

Terms of reference (ToRs)

Project title: EnDev – African Biodigester Component (ABC)	Transaction Number: 83427345
Country: Kenya	
Subject of the tender procedure: Result Based Reimbursement Facility for the Installation of Small-Scale Biodigesters	

0. List of abbreviations	2
1. Context.....	3
2. Tasks to be performed by the contractor	7
3. Technical-methodological concept.....	10
3.1. Strategy – 10%.....	10
3.2. Learning and innovation – 20%	10
3.3. Project management activities – 30%.....	10
3.4. Proposed sales – 20%	11
3.5. Sustainability requirements – 10%	11
3.6. Historical sales (section 1.6 of the assessment grid)	11
4. Costing requirements	12
4.1. Costing for the installed biodigesters to be reimbursed inline with the requirements of the RBR facility	12
5. Requirements on the format of the tender	12
6. Data Protection.....	13

Subject of the tender procedure: Result Based
Reimbursement Facility for the Installation of Small-Scale
Biodigesters

Transaction number: 83427345

0. List of abbreviations

API	Application Programming Interface
ABC	African Biodigester Component
BMZ	German Federal Ministry for Economic Cooperation and Development
DANIDA	Danish International Development Agency
DGIS	Netherlands Ministry of Foreign Affairs
EnDev	Energising Development
GIZ	Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ)
IVA	Independent Verification Agent
KBP	Kenya Biogas Programme
NORAD	Norwegian Ministry of Foreign Affairs and the Norwegian Agency for Development Cooperation
RBF	Results Based Financing
RVO	Netherlands Enterprise Agency
SDC	Swiss Agency for Development and Cooperation
ToRs	Terms of reference

Transaction number: 83427345

1. Context

a) About EnDev

The **Energising Development (EnDev)** programme is a strategic partnership of likeminded donors and partners to promote energy access. EnDev is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), the Netherlands Ministry of Foreign Affairs (DGIS), the Norwegian Ministry of Foreign Affairs and the Norwegian Agency for Development Cooperation (NORAD) and the Swiss Agency for Development and Cooperation (SDC). The programme is implemented in close cooperation with leading international organizations and key local stakeholders. EnDev is co-managed by the *Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH* and the Netherlands Enterprise Agency (RVO.nl). EnDev works in more than 20 countries across Africa and Asia.

EnDev Kenya was launched in 2006 and is composed of two core components i.e. cooking energy, promoting access to modern and improved cooking solutions (ICS) as well as off-grid electrification, promoting access to stand-alone solar systems and more recently biogas technologies. EnDev Kenya interventions target households, social institutions, and small businesses particularly in rural and peri-urban areas. EnDev Kenya is implemented by GIZ, SNV, Practical Action, Energy for Impact and CLASP covering at least 20 counties in Lake Victoria, Western, Central, Lower Eastern, Coast and Northern regions in Kenya.

EnDev Kenya portfolio consists of the following projects/initiatives:

- EnDev Core
- EnDev African Biodigester Component (ABC)
- Sustainable Energy for Small Holder Farmers (Ethiopia, Kenya and Uganda)
- Social Impact Incentives' (SIINC) project
- EnDev Innovation Fund - Promotion of PUE consumer financing through VSLAs
- Smart Communities Coalition Innovation Fund (SCCIF)
- Kenya Solar Waste Collective Producer Responsibility Organisation (PRO) Project

b) About the African Biodigester Component (ABC)

Funded by the Dutch Ministry of Foreign Affairs (DGIS), the Danish International Development Agency (DANIDA) and the European Union (EU), the African Biodigester Component (ABC) aims to support the growth and sustainability of a commercial biodigester sector in Sub-Saharan Africa. The intervention will result in the installation of at least 50,000 small scale biodigesters by 2025 across Burkina Faso, Kenya, Mali, Niger and Uganda providing energy access for 250,000 people. ABC is managed by RVO (the Netherlands Enterprise Agency).

