PlanEnergi

WARMTENET MUIDERBERG, District Heating Plant

Tender conditions (Prequalification Selection Phase I)

17th of march

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Prepared for:

Warmtebedrijf Muiderberg B.V.

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een initiatief van wattnu

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Abbreviation	Description
ATES/WKO	Seasonal Thermal Energy Storage
NDT	Non-Destructive-Test
SCADA	Supervisory Control and Data Acquisition
TEO	Aquathermal Energy Extraction / Thermal Energy extraction from Surface Water
TTES	Tank Thermal Energy Storage

1 Tender Subject Matter and Scope

1.1 Scope of the contract

This tender document outlines the requirements and conditions for the procurement of a turnkey district heating production plant forming a central part of the Muiderberg District Heating Project in the Netherlands. As a greenfield development, the project entails the complete establishment of a new heating production facility that will supply the full heating demand of the Muiderberg community. The plant will utilize renewable thermal energy extracted from the IJmeer lake as its primary heat source and will incorporate heat pump technology, thermal storage, and all auxiliary systems necessary to ensure reliable, efficient, and resilient year-round operation. All works shall be carried out in accordance with Dutch applicable regulatory requirements, environmental considerations, and local planning conditions.

This tender concerns a comprehensive turnkey contract covering the design, supply, installation, testing, and commissioning of the complete district heating production plant for Muiderberg. The scope includes all technical systems, building works, integration tasks, and supporting infrastructure required to deliver a fully functional heating facility meeting the specified performance, availability, and sustainability criteria. The facility must be dimensioned to supply an estimated annual heat demand of **16-17 GWh**, including distribution losses, and must be fully compatible with the broader district heating system and its associated procurement lots.

The turnkey contract(s) are hereinafter referred to as the *Turnkey Contract(s)*, *Contract(s)*, or *Agreement(s)*. The successful tenderer is hereinafter referred to as the *Applicant*, *Tenderer*, *Turnkey Contractor*, or *Heating Plant Contractor*.

The Muiderberg District Heating Project is structured into multiple procurement lots to ensure high technical quality and effective interface management across specialized domains. The establishment of the district heating system is divided into the following contracts:

A: Heating Central
B: WKO/TEO
C: TTES

1.2 Detailed Scope Definition

For the prequalification phase, the project is described in *Document 1 – Project Description*, which provides an overall outline of the contract scope and the fundamental requirements for the Muiderberg district heating project. In the subsequent second phase (the tender phase), the Contracting Authority will issue a series of more detailed technical specifications. These specifications will define the full set of technical parameters, functional requirements, performance criteria, quality standards, and delivery obligations applicable to all three procurement lots: A (Heating Central), B (WKO/TEO), and C (TTES).

The forthcoming detailed specifications will collectively cover all systems and facilities required for establishing the Muiderberg district heating system, including—but not limited to—the heating production facility, lake-source heat extraction systems (TEO), aquifer thermal energy storage (WKO), thermal tank energy storage (TTES), mechanical and electrical installations, civil and structural works, as well as the integrated control, monitoring, and communication systems ensuring coordinated operation across all lots.

Warmtebedrijf Muiderberg B.V. is the Contracting Authority and is classified as a 'special sector company'.

Technical advisory services for this tender and the subsequent contract execution are provided by PlanEnergi. All technical questions, requests for clarification, interpretations of specifications, or inquiries related to the tender requirements must be submitted exclusively through the official communication channels defined in this tender documentation.

2 Procurement Legal Framework

Applicable Legislation

This tender is conducted in accordance with European Union Directive 2014/25/EU (the Utilities Directive) governing procurement by entities operating in the water, energy, transport, and postal services sectors. The contract value exceeds the threshold for mandatory EU-wide tendering procedures, requiring full compliance with transparency, equal treatment, and non-discrimination principles enshrined in EU procurement law.

Dutch national procurement legislation applies throughout this procedure. Tenderers must familiarise themselves with relevant provisions of Dutch law governing public procurement, contract formation, and commercial relationships with utility undertakings.

The procurement procedure follows the competitive negotiated tender format, permitting dialogue and refinement of offers through structured negotiation phases whilst maintaining competitive tension and transparent evaluation processes.

3 Tender Procedure and Award Criteria

The procurement follows a two-stage competitive negotiated procedure designed to identify the most economically advantageous tender whilst allowing for technical dialogue and optimisation of proposed solutions. This approach balances the need for competitive pricing with the technical complexity and innovative nature of the required heating plant installation.

3.1 Prequalification Stage (Selection Fase 1)

The first stage involves prequalification assessment where up to **3** applicants demonstrating suitable technical capacity, financial standing, and relevant experience will be selected to participate in the detailed tender phase. Selection is based on submitted evidence of capability, references from comparable projects, and compliance with minimum suitability criteria defined in this document.

3.2 Award Methodology (”Gunning” Fase 2)

Contracts will be awarded based on the most economically advantageous tender, evaluated through a multi-criteria assessment weighting both price and quality factors. This methodology ensures that the selected solution delivers optimal value considering lifecycle costs, technical performance, reliability, and service quality rather than focusing exclusively on initial capital cost.

The award criteria structure (see also cap 16.) allocates:

60% weighting to total economy

considering both capital investment and projected operational costs over 15 years, with the remaining 40% distributed across qualitative assessments of:

40% Technical & Delivery Excellence.

During the award phase, the individual sub-criteria and weighting distribution within *Technical & Delivery Excellence* will be further detailed and made fully transparent to all bidders.

4 Contract Structure and Indivisibility

The decision to structure the Muiderberg District Heating Project into three coordinated procurement contracts—**A: Heating Central**, **B: WKO/TEO**, and **C: TTES**—is based on the highly specialised nature of the individual system components and the need to allocate work to contractors with deep technical expertise in their respective fields. At the same time, the division into multiple lots requires strong interface management to ensure that the overall system functions as a single, integrated district heating solution.

Each contract includes defined responsibilities for design, delivery, installation, and commissioning of its respective systems, while also requiring active coordination with the other contracts to ensure proper system integration, performance optimisation, and seamless functionality across the heating production facility, the lake-source energy extraction systems, the aquifer storage installation, and the thermal tank storage. Clear definition of interfaces, shared data requirements, and coordinated commissioning protocols are essential to achieving reliable and efficient end-to-end system performance.

Although responsibilities are distributed across multiple contractors, each contractor remains fully accountable for the quality, safety, and timely delivery of the systems within their own scope, as well as for fulfilling all interface obligations defined in the tender documentation. Contractors may subcontract specialist tasks, but full contractual responsibility remains with the main contractor for each lot.

Tenderers are required to demonstrate the technical and organisational capability necessary to manage both their internal scope and the coordination tasks inherent to a multi-lot project. This includes competencies within mechanical and electrical engineering, civil and building works where relevant, control system integration, and project management. Consortia or partnerships between complementary specialists are permitted, provided that roles, responsibilities, and decision-making authority are clearly defined within the proposed organisational structure.

4.1 Parallel Works and Demarcation

There will be parallel works carried out by several other contractors throughout the execution of the Muiderberg District Heating Project. In addition to the three main technical contracts—**A: Heating Central**, **B: WKO/TEO**, and **C: TTES**—separate tenders will be undertaken for the **technical building**, the **district heating distribution network**, and the **consumer-side house installations**. Tenderers must therefore account for continuous coordination with these parallel work streams, ensuring proper interface alignment, safe co-activity management, and uninterrupted progress during both construction and commissioning phases.

The scope boundaries and division of responsibilities between each of the three technical contracts and the parallel tenders are defined in **Document AP2,1 – Demarcations (Demarcations Section)**. This document forms an integral part of the contractual basis, and the Contractor is obligated to comply with all demarcations, interface requirements, data exchange obligations, and coordination procedures set out therein. Compliance with these provisions is essential to securing a coherent, safe, and fully integrated implementation of the overall Muiderberg district heating system.

The tender documents

The complete tender documentation package comprises the Tender Notice, this Conditions Document, detailed Special Requirement Specifications, contract templates, pricing schedules, and supporting technical information. All documents are integrated components of the tender basis and must be read in conjunction to understand fully the requirements, constraints, and commercial terms applicable to this procurement.

4.2 Document Accessibility

Tender documents are available exclusively through electronic distribution via the TenderNed procurement platform. No physical document sets will be distributed. Applicants and tenderers are responsible for ensuring they have downloaded all current versions of tender documents, including any subsequently issued corrigenda or clarifications.

The 0.1 Document List provides a comprehensive index of all tender documents, their reference numbers, issue dates, and revision status. This list will be updated if correction sheets are issued or if documents are revised during the tender period. Regular monitoring of the TenderNed platform for document updates is essential to ensure tender submissions are based on current information.

