

**CONSTRUCTION CONTRACT
(Design and Build)**

**Tank thermal energy storage
100,000 m3**

1. The parties

Aalborg Varme A/S Nefovej 50 9310 Vodskov Denmark Reg.no.: 37271616 (hereafter referred to as the Client)	[Name] [Address] [Postal code] [City] [Country] Reg.no.: [Reg.no.] (hereinafter referred to as the Contractor)
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(Each a "Party" and together "the Parties")

2. The works

The Contractor shall design and build tank thermal energy storage (hereafter referred to as "TTES") with a total capacity of 100,000 m3 based on this contract. The works are described in detail in the documents listed in section 3.

The works shall be performed and delivered at Nefovej 50, 9310 Vodskov, Denmark.

The overall layout of the project site is determined by the Client. Thus, within the project site, each tank shall be placed according to the Client's instructions. Any instructed placement of the tanks within the project site shall be included in the contract sum listed in section 5.

3. Documents as a basis for agreement:

The following documents form the legal basis for agreement between the Parties. In the event of any discrepancies or contradictions in the documents the following order of priority applies:

A	This contract
B	Appendix 1: Agreed master programme
C	Appendix 2: ABT 18 Client's deviations and additions (English translation)
D	Appendix 3: Revisions issued by the Client in the tender period, including Q&A
E	Appendix 4: The Client's tender documents, including A Scope of work and Technical specifications, including A1 General description A2 Technical description A3 Master programme A4 HSE – Conditions for Health, Safety and the Environment A5 Environment and occupational health & safety – 2021 A6 Site Construction Plan A7 Visualization of possible tank layout A8 Water analysis – District heating water B Responsible Business Conduct, including B1 Aalborg Forsyning Business Relationships Code of Conduct B2 FAQ Aalborg Forsyning Business Relationships Code of Conduct B3 Summary of UNGPs/OECD C Technical documentation, including C1 Geotechnical report C2 Layout examples – Version – 8x25,000m3, 6x33,000m3 and 4x50,000m3

	C3 PFD – Principle C4 Old Heat Accumulator D Indexation D1 Index explanation D2 How to find indexes
F	Appendix 5: ABT 18 General conditions (English translation)
G	Appendix 6: The Contractor's final tender

The contract takes precedence over the appendices, except if expressly stated in the appendices or the contract that the Parties want to make an exception to the contract text.

The contract including the appendices take precedence over the Contractor's final tender. ABT18 clause 6, subclause (3) has been derogated by this priority.

However, if the Contractor has taken clear reservations about the contract documents in his final tender (must be stated in the tender list) and this has not led to inadmissibility, such reservations will be added as explicit exceptions in section 4 below.

Any revised pages produced during the call for tender will be incorporated in the text and the appendices before signing the contract.

Drawings and work descriptions are supplementing each other meaning that not all elements that the Contractor shall deliver in accordance with this contract are shown in both drawings and descriptions. In case of discrepancies between drawings and work descriptions, the Contractor shall deliver the largest service.

Any reference to ABT18 in the contract is considered a reference to ABT18, including any deviations or additions made to ABT18 by the Client, see Appendix 2.

4. Reservations

[Any clear reservations to the contract documents in the Contractor's final tender that have been accepted by the Client in the tender procedure will be inserted by the Client in this clause 4 prior to signing the contract]

5. Contract sum and performance bonds

The contract sum for all the works up until the handover of the delivery covered by this contract is a fixed price in the amount of DKK [insert contract sum], excluding VAT.

The agreed contract sum is a fixed price and includes all services that are necessary for a full and proper completion of the contract/the work including both seasonal measures and weather-related winter measures, see ABT18 clause 5, subclause 2.

The Client is entitled but not obliged to purchase any listed options for the prices listed in the Contractor's final tender.

The Contractor is to provide security in the form of a performance bond in accordance with ABT clause 9, subclause 3. The performance bond amounts to 15% of the contract sum.

In principle, the Client does not provide a performance bond as security for the performance of the Client's obligations to the Contractor.

However, if the Contractor can objectively justify that the Client must provide a performance bond as security for the performance of the Client's obligations, the Client must, within 8 working days after the request is made, provide a performance bond as security for the fulfilment of the Client's payment obligations to the Contractor.

