

Tender Specification Document

Tender for Firm Volume Capacity to store CO₂ at Stenlille Facility

DRAFT

Contents

1	Introduction	3
2	Overview of GSD’s objectives	3
3	Minimum Requirements for Bidders	4
4	GSD’s condition precedent	5
5	Price setting mechanism	5
6	Tender structure	5
6.1	Tender Documents	5
6.2	Tender time schedule	5
6.3	Questions and communication	6
6.4	Changes to the Tender Documents	6
6.5	Submission of Bids	6
7	Content of a Bid	7
7.1	Submission Letter	7
7.2	Bidder Template	7
7.3	Multiple bids	8
8	Evaluation and allocation process	8
8.1	Evaluation	8
8.2	Allocation	9
9	Award and signature of Storage Agreement	10
10	Terms and conditions for the Tender	10
	Appendix A: Defined terms	11
	Appendix B: Design of the top site	13

1 Introduction

This tender specification document (“**Tender Specification Document**”) provides information about Gas Storage Denmark A/S (“**GSD**”) tender for Firm Volume Capacity to store CO₂ at Stenlille Facility (“**Tender**”); guidelines for the submission of a Bid; and guidelines for communication between the Bidder and GSD.

This Tender is for the Firm Volume Capacity that will be made available to the market through CO₂RYLUS, GSD’s onshore underground CO₂ storage project in Denmark. This is a commercial, fast-track project to support the development of a CCS value chain in Denmark. Additionally, the project aims to build knowledge and support Danish political ambitions within the CCS sector.

GSD aims to start injecting and permanently storing biogenic and fossil CO₂ by 1st December 2025. The project will involve converting one of GSD’s existing observation wells into one that will be used for CO₂ injection. The project will also deliver the appropriate top site and associated pipeline infrastructure that will enable GSD’s future customers to deliver CO₂ to the Stenlille Facility by road transport.

The total capacity and term length offered in this Tender is:

Total Firm Volume Capacity	2,000,000 tonnes CO ₂
Total Yearly Firm Volume Capacity	200,000 tonnes CO ₂
Total Hourly Firm Injection Capacity	100 tonnes CO ₂ /hour, provided that it takes 1 hour to empty a 25-tonne capacity container at total of four unloading stations.
Term	10 years from 1 st December 2025. However, GSD and the Bidder is entitled to postpone the start date with up to 6 months, provided that the conditions hereof in the Storage Agreement are satisfied.

The Bidder/Storage Customer is responsible for establishing and ensuring its own CO₂ value chain and that the CO₂ quality is in accordance with the specification enclosed to the General Terms and Conditions for Carbon Storage (GTCCS).

Capitalised terms used in this Tender Specification Document shall have the meaning ascribed to them in Appendix A: **Defined terms**.

2 Overview of GSD’s objectives

GSD’s primary objectives with the CO₂RYLUS project and the Tender is to support rapid knowledge creation within the emerging Danish CO₂ sector, with an aim to inject and store the first CO₂ by 1st December 2025.

The project should be commercially viable and result in a net positive business case for GSD. Bids should cover the costs associated with building and operating the Stenlille Facility. In addition, GSD places importance on minimising financial risk to ensure these primary objectives can be met.

The primary objectives form the basis of the Minimum Requirements and Evaluation Criteria as laid out in Sections 3 and 8.

In addition to the primary objectives, the project should also aim to maximise utilisation of the storage capacity, price and term to deliver maximum value to GSD, however the term should not be longer than 10

years. Bidders can support effective allocation of the storage capacity by introducing flexibility in their Bids. This will enable GSD to ensure the best overall use of the Stenlille Facility and achieve final investment decision. The secondary objectives also form the basis of the Evaluation Criteria, as laid out in Section 8.

3 Minimum Requirements for Bidders

Minimum Requirements must be complied with by the Bidder.

