

Terms of reference (ToRs) for the procurement of services below the EU threshold

Business model design and piloting, identifying market building opportunities	Project number/ cost centre: 14.2275.7-031.00
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0. List of abbreviations

AVB	General Terms and Conditions of Contract (AVB) for supplying services and work 2018
ToRs	Terms of reference
EnDev	Energising Development
PUE	Productive use of energy
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
PV	Photovoltaik
MoWIE	Ministry of Water, Irrigation and Energy
CV	Curriculum Vitae

The Sustainable Energy for Smallholder Farmer project is searching for **two consultants – a Agricultural market development specialist as well as a Solar energy / PUE expert (covering the technical feasibility aspects of the assignment)** – who can support the GIZ team in business model design and piloting, identifying market building opportunities and capacity building support packages.

Energising Development (EnDev) is a global multi-donor partnership program implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) that facilitates market-based access to modern energy services in 20 countries worldwide.

In Ethiopia, EnDev cooperates closely with the Ministry of Water, Irrigation and Energy (MoWIE) in providing access to modern energy services to Ethiopian households, social institutions and SMEs through market development for solar PV, mini-grid, hydro and energy efficient cook stoves. In line with its work on productive use of solar energy (PUE), EnDev Ethiopia will implement a project on sustainable energy for smallholder farmers. The focus will be on developing and implementing sustainable business cases for PUE in the horticulture and dairy value chain in Ethiopia, i.e. solar cooling, renewable energy hub, through capacity building, awareness-creation and piloting business cases.

For smallholders, the lack of access to modern energy sources for productive use is a main limitation to development and improved livelihoods. Energy related costs often represent one of the highest agribusiness operating costs. Some renewable energy technologies have been developed already, however, very few can be called “accessible” to smallholder farmers to date due to high investment costs. A major reason for this situation is the lack of scalable, innovative business cases which ensure that already available PUE technologies and services reach smallholder farmers and local agribusiness enterprises.

1. Context

The project duration spans three years (01/2021 - 12/2023) and is divided into three phases:

1. **Inception** to determine the grounds for implementation of the business cases for the horticulture and dairy value chains with high impact on small holder farmers and their livelihoods through a baseline study that includes needs assessment and market assessments of key technologies/services needed for the business cases.
2. **Implementation** of the business cases through three main mechanisms - piloting, capacity building and innovation to improve access to Productive Use of Energy services and technologies across the value chains.
3. **Finalization** the results of the project will be presented to a larger community of interested regional and international organizations in order to promote the further scaling up of the business cases.

Currently, the project is in the implementation phase, which will last until the end of Q4 2021.

And for that phase, GIZ is looking for two consultants to support the development of **innovative scalable PUE business models for**

- **The cooling of milk (and dairy products), as well as**
- **For a renewable energy community hub**

* All page indications are excluding graphs, pictures and tables.

and the piloting of the same.

2. Tasks to be performed by the contractor

The contractor is responsible for providing the following services:

	<i>Work package</i>	<i>Expert and expert days (est.)</i>	<i>Deliverable</i>
d.1.	<p>Kick-off and preparation:</p> <ul style="list-style-type: none"> - Kick-off meeting with the GIZ team to clarify expectations on the assignments, modalities of executing the works etc. - Review documents provided by GIZ such as baseline studies and market assessments. 	<p>Expert 1 with 2 expert days supported by Expert 2 with 1 expert day</p>	n.a.
d.2.	<p>Develop, in consultation with the GIZ team, innovative scalable business models based on the data collected during the project's inception phase for:</p> <ul style="list-style-type: none"> - The cooling of milk and other dairy products (min. 2 business cases) as well as - For a renewable energy community hub (min. 2 business cases) <p><i>Incl. field trip for researching or interviewing stakeholders (to where and interviewing who in agreement with GIZ team)</i></p>	<p>Expert 1 with 20 expert days, supported by Expert 2 with 6 expert days</p>	<p>Minimum of 4 business case models, each with:</p> <ul style="list-style-type: none"> - Detailed quantified analysis (Financial planning, Cost-benefit analysis, cost structure, break even analysis, revenue model) - Rationale of how the business model creates, delivers, and captures value, in the economic, social, cultural and environmental context. (3-4 pages*) - Value proposition (0.5-1 page*)
d.3.	<p>Design a market building concept for solar cooling for dairy products that support the business model pilot, incl. suggestion for market linkage support to boost commercial rationale of buying/selling PUE technologies for farmers and PUE companies</p>	<p>Expert 1 with 20 expert days supported by Expert 2 with 6 expert days</p>	<ul style="list-style-type: none"> - Report including the concept and feasible suggestions which can be locally implemented (max. 8 pages*)

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	<i>Incl. field trip for researching or interviewing stakeholders (to where and interviewing who in agreement with GIZ team)</i>		
d.4.	Research and identifying PUE technologies and services available in the market (local, regional, international) necessary for the piloting of business models identified.	Expert 1 with 5 expert days supported by Expert 2 with 12 expert days	- Summary of possible technology and service suppliers (local, regional, international), incl. prices, technical specification, contact, business address etc. (1 excel sheet)
d.5.	Research and identifying activities that support the scaling of the business models, i.e. support packages for the benefit of the actors along the value chain (e.g. technical trainings, soft skills trainings, demonstration events, workshops etc.)	Expert 1 with 5 expert days supported by Expert 2 with 2 expert days	- Summary of recommendations for business model support packages available locally, incl. description of activity, prices (if applicable), contacts etc. (1 excel sheet)
d.6.	Assess the opportunities of access to finance facilitation for cooperatives and farmers and give recommendation how this could be implemented in the local market. <i>Incl. field trip for researching or interviewing stakeholders (to where and interviewing who in agreement with GIZ team)</i>	Expert 1 with 10 expert days supported by Expert 2 with 2 expert days	Report and recommendations (5-8 pages*), incl. - Assessment of the interest of financial intermediaries to offer suitable financial products for cooperatives and farmers - Mapping of financial intermediaries and relevant stakeholders in the market - Building connections with FI which would be interested in designing adequate financial product.
d.7	Finalization of assignment, debriefing and Wrap-up	Expert 1 with 3 expert days supported by Expert 2 with 2 expert days	All finalized deliverables and other documents produced and relevant for the assignment