The **ABC project in Kenya**, herein referred to as 'ABC Kenya' and to be implemented in 2022 - 2025, aims at facilitating a shift of the biodigester market from its pioneering to the expansion phase with focus on the installation of over **20,000 small-scale** and 250 medium scale **biodigesters**. The project is implemented by a consortium of GIZ and SNV in partnership with ABPL, the African Bioenergy Partnership Limited (ex-KBP – Kenya Biogas Programme). This will be achieved by means of a well-balanced mix of demand-side, supply side, financing and enabling environment interventions, geared at boosting demand and supporting small-scale and medium scale biodigester companies in acquiring more clients. A Result-Based Reimbursement facility for small-scale biodigesters will be the core instrument

Transaction number: 83427345

of the African Biodigester Component (ABC) Project. Through the provision of Result-Based Reimbursements, the Project expects to provide the last push needed for the biodigester market to reach a critical mass of clients within Kenyan farmers. This is expected to enable suppliers of small-scale biodigesters to achieve economies of scale, the market to be firmly rooted in the expansion phase and become self-sustainable.

Beyond the Result-Based Reimbursement support, the project:

- Stimulates the adoption of biodigesters through **information and awareness raising** and maximise end-user benefits through the valorisation of biogas and other by-products, such as bio-slurry and compost.
- Provides **Business Development Support (BDS)** to biodigester companies through an e-learning platform, cohort training as well as one-to-one coaching to achieve the professionalization of the sector. Critical training areas include business formalisation, bookkeeping, staffing, tax compliance, institutional capacity to participate in public tenders, marketing and pitching skills.
- Biodigester companies are able to benefit from **three levels of access to finance (A2F) support:** (i) the general A2F strategy defined with (micro)finance institutions (ii) loans from €25,000 to €250,000 and the effect of (iii) the RBF incentives provided to Financial Institutions providing credits to biodigester customers.
- **Supports the enabling environment** by ensuring the policies, regulations, standards and tax regimes are conducive to the development of biodigester companies. The ABC project will also build the capacity of partner organisations and public stakeholders at national and county level on the benefits of biodigesters.
- Biodigester companies benefit from technical trainings of their own staff, of financial institutions on the benefit of biogas and bioslurry. ABC also supports knowledge creation and **provide market intelligence** (biodigester potential in Kenya, Uganda, Somalia and South Sudan, lessons learnt from biodigester market development...)
- The project strengthens the biodigester business model for end users by supporting the valorisation, application and trading of bio-slurry and bio-slurry enriched compost. The ABC project organizes a yearly **Biogas Valorisation Challenge** rewarding the best biogas valorization option for medium scale biodigesters. The winners are rewarded with a money prize, as well as media coverage.

c) Overview of the Facility

The Result Based Reimbursements Facility of ABC Kenya aims at providing **result based reimbursements** for **pre-agreed results** for eligible biodigester enterprises **operating, having physical presence and legally registered in Kenya** as per the approved ABC Kenya proposal. The results in this context shall be the number of biodigesters systems installed by the participating enterprises. The payments for the results are done after verification by an Independent Verification Agent (IVA) of the ABC Project (KPMG).

The project targets to achieve the installation of over 20,000 small scale biodigesters during the project implementation through participating biodigester enterprises. The aim of the result based reimbursements shall be to facilitate the participating enterprises to deliver the targets but also support the companies to mitigate the temporary market barriers.

Subject of the tender procedure: Result Based Reimbursement Facility for the Installation of Small-Scale Biodigesters

Transaction number: 83427345

The projected sales/installation targets are grouped into 3 quotas and the expected duration during which the sales targets shall be achieved. The payments of the results is also pre-specified for each sales quota and the amounts indicated below are the **maximum possible per sales quota**.

Sales Quota	Expected duration for achievement*	Number of Biogas Plants	Payment per installed digester (EUR/KES)**
Quota 1	January 2023 – December 2023	8,000	Up to EUR 100 / up to KES 12,000)
Quota 2	January 2024 – December 2024	7,000	Up to EUR 75 / up to KES 9,000
Quota 3	January 2025 – August 2025	5,020	Up to EUR 60 / up to KES 7,200
Total		20,020	

*The expected duration is not fixed for each sales quota. The advancement from one sales quota to the next is triggered by the achievement of the sales targets by all the companies regardless of the expected duration

**KES equivalent based on December 2022 exchange rate and may change due to exchange rate fluctuations.

Reaching the different quota depends on the sales of the 35 selected companies in the 4 lots. GIZ will indicate every month if the quota is reached. The reimbursements for the results shall only be made subject to a successful verification process by the Independent Verification Agent (IVA) of the ABC project. The IVA is KPMG and in case of any changes the contractors shall be informed accordingly.

