

# APPENDIX 5 SUBSIDY AND ECONOMY SCHEME

Contract on subsidy for negative emissions carbon capture, transport, and storage

Danish Energy Agency

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#### Instructions for tenderers

This Appendix constitutes General Requirements in its entirety, cf. Tender specifications, paragraph 6.

The tenderer shall not fill in or complete this Appendix and it should not be submitted as a part of the tenderer's Offer.

This guidance text will be deleted by the DEA in connection with conclusion of the Contract.



# 1. Introduction

- 1.1 This Appendix sets out the calculation and payment of Subsidy and Penalties.
- 1.2 Capitalised terms used in this Appendix shall have the meaning ascribed to them in Appendix 2, Definitions.

# 2. The Subsidy

#### 2.1. Calculation of Subsidy

- 2.1.1 The Subsidy shall be paid pr. tonne CO<sub>2</sub> permanently, geologically stored in accordance with the Contract (Delivered Quantity) based on the Subsidy Rate calculated by the DEA for each year of the Contract (the Subsidy Rate).
- 2.1.2 The Subsidy Rate for a given year will be calculated by the DEA based on the Offered Rate adjusted for inflation in accordance with clause 3 and with a reduction in accordance with clause 2.1.3 – 2.1.6 below, if applicable.
- 2.1.3 The Subsidy Rate will be subject to a reduction as set forth in clause 2.1.4 – 2.1.6 below if future legislation entails that participation in the EU Emissions Trade Scheme (ETS), or a similar EU-mandated trade scheme, become mandatory for emitters of biogenic CO<sub>2</sub>.
- 2.1.4 Such reduction will be applied if:
  - the emission of biogenic CO<sub>2</sub> from the point source that the Carbon Capture Plant encompassed by the Contract is based on will require allowances that are transferable and that can either be awarded to the Operator or purchased by the Operator and
  - the storage of CO<sub>2</sub> under the Contract consequently can result in a reduced cost, or an income generated by the storage of Delivered Quantity.



- 2.1.5 The reduction will be made with effect from the year such legislation enters into force. If such legislation enters into force during a calendar year, the reduction will be made with effect from the subsequent year.
- 2.1.6 The reduction for a given year will be calculated by the DEA as a fixed amount pr tonne based on the market value of an allowance pr. Tonne. The market value will be calculated on the basis of an average closing price for future contracts between 20. September to 20. December in the year prior to the given year and converted from EUR to DKK based on Danmarks Nationalbank's daily exchange rate, which is obtained from the European Central Bank at 4pm CET, for each day when the forward price of the allowance is obtained. The price for future contracts is obtained from the exchange/trading platform that on average had the largest volume of future contracts.
- 2.1.7 If a reduction is not applied, see clause 2.1.3-2.1.6, the Subsidy Rate for a given year will be notified to the Operator as set out in clause 3. If a reduction is applied in accordance with clause 2.1.3-2.1.6, the Subsidy Rate for the given year will be notified to the Operator no later than 31. December in the year prior to the given year.
- 2.1.8 The Subsidy in a given year cannot exceed the annual subsidy allocated under the Contract calculated on the basis of the Subsidy Rate applicable for the given year and the Annual Quantity, respectively and if applicable, the 2025 Quantity for 2025. (Allocated Annual Subsidy). No unused amount within the Allocated Annual Subsidy can be transferred to subsequent years.

#### 2.2 Invoicing

2.2.1 For each quarter after the COD<u>or</u> – to the extent that the Operator's performance of the Contract is based on more than one Carbon Capture Plant and the operation date of one or more of these Carbon Capture Plant(s) are before the COD<u>– for each quarter after the operation date of the first Carbon</u> Capture Plant the Operator shall submit to the DEA an invoice based on the Delivered Quantity for the given quarter. The invoiced amount shall be calculated as the Delivered Quantity in the quarter multiplied with the Subsidy Rate in the given year plus VAT. For each year the Operator can only claim subsidy up to the Allocated Annual Subsidy, see clause 2.1.3 and the Operator is not entitled to any



subsidy or any other payment for stored CO<sub>2</sub> exceeding the Annual Quantity, respectively and if applicable, the 2025 Quantity for 2025.

