

# Response to the consultation: Summary of the answers and the DEA response to the input received

Office/department
Center for Green Utilities

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# **Background**

In April and May 2023, the Danish Energy Agency ("DEA") conducted a public consultation concerning the deployment of the negative emissions carbon capture and storage ("NECCS") fund. The purpose was, among other things, to consult publicly on the competition impacts and proportionality of a proposal for a State aid scheme designed to deploy the NECCS funds. The consultation was conducted following the Commission's Guidelines on State aid for climate, environmental protection and energy 2022 ("CEEAG")¹, which require that a response summarizing and addressing the input received during the consultation is published. This memo constitutes the DEA's response to the input received during the public consultation.

#### The consultation

After the agreement to establish the NECCS fund was signed in late 2021<sup>2</sup>, the DEA initiated a first round of market dialogue in 2022, in which several market operators participated. The purpose was to gain knowledge on, among other things, when the operators could be ready to capture and store CO<sub>2</sub>, possible storage facilities, penalty and potential sales of voluntary carbon credits etc. Based on the feedback from this first market dialogue and the political objectives of the NECCS fund, the DEA designed a suggestion for a scheme comprised of a competitive bidding process in which the DEA would grant aid in the form of a fixed price paid for eight years until 2032 for each ton of captured and geologically stored biogenic or atmospheric CO<sub>2</sub>.

On the basis of this suggestion for a scheme, the DEA initiated on 31 March 2023 a new two-stringed public consultation:

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<sup>&</sup>lt;sup>1</sup> Communication from the Commission, Guidelines on State aid for climate, environmental protection and energy 2022 (2022/C 80/01) ("CEEAG").

<sup>&</sup>lt;sup>2</sup> Agreement for the Danish Financial Act for 2022 of 6 December 2021, in which a majority of the parties in the Danish Parliament agreed to allocate DKK 2.6 billion (2023 prices) in aid for NECCS (Available in Danish at: <a href="https://www.regeringen.dk/aktuelt/publikationer-og-aftaletekster/aftale-om-finansloven-for-2022/">https://www.regeringen.dk/aktuelt/publikationer-og-aftaletekster/aftale-om-finansloven-for-2022/</a>).



- The first part, for which the deadline for submission of answers was 8 May 2023, covered questions on the carbon capture and storage ("CCS") value chain, project maturity, financing, etc.
- The second part, for which the deadline for submission of answers was 17 May 2023, covered questions concerning competition impact and the proportionality of the scheme. More specifically, the questions covered the following topics:
  - Eligibility
  - Method and estimate of subsidy per ton of CO₂e emissions avoided
  - Proposed use and scope of competitive bidding processes
  - Main parameters for the aid allocation process including for enabling competition between different types of beneficiaries
  - Main assumptions informing the quantification used to demonstrate the incentive effect, necessity and proportionality of the scheme

Press releases in Danish and English initiating the public consultation were published on the DEA's website on 31 March 2023<sup>3</sup>. The press releases included a memo outlining the NECCS scheme ("market dialogue memo"), including a description of technologies eligible for aid under the scheme and a short reasoning for excluding others, the main costs and income sources, the tender process used to allocate the aid and the main contractual features governing the possible aid grants. An appendix to the memo listing specific requirements (minimum requirements<sup>4</sup> 1-5 and general requirements<sup>5</sup> R-1 to R-9) that the bidders in the tender process must fulfil, such as the deadline for delivery of the promised quantity of stored CO<sub>2</sub>, was also included. The market dialogue memo also contained a list of questions covering the five topics above – the questions are also enclosed below as annex A.

The DEA hosted a meeting on 26 April 2023 with onsite and online participants concerning the public consultation and the NECCS scheme<sup>6</sup>. On 17 May 2023, the DEA had received input from a number of organizations, including possible beneficiaries from Denmark and several other countries and industry associations.

<sup>&</sup>lt;sup>3</sup> The Danish press release is available at: <a href="https://ens.dk/presse/energistyrelsen-inviterer-til-anden-runde-af-markedsdialog-om-neccs-puljen">https://ens.dk/presse/energistyrelsen-inviterer-til-anden-runde-af-markedsdialog-om-neccs-puljen</a>. The English press release is available at: <a href="https://ens.dk/en/press/invitation-second-round-market-dialogue-neccs-fund">https://ens.dk/en/press/invitation-second-round-market-dialogue-neccs-fund</a>.

