**Green People’s Energy – Ethiopia**

PN: 18.2176.8 – 080.00

**Terms of Reference (ToR)**

**Supply and installation of water tank and stand at 20 locations in Amhara and Oromia**

1. **Background**

Commissioned by the German Ministry of Economic Cooperation and Development (BMZ), the GIZ project Green People’s Energy for Africa aims to improve the conditions for decentralized energy supply in nine countries of Sub-Sahara Africa, amongst them Ethiopia.  Since the inception of its country project in Ethiopia in December 2019, Green People’s Energy Ethiopia (hereinafter: GBE) collaborates closely with the Ethiopian Ministry of Water, Irrigation and Energy (MoWIE) and a variety of public and private sector stakeholders.

The main output areas of the Ethiopian country project of GBE are as follows:

1. Supporting local initiatives to uptake and use of renewable energy (RE) technologies thereby improving their impacts on the livelihoods of the off-grid community
2. Increasing vocational training capacities for solar PV
3. Promote use of solar PV energy for enhancing social services and production
4. Support decentralized, local energy supply and service provision initiatives

As part of output area 3 - promotion of solar PV energy for enhancing social services and productive use, GBE intends to introduce 20 solar powered irrigation systems (SPIS) in Amhara and Oromia regions. Under this project, small holder farmers typically with farm field sizes of 2000-3000m2 (ca. 0.25ha) shall be supported with SPIS technology on cost sharing basis. The project is implemented in collaboration with another GIZ project, the Green Innovation Center (GIC) which works on agricultural value chain development. GBE therefore targets beneficiaries of GIC – local farmers in different regions including Amhara and Oromia. This is to ensure synergy and efficiency but also to follow up with the intervention and maximize its impact thus warranting sustainability.

This ToR concerns the supply of water storage tank and construction of structure for the application of SPIS in Alefa Basi and Amude kebeles of Amhara and Oromia regions, respectively. GBE hereby seeks to hire suitable contractors to supply and construct water storage facility at the farms of selected farmers in the specified kebeles/locations of Amhara and Oromia regions.

1. **Objectives**

The objective of this assignment is to engage two suitable contractors in doing the following:

* To equip 20 farms with water storage facilities in order to enable them to store and use pumped water for irrigation purposes.

1. **Description of works**
   1. **Location**

The following table lists the location of the sites where the well digging and installation of the water storage facilities is going to take place. Once contract is awarded, the GPS coordinates for all sites will be provided to the contractors.

Table 1 Locations of well construction and elevations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Region/ zone/ woreda** | **Kebele** | **Site code** | **Altitude, (m a.s.l.)** |
| 1 | Amhara/ West Gojam/ Bure Zuria | Alefa Basi | AM-AL-1 | 1998.5 |
| 2 | AM-AL-2 | 1994.75 |
| 3 | AM-AL-3 | 1998 |
| 4 | AM-AL-4 | 1998.42 |
| 5 | AM-AL-5 | 1994.4 |
| 6 | AM-AL-6 | 1995 |
| 7 | AM-AL-7 | 1997.03 |
| 8 | AM-AL-8 | 2000 |
| 9 | AM-AL-9 | 2000.46 |
| 10 | AM-AL-10 | 2002.86 |
| 11 | Oromia/ Arsi/ Doddota | Amude | OR-AM-1 | 1597 |
| 12 | OR-AM-2 | 1597 |
| 13 | OR-AM-3 | 1596 |
| 14 | OR-AM-4 | 1598 |
| 15 | OR-AM-5 | 1600 |
| 16 | OR-AM-6 | 1600 |
| 17 | OR-AM-7 | 1600 |
| 18 | OR-AM-8 | 1603 |
| 19 | OR-AM-9 | 1598 |
| 20 | OR-AM-10 | 1597 |