An **operational manual** shall be provided to the selected bidders to provide guidance and requirements for the RBF facility and the structure of the RBF.

d) Purpose of the assignment

GIZ seeks to invite biogas enterprises to submit the filled-in application template which contains the financial proposal (question 4.). The financial proposal is based on the number of biodigesters the enterprises intend to sell as well as associated conditions (sales beyond current baseline, functionality rate, presence / absence of double compost pit and sales in low sales / arid counties). The incentive total amount has been fixed in consultation with the different stakeholders.

The applicants shall propose how they will contribute to the project biogas installation targets (20,020 small-scale biodigesters) in their application as defined in b) Work Package description. Each applicant shall be required to propose realistic targets that shall be potentially achieved during the three years of project implementation. The targets of installed biodigesters shall inform the financial proposal.

Transaction number: 83427345

e) Eligibility criteria

This procedure targets enterprises as well as sole proprietors to ensure maximum participation to this tender. Both enterprises and individuals shall submit their document as stated therein:

i. General criteria for enterprises and sole proprietors

- Existing capacity (knowledge, structures and staff) to deliver the number of biodigesters – as indicated in the application template
- Capacity to properly collect and report data on their sales and customers (using the Taroworks application adopted by RVO, overall coordinator the ABC Project) as described in the application template. Selected companies will be trained on the tool by GIZ.

ii. For enterprises only

- Certificate of Incorporation
- CR12 Certificate
- Tax Compliance Certificate

iii. For individuals

- Kenya Revenue Authority PIN Certificate

f) Process flow and type of contract

The type of the contract shall be a **Contract for Works** where the contractor shall be required to install pre-agreed number of biodigesters to end consumers (Kenyan farmers and households) and reimbursements shall be based on pre-agreed reimbursements per biodigester built / installed in the designated quota. All biodigesters models are eligible up to a capacity of 50m³.

Biodigesters are installed to provide access to clean cooking energy and organic fertilizers in Kenya. Reimbursement can only arise between the signature of the contract of works and the end of the project (30th September 2025). Biodigesters can be built / installed throughout Kenya with a specific bonus reimbursement for sales in low sales / arid counties. This bonus will be paid up to a total of 1,000 biodigesters built / installed in the low sales / arid counties of Garissa, Lamu, Mandera, Wajir, Marsabit, Turkana, West Pokot, and Isiolo. This bonus of 40€ is an addition to the overall reimbursement.

The measureable work in this regard shall be the verified number of biodigesters that is delivered by the contractor (the verification methodology will be annexed to the contract). The reimbursement is based on 4 incentives and 1 bonus:

- Gas in the Kitchen (GIK) incentive – upon verification that the clients have gas in the kitchen
- Sales Additionality Incentive (SAI) – based on the difference between the sales baseline and verified sales by the IVA
- Plant Sustainability Incentive (PSI) – upon verification of the functionality rate of the biodigesters 12 months after installation (3 months in 2025)
- Bioslurry Incentive (BSI) – upon verification of the existence of a double compost pit
- Bonus Incentive for Implementation in selected low sales arid counties – upon verification of construction / installation in specific low sales / arid counties. The quota for this bonus is 1000 biodigesters.

Transaction number: 83427345

2. Tasks to be performed by the contractor

a) Scope and description of the tasks

GIZ is seeking to engage with Kenyan registered biodigester enterprises and individuals, herein referred as the contractors or bidders, to build / install over **20,020** small scale biodigesters (0 to 50m³). GIZ will engage up to **35 biodigester enterprises** who meet the eligibility criteria for participating in the assignment. **The biodigester enterprises could bid for only 1 of the 4 lots presented below.** Reaching the different quota depends on the sales of all companies in the 4 lots. GIZ will indicate every month if the quota is reached.