<sup>&</sup>lt;sup>4</sup> The term Minimum Requirements refers to the DEA's fundamental needs. Minimum Requirements are mandatory requirements, which cannot be changed during the tender procedure. Minimum Requirements are, therefore, not included in the tender evaluation. It is stated in the tender documents, which requirements are Minimum Requirements.

<sup>&</sup>lt;sup>5</sup> The term General Requirements means all other requirements set out in the tender documents by the DEA that are not Minimum Requirements.

<sup>&</sup>lt;sup>6</sup> The invitation to the meeting was included in the market dialogue memo published together with the press releases.



All answers received concerning the questions in annex A, with DEA responses to each answer, are listed in annex B and summarized in the following section.

# Summary of answers received and the DEA's response

Concerning *eligibility*, certain projects, such as pyrolysis, are de facto delimited from the NECCS scheme. However, DEA received no answers during the public consultation questioning the eligibility.

As for the *method and estimate of subsidy per ton of CO*<sub>2</sub>e *emissions avoided*, the DEA stated in the market dialogue memo that the subsidy per ton of CO<sub>2</sub>e emissions avoided corresponded to the levelized cost of capture ("LCoC"). DEA received no answers during the public consultation questioning this.

Regarding the *proposed use and scope of competitive bidding processes*, the DEA included a short description of the suggested tender procedure, including the criteria used to rank the bids. While the DEA received no answers concerning the tender procedure, some argued that competition could be enhanced if the DEA would withdraw the requirement that storage must commence in 2025. Based on this input, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO<sub>2</sub> in 2025.

The DEA also referred to the description of the suggested tender procedure when asking for comments concerning the *main parameters for the aid allocation process including for enabling competition between different types of beneficiaries*. However, the DEA also asked for other input on how the competition for aid under the NECCS scheme could be increased. Like the previous topic, the DEA received answers to the questions under this topic, arguing that upholding the requirement that storage must commence in 2025 would lead to fewer bids. As stated above, the DEA is considering to amend this requirement.

Finally, concerning the *main assumptions informing the quantification used to demonstrate the incentive effect, necessity and proportionality*, the description of possible revenues in the counterfactual scenario without aid included minor incomes from the sale of surplus heat and voluntary CO<sub>2</sub> certificates. The description of the cost drivers included transportation and storage as a non-capital expenditure post. The topic also included a question concerning the inclusion of a clawback mechanism.

Relating to the costs and potential revenues outlined in the market dialogue memo, the DEA received confirmation that the market for certificates for negative emissions is considered immature. However, the DEA also received input that indicated that income from the sale of surplus heating would be zero or close to zero for some potential beneficiaries. Moreover, some also argued that transportation and storage should be regarded as a capital expenditure, which



could lead to an increased LCoC and negative net present value ("NPV"). While the DEA may not necessarily update its assessment of the LCoC and NPV in the counterfactual scenario, the DEA takes the input as an indication that its estimates are conservative, underlining the necessity and incentive effect of the aid.

Concerning proportionality, the DEA received several answers arguing that a clawback mechanism would have a negative effect on the bids, potentially impeding competition for aid under the NECCS scheme. A few have answered that a clawback could be acceptable if it could be described in clear and transparent terms and would not be introduced until after the market for negative certificates has evolved. The DEA notes that one actor argued for a clawback mechanism or that the aid should be paid as a Contract-for-Difference ("CfD") instead of a fixed price.

In line with the majority of the answers received, the DEA believes that a clawback mechanism could have a negative effect. The DEA acknowledge that it is uncertain how the market for certificates for negative emissions will develop. Nevertheless, this potential revenue stream will most likely not materialize until the final years of the aid period, and it is far from given that value of the certificates would be sufficient to render state aid unnecessary. Moreover, without a firm indication of how the regulatory framework governing negative emission certificates will evolve, the phrasing of the contract clause regulating the clawback or adjusting the payment of future aid will be vague, which in itself could cause uncertainty and induce bidders to add an otherwise unnecessary risk premium.

