Request for proposal – Biomass thermal oil boiler unit

Introduction

Snežnik d.o.o., a state-owned company specializing in wood cutting and processing, is inviting qualified suppliers to submit proposals for the supply of technological equipment as described in this Request for Proposal (RFP).

The purpose of this RFP is to ensure a transparent, fair, and competitive procurement process, enabling Snežnik d.o.o. to select the most suitable supplier(s) based on quality, compliance with technical requirements, service capabilities, and overall value.

Background

Snežnik d.o.o. is fully owned by the Slovenian state forests d.o.o. but is not subject to public procurement legislation. Nevertheless, the company is committed to following the highest standards of transparency and accountability in its purchasing activities.

Through this RFP, Snežnik d.o.o. aims to identify reliable partners who can provide innovative, cost-effective, and sustainable solutions that support the company’s operations in timber sawing and further processing and contribute to its long-term development goals.

Scope of the RFP

This RFP covers the procurement of technological equipment divided into specific lots (tender packages). Suppliers may submit proposals for one or more lots, in accordance with the requirements set out in this document.

We kindly invite you to submit a budgetary quotation and basic technical design, based on the preliminary parameters outlined below.

Should you require any further information or clarification, please do not hesitate to contact us directly at **rok.rutar@sneznik.si**

The quotation should include the following:

- Offer in English
- A complete description of the proposed process
- A clear list of what is included and what is not
- Technical drawings with position numbers indicating the machines, matching the numbering in the offer
- Project borders
- Itemized (discriminated) pricing

Please submit your offer in PDF format, along with any relevant supporting documentation, to **rok.rutar@sneznik.si**

Deadline for submission: 14 November 2025

1. Project Background

Snežnik d.o.o. is a sawmill located in Kočevska Reka, in the southern region of the country. The current facility is approaching the end of its economic and technical lifespan, and the company is planning a full-scale modernization.

Currently, the sawmill processes approximately 60,000 m^3 of logs annually, primarily coniferous species such as spruce and fir. Beech logs currently account for less than 10,000 m^3 per year. However, the company anticipates increased availability of beech logs in the future, potentially exceeding 100,000 m^3 annually.

The upgrade project envisions a shift to fully automated processing exclusively beech logs, with an input capacity of 100,000m^3 per year and an expected output of over 60,000 m^3 of beech sawnwood annually. In later stages, the company also plans to expand production to include beech elements/components and possibly edge-glued panels.

As the new production site will involve the drying and steaming of large quantities of wood, we intend to expand the sawmill facility by integrating a CHP (Combined Heat and Power) unit fueled by wood biomass as part of the overall investment. The CHP unit will operate continuously throughout the year and will utilize lower-quality wood with high moisture content as fuel, such as logging residues, green wood chips, and sawdust.

Please refer to points 2 and 3 below for the technical requirements that form the basis for this RFP.

2. Raw material

- Mostly logging residues mixed with sawdust, bark and woodchips. Moisture content will be above 50%

3. Needed thermal output

- 10,2 MW thermal oil, HT/LT 310/240°C

4. Schedule

Estimated construction Q2 2026 – Q2 2027

Startup Q2-Q3 2027

5. Basic data and technical details to be included in the proposal

- Fuel specification:

  - Moisture content % 35 - 55

  - Bulk weight kg/m^3 300 - 400

  - Unit size category P100 (according to EN 14961)

  - Bark length up to mm max. 300

  - Excess lengths (max.1%) mm 500

- Ash content 3-5%
- Plant operation 24/7, with exception of yearly maintenance
- Firing construction: moving grate
- Combustion chamber: high temperature gasification chamber with automatic de-ashing
- Flue gas dust removal: multi cyclone and E-filter with automatic de-ashing
- Silo dimensions: min. volume 330 m3
- Silo discharge: (minimal requirement) hydraulic, 4 push-rods (walkingfloor)
- Material transport: hydraulic stoker
- De-ashing from moving grate: hydraulic/chain transporter
- De-ashing from E-filter/multicyclone/thermal oil heat exchanger: hydraulic/chain transporter
- De-ashing containers: at least 10 m3 containers for grate ash, at least 20 m3 for fly ash
- Emission values: compliant with EU standards
- Automatic cleaning system for heating surfaces: included
- Thermal oil water heat exchanger: included, heat output to be defined in the quote
- Emergency cooling system: min. reqirement of 2 emergency cooling systems
- Compressed air system: included
- Circulating pumps (primary cycle and secondary cycle): included and defined
- Pump for filling and draining: included
- Collection tank: included, size needs to be defined in the quote
- Expansion tank: included, size needs to be defined in the quote
- N2-Valves and accessories: included
- Degassing system: included
- Valves and accessories for the thermal oil system: included
- Measurement and safety equipment for the thermal oil cycle: included
- Thermal oil: included, the quantity needs to be defined in the quote
- Moving grate combustion chamber: included and described in the quote
- Insulation and sheathing: included
- Flue gas blower: included and described in the quote
- Flue gas tubing: included and described in the quote (description of quantity)
- Flue gas recirculation: included and described in quote
- Air pre heater: included, heat exchanger in stainless design
- Chimney: included, floor mounted
- Multi cyclone ash seperator: included
- E-filter: included, to be compliant with EU regulation and defind in the offer
- System for fuel monitoring: specified by supplyer

