





INVITATION FOR BIDS ON THE SUPPLY, INSTALLATION AND TRAINING OF TECHNICIANS ON THE OPERATION OF A GAS CHROMATOGRAPH (GC)

Introduction

Uganda is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement (PA). As a signatory to the Convention, Uganda committed to providing the necessary information to track progress towards implementing and achieving Nationally Determined Contributions (NDCs) and reducing greenhouse gas (GHG) emissions. Article 13 of the 2015 Paris Agreement established the Enhanced Transparency Framework (ETF, UNFCCC 2015) to build mutual trust and confidence and promote effective implementation of the Agreement. The framework enhances the existing Measuring, Reporting and Verification (MRV) arrangements under the Convention, with built-in flexibility accounting for Parties' different capacities and collective experiences. Uganda therefore seeks to enhance her compliance to the ETF through transparent, accurate, consistent, comparable and complete reporting.

Project Background

The Global Environmental Facility (GEF) has been supporting the Government of Uganda (GoU) to improve the capacity of its institutions to comply with the transparency requirements of the Paris Agreement. The Government of Uganda has received funding from the GEF through Conservation International (CI), the Implementing Agency, to strengthen Uganda's institutional and technical capacity to respond to the Enhanced Transparency Framework requirements of the Paris Agreement. This follows the successful implementation of Phase I of the Capacity Building Initiative for Transparency (CBIT) project in Uganda. The CBIT Phase II builds on achievements and lessons learnt from CBIT I, which laid a foundation for the formalization of GHG data and information-sharing process. The CBIT II project was launched on November 1st, 2024 and will be executed up to February 28th, 2028 by the Ministry of Water and Environment-Climate Change Department (MWE-CCD) in partnership with the Africa Innovations Institute (AfrII).

The CBIT Phase II project has four main components:

Component 1: Strengthening institutional capacity for improved transparency over time

This Component will focus on strengthening structures for GHG data collection, processing, and sharing amongst GHG emitting sectors by improving inter- and intra-agency coordination. It will build on the results of CBIT Phase I by implementing the six inter-ministerial MoUs that were signed as well as pursue the engagement of the private sector, NGOs and the academia. The outcomes are;

Outcome 1.1: Strengthened state and non-state institutions to coordinate and manage the sectoral and national GHG Inventory system.

- **Output 1.1.1:** Functional GHG emission sector hub working groups (Energy, Waste, Agriculture, FOLU, IPPU and Transport) established - each with at least 40% women (that includes representatives from state and non-state actors).







- **Output 1.1.2:** Infrastructure/equipment/gadgets for MRV system and GHG data collection, processing, and interpretation purchased.
- **Output 1.1.3:** Institutions and Individuals capacitated for actively coordinating and sharing GHG data for the functioning of the sectoral and national GHGI and MRV system (State and non-state actors (CSO/NGO, private sector, and academia), with at least 40% of the participants being women).,

Outcome 1.2: Strengthened collaboration and coordination between CCD and other sectors.

- **Output 1.2.1:** Enhanced coordination and collaboration between CCD and other sectors facilitated for improved transparency reporting.
- **Output 1.2.2.:** MRV system operationalized through training and data collection on Climate actions (Adaptation, mitigation, SDGs and Support (Finance, Capacity building and Technology transfer), of at least 30 trainees with at least 40% of the participants being women.

<u>Component 2: Strengthening the technical capacity of state and non-state actors for</u> <u>enhanced transparency reporting</u>

This Component will ensure the focal points within key government ministries and institutions in the IPCC sectors (AFOLU, IPPU, Transport, Waste, and Energy) and other stakeholders from academia, civil society and the private sector will be further trained in GHG data collection, processing, and transmission of GHGI data. The outcome is:

Outcome 2.1: Strengthened technical capacity of stakeholders to collect, process, and analyse activity data and feed GHG sectoral data into the national GHGI (at least 40% women).

- **Output 2.1.1:** Comprehensive and gender-responsive capacity needs assessment with recommendations for enhanced transparency reporting.
- **Output 2.1.2:** Gender sensitive tools (protocols, emission factors, technical guides) developed and implemented to support the Government in monitoring progress towards achieving the NDC targets and for monitoring companies and agencies in meeting their emission targets.
- **Output 2.1.3:** National and sub-national stakeholders (disaggregated by sex) from institutions working in the GHG emission sectors trained (to utilize the GHG equipment purchased by the project, collect activity data for GHG reporting, QA/QC, and emission factor with at least 40% women).