6. Time plan

The work must be performed within the deadlines of the agreed master programme.

7. ~~Payment schedule~~

~~Payment will be made in accordance with the following payment schedule which follows the agreed master programme:~~

~~If the Contractor delivers 4 x 25,000 m3 storage tanks, the following payment schedule shall apply~~

Rate	Milestone	Data	Payment	Sum
1*	Contract signing	[insert date]	20 %	20 %
2	Approval of Contractor's design	[insert date]	10 %	30 %
3	Tank 1 Handover	[insert date]	15 %	45 %
4	Tank 2 Handover	[insert date]	15 %	60 %
5	Tank 3 Handover	[insert date]	15 %	75 %
6	Tank 4 Handover	[insert date]	25 %	100 %

~~If the Contractor delivers 3 x 33,000 m3 storage tanks, the following payment schedule shall apply~~

Rate	Milestone	Data	Payment	Sum
1*	Contract signing	[insert date]	20 %	20 %
2	Approval of Contractor's design	[insert date]	10 %	30 %
3	Tank 1 Handover	[insert date]	20 %	50 %
4	Tank 2 Handover	[insert date]	20 %	70 %
5	Tank 3 Handover	[insert date]	30 %	100 %

~~If the Contractor delivers 2 x 50,000 m3 storage tanks, the following payment schedule shall apply~~

Rate	Milestone	Data	Payment	Sum
1*	Contract signing	[insert date]	20 %	20 %
2	Approval of Contractor's design	[insert date]	10 %	30 %
3	Tank 1 Handover	[insert date]	30 %	60 %
4	Tank 2 Handover	[insert date]	40 %	100 %

~~*In order to receive the first rate payment, the Contractor must provide a performance bond as security for delivery in conformity with the contract. The performance bond ceases after handover of the first tank. Moreover, the principles in ABT18 clause 34, subclause (2) shall apply.~~

~~The payment period for all rate payments is 30 calendar days after receiving the Contractor's correctly issued payment request, see ABT18 clause 35, subclause (1). Prior to issuing the payment request, a draft payment request must be sent to the Client for approval.~~

~~Payment will be made in accordance with ABT 18 clause 34.~~

~~On written request to the Client, the Contractor is entitled to receive a prepayment of a maximum of 20 % of the contract sum. In order to receive the prepayment, the Contractor must provide a performance bond as security for delivery in conformity with the contract, see the principles in ABT 18 clause 34, subclause (2).~~

~~The payment period for all payments is 30 calendar days after receiving the Contractor's correctly issued payment request, see ABT 18 clause 35, subclause (1). Prior to issuing the payment request, a draft payment request must be sent to the Client for approval.~~

8. Delays, liquidated damages and overall liability

The following milestones are associated with liquidated damages:

First 50,000 m3 TTES ready for water filling	[insert date]
First 50,000 m3 TTES ready for handover	[insert date]
100,000 m3 TTES ready for water filling	[insert date]
100,000 m3 TTES ready for handover	[insert date]

Liquidated damages for delays in regard to the stipulated milestones are determined as 0,1 % of contract sum per working day.

The calculated amount for liquidated damages in regard to delay cannot exceed 10 % of the total contract sum, see section 5.

Deadline for submission of qualitative documentation for each tank is set at the same time as the time of handover of the respective tank. If the deadline for submitting this documentation is exceeded, the Client will withhold payment corresponding to 5 % of the rate payment for handover of the respective tank until this documentation is received.

The Contractor shall not be liable for consequential or indirect losses and the aggregate liability of the Contractor under the contract shall not exceed an amount equalling the contract sum. This cap does not limit liability in any case of fraud, gross negligence, deliberate default or reckless misconduct by the Contractor or if the claim is covered by the Contractor's insurance in accordance with ABT18 clause 11.