**NB: During the assignment, the contractor is to conduct the works at two farms simultaneously, i.e., in parallel**.

* 1. **General system design**
* The water storage facility shall consist of a 3m high (above ground) four-pole-stand with cross-braces, all being made of anti-rust painted angle steel and carrying a 2mx2m platform with a 3000liter vertically oriented, cylinder-shaped water tank (“Roto-type”). Specifications of material and the construction design are provided in the BoQ and design.
  1. **General aspects of the works to be done (details in the annexes)**
* The contractor shall demonstrate high quality of works and service
* The technical design and implementation of the water storage facility construction must be according to the design and the BoQ.
* The contractor must explicitly indicate in the bid the specifications (material, diameter, height, thickness, etc) and capacity (in litres or m3) of the water storage tanker including the brand (manufacturer).

1. **Responsibilities of the contractor**

* The Contractor shall perform the works in accordance with the contract documents.
* The Contractor shall be fully responsible for all materials delivered and works executed by the Contractor as well as for safety precautions in connection with the works.
* The Contractor shall be responsible for all acts and omissions of the sub-contractors, of any of the Contractors’ agents or employees or of any others performing any of the works under this ToR.
* The Contractor will be responsible to provide and transport to site all materials required for all the works and the installation. If materials delivered are found technically faulty or damaged before the installation, the contractor is responsible.
* The contractor guarantees against poor workmanship and poor quality of materials of the works under this ToR. for **six (6) months** (defects liability period) after the completion and preliminary handing over. Such shall be clearly indicated in the technical offer of the Contractor.

1. **Responsibilities of GIZ GBE**

* GBE shall make available data, design, documentation and information required by the Contractor and available to it for carrying out the works under this ToR.

1. **Time schedule**

The contractor is going to start the works at the end of the rainy season, on 15th September 2021.

The overall work (all 20 water tankers and support frames supply and install) together with submission of report shall take place within a maximum of 40 (forty) calendar days after the signing of contract by the contractor. Final date for completion of works cannot go beyond 25th October 2021. In order to ensure the completion of all the work within schedule at every lot, the **contractor shall implement the project at least on two farms simultaneously.**

1. **Sample installations**

The contractor shall complete one supply and installation of water storage facility as per this ToR at one farm site and let GIZ GBE or its appointed supervising consultant conduct inspection and quality-control. Only upon GIZ GBE’s (or its consultant’s) approval shall the contractor continue to the next works. If the performance of the contractor is not up to the expectations, GIZ GBE reserves the right to cancel the contract.

1. **Others**

GIZ GBE and its hired supervising engineer will inspect all materials before they are allowed for use, installation or application.

# Remuneration

Payment related issues and contractual agreement shall be concluded according to the prevailing GIZ rules regulations and guidelines.

An advance payment can be provided ahead of the start of the works.

A retention payment of 5% of the contractual payment will be withheld until the end of the defect’s liability period (= defects and liability period after preliminary hand-over).

# Management of Assignment

The Contractor is accountable to the assigned supervisor by the regional offices of GIZ Energy Programme Ethiopia and/or independent supervisor that may be assigned by GIZ GBE. The Contractor is further accountable to - and should keep informed the other GBE experts based in Addis Ababa including the Country Project Manager of GBE Ethiopia.

# Bidding remarks

* Interested bidders have to indicate their prices for each of the kebeles (i.e., one financial proposal for Alefa Basi kebele and one financial proposal for Amude kebele).
* Following the technical and financial assessment of the offers, the company who is among the technically and financially best ranked will be awarded a contract.
* All required material needs to be delivered on-stock within 10 (five) days from contract signing.
* Bidders have to submit a technical proposal, including their company profile, installation experience, CVs of proposed staff and other documents as stated in the respective annexes to GIZ.
* Bidders have to submit a **separate financial proposal** in a **sealed separate envelope** with the proposed pricing for works, encompassing all supplies and services and using the cost calculation templates well as the summary sheet in the respective annexes.

**Annex I: BoQ/Financial schedule**

Separate BoQ/financial schedule provided

**Annex II: Water storage facility design, specification and description**

Separate water storage facility design provided.