The following table outlines the Minimum Requirements:

#	Minimum Requirement	Description
MR 1	Financial robustness	<p>Bidders should demonstrate financial robustness through one of the following options:</p> <ul style="list-style-type: none"> a. A credit rating of at least BBB- from S&P or Fitch, or Baa3 from Moody’s. <p>OR</p> <ul style="list-style-type: none"> b. Subject to the issuer of a bank guarantee has a credit rating at at least BBB- from S&P or Fitch, or Baa3 from Moody’s, a bank guarantee for the larger of: <ul style="list-style-type: none"> i. 25% of the total contract value (“Total Contract Value”) provided in a Bid; or ii. 12 months payment of average Firm Volume Capacity provided in a Bid. <p>OR</p> <ul style="list-style-type: none"> c. Subject to the issuer of a parent company guarantee has a credit rating at at least BBB- from S&P or Fitch, or Baa3 from Moody’s, a parent company guarantee for the larger of: <ul style="list-style-type: none"> i. 25% of the total contract value (“Total Contract Value”) provided in a Bid; or ii. 12 months payment of average Firm Volume Capacity provided in a Bid. <p>OR</p> <ul style="list-style-type: none"> d. If neither (a), (b) or (c) are obtainable, then the Bidder must participate in an internal GSD credit approval.
MR 2	Bid start date	The Firm Volume Capacity provided in each Bid should start no later than the end of 2026.
MR 3	Reservation Price	Bidders should provide a price in the Bid (“ Bid Price ”) that is equal to or higher than the Reservation Price [current estimates indicate this will likely be in the range of 275-300 DKK per tonne CO ₂].

MR 4	Reservation	No Reservations must be made against the Minimum Requirements, the GTCCS and the Storage Agreement.
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4 GSD’s condition precedent

GSD shall not be obliged to fulfil its obligations under the Storage Agreement, unless the conditions included in the Storage Agreement are satisfied (or waived by GSD).

5 Price setting mechanism

The price for the Firm Volume Capacity will be determined by a Pay as Bid mechanism.

The Storage Customer will be required to pay for the Firm Volume Capacity awarded to them and defined in the Storage Agreement, independent of whether or not the Firm Volume Capacity is utilised.

6 Tender structure

6.1 Tender Documents

Supplementary information to support your Bid is provided as appendices to this Tender Specification Document.

The Tender Documents are listed below:

- General Terms and Conditions Carbon Storage (GTCCS)
- Storage Agreement
- Submission Letter
- Bidder Template
- Q&A list

6.2 Tender time schedule

Date	Activity	Description
[Mid-late] October 2023	Tender launch	Publication of Tender Documents
[Mid-late] November 2023 14:00 CET	Bid Deadline (“ Bid Deadline ”)	Bid submission deadline
[Late] November 2023	Awarding of Storage Agreement(s) (“ Award Date ”)	Bidders are informed of the outcome of the tender
1st December 2023	Signature of Storage Agreement	Successful Bidders have returned a signed and completed copy of their Storage Agreement

GSD reserves the right to change the time schedule for the Tender.

6.3 Questions and communication

From tender launch until Bid Deadline you are invited to submit questions to facilitate your Bid. All questions must be submitted in an e-mail to the following e-mail address: CO2rylus@gasstorage.dk
Written questions received through any other channel will not be answered.

GSD will strive to answer any questions received within 3 business days. GSD cannot commit to provide answers to questions received later than 5 business days before the Bid Deadline.

All questions and answers will be anonymised and added to a publicly available Q&A list that will be hosted on GSD's website. Duplicate or similar questions will be grouped together and a single answer will be provided. The Q&A list will be updated on an ongoing basis, and it is the Bidder's responsibility to check for answers to their questions. Bidders will not receive a notification when their questions have been answered.

6.4 Changes to the Tender Documents

GSD reserve the right to make changes to the Tender Documents, the GTCCS and the Storage Agreement throughout the Tender. No changes will be made one week before the Bid Deadline.

If any changes are made, any Bids submitted before this point will no longer be considered binding and must be resubmitted.

When GSD deems that a change is required, GSD will mark the change with "tracked changes" and the document will be re-published on GSD's website. Bidders may be notified of these changes by subscribing to our news service for 'future storage news' on the GSD website [[placeholder for link](#)]. It is the Bidders responsibility to ensure they have signed up to the mailing list.

6.5 Submission of Bids

The Bids must be submitted no later than the Bid Deadline. Bids received after this time will be rejected.

Submitted Bids that are not withdrawn or superseded by a later version before the Bid Deadline will be considered as binding.

Bids remain valid up to 1 month after the Bid Deadline.

