



United Nations Industrial Development Organization

TERMS OF REFERENCE (TOR)

Title: Support with awareness raising and training of local technicians on manufacturing techniques for metal-ceramic fire places

CTCN request reference number: 2016000020

Country: Guinea

1 BACKGROUND INFORMATION

The Climate Technology Centre and Network (CTCN) is the operational arm of the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism and hosted by the United Nations Environment Programme (UNEP) in collaboration with the United Nations Industrial Development Organization (UNIDO) and supported by 11 partner institutions with expertise in climate technologies. The mission of the CTCN is to promote accelerated deployment and transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate-resilient development.

These requests for Technical Assistance (TA) are being submitted to the CTCN by the National Designated Entity (NDE) of the respective country. The scope of services under these Terms of Reference shall be executed based on a restricted solicitation process. By mandate, only accepted Members of the CTC Network are eligible to submit proposals and execute the required services to implement the response. Should the bidder partner with another institution to deliver a minor part of the services described in these Terms of Reference, it is expected that the partner institution also joins the CTC Network.

In case you are not a CTCN network member yet, you may bid for implementation of the technical assistance, subject to the condition that you submit your completed application for CTC Network membership before the bid closure and the same is acknowledged by the CTCN. Furthermore, the contract award – should your bid be selected – is conditional to your network membership application having been successfully approved by the Director of CTCN. Should the bidder partner with another institution to deliver the services described in these Terms of Reference, it is expected that the partner institution also joins the CTC Network.

The budget for this contract is up to US\$ 89,000.

2 CONTEXT OF THE ASSIGNMENT

The Republic of Guinea has an enormous potential in natural resources, but its environmental situation remains critical due to deforestation, mining, bush fires and uncontrolled urbanization – to name a few. This results in: land degradation, erosion, pollution, drainage and silting of the rivers that leads to a loss of the country's biodiversity. One of the major concerns and priorities of the Government of Guinea is the preservation of these natural resources (forest and wildlife) as it is essential to maintain the natural equilibrium to guarantee food security, the well-being of rural and urban populations as well as the



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development of ecotourism. However, greenhouse gas emission reduction technologies are still not sufficiently spread in Guinea due to the lack of technology deployment and qualified craftsmen, together with a weak institutional support to incentivize the creation of new specialized companies.

In order to bridge this gap, a new type of metal-ceramic cook stove (*Foyers Améliorés Métallo-Céramique*: FAMEC, its acronym in French) was designed by the local NGO “*Village Céramique de Guinée pour l’Environnement* (VICERAG)”. It has a fuel saving rate of 30-45% compared to the broadly used metal fireplaces (15%). Since its inception in 2005, the metal-ceramic fireplaces have demonstrated a high heat retention capacity and improved durability. A widely spread use of improved cook stoves can contribute to save a significant proportion of the areas that are deforested to meet domestic energy requirements on a yearly basis.

The Government is well aware of the importance of satisfying the domestic energy needs of households in a sustainable way and it is amongst the priority actions of the Ministry of Environment, Waters and Forests. Moreover, in its Nationally Determined Contributions (NDC), the country aims to introduce more than one million (1,000,000) Improved Metal-Ceramic Furnaces.

In this context, VICERAG's request for technical assistance to the CTCN proposes to support the key players along the value chain so as to improve the supply of improved metal-ceramic furnaces by building capacity for the institutional, technological and commercial actors. In addition, the CTCN also plans to promote a sustainable management strategy for wood energy consumption (*demand*) and identify appropriate market mechanisms as well as flexible and adequate sources of funding to facilitate the access to standardized metal-ceramic cook stoves.

The full text of the request submitted to the CTCN as well as the Response Plan can be found here:

<https://www.ctc-n.org/technical-assistance/projects/support-awareness-raising-and-training-local-producers-metal-ceramic>

3 OBJECTIVE OF THE CONTRACT

The main objective of this contract is to expand the access to standardized metal-ceramic cook stoves in Guinea through improved communication and awareness raising as well as technology dissemination.

Scope and activities of the proposed contracted services

In order to get a better understanding of the context of the request for technical assistance, it is recommended that the Contractor refer to the complete Request and Response Plan, which can be found in the above mentioned link. Particular attention should be paid to the following sections: synergies and baseline setting, past and ongoing efforts and post-assistance plans and actions.



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Once the contract is signed, the CTCN will organize a kick-off call between all parties involved in the request to introduce the Contractor to the NDE in Guinea, to present the activities and timeline and clarify roles and responsibilities.