5 Indicative tender schedule and communication

Publication of contract notice	17 March 2026
Q&A Round 1 – Selection Phase: opening date	17 March 2026, 12:00
Q&A Round 1 – Selection Phase: closing date	24 March 2026, 12:00
Q&A Round 1 – Selection Phase: publication of clarification note	31 March 2026
Q&A Round 2 – Selection Phase: opening date	1 April 2026, 12:00
Q&A Round 2 – Selection Phase: closing date	7 April 2026, 12:00
Q&A Round 2 – Selection Phase: publication of clarification note	14 April 2026
Deadline for receipt of requests to participate	**22 April 2026, 12:00**
Opening of the submissions vault (requests to participate)	22 April 2026, 12:00
Issuing of invitations	22 May 2026
Q&A Round 1 – Tender Phase: opening date	22 May 2026, 10:30
Q&A Round 1 – Tender Phase: closing date	29 May 2026, 10:30
Q&A Round 1 – Tender Phase: publication of clarification note	5 June 2026
Deadline for receipt of tenders	**26 June 2026, 12:00**
Opening of the submissions vault (tenders)	26 June 2026, 14:00
Issuing of invitation for Best and Final Offer (BAFO)	17 July 2026, 23:59
Deadline for receipt of BAFO submissions	**31 July 2026, 23:59**
Publication of the provisional award decision	28 August 2026
Publication of the final award	18 September 2026

This schedule is indicative and subject to modification at the client's discretion. Any changes to critical dates will be communicated through the TenderNed platform with adequate notice to participating parties.

6 Site Inspection Arrangements

Pre-Tender Site Visits

Tenderers are strongly encouraged to inspect the existing building, site conditions, access routes, and surrounding environment prior to tender submission. Direct observation of site constraints, spatial limitations, proximity to neighbouring properties and protected areas, and local infrastructure is essential for preparing realistic and compliant proposals. Site inspections must be arranged by prior appointment with the client.

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to schedule inspection visits. Multiple representatives from tenderers' organisations (including design engineers, project managers, and specialist subcontractors) may participate in site inspections as necessary.

Responsibility for Site Knowledge

Tenderers bear full responsibility for acquiring adequate knowledge of site conditions, existing installations, access limitations, and any other factors affecting design, pricing, or delivery of the contracted works. Lack of site knowledge or misunderstanding of existing conditions will not constitute grounds for subsequent claims for additional payment, time extensions, or contract variations.

During site inspections, tenderers should verify building dimensions, examine structural elements that may affect equipment installation, assess lifting and handling constraints, evaluate noise propagation to surrounding areas, and identify any site-specific factors relevant to their proposals.

7 Communication Protocols

All formal communication during the tender and award process, including submission of applications, tender documents, questions, clarifications, and notifications, must be conducted exclusively through the TenderNed electronic procurement platform. Direct communication with the client outside the platform is not permitted except for site inspection arrangements.

Question and Answer Process

Tenderers are actively encouraged to seek clarification of any ambiguities, uncertainties, or apparent inconsistencies within the tender documents. A structured question-and-answer process operates through TenderNed's integrated messaging system, ensuring transparency and equal access to information for all participating parties.

Questions submitted via the TenderNed platform will be answered through published responses visible to all registered tenderers, maintaining competitive equality. Answers will be collected and provided on an ongoing basis through formal correction sheets or clarification documents that become part of the tender basis. Questions and answers are not necessarily published in the chronological order of submission.

7.1 TenderNed Platform Technical Support

Document Submission Requirements

All tender submissions, including applications, detailed offers, supporting documentation, and any requested clarifications, must be uploaded and transmitted through the TenderNed platform prior to the applicable deadline expiry. Submissions via email, physical delivery, or alternative electronic means are not acceptable and will result in tender rejection.

Platform Functionality Support

Technical questions regarding TenderNed platform operation, document upload procedures, file format compatibility, or system access issues should be directed to TenderNed's dedicated support service rather than to the client. Support contact information and resources are available.

Tenderers are advised to familiarise themselves with TenderNed functionality well in advance of submission deadlines and to initiate document uploads with adequate time contingency to address any unforeseen technical difficulties.

8 Language Requirements

English shall serve as the working language throughout the procurement process, contract negotiations, and subsequent project execution phases. All negotiation meetings, project coordination meetings, design reviews, and progress reporting will be conducted in English.

The UAV-GC 2025 conditions will be in Dutch.

Given the project location in the Netherlands and the involvement of Dutch regulatory authorities, contractors must ensure that key personnel deployed to site possess sufficient proficiency in either English or Dutch to communicate clearly with client representatives, local inspectors, and neighbouring stakeholders. Safety-critical communications and coordination with emergency services require unambiguous linguistic capability.

ENGLISH WORKING LANGUAGE

ALL TENDER DOCUMENTATION, INCLUDING APPLICATIONS, DETAILED OFFERS, QUESTIONS, RESPONSES TO CLARIFICATIONS, TECHNICAL SPECIFICATIONS, AND ANY RESERVATIONS OR QUALIFICATIONS, MUST BE SUBMITTED IN ENGLISH.

Technical Documentation Language Flexibility

While primary tender documents must be in English, certain supporting materials such as manufacturer's product data sheets, technical specifications, or test certificates may be submitted in their original language where translation would be impractical or commercially unreasonable. However, in such cases, tenderers must provide English or Dutch translations of all passages material to the tender evaluation, including performance specifications, compliance statements, and warranty terms.

9 Prequalification Application Requirements (Phase 1)

Prequalification serves to identify applicants possessing the technical capability, financial stability, relevant experience, and organisational capacity necessary to deliver this complex heating plant installation successfully. The prequalification stage filters the applicant pool to a manageable number of qualified tenderers who will receive invitations to submit detailed tenders and participate in negotiations.

All applicants must complete and submit the Uniform European Procurement Document (UEA) via the TenderNed platform. The UEA is the standardised Dutch implementation of the European Single Procurement Document (UEA) and provides a structured format for declaring information concerning the applicant's identity, legal standing, financial capacity, and eligibility to participate in public procurement procedures. The UEA allows applicants to self-declare compliance with exclusion grounds and selection criteria, while detailed supporting documentation is only required from the winning tenderer or upon request by the Contracting Authority. This approach reduces administrative burden and ensures a consistent, transparent prequalification process.

9.1 UEA Preparation Guidance

These guidelines clarify the structure of the UEA, explain the information required in each part, provide examples of acceptable responses, and highlight common errors that may result in administrative non-compliance. Familiarity with the UEA format and the associated instructions published on TenderNed significantly improves the quality and completeness of submitted forms.

Document 0.8 will contain an English translation of the forms on TenderNed.

9.2 Reliance on Third-Party Capacity

Consortium and Subcontractor Arrangements

Applicants who intend to rely on the financial, technical, or professional capacity of other entities—whether through consortium arrangements, subcontracting, parent-company support, or specialist partners—must ensure that each supporting entity submits its own UEA. The applicant's own UEA must clearly identify these supporting relationships in Part II, Section C.

Where an applicant relies on another entity's technical or professional capacity (for example, a specialist WKO contractor, heat pump manufacturer, or tank fabricator), the applicant confirms a binding commitment that the supporting entity will perform the relevant part of the contract if the applicant is awarded the contract.

Consortium Applications

Groups of economic operators submitting a joint application must provide separate UEA forms for each consortium member. Each UEA must include the required declarations under **Parts II to VI**, including information on exclusion grounds, selection criteria, and self-declarations of suitability.

Particular attention must be paid to ensuring that UEA submissions from supporting or consortium entities are duly signed by authorised representatives. Unsigned or improperly executed UEAs may result in rejection of the application in its entirety.

9.3 Mandatory Exclusion Grounds

Economic operators, including prime applicants and their subcontractors, are automatically excluded from participation in this procurement if they fall within the mandatory exclusion grounds established by European and Dutch procurement legislation. These exclusion grounds address serious criminal activity, professional misconduct, and conflicts of interest incompatible with public procurement participation.

Criminal Convictions	Tax and Social Security	Insolvency Proceedings	Professional Misconduct
Participation in criminal organisations, corruption, fraud, terrorist offences, money laundering, or child labour	Failure to fulfil obligations relating to payment of taxes or social security contributions	Bankruptcy, insolvency, winding-up procedures, or similar situations under national law	Grave professional misconduct rendering integrity questionable, including competition law violations

Applicants must declare in their UEA submission that they are not subject to any mandatory exclusion grounds. False declarations may result in exclusion from this and future procurement procedures, as well as potential legal consequences under applicable fraud and misrepresentation provisions.

9.4 Economic and Financial Standing Requirements

Minimum Financial Capacity Thresholds

To ensure adequate financial resources for successful contract delivery, applicants must demonstrate minimum levels of turnover and solvency. These thresholds are calibrated to the contract value and technical complexity, ensuring that selected contractors possess sufficient financial strength to manage cash flow, obtain necessary bonding or insurance, and withstand potential project challenges without financial distress.