The DEA believes the same arguments apply to a possible CfD-model for the NECCS Fund. It should be noted that the DEA implemented a CfD-model in the first aid scheme for CCS in Denmark, which includes a mechanism to adjust the aid level yearly based on realized income and savings in operation<sup>7</sup>. However, this particular aid scheme involved possible aid to CCS of fossil CO<sub>2</sub>, which entails a guaranteed income stream consisting of savings from ETS-emissions allowances, the potential sale of surplus ETS emissions allowances, and mitigation of the Danish carbon tax on fossil emissions. Furthermore, contrary to the NECCS scheme's eight-year aid period, aid will be dispersed for 20 years, during which the market for voluntary carbon credits is expected to mature.

<sup>&</sup>lt;sup>7</sup> Se the Commission's approval of 12 January 2023 of the Danish CCS scheme in case SA.102777 (2022/N) – Denmark – State aid scheme for Carbon Capture and Storage in Denmark.



# Annex A: Consultation questionnaire

The following questions were asked by the DEA in the market dialogue memo:

- 1) Technologies eligible for aid:
- a) Given the requirement that the technologies eligible for aid must be able to store CO<sub>2</sub> permanently, does the [b]idder have any comments regarding the limitation of the technologies under [the NECCS scheme]?
- 2) Method and estimate of subsidy per ton of CO<sub>2</sub>e emission avoided (per reference project):
- a) Does the [b]idder have any comments regarding the assumptions stated in section 3.2 of [the market dialogue memo] that the estimated subsidy per ton of CO<sub>2</sub>e emission avoided is equal to the total levelized cost of capture or should other parameters be included in the estimate?
- 3) Proposed use and scope of the competitive bidding process:
- a) The DEA believes that the tender process outlined in section 7 of [the market dialogue memo] is the most efficient way to ensure competition among [b]idders, keeping the aid for each project to the minimum needed to induce investments in NECCS. However, the DEA welcomes opinions on how the use or scope of the tender process could be amended to achieve more competition for the funds.
- 4) Main parameters for allocation of the aid including for enabling competition between different types of technologies/bidders
- a) The DEA believes that the proposed evaluation criteria outlined in section 7 of [the market dialogue memo] ensure sufficient competition between different technologies and obtaining the lowest possible subsidy per ton of CO<sub>2</sub> emission avoided. However, the DEA welcomes considerations concerning the criteria used for allocating the aid, enabling competition between different types of technologies.
- b) The DEA believes that the proposed tender design described in this memo strikes a reasonable balance between ensuring competition between different types of technologies and an expeditious realization of the goal of capturing 0.5 [million ton annually] of CO<sub>2</sub> from 2025. However, the DEA



welcomes comments as to how the tender design may be altered to increase competition between different types of technologies.

- 5) Main assumptions used to demonstrate the incentive effect, the necessity and the proportionality of the aid:
- a) Is it a reasonable assessment of the counterfactual scenario, i.e. the situation without aid, that it includes no or only negligible potential revenue streams?
- b) Are the assumed financial elements outlined in section 3.2 [of the market dialog memo] in alignment with the expected cost base and revenue streams?
- c) In case a claw back mechanism is introduced to avoid overcompensation from sale of certificates from negative emissions, how would that affect your bid?



Annex B: Input receive	d during the public cons	ultation and DEA's response
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Input received	Response by the DEA	
Question 1a		
Input 1:  [Respondent] støtter den foreslåede begrænsning af teknologier.  Foretages der kun nulemissioner i samfundet, når vi ikke i mål med at reducere de historiske udledninger og dermed reducere CO2 koncentrationen i atmosfæren.	Response 1: The DEA has taken note of this remark	
Input 2: [Respondent] støtter den foreslåede begrænsning af teknologier.	Response 2: The DEA has taken note of this remark	

#### Question 2a

#### Input 1:

Der bliver nævnt, at en betydelig del af modtagerne af støtte kan opnå yderligere indtægter ved at sælge overskudsvarme fra CO2-fangstanlægget sammenlignet med referencescenariet. Det er af afgørende at bemærke, at ca. 1/3 af overskudsvarmen fra CO2-fangsten på biogasanlæggene allerede er inkluderet i produktionen af biometan. Det skal også tages i betragtning, at biogasanlæggene muligvis ikke kan udnytte denne potentielle indtægt, hvis overskudsvarmen ikke kan anvendes.