The Bids should be drafted so that the Storage Agreement may be entered into without prior negotiations.

All Bids must be sent via e-mail to the following e-mail: CO2rylus@gasstorage.dk

Once received, the Bidders will receive a confirmation of receipt within 1 business day of submission. If the Bid is received on the Bid Deadline date, the confirmation of receipt will be sent no later than 2 hours after the Bid Deadline.

A Bid is not accepted until GSD sends confirmation by e-mail, that the Bid is received.

For Bidders submitting multiple Bids, please ensure to use clear naming conventions on the relevant Bidder Templates. Bidders should attach one Bid per e-mail.

All Bids must be in English.

7 Content of a Bid

A Bid consists of the following documents:

- Signed Submission Letter
- Completed Bidder Template
- Evidence of Financial Robustness (see Section 3 regarding Minimum Requirements)

Any additional documents or attachments will not be considered as part of the Bid.

7.1 Submission Letter

The Bidder shall enclose in its submission a signed copy of the Submission Letter.

7.2 Bidder Template

The Bidder must complete the information requested in the Bidder Template in order to support an effective and fair evaluation of the Bid.

The Bidder Template has four sections:

A - Identity of the Bidder:

The Bidder should provide information about themselves and their CO₂ project(s)

B – Reservations:

Bidders may provide Reservations. However, such Reservations must be in compliance with the Minimum Requirements set out in Section 3 (MR 4).

C - Financial Robustness:

Bidders should provide evidence of their financial robustness either within the Bidder Template or as a separate document.

D - Firm Capacity Volume & Price:

Bidders should provide their desired Firm Volume Capacity and the associated Bid Price in section D of the Bidder Template. The template allows Bidders to provide multiple Firm Volume Capacities and associated Bid Prices ("**Price Steps**"). Price Step 1 of each Bid will be used to rank the Bid as part of the Evaluation Process.

Detailed instructions for the Bidder Template are provided within it.

The allocation of Total Hourly Firm Injection Capacity to each Storage Customer will pro-rated based on the amount of Firm Volume Capacity awarded to them as part of the Tender. Please note it is the Bidder's responsibility to ensure they can deliver their Firm Volume Capacity based on the Firm Injection Capacity that would be allocated to them.

Example

Storage Customer 1 is allocated a Firm Volume Capacity of 150,000 tonnes and Storage Customer 2 is allocated a Firm Volume Capacity of 50,000 tonnes.

Under the pro-rata principle, Storage Customer 1 is allocated 75% of the Total Hourly Firm Injection Capacity and Storage Customer 2 is allocated 25%.

7.3 Multiple bids

Although the Section D of the Bidder Template enables Bidders to submit multiple Firm Volume Capacities and associated Bid Prices (i.e. Price Steps), they must all have the same Reservations.

If Bidders wishes to submit a Firm Volume Capacity and associated Bid Price/ Price Steps under a different set of Reservations, they must do so in a separate Bidder Template. This is considered to be a separate Bid.

A Bidder can submit up to 3 Bids and each Bid will be ranked separately as part of the Evaluation Process.

The same Submission Letter and evidence for Financial Robustness can be used for all Bids submitted by the same Bidder.

8 Evaluation and allocation process

The awarding of storage capacity will be based on two Evaluation Criteria with which each Bid will be ranked.

8.1 Evaluation

Bids will be evaluated based on two criteria: Reservation score and Total Contract Value.

8.1.1 *Reservation score*

Reservations provided in the Bidder Template will be assessed by GSD and provided a score between 1-10.

1 = Reservations deemed to be unacceptable by GSD

10 = no Reservations

The scoring between 2-9 will be based on an assessment regarding the impact each Reservation has on GSD's business model and the level of capex risk it poses to GSD. A higher number of Reservations are also likely to lead to a lower score.

8.1.2 *Total Contract Value*

The Total Contract Value of the Bid will be evaluated based on the Firm Volume Capacity in Price Step 1 of Section D of the Bidder Template, using the following formula:

*Total Contract Value = Firm Volume Capacity across all year(s) * Bid Price*

Example:

A Bidder has provided the following information for their Firm Volume Capacity in a Bid.