- **Lot A:** Average annual turnover of at least **€5 million** over the three most recent completed financial years.
  Lot B: Average annual turnover of at least **€1,5 million** over the three most recent completed financial years.
  Lot C: Average annual turnover of at least **€1 million** over the three most recent completed financial years.
- Average solvency ratio of at least 10% across the three most recent financial years

Calculation Methodologies

For newly established enterprises operating for less than three years, financial key figures must be provided for the period since establishment, with minimum requirements applied proportionately to the period of operation. This accommodation recognises that innovative firms or newly formed specialist entities may possess relevant capability despite limited trading history.

For associations of undertakings such as consortia, solvency is calculated as the combined total equity of all consortium members relative to their combined total assets, expressed as a percentage. This aggregation approach reflects the enhanced financial strength available through consortium arrangements whilst ensuring adequate overall financial capacity.

Where applicants rely on the financial capacity of supporting entities (parent companies, financial backers, or consortium partners), solvency calculations encompass both the applicant's and the supporting entities' financial positions on a combined basis.

9.5 Minimum Technical and Professional Ability

Applicants must demonstrate technical and professional experience relevant to the three contract lots included in this tender. Documentation of comparable project experience is a mandatory component of the prequalification process and is required to establish the Applicant’s capability to undertake the works. Applicants shall therefore provide reference projects that demonstrate:

1. **Lot A – Heating Central:** Experience with the design, construction, installation, and commissioning of **heat-producing facilities**, such as district heating production plants, large-scale heat pump installations, central heating plants, or similar energy production systems.

2. **Lot B – WKO/TEO:** Proven experience with the design and installation of **Aquifer Thermal Energy Storage (WKO) systems**, including possession of, or eligibility to obtain, the legally required permits and qualifications to execute WKO works under **Dutch law and regulatory frameworks**.

3. **Lot C – TTES:** Experience in the **engineering, fabrication, and construction of large steel storage tanks for hot water or similar**.

Reference projects must have been completed within the **last three years**, ensuring that the Applicant’s experience reflects current technologies, regulatory conditions, and industry practices relevant to the Muiderberg District Heating Project.

9.6 Reference List Requirements

For each reference project submitted, Applicants must provide sufficient information for the Contracting Authority to assess relevance, scale, technical comparability, and the Applicant’s specific role in the delivery. Reference information shall be provided in the attached reference sheets.

Mandatory Reference Information

Each reference must include at minimum:

- the client organisation,

- project location,

- the overall project value,

- the execution period (design and construction), and

- a clear description of the Applicant's specific role, including whether it acted as main contractor, specialist contractor, equipment supplier, or other defined function.

This information is necessary to assess whether the Applicant has delivered work of comparable nature to the scopes included in the three lots. Reference projects must collectively demonstrate the required experience for:

1. **Lot A – Heating Central:** delivery of heating production facilities or comparable large-scale energy production systems.

2. **Lot B – WKO/TEO:** execution of WKO projects in accordance with Dutch regulatory requirements, including evidence of holding or obtaining the legally required qualifications or permits.

3. **Lot C – TTES:** engineering, fabrication, and construction of large steel storage tanks.

The required experience may be demonstrated through **a single integrated project** covering multiple relevant scopes or through **multiple projects** which, taken together, document the necessary capabilities.

Subcontractor References

If Applicants rely on subcontractors to fulfil parts of the technical scope, the relevant subcontractor must submit a separate signed UEA, a formal Statement of Support (using the template provided), and reference projects demonstrating experience specifically aligned with the tasks the subcontractor will carry out. The Contracting Authority must be able to verify that all parties relied upon—whether Applicant, consortium partner, or subcontractor—possess the experience necessary to execute their respective responsibilities within the Muiderberg District Heating Project

9.7 Documentation of Prequalification Compliance

Verification Process

At any stage during the procurement process, the client reserves the right to require applicants to provide detailed documentary evidence verifying the self-declarations made in UEA submissions. This includes confirmation that no mandatory exclusion grounds apply and that minimum suitability requirements are genuinely met. Verification requests will specify reasonable deadlines for document submission.

Where applications involve associations of undertakings or reliance on supporting entities, separate documentation must be provided for all parties whose capacity is being referenced. This ensures comprehensive verification of the combined capabilities underpinning the application.

Typical Documentation Requirements

Documentary evidence may include audited financial statements, tax compliance certificates, certificates of good standing, insurance documentation, professional licenses or certifications, detailed reference letters from previous clients, or other materials substantiating UEA declarations. The client will specify precisely which documents are required in any verification request.

Reference verifications may include requests for contact details of client representatives from cited projects, permitting direct confirmation of project scope, performance quality, adherence to schedules and budgets, and overall satisfaction with the applicant's delivery. Applicants should ensure that reference project information is accurate and that cited client contacts are prepared to provide verifications if requested.

Service certificates or similar reference confirmations should be dated within six months of the award decision date to ensure currency and relevance of the information provided.

9.8 Selection Process for Tender Invitation

Following the application deadline, the Contracting Authority will evaluate all prequalification submissions against the mandatory exclusion grounds and minimum eligibility requirements. Applicants who meet these basic criteria will be assessed using a structured points-based qualification system.

Each Applicant must complete the evaluation questionnaire corresponding to the lot(s) they apply for. Each question can be answered only with **"Yes"** or **"No"**, and points are awarded as follows:

- **Yes = 1 point**
- **No = 0 points**

For each lot, the Applicant's total score will determine its ranking.
The Contracting Authority will select up to **3** highest-scoring Applicants per lot to proceed to the tender stage.
In case of equal scores, preference will be given to Applicants whose references demonstrate the highest degree of relevance to the specific technical scope of the lot.

The questionnaires for each lot form an integral part of the prequalification material and must be fully completed.

Requirement for Supporting References

All answers provided in the Yes/No qualification questionnaires must be supported by relevant reference projects. Applicants are required to submit reference documentation that clearly demonstrates and substantiates each "Yes" response given in the questionnaire for the lot(s) applied for. Reference material must allow the Contracting Authority to verify that the Applicant (or its subcontractors/consortium partners, where applicable) has performed works comparable in nature, scale, and complexity to the areas indicated in the questionnaire. If a "Yes" response cannot be validated through the submitted references, the Contracting Authority reserves the right to award **0 points** for the corresponding question, regardless of the Applicant's stated answer. References must therefore be precise, clearly described, and directly linked to the specific capabilities claimed.

Lot A – Heating Central

Qualification Questionnaire (Yes/No)

Applicants must answer all questions:

1. Have you delivered a district heating production plant of at least 1 MW thermal capacity?
2. Have you designed or installed on or more heat pumps ≥ 1 MW thermal output?
3. Have you delivered heat pumps using water as the primary heat source?
4. Have you worked with or delivered heat pump solutions for cooperatives (publicly or consumer-owned district heating companies)?
5. Have you integrated heat pumps with thermal storage systems?
6. Have you supplied or installed gas boilers above **5 MW** thermal capacity?
7. Have you delivered gas boilers meeting **low-NOx emission standards**?
8. Have you commissioned a complete heat production facility as main contractor?
9. Have you integrated SCADA/control systems for multi-technology heating plants?
10. Have you executed mechanical and electrical works for heating installations ≥ 1 MW?
11. Have you delivered projects compliant with Dutch or EU industrial safety standards?
12. Have you executed similar projects (HP + Gasboiler + Scada + water treatment) within the last 3 years?
13. Have you coordinated interfaces between heat pumps, boilers, and storage in past projects?
14. Have you delivered turnkey heating plants?
15. Have you integrated heating production assets into a district heating network?
16. Do you hold an ISO 9001 certificate or comparable?
17. Is your company VCA* certified, ISO 45001or comparable HSE certification?
18. Have you previously completed a project involving a heating central, WKO/TEO system, and/or a storage tank?

Lot B – WKO / TEO

- ***Qualification Questionnaire (Yes/No)***

Applicants must answer all questions:

1. Have you designed or constructed WKO installations in the Netherlands?
2. Do you hold (or can you obtain) the legally required Dutch permits for WKO execution (BRL)?
3. Have you delivered groundwater abstraction and injection wells for energy systems?
4. Have you constructed TEO (surface water/lake-based) thermal extraction systems?
5. Have you designed WKO systems with both warm and cold wells?
6. Have you integrated WKO with large-scale heat pump installations?
7. Have you executed drilling works in compliance with Dutch environmental regulations?
8. Have you installed WKO systems ≥ 3 MW thermal exchange capacity?
9. Have you delivered monitoring and control systems for groundwater-based energy storage?
10. Have you performed thermal response tests or aquifer performance tests?
11. Have you executed WKO systems within the last 3 years?
12. Have you coordinated WKO works with adjacent civil/technical contractors?
13. Have you delivered TEO systems using lake or surface water as heat source?
14. Have you verified long-term thermal balance in aquifer projects?
15. Have you delivered WKO systems integrated into district heating networks?
16. Do you hold an ISO 9001 certificate or comparable?
17. Is your company VCA* certified, ISO 45001or comparable HSE certification?
18. Have you worked with or delivered solutions for cooperatives (publicly or consumer-owned district heating companies)?