#### Input 2:

Energistyrelsens OPEX-beregninger tager udgangspunkt i transport via lastbil på land. [Respondent] mener ikke, at det er en realistisk forudsætning, da det vil give markant trafikbelastning i nærområdet. Med de mængder, som forventes fanget på [Respondent's] anlæg, vil det kræve ca. 50 lastbiler i døgnet. Energistyrelsens bør derfor nuancere afsnittet yderligere, hvor flere løsninger for onshoretransport medtages.

Alt afhængig af teknologivalg kan der være mulighed for signifikant salg af overskudsvarme. Værdien af den varme vil dog variere hen over året afhængigt af de alternative leverandører i varmesystemet. Det vil i [Respondent's] tilfælde betyde, at overskudsvarmen forventeligt vil have en værdisætning på 0 kr. i sommerhalvåret

# Input 3:

[Respondent] is a carbon removal company with a business model highly reliant on sale of credits to the voluntary market. We are in frequent dialogue with buyers, and we expect that the voluntary credit market will be one of our sources of revenue. We agree with the DEA on the topic of the maturity of the market (or lack thereof). We would highly recommend that you design the incentive scheme in a way that takes into account the uncertainty of the market and how little we know about the pace of its future development. Specifically, this means to design a scheme that does not prevent companies from claiming offsets from the credits.

# Response 1:

The DEA has taken note of this remark. However, while the DEA may not necessarily update its assessment of the potential revenue stream in the counterfactual scenario without aid, the DEA takes the input as an indication that its estimates are conservative, underlining the necessity and incentive effect of the aid

#### Response 2:

The DEA has assumed road transportation by truck and shipping to offshore storage facilities in the estimation of OPEX in the counterfactual scenario without aid. This assumption is based on the appraisal that this value chain solution is the one most likely to be implemented if a bidder includes ramp-up quantity in its offer to the DEA, i.e. capture and storage of biogenic CO<sub>2</sub> in 2025. However, the DEA affirms that other modes of onshore transportation of CO<sub>2</sub>, such as transportation through pipelines, are not excluded from the NECCS scheme.

The DEA agrees that prices for surplus heat will fluctuate over the year. However, the agency's calculations are based on average annual prices, which should include this caveat in the overall cost assessments.

# Response 3:

The DEA notes that [Respondent] agrees with the assessment that the market for carbon offsets through certified negative emissions is still immature.

Furthermore, the DEA would like to affirm that the design of the aid scheme does not include any specific terms and conditions regarding offset claiming from buyers of voluntary carbon credits but



1) CAPEX may also entail tanks and other equipment for transportation of CO2 to storage. We have spoken to several CO2 transport companies that might be reluctant to take this investment on their own balance sheet, leaving it to the project developer/emitters to take this investment. 2) Payback period of 15 years seems long, given the lack of maturity in the voluntary carbon market and the incentive period only set to 8 years. 3) For a private company to make an investment, and simply to engage in work, there must be a margin or risk premium. Therefore, simply cost coverage will not be enough to get the value chain going.

that such claims are subject to applicable national and EU laws.

The DEA has taken note of the remark that storage in some situations should be regarded as capital expenditure in the counterfactual scenario without aid and confirms that intermediate, on-site storage is included in the estimation of CAPEX. The payback period of 15 years, as opposed to an aid period of eight years, is based on an approximation of the average expected lifetime of underlying point sources and, thus, an underlying assumption that carbon capture facilities should have value in and of themselves, as the markets for voluntary credits or other market-driven incentives develops.

It is assumed that bidders will include their required return on investment in their bids

#### Question 3a

#### Input 1:

Konkurrencen vil kunne øges betragteligt, hvis der blev åbnet op for muligheden for at søge en årrække af projektperioden. Gennem markedsdialoger er det [Respondent's] klare opfattelse, at der er mange projekter i Danmark, som kunne have interesse i at søge puljen. Udbudsformen og den stramme tidslinje spænder dog ben for, at styrelsen kan få flere og mere konkurrencedygtige ansøgninger til puljen.