9. Price basis and regulation

~~The agreed contract sum is a fixed price for the part of the work executed within twelve months of the date of tender. For the part of the work executed more than twelve months after the date of tender, the price is adjusted in accordance with [a relevant construction index considering both the development in labour and material costs], see ABT18 clause 32.~~

~~The contract sum is a fixed price for the part of the work executed within twelve months of the date of tender (fixed-price period) after which indexation will be made in accordance with the indexes stated in the table below.~~

~~However, for the part of the following works executed, a fixed-price period does not apply meaning that indexation will be made continuously in accordance with the indexes stated in the table below, also if the works are executed within twelve months of the date of tender:~~

- ~~• Concrete structures~~
- ~~• Steel plates, material~~
- ~~• Diffusors~~
- ~~• Internal main pipes, incl. mounting shut-off valves~~
- ~~• N2 – Pressure equalizing pipes between TTES~~
- ~~• Insulation~~
- ~~• Cladding~~
- ~~• Internal staircases and railings~~
- ~~• Walkways from top to top~~
- ~~• Staircase for access to one tank top~~
- ~~• One extra walkway from top to top (10 m in length) – Optional~~
- ~~• One extra N2 – Pressure equalizing pipes between TTES (10 m in length) – Optional~~

~~The prices listed in the tender list of the Contractor's final tender are adjusted in accordance with the following indexes, see ABT 18, clause 32.~~

<u>Work:</u>	<u>Index:</u>	<u>Fixed-price period</u>
<u>1 Construction site</u>		
<u>1.1 Construction site establishment</u>		
<u>1.1.1 Establishment</u>	<u>1115</u>	<u>Yes</u>
<u>1.2 Construction site operation</u>		
<u>1.2.1 Construction site operation</u>	<u>1115</u>	<u>Yes</u>
<u>1.3 Site Management and HSE coordination own works</u>		
<u>1.3.1 Site Management own works</u>	<u>ILON12</u>	<u>Yes</u>

<u>1.3.2 HSE coordination own works</u>	<u>ILON12</u>	<u>Yes</u>
<u>1.4 Dismantling construction site</u>		
<u>1.4.1 Dismantling construction site</u>	<u>1115</u>	<u>Yes</u>
<u>2 Tank Thermal energy storages – Complete</u>		
<u>2.1 Detailed design</u>		
<u>2.1.1 Detailed design</u>	<u>ILON12</u>	<u>Yes</u>
<u>2.2 Foundation – complete for TTES</u>		
<u>2.2.1 Earth works</u>	<u>EAWO</u>	<u>Yes</u>
<u>2.2.2 Concrete structures</u>	<u>CONST</u>	<u>No</u>
<u>2.3 Steel construction</u>		
<u>2.3.1 Steel plates, material</u>	<u>Steel-IM</u>	<u>No</u>
<u>2.3.2 Handling and welding, etc.</u>	<u>ILON12</u>	<u>Yes</u>
<u>2.4 Main components and pipes</u>		
<u>2.4.1 Diffusors</u>	<u>Steel 73</u>	<u>No</u>
<u>2.4.2 Internal main pipes, incl. mounting shut-off valves</u>	<u>Steel 73</u>	<u>No</u>
<u>2.4.3 N2 – Pressure equalizing pipes between TTES</u>	<u>Steel 73</u>	<u>No</u>
<u>2.4.4 TES – safe equipment</u>	<u>1115</u>	<u>Yes</u>
<u>2.4.5 Preparation for electrical installations</u>	<u>1115</u>	<u>Yes</u>
<u>2.5 Insulation and cladding</u>		
<u>2.5.1 Insulation</u>	<u>Steel 73</u>	<u>No</u>
<u>2.5.2 Cladding</u>	<u>Steel 73</u>	<u>No</u>
<u>2.6 Staircases and railings</u>		
<u>2.6.1 Internal staircases and railings</u>	<u>Steel 73</u>	<u>No</u>
<u>2.6.2 Walkways from top to top</u>	<u>Steel 73</u>	<u>No</u>
<u>2.6.3 Staircases for access to one tank top</u>	<u>Steel 73</u>	<u>No</u>
<u>2.7 Lightning protection</u>		
<u>2.7.1 Lightning protection</u>	<u>1115</u>	<u>Yes</u>
<u>2.8 Documentation</u>		
<u>2.8.1 CE-Marking and documentation</u>	<u>ILON12</u>	<u>Yes</u>
<u>2.8.2 As-built documentation</u>	<u>ILON12</u>	<u>Yes</u>
<u>3 Miscellaneous</u>		
<u>3.1 One extra walkway from top to top (10 m in length) – Optional</u>	<u>Steel 73</u>	<u>No</u>
<u>3.2 One extra N2 – Pressure equalizing pipes between TTES (10 m in length) – Optional</u>	<u>Steel 73</u>	<u>No</u>

An explanation of the indexes, including a guide on how to find the indexes is attached as Appendix 4D.