- 2.2.2 The Operator shall with each invoice provide documentation in accordance with R-6, Appendix 3, Requirements specification (Quarterly Report on Delivered Quantity).
- 2.2.3 Invoices regarding Delivered Quantity in a given quarter and the Quarterly Report on Delivered Quantity shall be submitted no later than 10 Business Days after the end of the given quarter. Invoices regarding Delivered Quantity in the last quarter of a year shall be submitted to the DEA no later than 10 January of the following year.
- 2.2.4 Reference is also made to the Contract, clauses 15, regarding invoicing, terms of payment etc.

#### 2.3 Annual Report on the Delivered Quantity

- 2.3.1 The Operator shall provide documentation in accordance with R-7, Appendix 3, Requirements specification (Annual Report on Delivered Quantity). Stored CO<sub>2</sub> is only considered as Delivered Quantity (i.e. entitling the Operator to subsidy) to the extent that the Annual Report on Delivered Quantity document that the requirements are fulfilled.
- 2.3.2 If the Annual Report on Delivered Quantity shows that the actual Delivered Quantity is lower than reported in the Quarterly Reports on Delivered Quantity during the year, meaning that excessive Subsidy has been paid to the Operator for the given year, the Operator shall be required to repay the excess amount.
- 2.3.3 Repayment of the Subsidy will fall due for payment thirty (30) Days from the date the Operator has received DEA's calculation of the repayment claim. The DEA may at its sole discretion choose to receive the payment by offsetting by the DEA in the subsequent payment of Subsidy.
- 2.3.4 If the Annual Report on Delivered Quantity shows that the actual Delivered Quantity is higher than reported in the Quarterly Reports on Delivered Quantity during the year, the Operator will not be entitled to further Subsidy or any compensation for the given year.



# 3. Adjustment for Inflation

## 3.1. Inflation adjustment

- 3.1.1.The Offered Rate and the amount of the Performance and Warranty Guarantee shall be subject to adjustments for inflation in accordance with the provisions set out in the following clauses. Since the NECCS Fund is fully financed by REPower EU means in 2025, the calculation of the Subsidy Rate for the 2025-Quantity and the Subsidy Rate for the Annual Quantities shall be made using separate indexes.
- 3.1.2.The Subsidy Rate and the amount of the inflation-adjusted Performance and Warranty Guarantee will be rounded to two decimal places.

## 3.2. Subsidy Rate for 2025-Quantity

- 3.2.1.The Subsidy Rate for the 2025-Quantity will be based on the Offered Rate adjusted for inflation using the index located in row "Generelt pris- og lønindeks" and column "Samlet opregning" in the table "Pris- og lønforudsætninger" published by the Danish Agency for Public Finance and Management (in Danish "Økonomistyrelsen").<sup>1</sup>.
- 3.2.2.As 2023 defines the reference price level, the Subsidy Rate for the 2025-Quantity is calculated as:

Subsidy Rate 2025 = Offered Rate  $*\left(1 + \frac{Generelt \ pris - og \ lønindeks_{2024}}{100}\right)$  $*\left(1 + \frac{Generelt \ pris - og \ løndeks_{2025}}{100}\right)$ 

3.2.3.The DEA will inform the Operator of the Subsidy Rate for the 2025-Quanity no later than 1 October 2024 if the Contract encompasses 2025-Quantity. The

 $<sup>\</sup>label{eq:linear} \ \underline{\ }\ \$ 



Operator will also be notified of the Subsidy Rate for the 2025-Quantity in 2024-prices, albeit for informational purposes only.

