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TERMS OF REFERENCE (TOR)

CATALYSING LOW COST GREEN TECHNOLOGIES FOR SUSTAINABLE WATER SERVICE DELIVERY (KENYA) CTCN request 2015000070

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 co-hosted by the United Nations Environmental 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 development 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. Eligible requests are processed by a group of selected experts who develop a Response Plan.

The scope of services under these Terms of Reference shall be executed based on a restricted solicitation process where only accepted Members of the CTCN Network, are eligible to submit proposals.

The estimated budget for this contract is approximately USD 40,000 to USD 50,000. The expected start of the contract is January 2017 for an estimated five months duration. The Contractor is however invited to follow the implementation of the previous activities implemented by CTCN consortium partner UNEP DTU Partnership (UDP). Once this contract will be awarded, the UDP coordinator will contact the Contractor to properly update them on the current status of the UDP activities.

2 PROJECT CONTEXT

Water services available for the poor in Kenya are often inadequate, unsafe and unsustainable. Arid and Semi-Arid areas in the Northern part of Kenya and poor peri-urban areas are particularly vulnerable, characterized by low level of water service provision and acute water scarcity, where water demand considerably surpasses availability. In addition, climate change is expected to further impact water availability and infrastructure, which highlights the need for improved water access in underserved areas and a more sustainable and strategic management of water resources. In this technical assistance the CTCN will support the Water Services Trust Fund (WSTF) in Kenya, through the provision of technical assistance to determine the technical and financial feasibility of selected green technologies for improved water resources and climate-proofed infrastructure.



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The main short-term objective of the assistance provided by CTCN is to analyze the feasibility and sustainability of the deployment of 3 specific low-cost green technologies for improved water services for household consumption, farming and/or irrigation, in underserved ASAL areas in Northern Kenya and in peri-urban areas.

Under this particular TOR, the aim is to analyze private sector engagement potential in the deployment of the 3 technologies and to develop cooperation and synergies between public and private actors, through the development of a public-private partnership model for green water technology deployment

3 AIM OF THE CONTRACT

The objective of the overall technical assistance is to catalyze low cost green technologies for sustainable water service delivery in the Northern and ASAL regions of Kenya. This technical assistance is based on a request submitted by the CTCN Kenyan National Designated Entity (NDE) and on a response plan developed by UNEP DTU Partnership in coordination with the NDE and request proponent..

Within the framework of this Contract, which shall be concluded within five months (**January to May 2017**), the Contractor, in coordination with and support of the Consortium Partner lead of the Response Plan - UNEP DTU Partnership – UDP - will produce the following 3 main outputs:

1. Identification of potential private sector actors and Public Private Partnerships (PPP) within the water sector for the deployment of green water technologies;
2. Capacitation of public and private sector actors to engage in PPP;
3. Development of a Public Private Partnership business model in collaboration with relevant stakeholders;

It is important to note that the Contractor will not participate to the implementation of all activities of this technical assistance but only deliver Activity 2.3 and Activity 3 of the response plan 2015000070 attached to this tender.

4 SCOPE AND ACTIVITIES OF THE PROPOSED CONTRACTED SERVICES

To get a better understanding of the objectives of the request for technical assistance and the work elaborated beforehand by the Consortium partner as well as the necessary collaboration with the request proponent and National Designated Entity in this Response Plan, it is recommended that the Contractor refer to the complete Response Plan 2015000070 attached to this tender. **The Contractor will only be involved in Activity 2.3 and Activity 3 of this response plan but should be aware of the activities and progress achieved in Activity 1 to 2.2**, based on its communication with the Consortium Partner Lead of this Response Plan - UDP.

Note that the estimated budget presented in the response plan 2015000070 reflects the costs of all activities of the technical assistance. Specifically, the estimation for activity 3 also includes the cost



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related to time allocated for UDP's overall coordination role and the national coordinator's assisting role as well as the cost of the workshop to be delivered during activity 3.3. For the Contractor's information, the time allocated to UDP's coordinator and to the National Coordinator will be specified in each of the sub-activities described below. These costs are covered in another contract between CTCN and UDP and are not expected to be part of the financial proposal of the Contractor.

All activities have to be delivered in coordination with the NDE and the request proponent.

Activity 2 (of the response plan 2015000070) –Feasibility study of the selected technologies

Pre-feasibility studies are undertaken in order to determine the technical, economic and social feasibility of each of the three selected water technologies for the targeted areas. This entails in-depth analysis of the current experience with each of the technologies in target areas and/or similar contexts (similar technologies applied in other parts of the world), with focus on technical feasibility (types of techniques and materials, skills and knowledge, potential providers etc.), economic feasibility (cost effectiveness, price of materials, potential to create employment, operation and maintenance costs, current demand and supply etc.), social feasibility of the chosen technologies (acceptability, attitude and perception of the technology, land-use patterns, capacity to absorb, gender and governance issues etc.), risk analysis as well as sustainability and replicability potential.

Activity 2.3 (activity led by UDP) – Data analysis and submission of final feasibility study report

The report should be 30-50 pages conveying clear, concise and accurate information. The report may include but need not be restricted to:

- Executive summary
- Introduction
- Methodology section
- Technology description (e.g. types of techniques, skills and knowledge required, current experience with the technologies in target areas and with similar technologies applied in other parts of the world, potential providers, etc.).
- Economic feasibility (e.g. economic viability of technology, cost effectiveness, potential to create employment, operation and maintenance costs etc.).
- Social feasibility of the chosen technologies (e.g. acceptability attitude and perception of the technology, consideration of gender and youth issues (i.e. involvement of women in local water management etc.) land-use patterns, capacity to absorb, gender and governance issues etc.).
- Risk analysis
- Sustainability and replicability potential
- Findings: PPP potential and Recommendations
- Annexes: list of interviewees, interview guides etc.