Price Step	Price per tonnes of CO ₂ (DKK)		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Contract value ('000 DKK)
1	300	Max	10,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	303,000
		Min	10,000	90,001	90,001	90,001	90,001	90,001	90,001	90,001	90,001	90,001	90,001	90,001
2	270	Max	5,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	244,350
		Min	5,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	136,350

The Firm Volume Capacity in Price Step 1 across all years is 1,010,000. The Total Contract Value is therefore calculated as 1,010,000 tonnes x 300 DKK/tonnes CO₂.

Total Contract Value = 303,000,000 DKK

8.1.3 Ranking process

Bids will first be ranked on the basis of their reservation score. Where two or more Bids have the same reservation score, they will be ranked by Total Contract Value.

Example

Step 1: Reservation score	Step 2: Total Contract Value	Final Rank
10	700,000,000	1
10	576,000,000	2
5	800,000,000	3
5	320,000,000	4
5	270,000,000	5
5	72,000,000	6
4	360,000,000	7
3	70,000,000	8

8.2 Allocation

The Firm Volume Capacity will be allocated to the highest ranked Bid(s) that provide(s) the best overall use of the storage capacity. In this context 'best overall use' is measured by the degree to which a collection of Bids best support GSD's objective of mitigating risks to GSD's business case of the Stenlille Facility.

Example:

Please note, this is a simplified example for a 1-year period only.

Final Rank	Maximum Firm Volume Capacity	Minimum Firm Volume Capacity	Capacity allocated	Allocation justification
1	175,000	175,000	-	Doesn't maximise overall value for GSD, as no other Bid can fill remaining 25,000 capacity
2	150,000	100,000	150,000	The combined capacity provides the best value for GSD
3	100,000	50,000	50,000	
4	50,000	50,000	-	Not allocated as all capacity is filled with higher ranking Bids

Where the Bids received by GSD do not generate adequate cash flow (defined as the Reservation Price multiplied by the Total Firm Volume Capacity), then GSD reserves the right not to allocate any of the Total Firm Volume Capacity.

9 Award and signature of Storage Agreement

The Storage Agreement(s) will be awarded on the Award Date.

Successful Bidders will be informed via e-mail in which the Storage Agreement will also be enclosed.

Successful Bidders must return a signed Storage Agreement for counter-signature no later than 5 business days after the Award Date.

10 Terms and conditions for the Tender

- GSD reserves the right to cancel and change the Tender at any time.
- GSD is not obliged to award any Storage Agreements.
- GSD shall have no obligation or liability to any party in connection with this Tender. Only the execution of a Storage Agreement will obligate GSD in accordance with the agreed-on terms and conditions contained in such Storage Agreement.
- The Bidders are responsible for all costs associated with their Bid(s).
- Even though a Storage Agreement has been awarded to one or several other Bidders, the Bidder is bound by its Bid(s) until GSD has signed the Storage Agreement(s) but no longer than 1 month after the Bid Deadline.
- Information provided in the Bid must be complete, accurate and final as the Storage Agreement will be awarded and signed without prior negotiation.
- GSD reserves the right to share the Bids with consultants and advisers chosen by GSD.

Appendix A: Defined terms

“Award Date” has the meaning set forth in Section 6.2 of this Tender Specification Document.

“Bid” means an entity’s offer for Firm Volume Capacity at Stenlille Facility submitted to GSD through the completion and submission of the Tender Documents.

“Bidder” means an entity that has submitted a Bid for Firm Volume Capacity at Stenlille Facility.

“Bid Deadline” has the meaning set forth in Section 6.2 of this Tender Specification Document.

“Bidder Template” forms part of the Tender Documents and must be completed by Bidders in order to make a Bid.

“Bid Price” is the price provided by Bidders in Section D of the Bidder Template. The Bid Price is equal the price the Bidder is willing to pay for the Firm Volume Capacity.

“CO₂” means carbon dioxide.

“Evaluation Criteria” has the meaning set forth in Section 8 of this Tender Specification Document.

“Firm Injection Capacity” means the maximum firm injection capacity agreed between the Storage Customer and GSD with a view to inject CO₂ under the Storage Agreement.

“Firm Volume Capacity” means the maximum firm volume capacity agreed between the Storage Customer and GSD with a view to store CO₂ under the Storage Agreement.

