



Transforming African Organic Waste into **Green Energy** for **Cooling**

CALL FOR EXPRESSION OF INTEREST

Pre-qualification of Main Contractor for an Organic Waste to Biogas
and Cold Storage Demonstration Plant

Stage 1

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1. Introduction

The KijaniCooling project (formerly KijaniBox), funded under Horizon Europe Grant Agreement No. 101147463 and implemented in partnership with Africa Bioenergy Limited (ABPL) and Dedan Kimathi University of Technology (DeKUT), invites expressions of interest from qualified contractors, fabricators and engineering firms.

This call is the first step towards a competitive tender for the fabrication, supply, installation and commissioning of a demonstration plant that converts organic waste into biogas and uses it to provide cooling for cold storage. It aims to identify firms with the experience, facilities and personnel to take part in that tender, and to give interested firms an early view of what the tender will ask for. This call does not constitute an award, a contract or a commitment to procure.

2. The Project

KijaniCooling demonstrates how locally available organic waste can be turned into clean energy for cooling in Africa. The demonstration plant will receive and prepare organic waste, digest it anaerobically to produce biogas and digestate, then clean and store the biogas and use it to drive an absorption chiller. The chiller charges a cold thermal energy storage tank, which in turn serves a 20-ft containerised cold room. The plant will be installed at two pilot sites in Kenya and is designed to support local fabrication, operation, maintenance and future replication.

3. What the Tender Will Involve

The tender is expected to appoint a single contractor, or a lead contractor with named partners, to deliver a complete and working plant from fabrication through to handover. Most of the principal equipment will be built to Project engineering drawings, process flow diagrams, P&IDs and specifications, which will be issued to prequalified firms under a confidentiality undertaking. The contractor will verify these designs for manufacturability, prepare fabrication drawings for Project approval and complete the design of selected items, principally the organic waste shredder and the cold thermal energy storage tank. The absorption chiller will be supplied separately by the Project, and the contractor will provide the connections between the chiller and the rest of the plant. Table 1 summarises the indicative scope.

Table 1. Indicative scope of the future tender

Work package	Indicative content
Feedstock preparation	Organic waste shredder, mixing and holding tanks, weighing, feed pumps, valves and pipework.
Anaerobic digestion	Digester of approximately 38 m ³ working volume with insulation, mechanical agitation, digestate recirculation and a heating system to hold a stable mesophilic operating temperature.
Digestate management	Discharge tank, solid and liquid separation, transfer pumps and containment for the solid and liquid fractions.
Biogas handling and cleaning	Gas collection, condensate removal, hydrogen sulphide removal and filtration, gas blowers, flow metering, a gas holder of approximately 40 m ³ and a flare.
Cold storage	Cold thermal energy storage tank, circulation pumps, insulated supply and return pipework and a 20-ft containerised cold room, with interfaces to the separately supplied chiller.
Electrical, controls and safety	Power distribution, motor control and variable speed drives, control panel and automation, process instrumentation, fixed gas detection and equipment suited to hazardous areas.
Civil and structural works	Foundations, equipment and pipe supports and containment, within a boundary to be defined in the tender.
Installation to handover	Fabrication engineering, factory and site testing, installation, integration, commissioning, performance verification, operator training, O&M manuals, as-built records, warranty and spare parts.

The scope above is indicative. The final scope, quantities and specifications will be set out in the tender documents.

4. Capabilities Sought

Firms should be able to show experience in one or more of the areas below. Preference will be given to firms able to deliver an integrated system, either in-house or with established partners.

1. Design and fabrication of tanks, vessels, process equipment and steel structures in stainless steel, carbon steel, HDPE, PP or similar materials.
2. Anaerobic digestion, biogas, wastewater or organic waste handling systems.
3. Biogas treatment, including condensate removal, desulphurisation, filtration, gas storage and flaring.
4. Supply and installation of pumps, shredders, mixers, valves, piping and associated process equipment.
5. Refrigeration, cold rooms, thermal energy storage or the integration of cooling systems.
6. Electrical, instrumentation, automation and control integration, including equipment for hazardous areas.
7. Welding, machining, assembly, site installation, testing and commissioning.
8. Working from engineering drawings, P&IDs and specifications, with sound quality assurance, health and safety practice and as-built documentation.