The Contractor is expected to undertake the following activities:

Outcome 1: The FAMEC offer is improved and accessible to end users

Output 1: Policy recommendations for integrated forest resource management and deployment of clean cooking technologies

Activity 1.1: Analytical mapping of policies, programmes and projects on access to energy services for cooking and wood-energy management

Activity 1.2: Recommendations for policy makers and experts on the institutional and policy framework for integrated and sustainable management of natural resources and deployment of clean energy cooking technologies

Deliverable 1: Analytical mapping of FAMEC dissemination policies and recommendations on the management of wood-energy resources and the deployment of FAMEC

Output 2: The key actors of the FAMEC value chain, particularly from peri-urban and rural areas, are trained

Activity 2.1: Analytical mapping of the key-actors of the chain (bibliographical review, selection of the champions, particular attention to potter-ceramic women);

Activity 2.2: Meet & greet with the key-actors: Prioritization of training needs and advisory support / Platform to exchange good practices and risk factors throughout the chain of FAMEC in Guinea;

Activity 2.3: Training developed and conducted according to the priority needs identified and the standardized improved cook stove models. Back-to-back with the training, coaching sessions will take place with the key actors for support and advice;

Deliverable 2.1: Analytical mapping of the actors of the chain;

Deliverable 2.2: Report on the Meet & Greet / Coaching sessions;

Output 3: FAMEC models in Guinea are standardized and certified

Activity 3.1: Benchmarking of FAMEC models and good practices of standardization and certification at the national and international level

Activity 3.2: Regional visits for knowledge sharing on the standardization process of FAMEC in West Africa

Activity 3.3: Recommendations on a certification strategy for targeted FAMEC models with the National Standardization Authority and Authorized Research Centers

Deliverable 3.1: Mapping of the different FAMEC Models

Deliverable 3.2: Report on the knowledge sharing regional visits



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Deliverable 3.3: Recommendation on a certification model for the selected FAMEC models

Outcome 2: Wood-energy consumption following more efficient and sustainable practices in place

Output 4: Awareness strategies are developed and implemented

Development and Implementation of a communication strategy for the deployment of FAMEC in Guinea

Deliverable 4: Report of the proposed communication strategy for the deployment of FAMEC

Output 5: The key actors are trained on: ecosystems conservation and restoration techniques, and on economic valorization of non-ligneous forest products (*produits forestiers non ligneux*)

Activity 5: Meet & Greet the key actors of the riparian zones of wood / energy harvesting / ecosystem ecosystems: conservation techniques and restoration of ecosystems (selective reforestation, sustainable management, economic valorization of non-ligneous forest products including honey, etc.)

Deliverable 5: Report on the Meet & Greet / Coaching sessions

Outcome 3: A market mechanism (supply and demand) for the access to standardized FAMECs is proposed

Output 6: A financing strategy to access standardized FAMECs is available

Activity 6.1: Development of a financing strategy among: key actors, end-users and financial institutions

Activity 6.2: Development of a marketing strategy for the standardized FAMEC models

Deliverable 6: Financing and Marketing Strategies for accessing the standardized FAMEC

Output 7: Recommendations and concept notes for access to other innovative financing mechanisms are proposed

Activity 7.1: Mapping of the climate finance mechanisms (i.e. Carbon Market, GCF, etc.)

Activity 7.2: Technical support for linking and developing project ideas by potential financial partners

Deliverable 7.1: Mapping of the innovative financing mechanisms

Deliverable 7.2: Project ideas developed to access the identified funding mechanisms

4 GENERAL TIME SCHEDULE AND ACTIVITY/DELIVERY PLAN

The activities under this contract have an expected duration of six (6) months from the contract signature. The proposed plan for the implementation of activities and deliveries:



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Objective: Expand the access to standardized metal-ceramic cook stoves (FAMEC) in Guinea through improved communication and awareness raising as well as technology dissemination to the key actors of the FAMEC value chain						
	Month					
	1	2	3	4	5	6
Outcome 1: The FAMEC offer is improved and accessible to end users						
Output 1: Recommendations on improving the policy-institutional framework for integrated forest resource management and the deployment of clean cooking technologies are developed and shared with policy makers and key stakeholders						
Activity 1.1: Analytical mapping of policies, programmes and projects on access to energy services for cooking and wood-energy management						
Activity 1.2: Recommendations for policy makers and experts on the institutional and policy framework for integrated and sustainable management of natural resources and deployment of clean energy cooking technologies						
<i>Deliverable 1. Analytical mapping of FAMEC dissemination policies and recommendations on the management of wood-energy resources and the deployment of FAMEC</i>		X				
Output 2: The key <i>actors</i> of the FAMEC value chain, particularly from peri-urban and rural areas, are trained						
Activity 2.1: Analytical mapping of the key-actors of the chain (bibliographical review, selection of the champions, particular attention to potter-ceramic women)						
Activity 2.2: Meet & Greet with the key-actors: Prioritization of training needs and advisory support / Platform to exchange good practices and risk factors throughout the chain of FAMEC in Guinea						
Activity 2.3: Training developed and conducted according to the priority needs identified and the standardized improved cook stove models and coaching sessions with the key actors for support and advice						
<i>Deliverable 2.1: Analytical mapping of the actors of the chain.</i>		X				
<i>Deliverable 2.2: Report on the Meet & Greet / Coaching sessions</i>			X			
Output 3: FAMEC models in Guinea are standardized and certified						
Activity 3.1: Benchmarking of FAMEC models and good practices of standardization and certification at the national and international level						



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Activity 3.2: Regional visits for knowledge sharing on the standardization process of FAMEC in West Africa						
Activity 3.3: Recommendations on a certification strategy for targeted FAMEC models with the National Standardization Authority and Authorized Research Centers						
<i>Deliverable 3.1: Mapping of the different FAMEC Models</i>						
<i>Deliverable 3.2: Report on the knowledge sharing regional visits</i>						
<i>Deliverable 3.3: Recommendation on a certification model for the selected FAMEC models</i>						
Outcome 2: Wood-energy consumption follows more efficient and sustainable practices in place						
Output 4: Awareness strategies are developed and implemented						
Activity 4: Development and implementation of a communication strategy for the deployment of FAMEC in Guinea						
<i>Deliverable 4: Report of the proposed communication strategy for the deployment of FAMEC</i>						
Output 5: The key actors are trained on: ecosystems conservation and restoration techniques, and on economic valorization of non-ligneous forest products (NTFP; produits forestiers non ligneux)						
Activity 5: Meet & Greet the key actors of the riparian zones of wood / energy harvesting / ecosystem ecosystems: conservation techniques and restoration of ecosystems (selective reforestation, sustainable management, economic valorization of non-ligneous forest products including honey, etc.)						
<i>Deliverable 5: Report on the Meet & Greet / Coaching sessions</i>						
Outcome 3: A market mechanism (supply and demand) for the access to standardized FAMECs is proposed						
Output 6: A financing strategy to access standardized FAMECs is available						
Activity 6.1: Development of a financing strategy among: key actors, end-users and financial institutions						
Activity 6.2: Development of a marketing strategy for the standardized FAMEC models						
<i>Deliverable 6: Financing and Marketing Strategies for accessing the standardized FAMEC</i>						
Output 7: Recommendations and concept notes for access to other innovative financing mechanisms are proposed						
Activity 7.1: Mapping of the climate finance mechanisms (i.e. Carbon Market, GCF, etc)						
Activity 7.2: Technical support for linking and developing project ideas by potential financial partners						
<i>Deliverable 7.1: Mapping of the innovative financing mechanisms</i>						
<i>Deliverable 7.2: Project ideas developed to access the identified funds</i>						



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All drafts and final deliverables are subject to approval by the CTCN Climate Technology Manager, before these can be considered as complete.

5 PERSONNEL IN THE FIELD (PROFESSIONAL EXPERIENCE AND QUALIFICATIONS)

The Contractor is expected to provide the services of a team that should ideally comprise the following competencies:

- Master's degree in environmental/industrial engineering, energy technologies or similar.
- A minimum of 10 years relevant work experience in energy efficiency technologies.
- Demonstrated experience in climate change project development, implementation and management.
- Demonstrated experience in awareness raising strategies and featuring hands-on experience in technology dissemination in terms of both design and operation.
- Demonstrated experience on standardization for cook stoves.
- Demonstrated experience in advising the design of legal and regulatory frameworks for cook stoves energy technologies.
- Ability to pick up new terminology and concepts easily and to turn information from various sources into a coherent outcome.
- Previous work experience in West Africa is required.
- Excellent written and communication skills in both English and French.

6 LANGUAGE REQUIREMENTS

The working languages for the purposes of this assessment are French and English, thus an excellent command of both is required for the proposed personnel. All delivered documents must be of sufficient enough quality so that no further editing shall be required.