Lot	Type of biodigester company	Number of companies to be selected	Quota 1 (Reimbursement up to 100€ per verified biodigester)		Quota 2 (Reimbursement up to 75€ per verified biodigester)		Quota 3 (Reimbursement up to 60€ per verified biodigester)		Total verified sales
			Expected verified sales / company	Total verified sales	Expected verified sales per company	Total verified sales	Expected verified sales per company	Total verified sales	
1	More than 1200 sales / year	1	2400	2400	2200	2200	1500	1500	6100
2	200 to 1200 sales / year	6	470	2820	450	2700	340	2040	7560
3	100 to 200 sales / year	8	150	1200	140	1120	100	800	3120
4	0 to 100 sales / year	20	79	1580	49	980	34	680	3240
Total		35	8000		7000		5020		20020

The bidders can only bid to 1 lot based on their **institutional capacity** and **past sales performance**. **The contractors will be evaluated on their past sales performance and application.** They should therefore propose **realistic** and **achievable** sales targets.

The contractors are responsible for achieving the allocated sales targets for the installed biodigesters. The allocated targets shall be agreed upon with ABC Kenya but based on the validated proposed targets by the bidders. The bidders shall propose sales targets for each of the quota (1 – 100€ / 2 - 75€ / 3 - 60€). These bids will constitute the basis for contract negotiation between GIZ and contractors after their selection through this tender.

The contractors are responsible for investing and implementing the interventions that will contribute to the delivery of the results during the project duration. These interventions are collectively referred below as the Work Package.

Transaction number: 83427345

b) Work Package description

The work package constitutes of specific interventions to facilitate the achievement of the results/targets of the project: installation of 20,020 small-scale biogasifiers (0 to 50m³) in Kenya. These shall be decided and prioritised by the selected contractors.

The contractors shall:

1 – support marketing activities to reach out to more clients. Different marketing means can be used: referrals, sale agents, demand aggregation through business marketing hubs, social media, USSD codes, toll free phone numbers and opening of new county hubs.

2 – once a lead has been found, work with the potential client to define the adequate size of the biogasifier according to the quantity and quality of feedstock as well as the clients energy needs (cooking, lighting and powering) taking into account the potential for on-farm or off-farm bioslurry and bioslurry enriched compost use. The total biogasifier capacity shall not exceed 50m³.

3 – define with the client the payment scheme (number of installments) and modalities (for instance in cases where the client purchases the construction materials).

4 – establish the installation and maintenance contract with the client. For the purpose of verifying the installation of the biogasifier by a third party (the IVA), the contractor shall stipulate that the client intend to share some personal information: Mobile phone number of customer, Customer name, GPS location and Photos of the installed biogasifier. The contractor shall stipulate that the client will receive a phone call from the IVA with the intention to verify biogasifier installation.

5 – install the biogasifiers according to the specifications of the sale and maintenance contract

6 – train the biogasifier client on biogasifier feeding, regular operation and maintenance and bioslurry management

7 – ensure commissioning of the biogasifier and provide a unique serial number to the biogasifier based on the GIZ service contract number. This unique serial number as well as the company contact details shall be provided to the client.

8 – once the biogasifier is commissioned, the contractor shall insert the mandatory verification data points in the TaroWorks application as per the verification protocol. If mandatory verification data points are not inserted, the IVA cannot verify the installation and GIZ cannot reimburse the contractor.

9 – the contractor should maintain the functionality of installed biogasifiers for at least one year. Failing to ensure at least 60% functionality will lead to the termination of the service contract between the contractor and GIZ.

Contractors are only responsible for delivering pre-agreed results. They are advised to use marketing, consumer education and consumer financing to support their interventions. Reimbursement of pre-agreed incentives are based on successful verification process led by an independent third party: the IVA (KPMG).

Transaction number: 83427345

The contractor is also required to take the following key measures to avoid or reduce possible unintended negative results and to support gender equality in its area of responsibility:

- **Environment, mitigation or adaptation to climate change:**

The biodigesters should be appropriately sized to avoid excess biogas which can potentially leak into the atmosphere. Where appropriate and especially for larger biodigesters, flaring equipment may be included. The disposal of bio-slurry should be considered during the design phase of the biodigesters to mitigate potential conflicts between the consumers and their neighbours. Where appropriate, the contractors should seek clearance from the county authorities and the National Environmental Management Authority (NEMA).