Moreover, the contract sum is subject to exceptional adjustments, see ABT18 clause 33.

Where a change is made in project specific legislation after the date of the final tender, the Contractor may require a modification of the offered prices if this modification is reasonably justified and documented.

10. The services of the Contractor

The Contractor is obliged to carry out the design and build contract in accordance with the present descriptions and to supply all materials and perform all ancillary services, supplies and labour services needed to complete the works so that the Contractor delivers a finished and operational construction.

As part of the Contractor's execution, the Contractor is obliged to prepare the necessary detailed design for the Client's approval, see ABT18 clause 18, subclause (6).

An approval of the design does not imply that the Contractor is exempt from the responsibility for any liability arising from liability, including any defect liability / project responsibility that may result from the detailed drawings.

The Contractor must perform quality assurance of its services and the Contractor must prepare and submit to the Client quality documentation, see ABT18 clause 21, subclause (1).

11. Variations

The procedure for dealing with any deviations from the prescribed execution and variations is described in ABT18 clause 23-25.

For any variations that cannot be priced based on unit prices, the Contractor is not allowed to add more than 10% in margin by open book calculation.

No extra work may be initiated without prior written agreement. Such an agreement on additional work must be concluded between the Contractor and the Client in order to be valid.

12. Subcontractors and named key persons

The Contractor may not without the Client's prior consent delegate the performance of the Contract to subcontractors to any further extent than stated in the Contractor's final tender or replace such named sub-contractors. Such consent may not be unreasonably withheld by the Client.

The Contractor must utilise key personnel offered in the Contractor's final tender in the execution of the Contract. The Contractor shall not be entitled to replace any such key personnel without the prior consent of the Client, unless such replacement is due to the personal circumstances of the employee, including termination of employment or any similar circumstances.

The Contractor shall where possible with at least one month's written notice inform the Client of his intention to replace any member of the key personnel and new key personnel shall hold at least the same qualifications as the replaced key personnel.

13. Confidentiality

The Client and the Contractor shall keep confidential and shall not, without the written consent of the other Party hereto, divulge to any third Party any documents, data or other information furnished directly or indirectly by the other Party hereto in connection with the contract, whether such information has been furnished prior to, during or following termination of the contract.

Notwithstanding the above, the Contractor may furnish to its subcontractor(s) such documents, data and other information it receives from the Client to the extent required for the subcontractor(s) to perform its work under the contract, in which event the Contractor shall obtain from such subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this clause.

The Client shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the tanks.

Similarly, the Contractor shall not use such documents, data and other information received from the Client for any purpose other than the design and building of the tanks or such other work and services as are required for the performance of the contract.

However, the obligation of a Party under the two subclauses above shall not apply to that information which:

- a) now or hereafter enters the public domain through no fault of that Party
- b) can be proven to have been possessed by that Party at the time of disclosure and which
- c) was not previously obtained, directly or indirectly, from the other Party hereto
- d) otherwise lawfully becomes available to that Party from a third Party that has no
- e) obligation of confidentiality.

The above provisions of this clause shall not in any way modify any undertaking of confidentiality given by either of the Parties hereto prior to the date of the contract in respect of the facilities or any part thereof.

The provisions of this clause shall survive termination, for whatever reason, of the contract.

Nothing in this clause can prohibit or in any way lead to an obstruction of the Client's obligations to comply with any obligations to share information in accordance with the Danish Access to Public Administration Files Act or similar public legislation.

14. Termination of the Contract due to violation of public procurement rules

If the Danish Complaints Board for Public Procurement or a court declares the Contract ineffective and orders the Client to terminate the Contract within a specific time limit, the Client is entitled to terminate the Contract wholly or partly in accordance with an order from the Danish Complaints Board for Public Procurement or the court.

If the order issued contains further conditions or demands, the Client will be entitled to pursue these conditions or requirements in the termination vis-à-vis the Contractor, provided that this is objectively justified, and in that case the Contractor must comply with those conditions.

