

Intention for Procurement Notice

Title:	EOAL 63/2025 Supply, Installation, Commissioning and Maintenance of a Pilot Biomass Pyrolysis System for Wastewater Sludge at Larnaka WWTP
Contract Scope	The scope of the contract includes the procurement, transport, installation, commissioning, and a two-year maintenance period for one fully containerized demonstration pyrolysis unit to be deployed at the designated site in Larnaka, Cyprus. Key activities covered under the contract are: · Transport to site in Larnaka, Cyprus · Installation and connection to the local power grid · Commissioning, including functional testing of the unit · Training of operational personnel to ensure safe and effective operation · Two-year maintenance period, during which the supplier shall perform all maintenance activities as required by the unit manufacturer, in accordance with the Operation and Maintenance Manual. The supplier is expected to ensure the unit becomes fully operational and remains in optimal condition throughout the maintenance period.
Estimated Value	Three hundred thousand euros (€ 300,000.00) exclusive of VAT as follows: Supply, installation, and commissioning of one (1) biomass pyrolysis unit corresponding to the amount of two million one hundred fifty thousand Euros (€ 250,000.00) Two-year maintenance period corresponds to the amount of 50,000 Euros (€ 50,000.00)
Economic and financial standing	The average annual turnover for the last three (3) financial years (2024,2023,2022) must be at least equal to Two Hundred Thousand Euros (€200,000.00) Euro.
Estimated date of publication of the competition:	December 2025

CPV Codes:	42996000-4 42940000-7 42993000-3 42914000-1 42990000-2 44613800-8 42000000-6 42942000-1
All qualified and interested suppliers are invited to review the forthcoming tender details and confirm their readiness to participate. Preliminary technical specifications are provided in Annex A. Interested parties are encouraged to express their interest and share any comments or opinions with Mr. Pavlos Michael via email at pmichael@eoal.org.cy or by telephone at 00357 99530976. Feedback should be submitted no later than 21 November 2025, to allow for consideration and potential amendments where applicable.	

ANNEX A: Preliminary Technical Specifications

Type: Biomass Pyrolysis System		
	Specifications	Minimum Requirements
The system consists of:		
1	Continuous or Batch Operation	Minimum feed: 75 kg/hour for continuous operation or 350 kg per batch cycle for batch operation.
2	Minimum Operating Temperature	500 °C
3	Maximum Operating Temperature	800 °C
4	Reactor Material	Stainless steel with a minimum resistance to operating temperatures of 1050°C
5	Feeding System	Minimum material quality for components in contact with the processed medium: stainless steel grade EN 1.4301
6	Condenser	Minimum material quality for components in contact with the processed medium: stainless steel grade EN 1.4301
7	Syngas Cleaning System	Minimum material quality for components in contact with the processed medium: stainless steel grade EN 1.4301
8	Extraction System	Minimum material quality for components in contact with the processed medium: stainless steel grade EN 1.4301
9	Gas Pipes	Minimum material quality for components in contact with the processed medium: stainless steel grade EN 1.4301
10	Ability to measure produced syngas gas	Syngas sampling and cooling for humidity/oil condensation; flow and gas composition (CO, CO ₂ , N ₂ , CH ₄ , H ₂) sensors.
11	Control	Electronic control via PLC of: - Motors - Pumps - Ventilation - Burner
12	Monitoring	- Temperatures - Pressures
13	Operation and Monitoring	Remote Control
14	Self-sufficient Installation	The main structure and equipment must be installed on a standard 20- or 40-foot container.
15	Total Required Area	The fully developed unit must be deployable within an area measuring 15 by 10 meters, and the maximum height of any component should not exceed 4.0 meters.
16	Input moisture	Up to 30%
17	Retention time	In the case of continuous reactor, the possibility to modify the retention time up to 1 hour
18	Burner	Produced syngas must be burnt in a burner able to accept both syngas and liquid propane gas/natural gas for start-up.

		Measure of the exhaust gases flow rate.												
19	Emissions	Exhaust gases from the burner must comply with: Table 1 – Emission limits assumed for the syngas burner emissions. <table><tr><td>Dust</td><td>20 mg/Nm³</td></tr><tr><td>Nitrous oxides (as NO₂)</td><td>200 mg/Nm³</td></tr><tr><td>Sulphur oxide (SO₂)</td><td>100 mg/Nm³</td></tr><tr><td>Carbon monoxide (CO)</td><td>150 mg/Nm³</td></tr><tr><td>Total Organic Carbon (TOC)</td><td>20 mg/Nm³</td></tr><tr><td>Ammonia (NH₃) [*]</td><td>5 mg/Nm³</td></tr></table> [*] It applies in the case where abatement systems using urea or ammonia are adopted for nitrogen oxides removal.	Dust	20 mg/Nm ³	Nitrous oxides (as NO ₂)	200 mg/Nm ³	Sulphur oxide (SO ₂)	100 mg/Nm ³	Carbon monoxide (CO)	150 mg/Nm ³	Total Organic Carbon (TOC)	20 mg/Nm ³	Ammonia (NH ₃) [*]	5 mg/Nm ³
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Ammonia (NH ₃) [*]	5 mg/Nm ³													
20	Operating pressure	The pressure inside the reactor must be kept 10-20 mb higher than the ambient pressure												
21	Feeding and extraction systems	Must be able not to let any air into the reactor												
22	Noise	< 80 dB												