Component 3: Learning and knowledge sharing

This Component will strengthen the sharing of transparency-related information, including the aggregation of data for GHG inventory from different emission sectors and the reports on the implementation of Project outcomes under Components 1 and 2, through the Integrated Knowledge Management Platform of MWE/CCD. The outcome is:







Outcome 3.1: Strengthened coordination, learning and sharing between the CBIT II Uganda project and ongoing transparency initiatives.

- **Output 3.1.1:** CBIT Uganda Focal Point facilitated to undertake his/her functions and responsibilities to plan, link and coordinate transparency activities.
- **Output 3.1.2:** Learning and exposure visits facilitated for selected stakeholders (e.g., COP, South-to-South exposure visits and attending the CBIT Global annual meeting).
- **Output 3.1.3**: Gender responsive and inclusive knowledge management products generated, disseminated and uploaded on the Climate Transparency Platform managed under the CBIT Global Support Programme.

Component 4: Monitoring and evaluation

This component is designed to support project monitoring systems providing systematic information on progress in meeting project outcomes and output targets. The outcome is;

Outcome 4.1: A gender-sensitive monitoring and evaluation framework for the project

- Output 4.1.1: Periodic M&E reports generated and submitted to CI-GEF Agency
- Output 4.1.2: Terminal Evaluation commissioned by CIGEF.

The CBIT phase I supported some of the capacities that include strengthening the institutional arrangements such as data sharing arrangements and developing tools for collecting activity data. Despite these efforts, a gap remains in the collecting, analyzing and processing of data on emission factors. Therefore, AfrII is inviting bids for the supply of equipment for measuring greenhouse gas emissions.

Purpose of the bid

The Africa Innovations Institute is inviting bidders to supply, install a Gas Chromatograph (GC), and train technicians on its operation and maintenance. AfrII is a not-for-profit, non-governmental center of excellence in agricultural and environmental innovations. Established in 2005, AfrII undertakes research and innovations development on environmental sciences, agriculture and food systems to ensure sustainable increase in environmental sustainability in Eastern and Central Africa. To learn more please visit http://www.afrii.org.

The GC will be used for training state and non-state actors on the use of GC for collecting, analyzing and managing GHG emissions data for use in national and international reporting. The equipment will also be used to generate data for developing emission factors of priority emission categories. The priority greenhouse gases (GHGs) to be analyzed by the GC include the three Long-Lived Greenhouse Gases i.e. Carbon dioxide (CO₂), Methane (CH₄), and Nitrous Oxide (N₂O). Therefore, the GC to be supplied shall be fitted with detectors to quantify these gases.

Technical specifications







| No. | Technical specification | Quantity | Unit | Total | * | ** |
|-----------------------|-----------------------------------|----------|-------|-------|------------|---------|
| | | | Price | Price | Compliance | Remarks |
| GC frame | GC Mainframe, 6- channel, | 1 | | | | |
| | includes Chromatography | | | | | |
| | Software, Wrenches and Allen | | | | | |
| | screw set. | | | | | |
| | FID detector for determination | 1 | | | | |
| | of CH ₄ | | | | | |
| | Methanizer Accessory, in jet for | 1 | | | | |
| | Determination of CO ₂ | | | | | |
| | ECD Detector for | 1 | | | | |
| | Determination of N ₂ O | | | | | |
| | Thermostated Valve Oven | 1 | | | | |
| | 10 Port Electrically Actuated | 1 | | | | |
| | Valve | | | | | |
| | Solenoid-Controlled Gas Valve | 1 | | | | |
| | for control of the backflush to | | | | | |
| | vent less for backflush of | | | | | |
| | moisture | | | | | |
| | Additional on-column injector, | 1 | | | | |
| | EPC circuit | | | | | |
| | Second Carrier Gas EPC w/o | 1 | | | | |
| | Injector port used for the | | | | | |
| | control of the ECD Make-up | | | | | |
| | gas. | | | | | |
| | Internal Whisper-Quiet Air | 1 | | | | |
| | Compressor, 220-240V; | | | | | |
| | Moisture and Hydrocarbon | | | | | |
| | Trap | | | | | |
| | 3' x 1/8" S.S. Porapak Q packed | 1 | | | | |
| | column | | | | | |
| | Hayesep D 3 m 1/8" AD 2 mm | 1 | | | | |
| ** 1 | ID Mesh 80/100 | 1 | | | | |
| Headspace | Static Headspace Sampler, ~42 | 1 | | | | |
| Autosampler | Positions | | | | | |
| | Oven: 6 Positions; Touch | | | | | |
| | Screenless with mounting unit | | | | | |
| | and rear injector (loop-filling- | | | | | |
| | port) | 1 | | | | |
| | 4 relay board for GC retrofit, | 1 | | | | |
| Nitrogan | with ext. jack | 1 | | | | |
| Nitrogen generator | Nitrogen GC HC | 1 | | | | |
| | Air compressor | 1 | | | | |
| | CPU | 1 | | | | |
| | Base | 1 | | | | |