Lot C – TTES (Steel Thermal Storage Tank)

- ***Qualification Questionnaire (Yes/No)***

Applicants must answer all questions:

1. Have you engineered or constructed large steel thermal storage tanks (> 500 m^3)?
2. Have you delivered tanks for district heating applications?
3. Have you designed steel tanks in compliance with EN or Dutch standards?
4. Have you executed on-site assembly and welding of steel storage tanks?
5. Have you installed insulation systems for large thermal tanks?
6. Have you installed piping/connection interfaces between tanks and heating systems?
7. Have you commissioned temperature and level monitoring systems for tanks?
8. Have you delivered pressure-bearing or non-pressure steel tanks?
9. Have you completed at least one TTES project in the past 3 years?
10. Have you performed hydrostatic testing of large tanks?
11. Have you executed civil foundations for steel tanks (directly or via subcontractor)?
12. Have you delivered tanks with corrosion protection systems?
13. Have you delivered tanks ≥ 90°C operating temperature?
14. Have you coordinated tank delivery with heating plant and network contractors?
15. Have you delivered thermal tanks integrated into district heating networks?
16. Do you hold an ISO 9001 certificate or comparable?
17. Is your company VCA* certified, ISO 45001or comparable HSE certification?
18. Have you worked with or delivered solutions for cooperatives (publicly or consumer-owned district heating companies)?

10 Contract Basis and Reservation Procedures (Phase 2)

By submitting a tender, tenderers undertake an unconditional commitment to enter into a contract based on the contract template documents provided as part of the tender package. These templates establish the fundamental commercial terms, risk allocation, warranties, performance obligations, and dispute resolution mechanisms that will govern the contractual relationship.

Treatment of Reservations

Any reservations, qualifications, exceptions, or proposed amendments to the contract terms must be explicitly stated in the Reservation List document provided for this purpose. Reservations embedded within technical submissions, pricing documents, or other tender components without clear identification in the Reservation List may not be recognised during evaluation and could render the tender non-compliant.

Tenderers must exercise particular caution regarding attachment of their own standard terms and conditions, boilerplate contract language, or warranty limitations to tender submissions. Such documents will be treated as reservations and evaluated for acceptability accordingly. Blanket incorporation of standard terms substantially departing from the client's contract template may result in tender rejection.

Acceptable Reservations	Problematic Reservations	Unacceptable Reservations
Minor clarifications, technical alternatives within specification, commercially quantifiable adjustments	Fundamental amendments to risk allocation, warranty limitations, liability caps below specified requirements	Rejection of basic contract structure, refusal of specified warranties, non-compliance with minimum requirements

10.1 Options and Variants

The tender structure incorporates specified options that must be priced by tenderers even though the client is not obliged to exercise these options upon contract award. Options provide flexibility for the client to adjust the scope of contracted works based on budget considerations, operational requirements, or other factors emerging during the procurement process or early contract stages.

Option Categories

Two categories of options are defined within this tender. Evaluated options form part of the tender assessment and award decision—the economic and technical merits of these options influence the overall ranking of tenders. Non-evaluated options must be priced but do not affect tender evaluation scores; these represent potential future additions that the client may elect to procure subsequent to initial contract award.

Detailed specifications for each option, including technical requirements and pricing schedule entries, are provided in the Special Requirement Specifications and tender pricing documents. Tenderers must ensure that option pricing is consistent with the main tender and that options are technically compatible with the baseline installation.

Alternative Tenders Not Permitted

Alternative or parallel tender submissions proposing fundamentally different technical approaches, equipment selections, or delivery strategies are not permitted. Tenderers must submit offers conforming to the specified technical requirements and contract structure. Innovation and optimisation within the defined parameters are encouraged, but variant solutions departing from core requirements will not be considered.

10.2 Intellectual Property and Remuneration

All tender materials, technical proposals, design documentation, pricing information, and associated appendices submitted by tenderers become the property of the client upon submission and will not be returned to unsuccessful tenderers. The client retains these materials for record-keeping purposes and to document the procurement process in accordance with legal and auditing requirements.

No Tender Compensation

No remuneration, compensation, or reimbursement will be paid to applicants or tenderers for costs incurred in preparing and submitting prequalification applications, detailed tenders, attending site inspections, participating in negotiation meetings, or any other activities related to this procurement process. This applies regardless of whether the tender proceeds to contract award or is cancelled without awarding a contract.

Tenderers participate in this procurement at their own cost and risk, acknowledging that commercial success is uncertain and that substantial effort may be required without guarantee of contract award. This risk allocation is standard in competitive procurement processes and is reflected in the eventual contract value, which will include an implicit allowance for reasonable tender preparation costs amortised across successful projects.

10.3 Tender Validity and Acceptance Period

Binding Offer Period

Submitted tenders constitute legally binding offers that remain open for acceptance by the client for 90 calendar days from the expiry of the tender submission deadline. Tenderers may not withdraw, modify, or qualify their offers during this acceptance period except as explicitly permitted through the structured negotiation process described in this document.

The 90-day acceptance period provides the client with adequate time to complete tender evaluation, conduct negotiations if required, obtain internal approvals, and make an informed award decision. Tenderers remain bound by their submitted offers throughout this period and, if selected for contract award, until contract execution is completed.

Release from Tender Obligations

Notification of contract award to a successful tenderer does not automatically release unsuccessful tenderers from their tender obligations. Unsuccessful tenderers remain bound until the standstill period expires and the contract is formally executed with the selected contractor. This provision protects the client's position in the event that contract negotiations with the preferred tenderer fail or if legal challenges to the award decision necessitate reconsideration of tender rankings.

11 Detailed Tender Submission Requirements (Phase 2)

Selected applicants invited to submit detailed tenders must provide comprehensive technical, commercial, and organisational information enabling thorough evaluation against the award criteria. Tender submissions must address all specified requirements, providing evidence of compliance, demonstrating proposed solutions, and substantiating claims regarding performance, quality, and value.

Mandatory Tender Components

Tenders must include correctly completed pricing schedules, warranty data sheets guaranteeing performance parameters, technical descriptions and specifications for all major equipment and systems, organisational proposals identifying key personnel and subcontractors, quality management documentation, and service organization descriptions. Incomplete tenders lacking essential information may be rejected as non-responsive.

Each tender component corresponds to an evaluation sub-criterion, with the information provided forming the basis for scoring against that criterion. Tenderers should ensure that submissions comprehensively address all evaluation factors within each component, providing sufficient detail and substantiation to support favourable scoring.

11.1 Stipulated Services and Options

In the documents as well as in the tender lists certain services are categorised as either *stipulated services* or *options*. These categories form part of the commercial structure of the tender and follow standard practice within Dutch public procurement and UAV-GC 2025 contractual frameworks.

Stipulated Services (“voorgeschreven posten”)

Stipulated services consist of predefined quantities, unit rates, and lump-sum items that must be included in the Tenderer’s total tender price.
These prices are included 100% in the evaluation of the total economic offer.

Stipulated services may be deducted in whole or in part from the Contract Price after contract award, but the corresponding unit prices and quantities will remain binding and can subsequently be applied for additional or reduced works (“meer- en minderwerk”) throughout the contract period.

The full scope and breakdown of stipulated services are listed in the tender lists.

Options (“opties”)

Options represent services or components that the Contracting Authority may choose to include or exclude at the time of contract award.
The Contracting Authority retains full discretion to select or reject any option.

Tenderers are required to provide complete and clearly identifiable option prices in their offers.
The detailed description and scope of all options are specified in the option schedule within the tender list.

11.2 Tender Pricing and Warranty Performance Data

Pricing Schedule Completion

Tender pricing must be provided using the standardised tender list documents. These schedules itemise all contract elements, specifying units of measurement, quantities, and allowing insertion of unit rates and extended values. Correct and complete pricing schedule completion is mandatory—errors, omissions, or inconsistencies may render tenders non-compliant.

Warranty Sheet Requirements

Performance warranty data must be entered into the standardised warranty sheet format (document VP01). These sheets capture guaranteed performance parameters at multiple operating points spanning the expected operational envelope of the heat pump system. Both Excel file format (allowing calculation verification) and PDF format must be submitted.

11.3 Technical Descriptions and Equipment Documentation

Tenders must include comprehensive technical descriptions addressing the tenderer’s design approach, understanding of the Muiderberg District Heating Project requirements, and the rationale behind selected technical solutions. The documentation must clearly explain the tenderer’s approach to the distinct disciplines covered by the three lots—Heating Central, WKO/TEO, and TTES—and how the proposed solutions meet the project’s functional objectives, environmental constraints, and regulatory obligations. In addition, the tender must include a detailed plan for testing and commissioning, outlining the methodology, sequencing, responsibilities, and validation criteria to ensure full operational readiness.

The narrative shall demonstrate the tenderer's understanding of the project’s unique context, including the greenfield nature of the site, integration with lake-based thermal extraction from the IJmeer, groundwater protection requirements for WKO, spatial constraints related to the heating plant location, and acoustic and environmental considerations relevant to nearby sensitive areas.