#### Input 2

Risk that the tender is not effective, including as a result of the short window to establish full value chain and apply for NECCS funds, the time for delivery of required facilities to exceed 18 Months and such will not be ordered before it has been clarified whether NECCS funds can be achieved, and the contemplated tender design does not provide a reasonable balance between risk / reward (pisk / gulerod).

#### Input 3

Som nævnt i [Respondent's] generelle input ovenfor, så vil konkurrencen øges betragteligt, hvis minimumskravet om fangst og lagring af den kontraherede mængde i 2025 fjernes.

#### Input 4:

As described here, it is a flawed assumption that competition among only Danish Bidders for only Danish origin CO2 will keep aid to a minimum. We would just note that in the United States, absolutely none of the Inflation Reduction Act subsidies (which are effective) are for only a portion of the geography of the United States. Accordingly, if the EU adopts CCS policies in which there are 27 distinct and separate markets, then, by definition and by the logic

#### Response 1:

Based on the input received, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO<sub>2</sub> in 2025

The primary objective of the NECCS Fund is to achieve 0.5 mio. ton negative CO<sub>2</sub> reductions annually in the period 2026-2032, thus, contributing to Denmark's 2025 and 2030 climate targets. Enabling awarding of contracts for only a part of this period would limit the contributions of the NECCS scheme in meeting the Danish climate targets.

# Response 2:

Based on the input received, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO<sub>2</sub> in 2025

# Response 3:

Based on the input received, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO<sub>2</sub> in 2025

# Response 4:

The DEA notes that the NECCS scheme will not be open only to Danish bidders but also non-Danish bidders if they establish a capture plant in Denmark or engage a subcontractor that operates a capture facility in Denmark. Moreover,



stated above, the United States will develop much more cost efficient CCS infrastructure than then EU, leading to (further) long term loss of EU competitiveness vis a vis the US.

there will be no requirement that storage facilities must be located in Denmark.

The requirement that the capture plants must be located in Denmark is necessary to ensure the scheme's objective of incentivizing negative emissions counted in Denmark's National Greenhouse Emission Inventory. The DEA disagrees with the claim that this requirement makes the competition for the funds too weak to ensure the proportionality of the aid. Neither does the DEA agree with the claim that the requirement leads to 27 distinct CCS markets within the EU. On the contrary, the DEA notes that by allowing storage outside Denmark, the NECCS scheme both aids the NECCS in Denmark and supports the development of the CCS sector in other EU Member states.

#### **Question 4a**

#### Input 1:

We would welcome a less strict requirement for storage in 2025. As stated in our last response, on section 2, we deem it highly uncertain that we can get access to a CO2 storage site in Denmark in 2025. To take on the risk of being awarded NECCS, without getting out of the obligation if we do not get storage site access would be very difficult for us.

#### Input 2.

[Respondent] is of the opinion that project maturity should be a criterion at least as part of the project execution certainty criterion

#### Input 3

We believe this has already been answered. The DEA approach will result in high costs and market distortions.

# Response 1:

Based on the input received, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO<sub>2</sub> in 2025. Furthermore, the DEA notes that there will be no requirement to use a storage site in Denmark. Only the CO<sub>2</sub> capture installation shall be placed in Denmark.

#### Response 2:

The DEA affirms that project maturity is part of the evaluation of offers

#### Response 3

The DEA has taken note of this remark. However, the DEA does not find that the remark gives reason to modify the NECCS scheme.

# **Question 4b**

#### Input 1:

[Respondent] er af den overbevisning, at det ikke vil være muligt at etablere CO2-lagring allerede fra 2025. En sådan implementering kræver en lang række investeringer og godkendelser, som vil tage tid at fuldføre, før CO2-lagring kan påbegyndes fra biogasanlæg.