- **Conflict and context sensitivity, human rights and decent work:**

Companies participating in the ABC programme must apply decent work conditions and protection measures (including specific Covid-19 Standard Operating Procedures), equal and fair pay, as well as the interdiction of child labour including in manufacturing countries of prefabricated biodigesters. Biodigester enterprise staff must have a work contract including temporary staff. Companies must endeavour to prevent serious sexual and other misconduct and other serious forms of inappropriate behaviour towards employees and other individuals when delivering the outputs and that in the event of such incidents, they will act as promptly as possible to put an end to the misconduct or inappropriate behaviour and mitigate the consequences. Biodigester companies will not provide any resources to any third party or accept any third party resources of any kind that could be interpreted as illegality or corruption.

- **Gender equality:**

The contractors should mainstream gender in their implementation and sales strategies and ensure they have affirmative action during implementation with the aim of targeting female customers or decision/influence makers in the investment of biodigesters. It is desired to have upto 30% of customers/decision/influence makers for the investment of biodigesters to be from either gender and this shall be monitored during implementation by the contractors. It is desired that 30% of the biodigester enterprise staff position is filled by women.

Transaction number: 83427345

3. Technical-methodological concept

The contractor shall submit the filled-in application template which contains the financial proposal that demonstrates the specific interventions that shall be implemented to achieve the proposed sales targets for biogas plants. A template is provided as an annex to this ToR to guide the development of the proposal and shall provide the information for the following aspects:

- Profile of the organisation and current positioning in the market
- Details of the promoted biogas technologies (including quality assurance)
- Past track record in form of historical sales from 2020 to 2022 which constitute their baseline
- Indicate the lot they are bidding for (1, 2, 3 or 4)
- Sales forecast/targets for biogas plants for quota 1, 2 and 3
- Prioritised activities to assure delivery of sales targets including in low sales arid counties

Below are key considerations to focus in the technical proposal.

3.1. Strategy – 10%

The bidders shall provide a brief description of the enterprise highlighting basic company details as well as how the overall contractor's strategy fits with the proposed result-based reimbursements facility.

3.2. Learning and innovation – 20%

The bidders shall be required to share their data collection process to facilitate their growth and support knowledge creation and lessons-learned. The bidders are therefore required to indicate their data collection methodology in order to facilitate this.

The contractor shall use the recommended data collection tool by the IVA (TaroWorks) to report the sales data for commissioned biogas plants in real time while ensuring completeness of data on a monthly basis. **Only reported in Taroworks and verified by the IVA biogas plants are subject to reimbursement.** If a contractor has not done any commissioning during a specific month, they do not need to report sales in Taroworks.

Bidders may also include any innovative ideas they would like to explore during project implementation. This may include innovations in business models, marketing approaches, access to consumer finance, biogas utilisation, productive use of biogas etc.

3.3. Project management activities – 30%

As indicated in the strategy section, the business plan prepared by the bidders shall include specific interventions to facilitate the achievement of the results/targets of the project. These shall be decided and prioritised by the selected contractors. These interventions shall include but not limited to:

- Sales and installation of biogas plants
- Marketing and consumer education for biogas plants
- Establishing and expanding lastmile distribution channels

Transaction number: 83427345

- Quality assurance and after sales support
- Consumer financing
- Other relevant activities

Under this section the contractor shall describe their approach to meet the proposed sales targets and how they want to collaborate with the GIZ. Contractors can provide a brief operational plan for this assignment as well as describe how they ensure they remain on track to deliver pre-agreed sale targets and any mitigation measures they could implement. A brief description of the technical background of the team is also recommended.

