



Public consultation: Competitive bidding process for state aid for upgraded biogas and other gasses from renewable sources that can be injected into the Danish gas system

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Background

The Danish Energy Agency (“DEA”) have facilitated a public consultation for potential bidders, relevant market operators and other interested parties to give their views on the forthcoming tenders on aid for upgraded biogas and other gasses from renewable sources. The consultation has been conducted in accordance with the Commission’s Guidelines on State aid for climate, environmental protection and energy 2022 (“CEEAG”), 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

Press releases in Danish and English initiating the public consultation were published on the DEA’s website on December 4, 2024. The press releases included a memo outlining the scheme, including a description of requirements that the bidders in the competitive bidding process must fulfil. The market dialogue memo also contained a list of questions covering the topics required by the CEEAG. These questions are also enclosed below as annex A.

The DEA hosted a meeting on December 18, 2023 with onsite and online participants concerning the public consultation. On January 25, 2024, the DEA had received input from organisations, including possible beneficiaries from Denmark and abroad and industrial associations. The following parties have answered the public consultation: Biogas Danmark, BioCirc, Confederation of Danish Industry (“DI”), E.ON, Hulgaard Advokater (on behalf of Danske Tegl, Rockwool and Topsoe), Landwärme and Nature Energy.

All answers received concerning the questions in annex A and the DEA’s response hereto are described below.

Summary of answers received and the DEA’s response

1) *Technologies eligible for aid*

Concerning the eligibility, certain technologies, such as pyrolysis, are excluded

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from the scheme. DEA received no answers during the public consultation questioning the eligibility. However, Biogas Danmark mentioned that they are in favour of the opportunity to support both biomethane and e-methane.

2) Proposed use and scope of the competitive bidding process.

Biogas Danmark endorse the proposed scope for both expansion of existing biogas plants and green field projects. In addition, the choice of opting in and out of the scheme is highly appreciated. BioCirc suggest a simpler model with a longer timeline of the administrative handling of the opting in and out of the scheme.

On this basis, the DEA has decided to allow for more time to apply for opting in and out of receiving aid under the scheme.

3) Main parameters for allocation of the aid including for enabling competition between different types of technologies/bidders

Hulgaard Advokater remarks that if funds from the competitive bidding process are residual and not allocated to biomethane, the unallocated funds should be reserved for new consumption-based biomethane measures.

DEA notes that any residual funds are handled at a political level as stated in the political agreement.

Landwärme, Biogas Danmark, Hulgaard Advokater, BioCirc, E.ON, DI and Nature Energy have commented on the condition according to which subsidized biomethane under the scheme cannot receive guarantees of origin ('GOs').

Landwärme GmbH commented that to avoid restrictions on competition, it should be ensured that exported biomethane is not supported under the new scheme. This could be achieved with the proposed model regarding GOs that excludes the export of subsidized biomethane. Landwärme however viewed the model as insufficient to guardrail against restrictions to competition and proposed the following further modifications.

Landwärme proposes that, firstly, the DEA should clarify that biomethane which receive aid by any other EU Member State cannot receive aid under the future scheme. Secondly, Landwärme suggests to restrict or stop and recover the support under the new scheme, if biomethane which has been supported under the new scheme is exported to other Member States.

Biogas Danmark, BioCirc and E.ON find it problematic that beneficiaries cannot receive GOs for subsidized biomethane, since GOs account for a significant part of the revenue for biogas producers. BioCirc argues that without GOs there is a lower incentive to use the biomasses that have the highest CO₂e reduction effect. The



most CO₂e reducing biomasses are more costly and thus more dependent on the income from GOs, since the most CO₂e reducing biomasses add more value to the GOs.

DI and Hulgaard Advokater find it important that GOs can be bought by industrial users to achieve zero emissions from gas consumption and showing zero emissions in the EU emissions trading system. Hulgaard Advokater underlines the importance of availability of GOs for the industry, because of requirements regarding the climate footprint for products, especially in the building industry, and because GOs can be used for a potential tax exemption from the planned tax on CO₂ emissions. Since the producer cannot receive GOs for subsidized biomethane, DI, Hulgaard Advokater and Nature Energy propose that the state auctions off the subsidized GOs.

The DEA takes note of the comments and suggestions regarding the conditions concerning auctioning of GOs and will consider the possible options. The proposed tender measure does not allow for the issuing of GOs for subsidized biomethane to avoid export of subsidised biomethane. By doing this, the scheme can avoid that biomethane subsidized in Denmark e.g. also receives subsidies in another country and thus avoid a potential risk of overcompensation.

Nature Energy proposes to remove the condition that in case there are not enough bids to cover the budget in the bidding process, the bid with the highest price premium will not be accepted. Nature Energy argues that this risks to exclude a possible large bid covering much of the budget, in case the bids do not cover the whole budget.

The DEA emphasises the mechanism is part of ensuring price competition. In the unlikely event that there is an insufficient number of bidders, the highest bidder will be excluded and, thus, not receive any aid. This incentivizes bidders to submit competitive bid prices in the bidding process despite possible undersubscription. It should be noted that if there are available funds in one bidding round, these funds may be transferred to subsequent years

4) Main assumptions used to demonstrate the incentive effect, the necessity and the proportionality of the aid.