For det første kræver implementeringen af CO2-lagring omfattende investeringer. Der skal allokeres betydelige midler til udvidelse af CO2 lager og infrastruktur for at etablere faciliteter til CO2 lagring. Det er afgørende, at der gives tilstrækkelig tid til at planlægge og gennemføre disse investeringer på en effektiv og økonomisk ansvarlig måde

For det andet er der en lang godkendelsesproces til forflydningsanlæg og mellemlagre. Det er vigtigt at sikre, at alle nødvendige tilladelser og reguleringer er på plads for at undgå unødige investeringer

#### Response 1:

Based on the input received, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO<sub>2</sub> in 2025



Denne problemstilling er ikke kun speciel for biogasanlæggene, men også for de andre aktører i den logistisk værdikæde ved lagring af CO2.

#### Input 2:

[Respondent] bakker op om at støtte projekter med en hurtig realisering. Tidslinjen for puljen er helt urealistisk når sagsbehandlingstider, udbuds- og byggeprocesser tages i betragtning. Jo før puljen reelt afspejler markedets tidslinjer, des mere konkurrence kan styrelsen forvente der vil være om puljen.

We believe an EU-wide support instrument, such as a Contract for Difference, should be deployed.

#### Response 2:

Based on the input received, the DEA is considering whether the tender documents are to include a requirement of capture and permanently store of CO2 in 2025

#### Response 3:

The DEA has taken note of this remark. However, the DEA does not find that the remark gives reason to modify the NECCS scheme.

#### Question 5a

#### Input 1:

[Respondent] er enig i, at salg af negative emissioner bør fraregnes støtteprisen. Dette vil kræve et etableret marked for salg af CO2kreditter. Dette vil man forventeligt tidligst se efter 2030, i takt med at EU udvikler området.

#### Input 2:

Yes, this is a fair assumption given the immaturity of the voluntary carbon market for negative emissions, and the lack of other regulated incentive schemes for biogenic CO2.

#### Input 3:

[Respondent] shares this assessment

# Input 4:

Yes.

#### Response 1:

The DEA has taken note of the Respondent's remarks. The DEA agrees with the Respondent's assessment that a prerequisite for the introduction clawback mechanism is a mature voluntary carbon market.

#### Response 2:

The DEA notes that the Respondent agrees with the assessment that the counterfactual scenario, i.e. the counterfactual situation without aid, includes no or only negligible potential revenue streams.

#### Response 3:

The DEA notes that the Respondent agrees with the assessment that the counterfactual scenario, i.e. the counterfactual situation without aid, includes no or only negligible potential revenue streams.

# Response 4:

The DEA notes that the Respondent agrees with the assessment that the counterfactual scenario, i.e. the counterfactual situation without aid, includes no or only negligible potential revenue streams.

# **Question 5b**

#### Input 1:

Det er [Respondent's] overbevisning, at indførelsen af en Claw Back mekanisme vil have en negativ effekt på de indkommende bud. Hvis der skal indføres en Claw Back mekanisme, vil [Respondent] kraftigt anbefale, at der gives en præcis beskrivelse af, hvordan denne mekanisme vil fungere. Det er afgørende at forstå, hvilke specifikke betingelser og vilkår der vil være gældende for tilbagebetaling af midlerne. Der skal også beskrives, hvilke data og informationer der skal danne grundlag for en sådan mekanisme. [Respondent] er af den opfattelse, at det ikke vil være hensigtsmæssigt at basere Claw Back mekanismen på virksomhedernes offentlige regnskaber, da disse i mange tilfælde vil indeholde indtægter fra forskellige kilder.

# Response 1:

The DEA has taken note of this remark



#### Input 2:

Der mangler forsat afklaring på de skatte- og afgiftsmæssige konsekvenser for bl.a. hvordan overskudsvarmen håndteres. Ligesom der udestår klare rammer for hvordan værdien af sparede ETS-kvoter skal prissættes.

### Input 3: Yes

#### Input 4:

It's not clear to [Respondent] why the expected costs base does not include capex in relation to the transportation and storage parts of the value chain. Such costs, which would be significant, would be incurred to establish a full value chain in relation to a project with storage in DK

#### Response 2:

The DEA has taken note of these remarks. However, DEA believes a clawback mechanism should be set out in precise terms in the draft contract published as part of the tender documents to ensure full transparency of the potential financial consequences of such a mechanism for the bidders. As stated in the DEA's reply to the Respondent's answer to question 5a, the DEA believes that a prerequisite for setting the specific terms and conditions of a clawback mechanism presupposes a mature market for voluntary carbon credits.

