

TERMS OF REFERENCE FOR CONSULTANCY TO CONDUCT DATA VERIFICATION AND REISSUANCE OF CERTIFICATES TO VPA6 HOUSEHOLDS

1. Introduction and background

Biogas digesters allow the production of sustainable fuel from organic waste through anaerobic digestion. The biogas can be used as a clean source of cooking fuel while the slurry from the digester is a very good fertiliser.

The *Africa Biogas Partnership Programme (ABPP)* is a partnership between Hivos and SNV in supporting national programmes on domestic biogas in five African countries. The Programme aims at constructing 100,000 biogas digesters in Ethiopia, Kenya, Tanzania, Uganda, and Burkina Faso providing about half a million people access to a sustainable source of energy by the year 2019.

The overall objective of the ABPP is to contribute to the achievement of the Sustainable Development Goals through sustained construction of domestic biogas digesters as a local, sustainable energy source. This will be fulfilled through development of a commercially viable and market-oriented biogas sector.

The Programme is financially supported by the Directorate General for International Cooperation (DGIS) of the Dutch Ministry of Foreign Affairs and SNV – Netherlands Development Organisation. Hivos carries out the role of fund and programme manager, operating from Nairobi. SNV provides capacity building services in the five countries and takes responsibility for knowledge management at the international level.

The Kenya Biogas Program (KBP) is the lead entity implementing the Africa Biogas Partnership Program (in Kenya). KBP envisions a commercially viable domestic biogas sector that would contribute towards food security, clean/sustainable use of energy and environmental conservation.

The Kenya Biogas Program (KBP) envisions all Kenyan households accessing and utilizing green energy for their homes and green fertilizer for their farm. The program started rolling out bio-digester technology in Kenya in 2009, with over 16,000 bio-digesters installed across the country between 2009 and 2015. KBP aims to achieve installations of over 10,000 more bio-digesters by 2019, to scale affordable clean energy for domestic use and bio-slurry fertilizer for increased agricultural productivity.

KBP is seeking assistance to undertake the task of reissuance of certificates dubbed “re-contracting” and data collection in order to meet its data quality requirements, fill in any missing data required to calculate and monitor emission reductions by African Biogas Carbon Programme (ABC) – Kenya –VPA6 (for digesters installed since October 23rd 2015 to date) and compile the report. A total of **2600 households (HH)** are targeted under this task.

2. Objectives

The objectives of the assignment is to verify data quality and fill in any gaps that are required to fulfil carbon monitoring survey requirements as stipulated by the Gold Standard for successful monitoring and verification of the emission reductions accumulated under KBP activities

In Collaboration With

3. Eligibility Criteria

The ideal candidate should have the following qualifications and experience,

- a) Entities or individuals with demonstrable working experience and engagement with biogas stakeholders and clear understanding of the operational environment and context
- b) Biogas professionals or entities with proven qualifications (attach relevant documents including training and professional certificates including referees), and operational experience working with small-scale AD systems including but not limited to;
 - o Knowledge of O & M procedures
 - o Troubleshooting/diagnosis skills
 - o Design knowledge of the AD models in the sector (candidate must disclose which models they are familiar with)
 - o Bio-slurry use and management
- c) Proven experience in carrying out research and survey with teams
- d) Assessment, analytical, statistical and planning skills
- e) Strong and effective stakeholder engagement/mobilisation and management skills
- f) Must declare no conflict of interest
- g) Must not have pending litigation cases

4. Scope of Work

The consultant will conduct the following tasks:

- a) **Desk review**-After awarding the contract, the consultant will start with a desk review of database in consultation with KBP
- b) **Preparations for data collection**-The consultant will select a field survey team and conduct an intensive training for all team members clustered in regions. The consultant shall establish a procedure to control reliability of data collected in the field.
- c) **Data collection** -The consultant, with his team will fill in all missing data in the database through physical verification of the households.
- d) **Re-contracting through issuance of Certificate of Warranty for all visited households**
Certificates of warranty shall be given to all households visited. The consultant shall ensure the certificates are all signed by the households, and the copies remaining are submitted to KBP. The complete checklist is as tabulated below;

| | |
|------------------------------|---|
| DATA COLLECTION | <i>We are using taroworks app for data collection; the tool is GPS CAPTURE- EXISTING PLANT V2</i> |
| WARRANTY CERTIFICATES | The details on the allocation list should be transferred <i>as is without any modification</i> . <i>Should there be any material difference, the same should be noted under description or notes.</i> |
| | The following entries must be made on the certs as contained in the plant list: |
| 1 | Unique code |
| 2 | Client name |
| 3 | GPS co-ordinates |
| 4 | County |
| 5 | Plant model/type |
| 6 | Plant size |
| 7 | Date of commissioning |
| 8 | BCE name and Signature |
| 9 | Client signature |
| GPS CAPTURE TOOL-V2 | The following entries MUST be made; |
| 1 | GPS co-ordinates |
| 2 | Photo of the bio-digester-the unique code MUST be written on the plant |
| 3 | Photo of the certificate (Front and back)- MUST be legible |

e) **Data Quality Verification Report 2018**-Based on the former tasks, the consultant prepares the summary report exercise. The final report should contain the following table of contents:

- Executive Summary;
- One chapter with a detailed and verifiable description of the methodology, training of surveyors and implementation of each survey;
- Several chapters analysing the Findings and observations made during the exercise
- Challenges

Conclusions and Recommendations

5. Expected output (deliverables)

- a. **Taroworks** -The Taroworks mobile app will be used for data collection in the field. The consultant will ensure the team is well versed with the use of the **GPS CAPTURE EXISTING PLANT V2** tool to collect the data.
- b. **Raw data files and hard copies of completed verification forms**-The consultant should provide hard copies of all plants visited with clear status of each plant in excel sheets with the raw data for input into the final report.

- c. **Certificate of Warranty** -The consultant shall provide a report on how many households were issued with the certificates for signing, as well as capture clear images of the copies of the signed certificates. It is expected that regardless of the status of the digesters, 100% of visited households shall be issued with the certificates during the field visit and the same shall be signed by the households.
- d. **Draft data verification Report**-The consultant will present a draft Report and request feedback from KBP. KBP will provide feedback within 2 weeks (or 10 working days) after delivery.
- e. **Final data verification Report**-The final report will be approved if satisfactory by KBP.

5. Time schedule.

The assignment is planned for the period Mid-December to 28th February 2019. A draft report should be ready by 15th February 2019. The target date for the final report is 28th February 2019.

The consultant is expected to propose a time schedule at the start of the assignment with **intermediate milestones** (selection of data collectors/ field survey team, field data collection, data cleaning and entry, data processing, cleaning and analysis, frequency of interim reports, draft report writing, and revision of report).

6. Financial proposal.

The financial proposal should follow the template attached overleaf.

| Proposed Financial proposal for data collection and households re-contracting 2018 | | | | | | |
|--|-------|-----------------|------------|------|--------------|--------------------|
| Task | Unit | Unit cost (KES) | # of units | Freq | Totals (KES) | Sub totals |
| Training costs | | | | | | |
| Transport refunds for Field Assistants & Coordinator | Trips | | | | | A |
| Accommodation costs for trainees | Pax | | | | | |
| Meals and refreshments | Pax | | | | | |
| Stationery | Pax | | | | | |
| Training allowance | Pax | | | | | |
| Venue hire and projector | Days | | | | | |
| Undertaking Surveys | | | | | | |
| 1. Household visits (HH) | | | | | | |
| Field per diem (food accommodation, local transport, airtime) | Days | | | | | B |
| Remuneration | Pax | | | | | |
| Coordination costs | | | | | | |
| Coordinator remuneration | Days | | | | | C |
| Per diems for supervision | Days | | | | | |
| Printing costs | Batch | | | | | D |
| Total reimbursable costs | | | | | | X=(A+B+C+D) |
| Consultancy fee | | | | | | Y |
| Less withholding tax (5 % of consultancy) | | | | | | |
| Net consultancy fee | | | | | | |
| Total Cost of Consultancy | | | | | | (X+Y) |