5. Participation and Selection Process

Firms may express interest on their own or as a lead firm with named partners for specialist packages such as refrigeration, gas handling or controls. Where partners are proposed, the lead firm should name each partner and describe its role. Selection will follow the three steps shown in Table 2.

Table 2. Selection process

Step	What it involves	Open to
Stage 1. Expression of interest (this call)	Brief information on the firm, its experience and its capacity, for initial screening. No prices are requested.	All interested firms
Stage 2. Detailed technical & Financial proposal (Full Tender)	Detailed credentials and project references, technical approach, proposed personnel, quality and HSE systems, workshop facilities and equipment, proposed partners and an outline delivery programme. Full tender documents including drawings, specifications and bill of quantities. Firms submit technical and financial proposals.	Firms shortlisted at Stage 1

Firms should note that the tender stage is expected to require evidence of company registration, tax compliance, relevant registrations or licences such as National Construction Authority (NCA) registration and an Energy and Petroleum Regulatory Authority (EPRA) electrical contractor licence where applicable, financial capacity, and a declaration of no conflict of interest.

6. Stage 1 Submission Requirements

Interested firms are asked to provide only the information listed in Table 3, using the same item numbers. Detailed methodologies, drawings, financial statements and prices are not required at this stage.

Table 3. Information required at Stage 1

No.	Information required	Guidance
1	Firm name and year established	Legal name as registered.
2	Registered and physical address	Include the location of the main workshop or fabrication facility.
3	Contact person	Name, position, telephone and email. Must be the person with the power of attorney.
4	Registration details	Company registration number and any relevant professional registrations or licenses.
5	Company profile	Maximum of 150 words.
6	Relevant experience	Up to three similar projects completed in the last 5 to 7 years, giving the client, location, year and a brief scope and value of each.
7	Core capabilities	The work packages in Table 1 the firm can deliver in-house or through established partners.
8	Workshop and fabrication capacity	Brief description of workshop, machinery and fabrication facilities.
9	Engineering and technical personnel	Key disciplines available in-house or through partners.
10	Installation and commissioning	Brief description of relevant capability, with examples.
11	Geographical experience	Experience of working in Kenya or East Africa, where applicable.
12	Proposed partners	Name and role of each partner, where applicable.
13	Litigation history	Tenderers must disclose past or ongoing legal proceedings, arbitrations, regulatory actions, or contract defaults spanning the last 5 years. This applies to the primary company, its directors, partners, and any joint venture (JV) members.
13	Declaration	Confirmation of interest in the subsequent tender and disclosure of any actual or potential conflict of interest with the Project partners.

7. Screening Considerations

Stage 1 submissions will be screened on the relevance and quality of previous engineering and fabrication projects, demonstrated capability in the work packages in Table 1, the availability of suitable workshop and engineering resources and qualified personnel, experience with installing, testing and commissioning comparable systems, understanding of the project objectives, and overall capacity to take part in the tender.

8. Submission Details

Table 4. Submission details

Submission method	Email
Submission format	A single PDF document quoting the EOI reference number.
Clarifications	Written questions to the submission contact by 14 th October 2026
Submission contact	info@kbp.co.ke

9. Important Notes

- This call is a market screening exercise and not a request for prices. Firms should not submit pricing at this stage.
- Taking part does not guarantee an invitation to Stage 2, inclusion in the tender or the award of a contract.
- Firms bear their own costs of preparing and submitting an expression of interest.
- Information submitted will be treated as confidential and used only for this procurement process.
- The Project may amend or cancel this call at any stage.

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