If the Contractor at the time of signing of the Contract knew about the actual or legal circumstances causing the Contract to be declared ineffective, the Parties shall equally share the costs of a complaint before the Danish Complaints Board for Public Procurement and a subsequent legal action before the courts which might be imposed on the Client, including attorney's fees and other costs.

In the situations mentioned above, the Contractor may not make a claim for damages or other form of compensation against the Client.

15. Responsible Business Conduct

The Client complies with the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises (OECD) (hereafter collectively referred to as "UNGPs/OECD") and expects all its business relations, including the Contractor, to comply with this minimum standard for responsible business conduct, see Appendix 4B Responsible Business Conduct, including sub-appendices (hereafter referred to as "Aalborg Forsyning's CoC").

The purpose of this present clause is to ensure that the Contractor lives up to its responsibility of handling any adverse impacts that the execution of the Contractor's own work activities as well as the Contractor's subcontractors and partners may cause in accordance with the international agreed minimum standard for responsible business conduct (UNGPs/OECD).

The Contractor is obliged to establish a management system (i.e. policy; process for due diligence; complaint mechanism) in accordance with UNGPs/OECD, see also Aalborg Forsyning's CoC (Appendix 4B). Therefore, the Contractor must:

1. Commit (in a police declaration) to respect human rights, the environment and economic sustainability and to integrate the commitment in the Contractor's company.

2. Identify risks of adverse impact on human rights, the environment and economic sustainability – and update regularly.
3. Act to prevent or mitigate identified risks – and describe these actions.
4. Provide access to redress for people should they be exposed to impacts caused or contributed to by the Contractor.
5. Measure the efficiency of the actions to prevent or mitigate adverse impacts (i.e. registering progress).
6. Explain what the Contractor is doing – at the very least to the people at risk of experiencing adverse impacts and to the Contractor's business relations.

If the Contractor is a larger company (i.e. not a small and medium sized enterprise (SME)), the Contractor must, as part of the establishment of the above management system;

1. Prepare a police declaration, which obligates the Contractor to respect the human rights as well as handling adverse impacts on the environment and risks in relation to corruption. The police declaration must be in accordance with the instructions in UNGPs/OECD and must be finished latest one year after the assignment of this Contract.
2. Prepare an impact analysis on an operational level with measuring of the effectivity of specific acts. The analysis needs to cover the areas which is mentioned in this contract clause, and must include all units, which are involved in the delivery.

The impact analysis must comply with the demands from UNGPs/OECD and must be finished at latest two years after the assignment of this Contract. The analysis must be able to be shared with the Client.

The impact analysis must in accordance with the minimum standard be frequently updated. The updated impact analyses must be able to be shared with the Client every year. Besides the established processes concerning due diligence must be extended to cover other units in the company, which is controlled by the Contractor, even though those are not directly connected to the Client,

3. Establish complaint mechanism as described in UNGPs. The complaint mechanism must be aimed at interested parties, who can experience adverse impacts on their human rights, which the Contractor can cause or contribute to. The complaints mechanism must be established latest one and a half year after the assignment of this Contract, and
4. Demand from the Contractor's business relations to implement UNGPs/OECD, as described in this contract clause and in Aalborg Forsyning's CoC (Appendix 4B).

At any time, sufficient documentation to demonstrate the compliance with this clause must be available, see Aalborg Forsyning's CoC (Appendix 4B). The Contractor must regularly do an update of the documentation.

For further information on the mentioned principles and instructions as well as the definition of the terms used, please see Aalborg Forsyning's CoC (Appendix 4B).

16. Disputes

Any disputes arising out of or in connection with the contract shall be governed and construed in accordance with the laws of Denmark. The venue is Copenhagen, Denmark.

Disputes shall be resolved in accordance with the dispute resolution rules in ABT18 clauses 62-67.

Each Party has appointed the following persons, see ABT 18 clause 62, subclause (3)

The Client's project manager: **[insert the Client's project manager]**

The Client’s management representative: [insert the Client’s management representative]
The Contractor’s project manager: [insert the Contractor’s project manager]
The Contractor’s management representative: [insert the Contractor’s management representative]

Disputes between the Client and the Contractor, as well as disputes between the Contractor and the subcontractors or between subcontractors, do not give any party a right to postpone the work.

17. Signatures:

Date:	Date:
For the Client	For the Contractor

_____	_____
[Name]	[Name]
[Title]	[Title]