11.4 Specific Documentation Requirements (All Lots)

Lot A – Heating Central

Tenderers must provide detailed documentation describing the design of the heating production facility, including large-scale heat pumps, auxiliary systems, gas boilers, electrical installations, and integration with the district heating network.

A1. Heat Pump System (Primary Production Asset)

Tenderers must provide full documentation for the heat pump system, including configuration, performance, operational modes, safety, acoustics, and component-level data.

A1.1 System Configuration & Redundancy

- Number of heat pump modules, compressors, and heat exchange units
- Sectioning strategy and ability to maintain heat production during component failure
- Identification of factory-built vs. site-assembled components
- Preliminary layout including pipework routing and access zones

A1.2 Component Data Sheets

For each major component, the tenderer must provide manufacturer and if possible data sheets and performance specifications, including:

- Compressors: pressure class, nominal/max volume flow, nominal/max speed, manufacturer, country of origin
- Motors: power rating, efficiency class, insulation class, bearing type, lubrication principle
- Pumps: type, rating, hydraulic and electrical performance
- Heat exchangers: type, material selection, thermal performance
- Frequency converters and electrical switchboards

A1.3 Operational Modes & Control

- Detailed functional description of all operating modes: start/stop, load cycling, emergency restart (e.g. grid outage), weather-related operating modes (snow, ice, icing control)
- Control range, including minimum and maximum temperature setpoints, Heat output range, and minimum start/stop intervals.
- Compliance with applicable occupational safety guidelines for refrigeration/heat pump systems

A1.4 Refrigerant & Safety

- Refrigerant type (only natural), oil type, total calculated charge
- Description of refrigerant handling during maintenance and service
- Description of refrigerant monitoring system (air, condensate, DH-water)

A1.5 Acoustic Performance

- Certified noise data for compressors and evaporators
- Noise modelling for full-load, part-load, start-up, shutdown and defrost
- Documentation of all noise-mitigation measures needed to comply with Muiderberg acoustic limits

A2. Gas Boiler System (Auxiliary / Peak Load Unit)

The tenderer must submit full technical documentation.

A2.1 Component and System Specifications

- Data sheets for: boiler, burner, shunts, motors, pumps, flue gas components, neutralisation systems
- Country-of-origin for all major components
- OML calculation for chimney and emission compliance

A2.2 Operating Behaviour

- Start-up and shut-down times
- Description of set-point deviation during start-up
- Minimum/maximum temperatureset (forward and return)
- Expected operating pattern and control strategy

A2.3 Noise & Emissions

- Total noise contribution and noise reduction measures
- Low-NOx burner documentation (if applicable)
- Emissions compliance according to relevant regulatory standards

A2.4 Layout & Integration

- Space requirement drawings
- Proposed equipment location
- Functional description for combined operation with heat pumps and TTES

A3. SCADA / SRO System (Supervisory Control and Data Architecture)

Tenderers must provide a comprehensive description of the SCADA/SRO system for the Heating Central.

A3.1 System Architecture (preliminary scope)

- PLC and HMI platforms, manufacturers, software licenses
- Network architecture, communication protocols, cybersecurity considerations
- Redundancy concepts and fallback modes

A3.2 Control Philosophy

- Sequencing for heat pumps, gas boiler, TTES and auxiliary systems
- Behaviour after a sudden stop (e.g. grid interruption)
- Load management and optimisation algorithms
- Weather-compensated operation modes

A3.3 Instrumentation & Monitoring

- List of essential sensors, meters, and instrumentation
- Energy meter placement
- Description of measured vs. calculated flows and their implementation in SCADA

A3.4 Integration with DH System

- Interface design for integration with the district heating SCADA
- Integration of TEO, WKO and TTES data streams and controls

A4. Water Treatment & Internal Hydraulics

Tenderers must provide detailed documentation for all water treatment and hydraulic elements included in the Heating Central.

A4.1 Water Treatment Systems

- Specification of water treatment units: filters, softeners, degassers, automatic air vents, valves and gears
- Corrosion and abrasion protection measures

- Automatic aerators: type, manufacturer, location

A4.2 Hydraulic Systems

- Full P&ID for the Heating Central
- Pump performance data
- Switching strategy for parallel pump operation (with check valves)
- Temperature and flow regulation strategy

A4.3 Lifetime & Surface Treatment

- Assessment of surface treatment needs to ensure 25-year component lifetime
- Description of galvanic corrosion protection methods

Lot B – WKO / TEO Systems

Tenderers for the WKO/TEO lot must provide documentation demonstrating a fully integrated design for lake-source thermal energy extraction (TEO) and Aquifer Thermal Energy Storage (WKO) in compliance with Dutch regulatory requirements (including the pending permits under Waterwet og Omgevingswet).

Documentation Requirements (Lot B)

Tenderers must include:

B1. System Design & Compliance

- Design basis, hydraulic concept, and dimensioning for TEO and WKO
- Compliance with Dutch Waterwet and groundwater/environmental regulations
- Qualifications and permits required to execute WKO works

B2. Aquifer & Well Engineering

- Well construction methods, drilling plans, casing, filters, sealing, environmental protection
- Long-term thermal balance calculations
- Groundwater monitoring and protection systems

B3. TEO (Lake-Source) System

- Intake/outlet design for IJmeer, including corrosion mitigation and biofouling prevention
- Heat exchangers, pump systems, filtration and screening
- Hydraulic performance, flow control and seasonal operating modes

B4. Integration with Heating Central

- Temperature/flow ranges delivered to heat pumps
- Control philosophy, instrumentation and SCADA integration
- Redundancy concepts and fallback modes

B5. Noise & Environmental Impact

- Noise documentation for TEO pumps or onshore equipment
- Environmental mitigation measures for aquatic ecosystems
- Measures ensuring safe operation in winter, ice conditions, seasonal variations

Lot C – TTES (Thermal Tank Energy Storage)

Tenderers must document the engineering and design of the steel thermal storage tank, including structural, thermal, hydraulic, and safety aspects.
Documentation Requirements (Lot C)
Tender submissions must include:
C1. Tank Engineering & Lifetime Requirements

- Design basis for tank geometry, pressure/non-pressure classification
- Compliance with EN 14015, Eurocodes and Dutch standards
- Material selection, corrosion protection, thermal insulation strategy

C2. Structural & Civil Works

- Load conditions, anchoring, uplift considerations
- Access systems, platforms, ladders, safety equipment

C3. Hydraulic & Thermal Integration

- Internal flow distribution/mixing concepts
- Nozzle list, piping integration with Heating Central
- Instrumentation.

C4. Reliability and Maintenance

- Service access, inspection strategy, corrosion monitoring
- Expected lifetime and refurbishment needs (≥25 years)
- Surface treatment and galvanic corrosion prevention

P&ID, Layouts and Integration Drawings (All Lots)
For all three lots, tenderers must provide:

- Piping and Instrumentation Diagrams (P&IDs)
- process flow diagrams
- system layouts, including spatial arrangement within the Heating Central
- site layout plans showing WKO wells, TEO structures, and TTES placement
- civil/structural integration drawings showing space allocation, access routes, safety zones, and maintainability

The submitted drawings must demonstrate:

- spatial feasibility
- accessibility for operation and maintenance
- compliance with Dutch safety regulations
- integration between lots and with future system expansions

11.5 Organisational Proposals and Key Personnel

Tender submissions must describe the proposed project organisation, clearly delineating responsibilities between the turnkey contractor's own staff and subcontractors engaged for specialist scopes. Organisational clarity is essential for effective project coordination, accountability for performance, and client confidence in successful delivery.

- Project Manager
  - Minimum 5 years' experience; heat pump project delivery track record; full-time assignment
- Electrical Systems Lead
  - Minimum 5 years' relevant experience; high-voltage systems expertise; coordination capability
- Controls Specialist
  - Minimum 5 years' controls experience; SCADA integration capability; commissioning expertise
- Construction Manager
  - Building construction experience; site safety leadership; subcontractor coordination

Curriculum vitae for key personnel must demonstrate relevant qualifications, experience on comparable projects, and specific competencies aligned with this project's requirements. Named individuals become contractual commitments—substitution during contract execution requires client approval and demonstration that replacement personnel possess equivalent capabilities.

Quality Management Systems

Description of the tenderer's quality management framework, certification to relevant ISO standards (particularly ISO 9001 for quality management systems), and project-specific quality assurance procedures must be provided. The quality assurance plan should address design reviews, procurement controls, manufacturing oversight for factory-built components, site inspection programmes, testing and commissioning protocols, and documentation management systems ensuring traceability and regulatory compliance.

11.6 Service Organisation and Warranty Proposals

The minimum warranty obligations applicable to the contract are set out in the contract documents. Tenderers may offer warranty periods exceeding these minimum requirements. Any such extended warranty period will be considered an improvement and will be included as a qualitative element in the evaluation of the tenderer's service organisation. Extended warranty commitments may be regarded as an indication of product reliability and may contribute to reducing the contracting authority's long-term operational risk.