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Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at particular locations:

Milestone	Deadline/place/person responsible
Briefing and Kick-off	First week after contract award, Addis Ababa, Experts and GIZ team
Business models developed and ready to be piloted	Submission of deliverables (see above) and presentation of business models by Expert 1, Addis Ababa, latest 1,5 month after contract award
Market building concept for solar cooling for dairy products finalized	Submission of deliverables (see above) by Expert 1 latest 2,5 months after contract award
Available PUE technologies and services identified	Submission of deliverables (see above) by Expert 2 latest 1,5 months after contract award
Opportunities of access to finance facilitation identified	Submission of deliverables (see above) by Expert 1 latest 3,5 months after contract award
Debriefing and finalization of assignment	Experts and GIZ team, towards contract end

Please note: All documents developed under this contract will be property of GIZ.

Period of assignment:

GIZ shall hire the contractor for the anticipated contract term, from **15 November 2021 to 31 March 2022**, with a **total number of 96 expert days (65 expert days for expert 1 and 31 expert days for expert 2) within this period.**

Important: The period of assignment may be shifted in response to health and safety concerns and according to restrictions of movement and/or other directives from the Government of Ethiopia related to the ongoing Corona pandemic or security-related issues that might put the save and effective undertaking of the mission at risk.

3. Concept

the bidder should include on how and when the task will be implemented.

In the bid, next to the CV and references, the bidder is required to show how the objectives defined in Chapter 2 are to be achieved in a technical concept of a maximum of 5 (five) pages*, under consideration of the below specific method-related requirements (technical-methodological concept).

Technical-methodological concept

Strategy: The bidder is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 0). Show reflection and full understanding of the tasks and objective. Following this, the bidder presents and justifies the strategy with which it intends to provide the services for which it is responsible (see Chapter 2).

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The bidder is required to present the actors relevant for the services for which it is responsible and describe the **cooperation** with them.

The bidder is required to describe the key **processes** for the services for which it is responsible and create a schedule that describes how the services according to Chapter 2 are to be provided. Provide a rough workplan including timeline on how and when the processes will be implemented, managed, and monitored during the assignment.

Other specific requirements

Technical capacities: Reference research projects on agricultural business modelling and solar PV solutions (esp. cooling) for smallholder agricultural sector.

Focus on women and youth: As women and youth often play a key role in the dairy and the horticulture value chains the project puts a special focus on this target group. This needs to be reflected in the concept.

4. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 6), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points.

Expert 1 – Agricultural market development specialist

Tasks of expert 1

- Develop of innovative scalable business models for:
 - The cooling of milk and other dairy products as well as
 - For a renewable energy community hub
- Design of a market building concept for solar cooling for dairy products that support the business model pilot
- Assessment of the opportunities for access to finance facilitation for cooperatives and farmers and give recommendation how this could be implemented in the local market
- Qualifications of expert 1
- Education/training (2.2.1): Master's degree in renewable energy/solar energy, business, business development or related field.
- Language (2.2.2): business fluency in English, knowledge of local languages is a plus
- General professional experience (2.2.3): 15 years' experience in in the implementation of smallholder agricultural projects with a market-based approach
- Specific professional experience (2.2.4): experience in the local dairy sector is a plus
- Regional experience (2.2.6):
 - East Africa (Uganda, Kenya, Ethiopia): 1-2 years
 - Ethiopia: 5 years

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Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

Expert 2 – Solar energy / PUE expert

Tasks of expert 2

- Research and identifying PUE technologies and services available in the market (local, regional, international) necessary for the piloting of business models identified.
- Support of expert 1 and covering the technical feasibility aspects of this assignment

Qualifications of expert 2

- Education/training (2.2.1): Master's degree in renewable energy/solar energy, business, business development or related field.
- Language (2.2.2): business fluency in English, knowledge of local languages is a plus
- General professional experience (2.2.3): 15 years' experience in the implementation of solar energy PUE projects with a focus on market-based access to solar energy in smallholder agriculture
- Regional experience (2.2.6):
 - East Africa (Uganda, Kenya, Ethiopia): 1-2 years
 - Ethiopia: 5 years

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

5. Costing requirements

Assignment of personnel

Expert 1: Assignment in country of assignment for 65 expert days

Expert 2: Assignment in country of assignment for 31 expert days

Travel

The bidder is required to calculate the travel by the specified experts and the experts it has proposed based on the places of performance stipulated in Chapter 2 and list the expenses

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separately by daily allowance, accommodation expenses, flight costs and other travel expenses.

6. Requirements on the format of the bid

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) is to be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). It must be legible (font size 11 or larger) and clearly formulated. The bid is drawn up in English (language).

The complete bid shall not exceed 10 pages (excluding CVs).

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages. The CVs must clearly show the position and job the proposed person held in the reference project and for how long. The CVs can also be submitted in English (language).

If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment.

Please calculate your price bid based exactly on the aforementioned costing requirements. In the contract the contractor has no claim to fully exhaust the days/travel/workshops/ budgets. The number of days/travel/workshops and the budget amount shall be agreed in the contract as 'up to' amounts. The specifications for pricing are defined in the price schedule.

7. Option

Not applicable

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