A vague clause – or a clause stating that a clawback mechanism might be introduced later on – entails uncertainty that could harm the competition for the NECCS funds or lead to an unnecessary risk premium being added to the bids

#### Response 3:

The DEA has taken note of this remark.

#### Response 4:

While storage and transport are assumed to be OPEX for the cost case, the estimated costs of these activities include CAPEX spread out over the expected technical lifetime of the assets. The DEA acknowledge that this approach could increase the net present value of projects relative to a case where CAPEX related to the storage and transport of CO<sub>2</sub> is included separately. While the DEA may not necessarily update its assessment of the potential costs in the counterfactual scenario, the DEA takes the input as an indication that its estimates are conservative, underlining the necessity and incentive effect of the aid.

# Question 5c

#### Input 1:

Så snart certifikatmarkedet er modnet og veldefineret er en clawback mekansime acceptabel. Jf. svar i spørgsmål 3.3.5 a. forventes det ikke at der vil være et modent marked for salg af negative CO2emissioner før 2030.

En claw-back mekaniske skal varsles med tilstrækkelig tid til, at indførslen ikke får utilsigtede og urimelige økonomiske konsekvenser på ejeren af CO2-fangstanlægget.

# Response 1:

The DEA has taken note of these remarks. However, DEA believes a clawback mechanism should be set out in precise terms in the draft contract published as part of the tender documents to ensure full transparency of the potential financial consequences of such a mechanism for the bidders. As stated in the DEA's reply to the Repondent's answer to question 5a, the DEA believes that a prerequisite for setting the specific terms and conditions of a clawback mechanism presupposes a mature market for voluntary carbon credits.



#### Input 2:

We welcome a claw back, if the NECCS scheme can be designed to de-risk projects. Getting (sufficient) additional revenue to run negative emission projects at a profit is highly uncertain, and NECCS could play a role in helping us de-risk our project development efforts. A few examples of how NECCS (with or without a claw back) can de-risk projects:

- Project developers can choose whether or not to accept the NECCS contract that they have been awarded on the basis of having secured sufficient additional revenue sources and/or getting access to storage
- Project developers can stack the NECCS scheme and the revenue from sale of credits in voluntary markets, and the buyers may use the credits towards their own climate and net-zero targets.
- A claw-back is only applied in the event that the project can be run profitably without it.

#### Input 3:

Yes such mechanism would potentially hamper or block [Respondent's] ambition to pursue NECCS' funds and further pursue the related project. The tender design should create incentives for the bidders to realize the overarching political goal of achieving negative emissions and boost the unlocking of the potential of the Danish sector as CO2 storage hub. Moreover, a claw-back mechanism appears not to be reasonable in relation to a bidder which rely on DK storage. The Danish state participant (Nordsøfonden) participates in any and all licences for CO2 storage. Hence, the Danish state will pick up their proportional part of proceeds, if any

#### Input 4:

The absence of such a mechanism would likely not be legal under EU law, and we question whether either a 90% clawback (as used previously by DEA) or a clawback based on projected revenues (as used previously by DEA) rather than actual revenues would be legal.

A vague clause – or a clause stating that a clawback mechanism might be introduced later on – entails uncertainty that could harm the competition for the NECCS funds or lead to an unnecessary risk premium being added to the bids.

#### Response 2:

The DEA agrees with the assessment that a clawback mechanism should only be introduced if it does not jeopardize the aided projects. However, the DEA does not find the proposed de-risk measures feasible under the NECCS scheme in that the use of voluntary carbon credits to achieve reduction targets is subject to national and EU law, which the scheme has no influence over.

Moreover, conditional offers will not be accepted since bidders will be required to stand by their offers if they are awarded a contract.

#### Response 3:

The DEA has taken note of this remark.

#### Response 4

The DEA has taken note of this remark. However, DEA does not agree that a clawback would be required. The DEA believes that the competition for aid under the NECCS scheme will be enough to ensure the proportionality of the aid.