In addition, the tenderer shall submit service agreement proposals covering the initial contract period of five (5) years, with pricing also provided for the optional extension period of up to an additional five (5) years, should the contracting authority choose to exercise this option. Each service agreement proposal must, as a minimum, specify the scope of services included, response time obligations, scheduled preventive maintenance activities, reporting obligations, performance monitoring arrangements, and the corresponding annual remuneration for both the initial period and the optional extension period. Clear and contractually robust service agreements are expected to support stable operation of the equipment and may contribute to a reduced total cost of ownership for the contracting authority.

12 Award Criteria Weighting and Evaluation Methodology

Contract award will be made to the tenderer achieving the highest weighted score across all evaluation criteria, representing the most economically advantageous offer considering both quantitative economic factors and qualitative assessments contributing to the project objectives on basis of technical merit, reliability, constructability, organization and service capability, based on the following sub-criteria (calculation factor stated as a percentage):

The Contracting Authority expressly reserves the right to further determine or adjust both the content of the qualitative criteria and their weighting during the award phase. This further interpretation is laid down in the Tender Guidelines, which are submitted via TenderNed at the start of the award phase.

Best price/quality ratio.

Sub-criterion	Weighting
A. Total economy	**60 %**
B. Technical & Delivery Excellence, Reliability and Constructability Sustainability, Organisation structure and continuity, cooperation and Service Level Agreement	**40 %**

12.1 Total economy lot A, heating central

Evaluation principle
The total economy is assessed on the basis of the **overall lifecycle cost** for the single heating plant covered by this tender. All evaluation calculations relate solely to this one installation.

Deviations and reservations

- If a tender includes deviations or reservations from the Tender Conditions, these will be **monetised**—positively or negatively—by the Contracting Authority to establish a **comparable evaluated bid price**.
- If Tenderers propose different technical solutions within the permitted tender framework, the Contracting Authority will monetise deviations relative to a defined **average reference quality**, ensuring equal comparison of all offers.

Alternative timetable (schedule)

- Tenderers may submit an **alternative timetable**, provided it is expressly stated in the tender submission that the proposed schedule differs from the Tender Main Schedule.
- The alternative timetable must:
    - be submitted as a standalone annex,
    - include **sanctionable milestones** for (i) start-up of heat production and (ii) final handover (oplevering),
    - follow the same assumptions regarding approvals and regulatory processing as set out in the Tender Main Schedule.

Evaluation of schedule deviations
If a tender is based on an alternative timetable, deviations from the Tender Main Schedule will be incorporated into the total economic evaluation.
A shift in the final handover date will be monetised at € **1,500 per calendar day**, calculated in present value. No cap is applied to this monetisation.

Present value optimisation

A higher present value results in greater long-term savings for the Contracting Authority. Tenderers are therefore encouraged to optimise their proposed solution to **maximise present value**. Offers with a higher present value will be regarded as **more advantageous**.

- The present value for the heating plant must be calculated using the **Warranty Sheet VP01** (Document **2.4**).
- The resulting present value shall be entered in the applicable Tender List (Document **2.3**).
- An example of the Warranty Sheet is shown in **Figure 1**.

Input parameters for present value calculation

Tenderers may optimise the following parameters within the boundaries of the tender:

- **COP value**,
  - which is calculated automatically from the entered performance data.
- **Heat pump heat output**
  - within the permissible range specified in **Table 3** of **Document 1 – Overall Project and Contract Description** (minimum and maximum output at −1 °C).

Tenderers are encouraged to identify the output level that maximises present value.

Tenderer			Company name									
Date for filling out			date									
Total tender amount			14.194.547,88	EUR								
Price for service agreement [1] [3]			915.436,70	EUR								
Total tender amount without service agreement [2]			13.279.111,18	EUR								
									Nominal operation point			
	Operation point			**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	Load			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Cold side													
	Outdoor temperature		°C	15,0	15,0	7,0	7,0	4,0	4,0	-1,0	-1,0	-4,0	-10,0
	Relative humidity		RH	60%	60%	75%	75%	85%	85%	90%	90%	90%	95%
	Air volume flow		m³/h	3.724.848	3.724.848	3.724.848	3.724.848	3.724.848	3.724.848	3.724.848	3.724.848	3.724.848	3.724.848
	cooling load		kW	6.929	7.551	6.063	6.613	5.780	6.306	5.218	5.696	5.115	4.275
	Fan speed		rpm	450	450	450	450	450	450	450	450	450	450
	Evaporation temperature		°C	5,4	4,8	-0,6	-1,2	-2,7	-3,3	-7,2	-7,8	-10,4	-15,5
Warm side													
	Return temperature		°C	43,0	33,0	43,0	33,0	43,0	33,0	43,0	33,0	38,0	38,0
	Supply temperature		°C	70,0	70,0	70,0	70,0	70,0	70,0	70,0	70,0	70,0	70,0
	Temperature increase		K	27,0	37,0	27,0	37,0	27,0	37,0	27,0	37,0	32,0	32,0
	Heat load [1]		kW	9622	10250	8818	9376	8563	9099	8072	8563	8029	7075
	Flow		m³/h	312	243	286	222	278	216	262	203	220	194
	Pressure loss [1]		kPa	65	39	54	33	51	31	46	27	32	25
Electricity consumption													
	Compressors [1]		kW	2.828,1	2.833,9	2.892,3	2.901,2	2.921,7	2.932,0	2.996,6	3.010,7	3.059,6	2.940,1
	Electrical power for fans, cold side [1]		kW	133,2	133,2	133,2	133,2	133,2	133,2	133,2	133,2	133,2	133,2
	Electrical power for pumps, warm side		kW	5,63	2,64	4,33	2,02	3,97	1,85	3,32	1,54	1,96	1,34
	All other electricity consumption [1]		kW	9,0	9,0	9,0	9,0	9,0	9,0	9,0	9,0	9,0	9,0
	In total [4]		kW	2.976,0	2.978,8	3.038,9	3.045,4	3.067,9	3.076,1	3.142,1	3.154,4	3.203,7	3.083,7
Effeciency													
	COP-warm		-	3,23	3,44	2,90	3,08	2,79	2,96	2,57	2,71	2,51	2,29
	Lorenz-COP		-	7,35	8,18	6,24	6,80	5,90	6,40	5,42	5,83	5,34	4,86
	LMTD cold		K	284,6	284,6	276,6	276,6	273,6	273,6	268,6	268,6	265,6	253,6
	LMTD warm		K	329,5	324,3	329,5	324,3	329,5	324,3	329,5	324,3	326,9	326,9
	Lorenz-efficiency [5]		%	44,00%	42,09%	46,53%	45,25%	47,30%	46,21%	47,43%	46,60%	46,96%	47,20%
Other calculations													
	Heat output [5]		kW	6.646	7.271	5.779	6.331	5.495	6.023	4.930	5.409	4.825	3.991
	Heat loss		kW	283	280	284	282	285	284	288	287	290	284
Net Present Value													
				19.291.132	EUR	<--- This net present value is used in the evaluation of the offer's overall economic value (the higher, the better)							

[1] These lines affect the net present value
[2] This price is included as an investment in the net present value calc
[3] This price is used for the calculation of O&M
[4] Total electricity consumption, however with theoretically calculated electricity consumption for district heating pumps.
[5] These are used for calculating penalties/bonuses in the guarantee tests

The heat pump's full-load hours	4.568	FLH

Figure 1 example of the VP01 sheet

Total lifecycle cost basis

The total economy is calculated as a combination of:

- the investment cost for the heating plant, and
- operating and maintenance costs over a 15-year period.

The largest cost components are expected to be:

- the heat pump's electricity consumption, and
- the gas boiler's gas consumption.

Therefore, heat pump efficiency (COP) and heat output should be optimised as far as technically feasible.

Operating points and performance data

Present value calculations must be based on performance data for 10 operating points.

For each point, the Tenderer must provide values for the cold side, hot side, and electricity consumption.

The Warranty Sheet indicates which fields are used in the present value calculation.

The plant's operating economy is also assessed using a calculated Lorenz efficiency across the same 10 operating points, ensuring evaluation of the heat pump's performance under realistic annual operating conditions.

Operating points reflect variations in:

- district heating supply and return temperatures, and
- ambient air temperature and humidity throughout the year.

"Air temperature" refers to uncontaminated ambient air unaffected by the installation.

Electricity consumption accounting

All electricity consumption associated with the heat pump must be included in the total electricity consumption figure.
This must be used in the declaration, measurement, and verification of warranty data at all operating points, cf. Warranty Sheet VP01.

Performance guarantee and acceptance testing

The performance data entered for all 10 operating points will form the basis for:

- the performance guarantee, and
- the warranty (acceptance) test at final handover.

12.2Total Economy – Lot B (WKO / TEO)

Evaluation Principle

The total economy for Lot B is assessed based on the overall lifecycle cost and operational reliability of the proposed WKO/TEO system. All evaluations relate solely to the systems included in this lot.

Deviations and Reservations

Any deviations or reservations from the Tender Conditions will be monetised by the Contracting Authority for evaluation purposes.