The bidding cap on 100 DKK/GJ has been questioned by Nature Energy, Biogas Danmark, BioCirc, E.ON and DI. Biogas Denmark and BioCirc argue that the cap should be raised by 25 % due to higher prices on biomasses and on equipment. The DEA's analysis is based on a study from 2020 and according to Biogas Danmark the prices have risen beyond inflation since then. BioCirc states that the forthcoming tariffs for injection of gas to the gas system from the distribution system operator should be taken into account. Until now biogas producers have not been



subject to pay tariffs for injection of gas to the gas system. Due to the competitive bidding process a cap is not needed according to BioCirc, since the competition will define the level of support. E.ON argues, that if GOs are not issued to the producer, the cap should be adjusted accordingly. DI observes that if the cap is not raised, major investors will not participate in the bidding round.

DEA notes that there is a 22 % gap from the DEA calculations of the necessary support without GO (78 DKK/GJ) to the cap on 100 DKK/GJ (in 2020 prices). The cap has also been set to mark the maximum acceptable level of support. Moreover, the DEA have indications, that the costs for biomass follows the gas price, and accordingly have declined recently. The DEA further notes that the bid cap is in 2020 prices and will be inflation-adjusted.

The gas price cap on the aid on 120 DKK/GJ is mentioned by BioCirc, Biogas Danmark and E.ON. BioCirc states that the higher gas price finances the downside, when the gas price is low. Biogas Danmark and E.ON draws attention to that they find that when GOs are not issued, the necessity of a gas price cap disappears and that this price cap accordingly should be raised.

The cap on 120 DKK/GJ is set to limit profitability in case of extraordinary high gas prices. A cap on the aid paid while still allowing the beneficiary to earn high profits, is to safeguard its finances for times with lower gas prices. Moreover, a (partial) clawback mechanism instead would add uncertainty to beneficiaries' payoff, which could increase the risk premium and their bid – or even discourage some possible producers of gas to participate in the scheme.

DEA plans to continue with the competitive bidding process as proposed and will evaluate the level of the bidding cap and the gas prices cap after the first bidding round.

On balance, the DEA believes that the measure does not increase the market power of any existing biogas or e-methane producers, discourage entry of new competitors or distort competition in any other way. Hence, the measure is expected to increase competition by supporting entry of new competitors. In this context, it must be stressed that because the aid will be granted through an effective competitive bidding process distortion of competition and trade is kept to the necessary minimum as required by the CEEAG.

5) Method and estimate of subsidy per ton of CO₂e emission avoided (per reference project).

Biogas Danmark comments on the CO₂e emission calculation noting that the emission factor for methane emissions from biogas plants is set to 2.9 %, which they find too high. They comment that with the new methane emissions regulation



in Denmark, which entered into effect in 2023 for all biogas production, the methane emissions are expected to be significantly lower in the future.

DEA has applied the latest emission factor according to Denmark's National Inventory Report in accordance with IPCC standards, since this is the official greenhouse gas account for Denmark. The factor will be revised when a new measurement has been completed in 2025.

Additional remarks

Nature Energy has provided a number of specific comments on the conditions in relation to fuels for process heating, effects of reduced capacity at the DSO gas system, no state aid in case of negative gas prices, VAT issues, extension period, on-demand guarantee and a conditional contract with the TSO/DSO.

DEA takes note of the comments and will adjust the conditions where appropriate. Since they refer to the specific conditions and does not relate to issues on concerns as regards competition, proportionality or other relevant aspects for this exercise, they are not further commented in this memo.

Biogas Danmark understand the bidding conditions to imply that unsubsidized biomethane can be used to fulfil the requirement in the bidding conditions to produce 80% of the biomethane in the bid within 1 year before 6 years has passed from contract signing. The DEA will clarify in the bidding conditions that all produced biomethane can be used to fulfil the 80% production requirement in the bidding conditions.

Annex A:

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

1. Technologies eligible for aid

- The DEA believes that the limitation of the eligible technologies described above in section 3 is justified. However, the DEA welcomes any comments regarding the eligibility of the technologies under the competitive bidding process outlined in this memo.

2. Proposed use and scope of the competitive bidding process.

- The DEA believes that the bidding process outlined above in section 4 is the most efficient way to ensure competition among bidders, keeping the aid for each project to the minimum needed to induce investments in biomethane and e-methane. However, the DEA welcomes opinions on how the use or scope of the tender process could be amended to increase the competition.



3. Main parameters for allocation of the aid including for enabling competition between different types of technologies/bidders

- The DEA believes that the proposed evaluation criterion outlined above in section 5 ensures sufficient competition between different technologies and obtaining the lowest possible subsidy per ton of CO₂ emission avoided. However, the DEA welcomes considerations concerning the criteria used for allocating the aid, enabling competition between different types of technologies.

4. Main assumptions used to demonstrate the incentive effect, the necessity and the proportionality of the aid.

- The DEA believes that the assessment of the counterfactual scenario, i.e. the situation without aid, stated above in section 6.1, to be a reasonable depiction of the costs and revenues of the reference projects. However, the DEA welcomes insights concerning the main assumptions used to demonstrate the incentive effect and the necessity of the aid. The DEA believes that the assessment that there is strong competition for the funds under the scheme, together with the other safeguards described above in section 6.3, will be sufficient to ensure the proportionality of the aid. However, the DEA welcomes considerations concerning the proportionality of the aid.

5. Method and estimate of subsidy per ton of CO₂e emission avoided (per reference project).

- The DEA believes that the estimates of subsidy per ton of CO₂ emission avoided stated above in section 7 to be reasonable. However, DEA welcomes any comments regarding the method used or the assumptions regarding the subsidy per ton of CO₂e emission avoided, for example, whether other parameters should be included in the estimate.