



OPEN TO INTERNAL AND EXTERNAL CANDIDATE

Reference No.	:	CFCV/MZ10/2024/001
Position Title	:	Energy Expert Consultant
Duty Station	:	Maputo, Mozambique
Organization Unit	:	Migration Environment Climate Change and Risk Reduction (MECR)
Classification	:	Consultancy, Category: Type A
Type of Appointment	:	Consultancy Contract, 03 (three) months
Report to	:	Project Officer (MECR)
Estimated Start Date	:	As soon as possible
Closing Date	:	11 April 2024

IOM is committed to a diverse and inclusive environment. This is a request for Curricula / expression of interest for the position of **Energy Expert Consultant**. The successful candidate will be offered a consultancy contract category Type A.

CONTEXT:

In October 2023, the International Organization for Migration (IOM) started the implementation of “Empowering Displaced Communities through Energy Mesh Networks”, project which is funded by Innovation Norway. The goal is to improve energy access for the IDPs in Mozambique and ensure sustainable energy for all that is reliable and affordable through the implementation of Mesh grid also called crowd grid. This project will be lead from IOM Mozambique, in partnership with NORCAP. The focus of the project is on resettlement sites located in Central Mozambique.

An IOM study reveals that access to household lighting remains considerably low in the resettlement sites, with 56% of households utilizing low-capacity solar lanterns, most of which were donated by humanitarian partners and IOM during emergency phases such as the 2019 cyclones. However, it has been reported that a majority of these systems are no longer functional due to damage and the absence of repair services in the sites. The remaining displaced population relies on alternative energy sources for lighting, such as battery-powered torches (28%), cell-phone torches (9%), firewood (4%), candles, and batteries (1%). In Mozambique, the lack of energy access disproportionately affects women, as they bear the primary responsibility for gathering cooking fuel, predominantly firewood. This further exacerbates the burden on women, who already engage in unpaid labour like subsistence farming and firewood collection, leading to time poverty and health risks. Introducing modern energy services like improved cookstoves and water pumps can mitigate these challenges by significantly reducing labour and time requirements for women.

IOM's has implemented various energy access initiatives to improve energy access in displacement settings stimulating both demand working with the displaced communities and supply working with the private sector employing innovative financial mechanisms. The energy access projects have demonstrated that, with support for both demand and supply, an energy market system can be established in displacement settings.

This project will explore and pilot community mesh grids also called crowd grids, which have the potential to improve energy access in these settings. These grids consist of interconnected solar home systems -SHSs that enable households to share power, thereby enhancing the energy capacity of the systems and benefiting more individuals. Mesh grids can connect households that already possess SHSs with those who don't, but may have lamps or batteries, allowing them to purchase power from the mesh grid to charge their devices.

To understand the viability of the mesh grid in resettlement sites in Mozambique IOM is seeking the services of a consultant to support the implementation of a detailed assessment that consider social, technical, financial and policy aspects and provide recommendations for the implementation of the Mesh-Grid.

The consultant will be expected to follow the recommendations of the IOM project team regarding the methodology and plans for the assessment and will have to operate within the framework of the project.

RESPONSIBILITIES AND ACCOUNTABILITIES

- 1) Analysis of the relevant displacement and energy-related policies, and regulatory framework influencing off-grid solutions in Mozambique, and more specifically for the proposed solutions (mesh-grid).
- 2) Revision of the existing IOM module for energy needs assessment to ensure that all the relevant data are collected.
- 3) Analysis of the data collected by IOM during the energy needs assessment and based on specific set of criteria provide recommendation on the most suited site to for the solution to be implemented.
- 4) Conduct a technical analysis of the infrastructure requirements, including the suitability of existing solar home systems (SHSs) in the country and outside and other energy sources for integration into the mesh grid.
- 5) Analyze the financial aspects of implementing and sustaining mesh grid systems, including investment requirements, revenue generation models, and financial sustainability.
- 6) In coordination with the Energy team Preparation for the market dialogue sessions, including but not limited to the design of the sessions, active outreach to stakeholders both within Mozambique and outside Mozambique, preparation of content for the communication products (concept notes, info sheets, video, social media posts, etc.).
- 7) Facilitation of the energy market dialogue sessions as a Rapporteur to lead and engage the various stakeholders participating in the sessions and capture all the key outcomes from the different market dialogue sessions to be fed into the viability assessment.

- 8) Based on the outcomes of the sessions of the market dialogue, registering of the relevant private sector actors in the energy space in Mozambique offering off-grid solar technologies, follow up to collect information on their existing and planned activities in resettlement sites and surrounding areas, their financing/funding sources, and their business models by conducting interviews with key private sector actors.
- 9) Based on the outcomes of the market dialogue sessions, registering of the relevant energy access programmes implemented in Mozambique by donors, NGOs, humanitarian organizations and/or the government. Follow up to collect information on the current state of the programmes, the main types of support (financial, technical, etc.) and delivery mechanisms, the target audience (households, small businesses, private actors from energy sector, etc.) with a focus of the displaced communities/resettlement sites in the Central region and North.
- 10) Collation of all the findings described above in the form of a written report.
- 11) Analysis of any other relevant aspects related to energy access in displacement settings as per the project's team and consultant's recommendations.
- 12) Support the project team with any other relevant tasks as requested throughout the three months of assignment.
- 13) Possible duty travel to fulfil the functions above.