#### 3.3. Subsidy Rate for Annual Quantity

- 3.3.1.The Subsidy Rate for the Annual Quantity will be based on the Offered Rate annually adjusted for inflation based on the index located in row "Forbrugerprisindeks" and column "Samlet opregning" in the table "Pris- og lønforudsætninger" published by the Danish Agency for Public Finance and Management (in Danish "Økonomistyrelsen").<sup>2</sup>.
- 3.3.2. As 2023 defines the reference price level, the Subsidy Rate for the Annual Quantity in 2026 is calculated as:

Subsidy 
$$Rate_{2026} =$$

$$\begin{array}{l} Offered \ Rate * \left(1 + \frac{Forbrugerprisindeks_{2024}}{100}\right) * \left(1 + \frac{Forbrugerprisindeks_{2025}}{100}\right) \\ & * \left(1 + \frac{Forbrugerprisindeks_{2026}}{100}\right) \end{array}$$

3.3.3.For any subsequent year of operation, the Subsidy Rate for the Annual Quantity is calculated with the Subsidy Rate of the previous year as reference, so that the Subsidy Rate for 2027 is calculated with the Subsidy Rate for 2026 as a reference, the Subsidy Rate for 2028 is calculated with the Subsidy Rate for 2027 as reference, etc.

The Subsidy Rate for 2027 is calculated as:

Subsidy Rate<sub>2027</sub> = Subsidy Rate<sub>2026</sub> \* 
$$(1 + \frac{Forbrugerprisindeks_{2027}}{100})$$

3.3.4. The DEA will each year after Contract signing inform the Operator of the Subsidy Rate for the Annual Quantity for a given year no later than 1 October in the year prior to the given year, if a reduction in accordance with clause 2.1.3 – 2.1.6 is not applied, see clause 2.1.7. The Operator will also be notified of the Subsidy Rate for the Annual Quantity in 2024-prices and 2025 prices, albeit for informational purposes only.

 $<sup>^2 \ \</sup>underline{https://oes.dk/statsregnskab/finanslov-og-udgiftsopfoelgning/indeks/pris-og-loenforudsaetninger/$ 



3.3.5.For Contracts encompassing a 2025-Quantity, the Subsidy Rate for the Operator's Annual Quantity will solely be based on the index "Forbrugerprisindeks".

## 3.4. The Performance and Warranty Guarantee

- 3.4.1.The amount of the Performance and Warranty Guarantee shall be adjusted for inflation every third (3rd) year in November with effect from 1 January the following year. The first adjustment for inflation shall be calculated in November 2026 with effect from 2027. The second adjustment for inflation shall be calculated in November 2029 with effect from 2030. The adjustment for inflation shall be based on the index located in row "Forbrugerprisindeks" and column "Samlet opregning" in the table "Pris- og lønforudsætninger" published by the Danish Agency for Public Finance and Management (in Danish "Økonomistyrelsen").<sup>3</sup>.
- 3.4.2. The guarantee amount shall be adjusted to reflect three years of inflation over the previous three-year period. The adjusted amount applicable from 1 January 2027 shall be calculated as:

$$\begin{split} Amount_{2027} &= Amount_{2024}*\left(1+\frac{Forbrugerprisindeks_{2025}}{100}\right)\\ &\quad *\left(1+\frac{Forbrugerprisindeks_{2026}}{100}\right)*\left(1+\frac{Forbrugerprisindeks_{2027}}{100}\right) \end{split}$$

The guarantee amount applicable from 2030 shall be calculated as:

$$\begin{aligned} Amount_{2030} &= Amount_{2027} * \left(1 + \frac{Forbrugerprisindeks_{2028}}{100}\right) \\ & * \left(1 + \frac{Forbrugerprisindeks_{2029}}{100}\right) * \left(1 + \frac{Forbrugerprisindeks_{2030}}{100}\right) \end{aligned}$$

 $<sup>\</sup>label{eq:linear} \ ^{3} \ \underline{https://oes.dk/statsregnskab/finanslov-og-udgiftsopfoelgning/indeks/pris-og-loenforudsaetninger/$ 



# 4. Penalties

#### 4.1. Non-performance regarding the Contracted Quantity

4.1.1 In the event the Operator fails to deliver the Contracted Quantity in a given year, the Operator's non-performance shall be subject to Penalty in accordance with the provisions set out in clause 4.3. However, see clause 4.2 for valid exemptions concerning non-performance regarding the Contracted Quantity, and clause 4.4, for the recovery, in part or in full, of penalties (catch-up), if the Operator in the subsequent year delivers an amount in excess of the Contracted Quantity for the subsequent year.