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Submission of feasibility report to proponents, CTCN and other potential stakeholders for comments followed by submission of final report.

For this sub-activity, 15 work days have been assigned to UDP overall coordinator to assist with data analysis draft of feasibility study and review of the final document in addition to UDP's coordination role. 50 work days have been assigned to National Coordinator/Water Expert to conduct data analysis (including gender dimensions), develop the feasibility report and submit the final report, with substantive input from the NDE and the request proponent.

In this sub-activity, the Contractor will participate in the drafting of the section dedicated to PPP potential and recommendation. The work also consists in coordinating with and analyzing the data gathered by UDP.

Deliverables	Estimated Delivery date
First draft of feasibility report for comments	31 st January 2017
Final Feasibility study report	28 th February 2017

Activity 3 (activity led by Contractor) – Training in and identification of potential PPP

Based on outcomes from feasibility study, multi-stakeholder consultations are conducted to identify potential private sector actors and approaches to Public Private Partnerships (PPP) and involved actors from public and private sectors are capacitated to engage in PPP for the deployment of the selected water technologies and make informed investments in the domain. While the coordination of activity 3 is the responsibility of UDP, the deliverable will be submitted by the Contractor, after review of the NDE and UDP.

Activity 3.1 - Identification and consultation of relevant stakeholders

In collaboration with proponents relevant public and private actors (investors, SMEs etc.) for PPP are identified and multi-stakeholder consultations are conducted to identify PPP opportunities within the water sector and selected technologies.

For this sub-activity, 1 work day has been assigned to UDP to support the Contractor and to provide overall coordination and links with earlier activities. 10 work days have been assigned to the National Coordinator to support the Contractor in identifying PPP stakeholders and participate in consultations as well as assisting the Contractor in the drafting of the consultation report.

Deliverables	Delivery date
List of stakeholders identified	28 th February 2017
Consultation report	15 th April 2017



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Activity 3.2 - Design of a PPP business model

Based on outcomes from feasibility study and consultations a PPP business model for selected water technology(ies) most apt for PPP is developed and shared with WSTF, private sector actor and other relevant stakeholders.

For this sub-activity, 1 work day has been assigned to UDP to support the Contractor and to provide overall coordination and links with earlier activities. 5 work days have been assigned to the National Coordinator to participate in the design and review of the PPP business model.

Deliverables	Delivery date
Public Private Partnership Business model for selected water technology	30 th April 2017

Activity 3.3 - Conduct workshop on feasibility study outcomes and training of actors in PPP for selected green water technologies

A 1-day-workshop is held to communicate feasibility report outcomes to stakeholders identified in activity 3.1 and to train actors (WSTF and other identified private and public sector actors) to engage in - and implement - PPP in general for the deployment of selected green water technologies and present business model as an example.

For this sub-activity, 5 work days have been assigned to UDP to support the Contractor and to participate to the workshop as well as to present the outcomes of feasibility study. 10 work days have been assigned to the National Coordinator to organize the workshop and prepare presentations. UDP will cover the cost of the workshop (venue and catering) as well as the cost of transport and DSA for 5 to 10 participants coming from outside Nairobi.

Deliverables	Delivery date
Workshop report	15 th May 2017

5 GENERAL TIME SCHEDULE

The activities under this contract should be completed within a period of five (5) months from the date Activity 2.3 starts (**foreseen period January – May 2017**). The Contractor is however invited to follow the implementation of the previous activities implemented by CTCN consortium partner UNEP DTU Partnership.

6 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:



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- Proven experience with private sector engagement and facilitation of Public Private Partnerships in public infrastructure, preferably in the water sector
- Familiarity with multiple stakeholder consultations and workshop facilitation
- Previous experience with providing technical assistance to government institutions at multiple levels in the country/region.
- Proficient analytical and writing skills.
- The staff assigned to the project must have previous experience and qualification of supporting climate projects, preferably in Africa
- The staff assigned must have previous experience providing technical assistance to governments of developing countries exceeding 10 years, preferably in Africa

The CVs of the respective experts assigned to this project by the Contractor must be provided.

7 LANGUAGE REQUIREMENTS

The working language for the purposes of this project is English, thus an excellent command of English is required of the proposed personnel. The final deliverables must be submitted in English.

All delivered documents must be of sufficient enough quality so that no further editing shall be required.

8 DELIVERABLES AND SCHEDULE

The table below details the indicative schedule for this assistance.

Activities	Delivery date (after contract start date)
Activity 2 – Feasibility study of the selected technologies	
Activity 2.3 – Data analysis and submission of final feasibility study report	
First draft of feasibility report for comments	31 st January 2017
Final Feasibility study report	28 th February 2017
Activity 3 – Training in and identification of potential PPP	
Activity 3.1 - Identification and consultation of relevant stakeholders	
List of stakeholders identified	28 th February 2017
Consultation report	15 th April 2017
Activity 3.2 - Design of a PPP business model	
Public Private Partnership Business model for selected water technology	30 th April 2017
Activity 3.3 - Conduct workshop on feasibility study outcomes and training of actors in PPP for selected green water technologies	
Workshop report	15 th May 2017