Expected Results

- 1) Desk review preliminary report on existing energy-related regulations and policies
- 2) Report with the results of the energy need assessments and recommendation on the sites for the implementation of the solutions
- 3) Protocol for market dialogue sessions and co-design workshop(s) including agenda, online tools for participant engagement and data collection.
- 4) Report on the outcomes of the market dialogue sessions and follow-up sessions with the stakeholders
- 5) Final viability assessment report
- 6) Terms of References for call for innovative partnerships and selection criteria.

Performance indicators for the evaluation of results

- 1) Quality and coherence of the results as per requirements, including IOM inputs and
- 2) feedback Adherence to deadlines.

EDUCATION

- Master's degree in one of the following areas: energy engineering/sciences or renewable energy, climate studies, environmental engineering/sciences/protection, humanitarian laws, social development, innovation, project development, Or
- International development.

EXPERIENCE/SKILLS

Minimum 5 years of experience in relevant areas mentioned above as well as the following:

- Proven experience working with health data and epidemiology.
- Experience of systems thinking and design thinking approaches, and more so in the energy access sector
- Experience in facilitation of sector dialogues and design/systems thinking sessions bringing to together various stakeholders and reporting on the outcomes.
- Experience in planning and organizing events/webinars involving various stakeholders.
- Knowledge and experience of off-grid energy access technologies such as mini-grids, solar home systems, productive uses of energy and clean cooking technologies
- Knowledge and experience of one or more of the following subjects: energy economic analysis and least-cost energy access planning, energy markets, enterprise models and bottom-of-the-pyramid delivery, rural development, community engagement, etc.
- Experience in applying a gender-sensitive approach to programming.
- Demonstrated understanding of energy sector analysis in sub-Saharan Africa
- Demonstration of an elevated level of professionalism and an ability to work independently and in situations of high pressure, with tight deadlines.
- Experience working with UN agencies and/or other international organizations would be an asset.
- Experience working in humanitarian energy space would be an asset.
- Knowledge of Mozambique would be an asset.
- Have a strong interest in innovation in the energy sector to improve clean energy access.
- Good analytical and problem-solving skills
- Excellent communications skills both in written and spoken forms.
- Multi-tasking and hands-on approach

LANGUAGES

Fluency in English is required. Working knowledge of Portuguese is desirable.

Travel required.

2 to 3 travels from Maputo to Sofala required to implement the data collection.

REQUIRED COMPETENCIES

The incumbent is expected to demonstrate the following values and competencies:

VALUES - All IOM staff members must abide by and demonstrate these five values:

- Inclusion and respect for diversity: Respects and promotes individual and cultural differences. Encourages diversity and inclusion.
- Integrity and transparency: Maintain high ethical standards and acts in a manner consistent with organizational principles/rules and standards of conduct.

- Professionalism: Demonstrates ability to work in a composed, competent, and committed manner and exercises careful judgment in meeting day-to-day challenges.
- Courage: Demonstrates willingness to take a stand on issues of importance.
- Empathy: Shows compassion for others, makes people feel safe, respected, and fairly treated.

CORE COMPETENCIES - Behavioural indicators

- Teamwork: Develops and promotes effective collaboration within and across units to achieve shared goals and optimize results.
- Delivering results: Produces and delivers quality results in a service-oriented and timely manner. Is action oriented and committed to achieving agreed outcomes.
- Managing and sharing knowledge: Continuously seeks to learn, share knowledge, and innovate.
- Accountability: Takes ownership for achieving the Organization's priorities and assumes responsibility for own actions and delegated work.
- Communication: Encourages and contributes to clear and open communication. Explains complex matters in an informative, inspiring, and motivational way.

Other

Any offer made to the candidate in relation to this vacancy notice is subject to funding confirmation.

How to apply

Interested candidates are invited to submit their applications in **ENGLISH**, with:

- a) Cover letter clearly specify suitability and availability date.
- b) Detailed *curriculum vitae*, including skype user ID, phone number, historical salary and minimum three referees (preferably former direct supervisors).

Please submit your application by email to iommzbvacancies@iom.int, indicating your name and the reference code above **[Name, CFCV/MZ10/2024/001 – Energy Expert Consultant]** as subject. The deadline for applications is **11 April 2024**.

Only applicant who meets the above qualification will be considered.

No Fees:

IOM does not charge a fee at any stage of its recruitment process (application, interview, processing, training, or other fee). IOM does not request any information related to bank accounts.

Posting period:

From 28.03.2024 to 11.04.2024