If tenderers propose technically different, but permitted, WKO or TEO solutions, the Contracting Authority will monetise the deviation relative to a standard reference solution to ensure equal comparison.

Alternative Timetable (Schedule)

Tenderers may submit an alternative timetable under the following conditions:

- It must clearly state that it deviates from the Tender Main Schedule.
- It must be submitted as a separate annex.
- It must include milestones for:
    - Completion of drilling works
    - Commissioning of the WKO/TEO system
- It must follow the same regulatory assumptions (e.g., permits and approvals) as the main schedule.

Evaluation of Schedule Deviations

Where an alternative timetable is offered:

Delays relative to the Tender Main Schedule will be monetised at € 750 per calendar day, calculated in present value.

No cap applies.

Present Value and technical optimisation

Tenderers may optimise technical parameters affecting lifecycle performance within the tender boundaries.

These include:

- Pump energy consumption
- Hydraulic efficiency of TEO systems
- Thermal balance design for WKO wells
- Anticipated long-term aquifer performance

Total Tender Price including O&M

The total evaluated price includes:

- Investment costs
- Operation and maintenance costs
- Energy consumption for pumps and auxiliary systems
- Estimated long-term maintenance of wells and lake-based intake structures

12.3 Total Economy – Lot C (TTES – Thermal Tank Energy Storage)

Evaluation Principle

The total economy for Lot C is assessed on the basis of the combined investment cost, long-term operation, and durability of the offered steel storage tank.
Only the TTES installation itself is evaluated under this lot.

Deviations and Reservations

Any deviation or reservation will be monetised (positive or negative) to ensure comparability.

Differences in tank design (e.g., materials, insulation, construction method) will be monetised relative to a baseline reference design.

Alternative Timetable (Schedule)

An alternative timetable may be submitted as a separate annex and must:

Specify deviation from the Tender Main Schedule Include milestones for:

- Mechanical completion of the tank
- Final commissioning

Follow the same assumptions regarding permits and approvals as in the Tender Main Schedule.

Evaluation of Schedule Deviations

If an alternative timetable is submitted:

Deviations from the Tender Main Schedule will be monetised at € 750 per calendar day in present value.

No cap applies.

Present Value and technical optimisation

Tenderers may optimise performance-related parameters such as:

- Insulation thickness and heat loss rate
- Surface treatment and corrosion protection strategy
- Expected refurbishment interval over 25 years

Higher present value is considered more favourable.

Total Tender Price including O&M

Evaluation includes:

- Tank fabrication and installation cost
- Structural integration
- Insulation and corrosion protection
- Lifetime maintenance (internal inspection, surface renewal)

12.4 Technical & Delivery Excellence (Lots A, B, and C)

Scope and structure. Under this unified criterion, tenders are evaluated across three dimensions applied to each offered lot:

1. **System Quality, Reliability, Construction & Maintainability**
2. **Project Organisation & Quality Management**
3. **Service Organisation & Warranty**

12.4.1 General (applies to all Lots A–C)

System Quality & Maintainability

- Use of proven technologies/components with a track record in comparable large-scale district heating/energy projects
- Low expected downtime, with robust redundancy, fallback modes, and partial-outage operation
- Stable, efficient control across load ranges and integration into the DH system
- High lifetime and long inspection intervals, supporting a ≥25-year asset life
- Corrosion-, wear-, and fouling-resistant materials and methods
- Good service access (disassembly space, craning paths, safe work areas) and maintainable instrumentation
- Low noise with documented mitigation in varying conditions
- Future-proof design enabling modular expansion (e.g., HP units, WKO wells, TTES volume)
- Maintainability evidenced by remote monitoring, safe access, standard components/spares, efficient daily checks, and repair during operation (redundancy/bypass/modular design)

Project Organisation & Quality Management

- Clear project organisation with transparent responsibilities, aligned with Dutch practice (e.g., UAV-GC 2025, Waterwet, Omgevingswet, SIKB protocols)
- Dedicated, empowered Project Manager with relevant large-scale energy/DH experience

- Qualified key personnel, with CVs relevant to the specific lot(s) and Dutch compliance where applicable
- Documented qualifications/certifications (e.g., ISO 9001; BRL11000 for WKO; relevant EN/NEN/CUR/PBV)
- Structured ITPs, robust document control, traceability, interface coordination, and effective non-conformity management

Service Organisation & Warranty

- 24/7 support across mechanical, electrical and controls; rapid response capability
- Proximity of service team and spare parts to ensure fast mobilisation/repair
- Short delivery time for critical spares with documented stock/guaranteed supply
- Longer warranty than minimum, clearly described, with strong service agreement (scope, response times, preventive maintenance) and demonstrable benefits (reduced downtime, predictable cost, availability guarantees, performance monitoring)

12.4.2 Lot A – Heating Central (heat pumps, gas boiler, SCADA/SRO, water treatment, internal hydraulics, technical building)

System Quality & Maintainability

- High COP/efficiency at key operating temperatures; short start-up times (HP and boiler)
- Resilient operation during component outages, e.g., compressor/module separation
- Measured/segmented energy consumption (compressors, evaporators, fans, pumps, controls)
- SCADA/SRO with robust monitoring, diagnostics, alarms
- High-quality water treatment and hydraulics preventing corrosion, scaling, air ingress, and thermal losses

Project Organisation & Quality Management

- Experienced refrigeration/heat pump specialists (MW scale), SCADA/SRO engineers, and integration engineers (HP, boilers, TTES, network hydraulics)
- Documented Dutch standards/cybersecurity familiarity where relevant

Service Organisation & Warranty

- Service competence on large HP/boiler/SCADA systems, with critical spares strategy and clear warranty tied to performance and availability

12.4.3 Lot B – WKO/TEO (aquifer wells, groundwater systems, lake-based intake structures, pumps, hydraulics, controls, acoustic measures)

System Quality & Maintainability

- Thermally stable/balanced WKO design with long-term aquifer balance calculations
- Robust TEO intake structures (ice, debris, biofouling, variable lake conditions)
- Certified drilling methods and high-quality well materials for groundwater protection
- Energy-efficient pumps and hydraulics with low parasitic losses
- Instrumentation/monitoring (groundwater levels, flows, thermal displacement)
- Redundant concepts for continued operation during well/intake maintenance

Project Organisation & Quality Management

- Certified WKO specialists (SIKB BRL11000 / Protocol 11001), geohydrologists, drilling engineers
- Coordination across geohydrology, ecology, hydraulic/mechanical design and Dutch Waterwet compliance

Service Organisation & Warranty

- Field service capability for wells/intake structures, spare parts/logistics suitability, and warranty aligned to aquifer/TEO performance monitoring

12.4.4 Lot C – TTES (steel thermal storage tank, structural works, hydraulics, corrosion protection, instrumentation)

System Quality & Maintainability

- Robust tank design to EN 14015/Eurocodes; high-quality insulation with documented heat loss
- Corrosion protection with long maintenance intervals and a clear refurbishment strategy
- Stable mixing/stratification control; safe access (manholes, platforms, ladders)
- Serviceability without stopping heat supply, e.g., via bypass arrangements

Project Organisation & Quality Management

- Structural/mechanical engineers (EN 14015, Eurocodes), corrosion specialists.

Service Organisation & Warranty

- Service/inspection planning for large tanks, coatings maintenance, and warranty covering integrity, heat-loss, and coating performance

Evaluation Method

- Tenders are assessed **under this single criterion** for each **offered lot** across the three dimensions above.
- The Contracting Authority may apply **sub-weights** to reflect project priorities (e.g., **System Quality & Maintainability**, **Project Organisation & Quality**, **Service & Warranty**) and **Lot-specific factors**.
- Evidence should be provided through: technical design documentation (design basis, P&IDs, layouts, site plans, 3D where available), organisational charts and CVs, certifications/compliance, ITPs and QA procedures, service concept, spare parts strategy, and warranty terms.

12.5 Evaluation model

Weighted points are indicated for each award criterion. The total score for the total points for all award criteria, and thus the decisive point in the evaluation of the tenders, is rounded to two decimal places.

12.5.1 Evaluation of the sub-criterion A. Total economy

Offers with the best (highest) present value will be awarded 10 points. An offer with present value of 70% of the best present value will be awarded 0 points.

If more than one tender cannot be included in the above scale, a model is used where tenders with the best present value are awarded 10 points and tenders with present value of 50% of the best present value are awarded 0 points.

Offers with a present value that is less than 50% of the best present value will be awarded 0 points.

12.5.2 Evaluation of sub-criteria B

In the qualitative evaluation of sub-criterion B, the contracting authority will assess the quality of the tenders using a graduated evaluation model. The model will reflect the extent to which each tender fulfils the sub-criterion, including the degree to which the tender demonstrates added value beyond the minimum requirements.

The evaluation will be carried out using a scale with multiple levels, where higher levels are assigned to tenders that demonstrate a particularly strong or optimal fulfilment of the criterion, and lower levels are assigned to tenders that only partially or insufficiently fulfil the criterion.