| No. | Technical specification | Quantity | Unit | Total | * | ** |
|-------------|--|----------|-------|-------|------------|---------|
| | | | Price | Price | Compliance | Remarks |
| | HG Basic 260 H ₂ High purity: | 1 | | | | |
| | 99.9999% | | | | | |
| Accessories | 100 pcs VialR20, clear/ HS- | 10 | | | | |
| | CTC | | | | | |
| | 100 pcs Septa R20/BK dark | 20 | | | | |
| | grey | | | | | |
| | 100 pcs Alu-Cap R20-L/W | 20 | | | | |
| | Chambers for sampling | | | | | |
| | | | | | | |
| | | | | | | |

(*) compliance must be confirmed in detail by the bidder's offer and technical documentation and will be verified by UNIDO during technical evaluation; (**) if not compliant with UNIDO's required parameters, the invite must indicate his parameters in this column

Terms and Conditions

- 1. The bid shall be delivered before 4:30 pm (EAT), on **03rd February 2025**
- 1. Delivery of the GC shall be completed no later than 45 calendar days from the date of receipt of Notice to Commence, from the Client,
- 2. Delivery Period shall be no later than 45 calendar days to delivery point from the date of signing the purchase order.
- 3. The GC should be supplied complete, with all necessary accessories for it to begin working after installation; A user manual should be provided for trouble shooting when needed. Your bid must be accompanied by adequate technical documentation, catalogue(s) and other material or pertinent information for the items quoted.
- 4. The GC shall be a worldwide known "Brand Name" manufacturer, unused and of the most recent or current models or stock lines, incorporating any recent improvements in design and components. The country of origin of the machine must be clearly stated for each accessory of the equipment.
- 5. Bidders must demonstrate that they are approved importers or sales agents for the manufacturer of the equipment being proposed. Where a bidder is a third-party reseller, the bidder should demonstrate the supply chain and provide a letter to prove the manufacturers authorization to offer their equipment through this channel. Bids without a manufacturer's authorization letter may be rejected.
- 6. Technicians should be trained for at least five days on the operation and maintenance of the equipment after installation is complete.
- 7. Offers to be made in English. AfrII reserves the right to accept all or part of your offer. We will not be bound to accept the lowest tender nor to assign a reason for the rejection of any tender
- 8. Bidders must include details of warranty conditions and an overview of the recommended service intervals to adhere to warranty conditions.
- 9. Bidders include in their offer the list of manufacturers' service outlets in/nearest to Uganda
- 10. The cost proposal must be all-inclusive of fees or taxes. Additional costs cannot be included after award, and revisions to proposed costs may not be made after submission







unless expressly requested by AfrII should the offerors proposal be accepted. Nevertheless, for the purpose of the proposal, Offerors must provide a detailed budget showing major expense line items. Offers must show unit prices, quantities, and total price. All items, services, etc. must be clearly labeled and included in the total offered price. All cost information must be expressed in **USD**.

| Company Name of Bidder: | | Contact person: |
|-------------------------|--|-----------------|
|-------------------------|--|-----------------|

Address of Bidder: _____ Signature:

Date: _____ Email:

To ensure consideration, your complete, detailed bid must be submitted by **03rd February 2025** 4:30 pm (EAT), in a sealed envelope to the following address:

Plot 1544, Koire Close, Off Old Kiira Road, Bukoto Tel: +256768 229 363; or as pdf by Email to:

cbit.mwe@afrii.org copy to info@afrii.org

Attention: Technical Lead, CBIT II

Confidentiality

All proprietary information provided by the bidder shall be treated as confidential and will not be shared with potential or actual applicants during the solicitation process. This includes but is not limited to price quotations, cost proposals and technical proposals.

Gender consideration

Africa Innovations Institute is an inclusive non-discriminative institution committed to gender equality and promoting inclusivity. Women-led firms are encouraged to bid

<u>Prohibited practices and institutional policies</u>- The offerors should ensure that they comply with AfrII, CCD-MWE, and CI-GEF policies on anti-corruption, anti-terrorism and other prohibited practices (<u>https://www.conservation.org/docs/default-source/gef-documents/prohibited-practices.pdf?sfvrsn=f1e1d9f3_0</u>)