## 4.2 Exemptions for non-performance regarding the Contracted Quantity

- 4.2.1 The Operator's non-performance of the obligation to deliver the Contracted Quantity shall not be subject to Penalty to the extent that the Operator can document that the non-performance is caused by one of the following circumstances:
  - Unplanned outages or other unplanned production stoppages in the primary production/CO<sub>2</sub> source to a level which make it impossible for the Operator to deliver the Contracted Quantity, provided that the outage/stoppage is not attributable to gross negligence or wilful misconduct of the Operator;
  - (ii) Demand reduction in the primary production leading to a reduced CO<sub>2</sub> generation from the source to a level which makes it impossible for the Operator to deliver the Contracted Quantity, provided that the demand reduction is not attributable to conduct of the Operator which significantly deviates from reasonable market practice;



- Production or energy optimisation which leads to reduced CO<sub>2</sub> generation from the source to a level which makes it impossible for the Operator to deliver the Contracted Quantity.
- 4.2.2 If the Operator considers that non-performance is caused by one of the circumstances mentioned in clause 4.2.1, and the Operator therefore considers it entitled to an exemption from Penalty, the Operator must notify the DEA of this in writing as soon as possible. The Operator must submit documentation that confirms that the non-performance has been caused by the circumstances claimed, and that the non-performance cannot be avoided or mitigated.
- 4.2.3 If the Operator can document that the non-performance is due to one of the circumstances above, the Operator will not be subject to Penalty for the quantity not delivered due to said circumstance(s).
- 4.2.4 The Operator shall not be entitled to any compensation in case of the circumstances in clause 4.2.1. In case of a partial delivery of the Contracted Quantity, payment of the delivered quantity of CO<sub>2</sub> will be made in accordance with the provisions of this Appendix.

#### 4.3 Penalties related to the Contracted Quantity

- 4.3.1 The determination of Penalties in accordance with the provisions set out in this Appendix will be based on the Operator's Annual Report on the Delivered Quantity in the given year with reference to R-7, Appendix 3, Requirements specification.
- 4.3.2 For each year a Penalty threshold applies and shall be either 80% or 95% of the Contracted Quantity, see clauses 4.3.3- 4.3.6. If the Delivered Quantity falls below the Penalty threshold of the given year, the Operator shall be subject to pay a Penalty calculated in accordance with clause 4.3.8.
- 4.3.3 By default the Penalty threshold is 80 % of the Contracted Quantity, meaning that a Penalty is only imposed on the Operator in case the Delivered Quantity is less than 80% of the Contracted Quantity. The 80% Penalty threshold applies for the Delivered Quantity in the first year of operation (i.e. 2025 or 2026, dependent on whether the Contract encompasses 2025-Quantity), and any subsequent years as set out in clauses 4.3.4 4.3.6.



- 4.3.4 If the Delivered Quantity is 95% or more of the Contracted Quantity in the given year, the 80% Penalty threshold remains applicable for the subsequent year.
- 4.3.5 If the Delivered Quantity in a given year is less than 95% of the Contracted Quantity in the given year, the Penalty threshold will be increased to 95% applicable for the subsequent year.
- 4.3.6 If the Delivered Quantity in a year subject to the 95% Penalty threshold
  is 95% or more of the Contracted Quantity the Penalty threshold will be reset to 80 %, meaning that a 80% Penalty threshold will apply for the subsequent year.
- 4.3.7 An example of the Penalty threshold and Penalty application is given below:

Year	2025	2026	2027	2028	2029	2030	2031	2032
Delivered Quantity as percentage of Contracted Quantity	95%	100%	90%	90%	100%	95%	75%	100%
Penalty threshold to be applied	80%	80%	80%	95%	95%	80%	80%	95%
Is the Operator subject to a penalty?	No	No	No	Yes	No	No	Yes	No

4.3.8 The Penalty amount is one third of the Subsidy Rate for the given year multiplied by the difference between the Delivered Quantity and Contracted Quantity for the given year. The Penalty is calculated based on the formula as specified below:

 $\begin{aligned} Penalty &= \frac{1}{3} * p_k * (Q_k - Q_f), where \\ Q_f \text{ is the Delivered Quantity for the given year,} \\ p_k \text{ is the Subsidy Rate for the given year and} \\ Q_k \text{ is the Operator's Contracted Quantity for the given year} \end{aligned}$ 

4.3.9 The Penalty threshold is not applied in the calculation of the Penalty amount, meaning that the Penalty amount is calculated on the basis of the Contracted Quantity for the given year, (i.e. 100 % of the Contracted Quantity) as set out on clause 4.3.8, regardless of whether a 80 % or 95 % Penalty threshold for the application of Penalty apply.



4.3.10 Payment of Penalties will not fall due until the DEA has made a calculation of final Penalties in accordance with clause 4.4.

#### 4.4 Recovery of penalties (catch-up)

- 4.4.1 If the Operator is subject to Penalty in a given year, the Operator can recover, in part or in full, said penalties (catch-up), if the Operator in the subsequent year delivers a quantity in excess of the Contracted Quantity in the subsequent year (i.e. "Additional Quantity").
- 4.4.2 For the purpose of the calculation of the final Penalty, the DEA will calculate a "Delivery Balance" for a two-year consecutive period, consisting of the year of non-performance (i.e. the year in which the Operator incurred the Penalty, see clause 4.3) and the subsequent year of operation ("the recovery year"). Any Penalty in the Operator's last year of operation cannot be recovered in the subsequent year.
- 4.4.3 The Delivery Balance will be calculated by adding the Delivered Quantity from the year of the Operator's non-performance together with any Additional Quantity for the recovery year:

 $\begin{aligned} & Delivery \ Balance = D_q + A_q, where \\ & D_q \ is \ the \ Delivered \ Quantity \ from \ Operator's \ year \ of \ non - performance, \\ & A_q \ is \ the \ Operator's \ Additonal \ Quantity \ from \ the \ recovery \ year \end{aligned}$ 

- 4.4.4 The Delivery Balance will be based on the Annual Reports on the Delivered Quantity in the year of non-performance and the recovery year. The calculation of the final Penalty will therefore be made by the DEA in the year following the recovery year after the Operator has provided the Annual Report on the Delivered Quantity for the recovery year.
- 4.4.5 The calculation of the final Penalty may result in the following outcomes:

(i) If the Delivery Balance meets or exceeds the Penalty threshold applicable in the year of the Operator's non-performance, then the Penalty will be annulled, i.e. the Operator shall not pay a Penalty.

See also example 1 in clause 4.4.6.



(ii) If the Operator delivers an Additional Quantity in the recovery year, but the Delivery Balance still falls below the penalty threshold applicable in the year of the Operator's non-performance, the Operator will incur the final Penalty. However, the final Penalty amount is to be calculated based on the difference between the Contracted Quantity in the year of non-performance and the Delivery Balance in accordance with clause 4.3.4. Note that "the Delivery Balance" will replace the "Delivered Quantity for the given year" for the value denoted " $Q_t$ " in the formula described in clause 4.3.8.

See also example 2 in clause 4.4.7.

(iii) If the Operator does not deliver an Additional Quantity in the recovery year, then the Operator will incur the final Penalty. No recalculation will be made, i.e. the final Penalty amount will not be adjusted.