6. Additional technical details to be defined and included in the quote

- Regulation with Siemens components
- Frequency convertors: Danfoss
- Descripion of electrical controls,:

  - power control unit

  - combustion optimisation

  - lambda control system

  - under pressure control

  - control cabinets

  - software program – connectivity to other SCADA systems

  - process visiulisation

- SNCR system: described and offered as an option
- Assemy: Assembly instructor is a part of the offered price, offer assemblers as an option
- Employee training: included
- Safety system: LO/TO equipment included
- Spare parts and special tool package: included
- Maintenance plan: included, with budget overview for 10 years
- Full service contract for the period of 10 years: offer as an option
- Transport to the site: included
- Lifting: included as an option
- Commisioning: included

7. Legal terms and conditions

a. Legal and Business Eligibility

The contractor must be a legally registered entity in an EU Member State, authorized to perform the required activities (e.g., industrial machinery manufacturing, technological plant construction, etc.). A contractor from a third country may submit a proposal if the subject of the contract is covered by the Agreement on Government Procurement concluded within the framework of the World Trade Organization or another binding agreement of the European Union or the Republic of Slovenia.

The client reserves the right, at its own discretion, to accept a proposal and conclude a contract even with a contractor who does not meet the above condition.

The contractor must have completed at least one comparable project or a part of a comparable project in the last 5 years (proven references required).

The contractor must not be subject to bankruptcy, liquidation, or compulsory settlement proceedings.

The contractor must have no outstanding tax liabilities (confirmed by a tax authority certificate not older than 30 days).

Individual contractor or consortia of contractors may apply. Each individual contractor must meet the above conditions.

In the event that subcontractors are engaged, the client must give consent to the engagement of each individual subcontractor.

b. Guarantees and Insurance

- A performance guarantee (10% of the contract value preferred) must be submitted.
- An Advance payment security (guarantee) must be submitted.
- Bank guarantee for defects notification period (Defects Liability Security) must be submitted (10% of the contract value preferred).
- Inclusion of a liquidated damages clause for delays (0.1% of contract value per day of delay, capped at 10% preferred).
- Mandatory liability insurance covering damages during transportation, installation and operation phases, must be submitted.
- Clauses on liability limitation are not preferred.

All guarantees and Insurance must be issued by a first class European bank or insurance company (i.e. rated "BBB" or better under Standard & Poor's classification, or with equivalent rating in case of another agency)

c. Technical Compliance and Standards

- The equipment must be built in compliance with all relevant EU and national standards, including CE marking and safety regulations (e.g., machinery safety, electrical safety, fire protection).
- The contractor must successfully complete all required technical tests and inspections as specified by the client, including functionality, safety, load capacity, and performance tests, prior to final acceptance.
- All applicable health and safety regulations must be followed.
- Full technical documentation, operating manuals, safety data sheets, and certifications must be provided.
- Contractor must provide full training of client's personnel.

d. Contract Requirements

- A detailed project timeline must be agreed upon, with defined milestones and deadlines.
- The client reserves the right to conduct regular inspections and quality control checks.
- The agreement on maintenance may be part of the contract or may be concluded as a separate contract.
- The contract must include:
    - Penalty clauses for breach of contract or delays,
    - Termination rights in case of rejection of the equipment prior to acceptance,
    - Right to claim damages.
    - Defects liability.

e. Warranty and After-Sales Obligations

- All defects must be remedied within a reasonable period (e.g., within 15 days of notification).

The contractor must provide after-sales support and guarantee the availability of spare parts for at least 10 years.

- A dedicated emergency contact and response time of 48 hours must be ensured.

f. Transparency and Cooperation

- The contractor must comply with anti-corruption and applicable laws.
- Regular progress reporting.
- Slovenian law shall preferably apply to the interpretation of the contract.
- Dispute resolution must be clearly defined:
    - Amicable resolution of the dispute first,
    - Failing that, jurisdiction preferably lies with a competent court in Slovenia.