“GSD” means Gas Storage Denmark A/S, company registration number (CVR 29 85 12 47, which owns and operates the Stenlille Facility in accordance with the relevant Storage Agreement and the GTCCS.

“GTCCS” means the General Terms and Conditions Carbon Storage, including its appendices.

“Minimum Requirements” has the meaning set forth in Section 3 of this Tender Specification Document.

“Pay as Bid” means in the case of a successful Bid, the resulting price stated in the Storage Agreement will be the Bidder’s Bid Price. In case the Bidder has more than one successful Bid, separate Storage Agreements will be signed for each Bid.

“Price Steps” refers to the different Firm Volume Capacities and associated Bid Prices that Bidders may provide, as outlined in Section D of the Bidder Template.

“Reservation” means a condition that need to be satisfied (or waived by the Bidder), before the Bidder shall not be obliged to fulfil its obligations under the Storage Agreement.

“Reservation Price” means the price of Firm Volume Capacity that will cover GSD investment and operation costs in relation to Stenlille Facility. This is the minimum Bid Price that Bidders can include in their Bids. The Reservation Price does not include the costs related to injecting the CO₂.

“Total Firm Volume Capacity” means the total marketable Firm Volume Capacity offered by GSD under the Tender.

“Stenlille Facility” means the CO₂ storage facility at Stenlille.

“Storage Agreement” means an agreement between the Storage Customer and GSD, which lays out the terms relating to the storage of CO₂ at the Stenlille Facility.

“Storage Customer” shall mean the successful Bidder who has been awarded the Storage Agreement by GSD as part of the Tender.

“Submission Letter” forms part of the Bid submitted by the Bidders, formally confirming their participation in the Tender.

“Tender” means GSD’s tender process for Firm Volume Capacity to store CO₂ at Stenlille Facility.

“Tender Specification Document” means this document setting out the scope of the Tender and provides Bidders with the information required to participate in the Tender and submit a Bid.

“Tender Documents” has the meaning set forth in Section 6.1 of the Tender Specification Document.

“Term” means the maximum length of time the Total Firm Volume Capacity is offered by GSD for.

“Total Contract Value” has the meaning set forth in Section 8.1.2 of the Tender Specification Document.

“Total Firm Volume Capacity” means the total marketable Firm Volume Capacity offered by GSD for a period of 10 years.

“Total Hourly Firm Injection Capacity” means the total marketable Firm Injection Capacity offered by GSD per hour.

“Total Yearly Firm Volume Capacity” means the total marketable Firm Volume Capacity offered by GSD per year.

Appendix B: Design of the top site

The top site facility for unloading CO₂ in Stenlille will be based on tank truck deliveries. The CO₂ is to arrive in liquid phase at 15 bar/-26 degrees Celsius with a quality that is in accordance with the Northern Lights Specification. Trucks will be weighed by a weighing cell on arrival. GSD is entitled to perform inspections and audits to ensure that the CO₂ specification is met.

Unloading will take place at 4 designated unloading stations. Two additional unloading stations will help to provide some flexibility and ensure that planned maintenance can be performed effectively. The aim is to minimise any impact on the Total Hourly Firm Injection Capacity.

Reservation of unloading stations will be according to the contracted Firm Volume Capacity, whilst, to a limited extent, also allowing for daily/weekly planning and seasonal fluctuations. The truck driver is expected to handle the offloading at the unloading stations, however the Stenlille Facility will be manned by daily operators who may provide some support.

An intermediate tank storage facility will be available to help accommodate variations in frequency of truck arrivals and unloading. Trucks may only deliver and unload CO₂ during opening hours and the size of the intermediate storage is large enough to accommodate for this, which will help to secure stable and continuous CO₂ injection into the underground. During opening hours, a steady arrival of trucks and unloading is preferable.

Once the CO₂ has been heated to an ambient temperature, a pump system will pump the CO₂ via a pipeline to the designated injection well, which is located approx. 3.8 kilometers away. Here the CO₂ is injected and permanently stored underground.

- Total Hourly Firm Injection Capacity: 100 tonnes/hour
- Expected intermediate storage capacity: 600 m³ (approx.15 bar/ -26 degrees Celsius)
- Expected opening hours: weekdays – 7:00 - 18:00