Based on this approach, the contracting authority will distinguish between levels such as “optimal fulfilment”, “high fulfilment”, “adequate fulfilment”, and “insufficient fulfilment”. The specific scale and the corresponding scoring model will be published in the final evaluation methodology before the deadline for submission of tenders.

13 Negotiation Procedure

In accordance with the Dutch Public Procurement Act (Aanbestedingswet 2012) and Directive Directive 2014/25/EU, the Contracting Authority will conduct a competitive procedure with negotiation. Based on the tenders received, an initial evaluation will be carried out for all valid tenders.

The Contracting Authority reserves the right to award the contract based on the first evaluation without entering into negotiations, provided this is in compliance with the applicable EU and Dutch procurement rules.

However, it is expected that one negotiation round will be held, during which the pre-qualified Tenderers will be invited to individual negotiation meetings following the first evaluation. The Contracting Authority reserves the right to conduct additional negotiation rounds if deemed necessary or appropriate. In such cases, the procedure described below will be repeated.

Form of Negotiation Meetings

Negotiation meetings may be held physically, digitally, or in hybrid form, at the discretion of the Contracting Authority.
Prior to the negotiation meetings, Tenderers will receive:

- an official invitation,
- the meeting agenda,
- the negotiation timetable (date and time), and
- procedural information on how the negotiations will be conducted.

During negotiation meetings, the Contracting Authority will:

- provide structured feedback on the initial tender,
- ask clarifying questions, and
- engage in dialogue on aspects where improvements may be advantageous.

The Contracting Authority is not obliged to disclose all identified issues, uncertainties, or weaknesses. Tenderers remain fully responsible for ensuring that their tender is clear, complete, and compliant with the tender requirements.

Documentation and Transparency

After each negotiation meeting, the Contracting Authority will prepare negotiation minutes, which will be shared with the Tenderer as formal documentation of the discussions.

Should the Contracting Authority need to amend the tender documentation as a result of the negotiations, revised tender documents will be communicated to all participating Tenderers following the negotiation round, in accordance with principles of equal treatment and transparency under Dutch and EU procurement law.

Submission of Revised Tenders

Following the negotiation round, each Tenderer will be invited to submit a revised tender (2nd tender). The Contracting Authority expects to be able to award the contract based on these 2nd tenders.

The Contracting Authority reserves the right to rely on a Tenderer's previous tender submissions until the expiry of the acceptance period. Participation in negotiations does not release the Tenderer from any earlier tender commitments unless explicitly stated by the Contracting Authority.

Shortlisting (Reduction of the Number of Tenderers)

In line with Article 2.30 of the Aanbestedingswet 2012 and Article 29(4) of Directive 2014/25/EU, the Contracting Authority reserves the right to reduce the number of Tenderers admitted to the negotiation phase and/or to subsequent negotiation rounds.

Such shortlisting will be based strictly on the Selection criteria set out in Section 14, ensuring compliance with the principles of equal treatment, non-discrimination, and proportionality.

14 General Conditions

14.1 Confidentiality

Tenderers are subject to unrestricted confidentiality obligations regarding all information contained in the tender documents and any information obtained through participation in the procurement procedure.

The Contracting Authority will treat all tenders and related documentation as confidential to the extent permitted by law. However, confidentiality may be overridden where disclosure is required under applicable legislation, including the Dutch Wet open overheid (Woo).

Tenderers are advised that documents submitted as part of this procedure—including tender submissions—may fall under the scope of the Dutch Public Access to Information Act (Wet open overheid).

If a request for access is received, the Contracting Authority will, as far as reasonably possible, consult the relevant Tenderer before deciding whether parts of the tender may be exempt from disclosure.

The assessment of what may be exempt will take into account whether the Tenderer has explicitly requested confidentiality and clearly identified the information for which protection is sought. However, the Contracting Authority retains the final decision, subject to statutory obligations.

14.2 Personal data from tenderers

In accordance with the General Data Protection Regulation (GDPR) and the Dutch Uitvoeringswet AVG, the Contracting Authority may only process personal data when there is a valid legal basis for doing so.

Tenderers are therefore strongly encouraged to:

- include personal data only where strictly necessary,
- anonymise personal data whenever possible, or
- submit personal data in a separate, clearly marked annex.

Personal data that is not required for the evaluation of the tenders will be deleted.
Documents containing personal data will, to the greatest extent possible, be deleted or anonymised at the end of the procurement process, in line with GDPR retention principles.

14.3 Affiliated applicants

To safeguard competition and prevent conflicts of interest, Tenderers that form part of a corporate group must clearly explain in their tender submission how independence and internal separation ("Chinese walls") are ensured between affiliated entities participating in the procedure.

For this purpose, a "group" is defined according to Directive 83/349/EEC (Consolidated Accounts Directive), Article 1(1).

If the Contracting Authority receives applications or tenders from more than one affiliated company, it will assess whether the Tenderers have adequately demonstrated that their internal organisational arrangements sufficiently prevent:

- exchange of sensitive information,
- influence on each other's tender, or
- distortion of competition.

If this cannot be demonstrated to the satisfaction of the Contracting Authority, all affiliated Tenderers may be excluded from the procurement procedure, in accordance with EU procurement principles of equal treatment, non-distortion of competition, and transparency.

14.4 Payment Terms and Financial Arrangements

Payment Schedule Structure

Contract payments shall be structured to align with project milestones and deliverables, providing appropriate cash flow to the contractor whilst protecting the client's interests through retention of payments until satisfactory completion of defined stages. The payment schedule shall include provisions for: mobilisation payment upon contract execution and provision of required insurances and bonds; progress payments linked to completion of design phases, equipment deliveries, and installation milestones; and final payment upon successful commissioning, performance verification, and delivery of complete documentation.

Retention amounts shall be held from progress payments and released following successful completion of defects liability periods. The specific payment schedule, retention percentages, and release conditions shall be detailed in the construction contract.

14.5 Insurance and Bonding Requirements

The contractor shall procure and maintain appropriate insurance coverage throughout the project duration to protect against risks associated with design, construction, and commissioning activities. Required insurance coverage includes:

- Contractors all risks insurance covering physical loss or damage to works, materials, and equipment during construction with coverage limits appropriate to total project value
- Professional indemnity insurance covering design errors or omissions with minimum coverage specified in contract conditions
- Public liability insurance covering third-party injury or property damage arising from construction activities
- Employers liability insurance covering injury to contractor employees during project execution
- Equipment insurance covering installed equipment during commissioning and initial operating periods

In addition to insurance coverage, the contractor may be required to provide performance bonds and/or parent company guarantees as specified in the tender conditions. These financial instruments provide the client with security regarding contractor performance and completion obligations.

14.6 Project and construction management

The Client shall retain full responsibility for the overall project and construction management in accordance with European procurement requirements and applicable Dutch standards, including UAV-GC 2025 where relevant.
Regular project and construction meetings will be organised to ensure coordinated execution of the works among all Contractors and subcontractors.
The Client is responsible for preparing and issuing the official minutes of all project and construction meetings. These minutes will be deemed accepted unless comments are submitted within the period specified in the contract conditions.

14.7 Schedule and sanctions

The contractual schedule and applicable sanctions for delays or non-compliance are defined in the individual construction contracts, in line with the provisions of the UAV-GC 2025 and EU public procurement regulations.

The number of recognised delay days (“verrekenbare werkdagen”) is in accordance with Dutch construction practice.

14.8 Liquidated Damages and Liability Limitations

Provisions regarding liquidated damages (“boeteclausules”) and liability limitations (“aansprakelijkheidsbeperkingen”) are included in the **Design–Build Contract Template** where applicable to the relevant contract. The principles follow the framework of the UAV-GC 2025, including

rules on proportionality, maximum financial liability, and the Contractor's obligations in cases of non-performance or delay.

14.9 Contractual Basis

The following documents and regulations constitute the contractual basis for the Works. All items apply in accordance with EU public procurement rules and relevant Dutch standards, including UAV-GC 2025 where applicable:

1. **All applicable laws, regulations, standards and technical requirements** in force at the project location and relevant for works of this nature, including national, regional and municipal requirements.
2. **Environmental noise regulations** applicable to the Project. Where relevant, local Dutch environmental legislation shall apply.
3. **Occupational health and safety legislation**, including applicable Dutch Arbeidsomstandighedenwet (Working Conditions Act), associated decrees and guidelines. Relevant instructions, executive orders and guidelines from the competent authorities shall be complied with.
4. **This Tender Documentation**, including all conditions, descriptions, appendices and any subsequently issued correction sheets or clarifications.
5. **Contract Conditions:** For turnkey works, the general terms and conditions follow UAV-GC 2025 with deviations and additions as specified in **Document Contract Deviations and Supplementary Conditions**.
6. **The Contractor's Tender**, including all submitted documents, commitments, technical descriptions and prices.

Order of Precedence

In the event of discrepancies or inconsistencies between the documents listed above, the documents shall apply in the order of priority listed, with the first-mentioned having the highest precedence.