See also example 3 in clause 4.4.8.

Year		2028	2029	
Annual Quantity (tonnes)		100,000	100,000	
Delivered Quantity (tonnes)		60,000	130,000	
Additional Quantity(tonnes)		-	30,000	
Delivered Quantity as percentage of		60%	130%	
Contracted Quantity				
Penalty threshold applicable in the given year		80%	-	
Is the operator subject to a penalty?		Yes	-	
Delivery Balance (tonnes)		-	90,000	
Delivery Balance as percentage of Annual		-	90%	
Quantity				
Has the Operator recovered any of its		-	Yes (in	
Penalty?			full)	

#### 4.4.6 Example 1

In 2028, the Operator fails to deliver the Annual Quantity by only delivering 60,000 tonnes (60% of Annual Quantity). The Operator's non-performance will therefore be subject to Penalty.

However, the Operator delivers an Additional Quantity of 30,000 tonnes in 2029 (130% of Annual Quantity), and the Delivery Balance is consequently calculated to be 60,000+30,000 = 90,000 (90% of Annual Quantity).



This surpasses the 80% penalty threshold applicable in the Operator's year of nonperformance (2028). The Operator has therefore recovered the incurred Penalty in full.

#### 4.4.7 Example 2

Year		2028	2029	
Annual Quantity (tonnes)		100,000	100,000	
Delivered Quantity (tonnes)		60,000	115,000	
Additional Quantity (tonnes)		-	15,000	
Delivered Quantity as percentage of		60%	115%	
Annual Quantity				
Penalty threshold applicable in the given		80%	-	
year				
Is the operator subject to a penalty?		Yes	-	
Delivery Balance (tonnes)		-	75,000	
Delivery Balance as percentage of Annual		-	75%	
Quantity				
Has the Operator recovered any of its		-	Yes	
Penalty?			(Partially)	

In 2028, the Operator fails to deliver the Annual Quantity by only delivering 60,000 tonnes (60% of Annual Quantity). The Operator's non-performance will therefore be subject to Penalty.

However, the Operator delivers an Additional Quantity of 15,000 tonnes in 2029 (115% of Annual Quantity), and the Delivery Balance is consequently calculated to be 60,000+15,000 = 75,000 (75% of Annual Quantity).

The Delivery Balance still falls below the 80% penalty threshold applicable in the Operator's year of non-performance (2028). The Operator has therefore only partially recovered the incurred Penalty. The final Penalty amount is to be calculated based on the difference between the Annual Quantity and the Delivery Balance, which in this example amounts to 25,000 tonnes.

4.4.8	Example 3
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Year	 2028	2029	
Annual Quantity (tonnes)	100,000	100,000	
Delivered Quantity (tonnes)	60,000	95,000	
Additional Quantity (tonnes)		0	
Delivered Quantity as percentage of Annual	60%	95%	
Quantity			
Penalty threshold applicable in the given year	80%		
Is the operator subject to a penalty?	Yes		
Delivery Balance (tonnes)		60,000	



Delivery Balance as percentage of Annual	60	)%	
Quantity			
Has the Operator recovered any of its Penalty?	No	0	

In 2028, the Operator fails to deliver the Annual Quantity by only delivering 60,000 tonnes (60% of Annual Quantity). The Operator's non-performance will therefore be subject to Penalty.

In the recovery year, the Operator does not deliver an Additional Quantity. The Delivery Balance is consequently identical to the Delivered Quantity in 2028.

The Operator has therefore not recovered any of its Penalty.

- 4.4.9 Payment of the final Penalty will fall due for payment thirty (30) Days from the date the Operator has received DEA's calculation of the final Penalty. The DEA may at its sole discretion choose to receive the payment by offsetting by the DEA in the subsequent payment of Subsidy.
- 4.4.10 The Operator is not entitled to subsidy or any other payment for any Additional Quantity delivered by the Operator, i.e. a quantity in excess of the Contracted Quantity.