportation and storage market of CO₂, which considerations does the Bidder deem relevant to share with the DEA to improve price certainty during the Contract?

2. Finances and payment

- 2.1. In the Bidder's opinion, does the proposed CfD-mechanism give rise to any remarks?
- 2.2. How does the Bidder buy EUA quota or sell surplus quota? Is quota traded as used at spot market price, or does the Bidder use other trading or hedging mechanisms, e.g., by using the forward market?
- 2.3. In the Bidder's opinion, is there a market for the sale of certificates from negative emissions? (if yes: what are the relevant prices you would expect? What is the expected market size?)
- 2.4. What financial means does the Bidder consider to secure and ensure sufficient financial capabilities e.g., equity for the establishment of the project?

3. The Danish Heat Supply Act (In Danish: "Lov om varmeforsyning")

- 3.1. What financial means does a Bidder subject to the Danish Heat Supply Act consider to secure and ensure sufficient financial capabilities e.g., equity for the establishment of the project?
- 3.2. What considerations does it give rise to for the Bidder that the cost of capturing CO₂ cannot be fully or partially passed on to heating customers?
- 3.3. Targeted municipally owned companies:
 - 3.3.1. What consequences does it have for a municipally owned company that it is expected to make use of or establish a separate company (in Danish: "Tilknyttet aktivitet") for the CO₂ activities? Please elaborate specifically regarding:
 - 3.3.2. Consequences for preparation of Prequalification and First Offer?
 - 3.3.3. Consequences for the Bidder's business case and offered price?
 - 3.3.4. Consequences for other related important issues?

4. Project maturity

- 4.1. Which activities does the Bidder expect to prepare (i.e., external reviews, third party reporting, etc.) to document the project's feasibility and certainty of reaching a Final Investment Decision (FID) within the timeline?
 - 4.1.1. Which specific technical activities does the Bidder expect to prepare before making an FID?
- 4.2. Which regulatory approvals is needed in order to establish a carbon capture facility and what is the expected time frame? Please provide further information on the concerns regarding



regulatory approvals including any suggestions as to how this can be taken into consideration in the process.

4.3. Which barriers does the Bidder expect to be the most significant challenges regarding the project's time schedule?

5. Quantity

- 5.1. What is the quantity of captured and stored CO₂ that the Bidder expects to be able to provide in the Offer?
 - 5.1.1. Until the end 2025? [Please specify in MT CO2]
 - 5.1.2. From 2026 and until end of Contracting Period? [Please specify in MTA CO2]

6. Knowledge and know-how for the benefit of other related projects

6.1. The DEA is considering a requirement in the Contract requiring the winning Bidder to exchange knowledge and information obtained through the Contract with the DEA and the general CCUS market. In the Bidder's opinion, which elements should be part of such a requirement with respect of information, actual performance, and learnings in order to benefit subsequent and similar CCUS projects in Denmark?

7. Public acceptance

7.1. In the Bidder's opinion, are there any challenges that needs to be addressed regarding the public acceptance of CCS-projects?

8. Feasibility of participation in the Tender

- 8.1. With the current information available, does the Bidder deem it possible to make an Offer? [Statements at this time are in no way binding]
- 8.2. With the current information available, does the Bidder deem it necessary to include any Reservations in the Offer? [Statements at this time are in no way binding]

9. Substantial comments regarding information presented in this document

9.1. Based on the information presented in this document, does the Bidder have any substantial comments?

5 Preliminary timeline and next steps

Currently, the DEA expects that the timeline for the Tender will be as follows:

- 18 March 2022: Deadline for submission of written contributions to the second market dialogue
- Spring 2022: The Tender is initiated with the Prequalification
- Summer 2022: Submission of a First Negotiated Offer for prequalified Bidders
- Autumn 2022: Negotiations
- December 2022: Conclusion of Contract and initiation of the first phase of the fund

The output of the market dialogue serves as input for the DEA's final design of the Tender documents.



We look forward to receiving your feedback.

Danish Energy Agency



Appendix 1: Glossary

- <u>Carbon capture and storage (CCS)</u> is a process consisting of the separation of CO₂ from industrial and energy-related sources, transport to a storage location, and permanent storage of the CO₂.
- <u>Contract</u> means this contract between the parties on carbon capture, transportation, and storage, including the Appendices.
- 3. <u>Contracting Period</u> is the duration of the contract.
- <u>Danish National Greenhouse Gas inventory report</u> is the submission to the United Nations Framework Convention on Climate Change. The structure of the report is in accordance with the UNFCCC reporting guidelines (UNFCCC, 2013).
- 5. <u>EUA</u> is the European Emission Allowance applied in the EU ETS.
- 6. <u>Offer</u> is the offer made by the Bidder.
- 7. Tonne is a metric ton, equal to 1,000 kg
- <u>Value chain</u> is the full range of activities needed to capture, transport, and permanently store CO₂.

Appendix 2: Abbreviations

BAFO = Best and Final Offer CCS = Carbon Capture and Storage CCUS = Carbon Capture Utilization and Storage CfD = Contract for Difference DEA = Danish Energy Agency EU = European Union EUA = European Emission Allowance FNR = First Negotiation Round FNT = First Negotiation Tender FID = Final Investment Decision MT = Million Tonnes MTA = Million Tonnes Annually T = Tonnes