3.4. Proposed sales – 20%

Under this section, the bidders are required to indicate a realistic and achievable sales forecast/plan for the biogasifiers to be installed during the entire project period i.e. 3 years. This forecast should consider historical sales performance and a reasonable and attainable growth rate. The bidders are responsible for preparing the sales forecast using realistic assumptions and ensuring that they are achievable

3.5. Sustainability requirements – 10%

The bidders are required to demonstrate how they will ensure that the project activities are sustainable and how they will implement them in a way that avoids or reduces unintended negative results and promotes gender equality. A brief description of the following topics shall be included in the technical proposal:

- Environment, mitigation or adaptation to climate change
- Conflict and context sensitivity, human rights and decent work
- Gender equality
- Focus (if interested) on low sales arid counties (Garissa, Lamu, Mandera, Wajir, Marsabit, Turkana, West Pokot, and Isiolo)

3.6. Historical sales (section 1.6 of the assessment grid)

In this section, the bidders shall provide their historical sales for 2020, 2021 and 2022. Historical sales will be triangulated based on ABPL, GIZ, the Ministry of Energy and SNV market knowledge.

Other requirements include:

- The sales data shall be subjected to an independent verification process before the reimbursements are done. This process shall be carried out by the Independent Verification Agent (IVA) for the ABC project: KPMG.
- Quality assurance and technical support is of paramount importance. The contractors are therefore responsible for ensuring there is a robust after sales support and appropriate warranty. The contractors shall also be required to ensure quality workmanship during production and installation of the products and provide at least 1 year warranty and after sales contract. There should be a respective functionality assessment carried out by KPMG after 12 months.
- The contractors shall be required to promote double compost pits alongside the biogasifiers

Transaction number: 83427345

4. Costing requirements

4.1. Costing for the installed biodigesters to be reimbursed inline with the requirements of the RBR facility

As mentioned earlier, the RBR Facility of ABC Kenya aims at providing results based reimbursements for contractors who deliver pre-agreed results i.e. sold and installed biodigesters. The limits for the reimbursements are stipulated in Section 1 of this ToR.

Below is an indicative specification of quantities as a guideline for the bidder to prepare the financial proposal for this bid. Bidders will provide projection of proposed number of biodigesters they will install per quota. The projected total number of digesters per quota for the project is summarised below:

Sales Quota	Proposed period of achievement	Proposed number of biodigesters
Quota 1	Jan 2023-Dec 2023	8000
Quota 2	Jan 2024- Dec 2024	7000
Quota 3	Jan 2025-September 2025	5020
Total		20,020

Reaching each quota is under the responsibility of the 35 enterprises engaged in the Facility. GIZ will inform the enterprises when the quota of verified biodigesters is nearly to be reached (90%) and reached (100%). The same goes for the quota for sales in arid low sales counties.

As a contribution to the above project targets, the bidders are required to provide the sales targets for the biodigesters to be installed for each sales quota and indicate the unit price per biodigester as summarised in the example below:

Lot	Sales Quota	Proposed period of achievement	Proposed number biodigesters**
1, 2, 3 or 4	Quota 1*	<i>July 2022 – June 2023</i>	<i>500</i>
	Quota 2		
	Quota 3		
	Total*		

*Example for illustrative purposes

**This should be based on the proposed targets

5. Requirements on the format of the tender

The structure of the tender must correspond with the structure of the ToRs. It must be legible (font size 11 or larger) and clearly formulated. The language of the tender is English. An application template which contains the financial proposal is provided.

The technical-methodological concept of this bid (section 0 of the ToRs) is not to exceed 20 (not including the annexes).

Subject of the tender procedure: Result Based
Reimbursement Facility for the Installation of Small-Scale
Biodigesters

Transaction number: 83427345

6. Data Protection

GIZ will not have access to any personal data of the clients of the contractor. Contractor is the controller of its clients data.

For the reimbursements for the results delivered by the contractors, the sales data reported to an Independent Verification Agent (IVA) i.e. KPMG will need to be verified. KPMG will contact the contractors directly with regards to the data requirements which shall be guided by the **Verification Protocol** prepared by KPMG. GIZ shall **have access only to the aggregated data managed by KPMG for analysis, interpretation and making reimbursements** but GIZ will in **no way store any private data** maintained by KPMG. KPMG is the sole data collector and data processor. Contractors must inform their clients that the biodigester sale will be verified by a third party (KPMG) through two phone calls (the first one 2 to 4 weeks after registration of the biodigester in the system and the second one one year after commissioning) and a potential site visit.