

Ministry of Environment and Energy

Republic of Maldives

Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Project SCF Grant NO.: TF017182

Terms of Reference for Renewable Energy Awareness Officer

A. BACKGROUND

The Republic of Maldives is a low lying, atoll based, archipelagic nation in the central Indian Ocean. It comprises 1,190 islands grouped into 26 atolls that together occupy a land area of 298 km2 and form a chain over 820 km in length, spread over an area of around 90,000 sq km. With a total population of the Maldives is 324,992, it is the smallest Asian country in terms of area and population.

Almost all of the country's current power needs are met through diesel fired generation. The cumulative installed electricity capacity in Maldives was approximately 245 MW in 2012. Of this, 105 MW (43% of installed capacity) is located in resort islands which run their systems independent of state-owned utilities. The fuel has to be imported and transported to the dispersed generating locations, adding to the cost and difficulty of maintaining reliable power operations. As a result, the Maldives has among the highest cost of electricity generation in South Asia - 30-40 US\$ cents per kWh in the larger islands, and even higher in the remote small islands. Despite these challenges, access to electricity is universal in the Maldives, and the GoM is constitutionally obligated to ensure the provision of electricity to every inhabited island at a reasonable standard.

The 2010 National Energy Policy and Strategy are centered on creating an enabling environment for the growth of a reliable and sustainable energy sector. Thus, the GoM had been taking measures under this policy to address the issues faced within the sector.

One of the key policy statements includes the development and promotion of renewable energy use within the country. Thus, through the efforts of the GoM through the Ministry of Environment and Energy (MEE), the Maldives became one of six pilot countries that participated in the Scaling-Up Renewable Energy Program in Low Income Countries (SREP).

As a requirement of the SREP, an Investment Plan (IP) was prepared on how SREP resources, leveraged by co-financiers, would be used to support the scaling up of renewable energy (RE) development in the Maldives. The IP was developed by the Government of Maldives (GoM) under the leadership of the Ministry of Environment and Energy. The main objective of Maldives SREP IP is to transform the electricity sector and to develop renewable energies on a large scale.

The SREP IP estimated that just rooftop space of individual households and public buildings could meet as much as 30% of the electricity demand in some islands, and as much as 80% in some other islands. The SREP IP objective of scaling-up renewable energy in the Maldives supports socioeconomic development by generating new economic opportunities and widening access to sustainable, clean and reliable energy. Thus, it effectively contributes to poverty reduction and sustainable development - benefiting the Maldives and its people as a whole.

The Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) Project hence had become one of the key projects under the SREP program that will contribute to the overall targets of SREP.

Currently, the Maldives has a cumulative installed PV based generation capacity of around 2 MW, spread across several islands and programs. The proposed ASPIRE Project will combine technical assistance with private sector investment, to scale-up the deployment of PV based generation on the islands. ASPIRE seeks to provision IDA and SREP resources to develop and implement an appropriate investment framework that will result in the deployment of PV systems through private sector investments during and after the ASPIRE implementation completion. The identified hurdles to private investments in the Maldives' energy sector include the paucity of experience with project finance, limited local familiarity with the technology, and little private sector exposure to the institutions in the sector.

To address these hurdles, the ASPIRE Project aims to develop the Maldives' potential for solar PV through private sector investments rolled out over the Project's implementation timeframe. This will be done through the use of an investment framework that has been developed and appraised taking into account government and institutional considerations and informed by feedback from potential private investors. In that regard, the Project has undertaken a significant market sounding exercise, and including an investor conference held on March 26, 2014 by the GoM.

The GoM is also a key beneficiary, since the Project would reduce the islands' financial exposure to oil price volatility, and generate savings by replacing higher cost, imported diesel fueled generation, with cleaner PV generation. The Project also reduces the need for public investment in the power sector, and helps reduce the operating and capital expenses of the state utility companies. Not only would this help GoM to achieve low carbon growth, but it would also free up resources to fund key social needs such as education and health.

Finally, the project would: (i) enable private sector investing in PV infrastructure development; and (ii) diversify the investment base in the country through developing a local market and expertise in renewable energy. This will benefit the private sector engaging in the renewable energy sector of Maldives.

In this regard, the promotion of renewable energy technology through a proper outreach mechanisms are very key in the successful implementation of the overall ASPIRE project.

B. OBJECTIVES OF ASSIGNMENT

Awareness and knowledge sharing on solar and other renewable technologies is an important subcomponent under the ASPIRE project which would act as a catalyst to increase the demand of solar photovoltaic (PV) systems application from consumers side. Hence, in order to achieve the key targets under this sub-component, the key objective of the Renewable Energy Awareness Officer, is to create a more engaging environment for the public in accelerating renewable energy uptake at a national level and promote these technologies through increased public awareness on available policy instruments in particular the Net-metering Program, along with the regulatory standards to be adhered in the process. These objectives are also consistent with the broader national target of fulfilling a minimum 30% of peak daytime electricity demand for every island through renewable energy.

C. SCOPE OF SERVICES

Overall, the RE Awareness Officer will be responsible in accelerating the uptake of PV technology at a national level by promoting the Net-metering model available to electricity consumers. Thus, the Awareness Officer will act as the central agent interlinking the general public to the various stakeholder groups in renewable energy policy development and deployment, through dissemination of information on policy tools, regulatory standards and technology options. Furthermore, as RE policies and programs are rolled out, the awareness officer's contributions in the improvement of these programs are important by understanding the public perception towards such.

Thus, the responsibilities of the RE Awareness Officer include, but is not limited, to the following:

- Identify, develop and execute effective promotional strategies to increase the uptake of solar PV among electricity end users, including preparation of materials to market and promote financial support and technologies relevant to net metering and other RE promotional programs.
- Gather information and coordinate public awareness sessions based on renewable technologies incorporating technological, financial and regulatory aspects related to feeding renewable energy sources to utility grids.
- Promote funding sources (such as loans) for household and private solar projects are
 well facilitated and utilized by coordinating with banks in establishing effective
 procedures for promotion of these funds.
- Identify and review the available market options on products related to solar power systems and the distributing agents, and disseminate this information to the public, and liaise with privates sector players in promoting net metering program
- Conduct public consultation and consumer surveys in relation to programs rolled out under different renewable energy policies and provide feedback as to further improve these.
- Identify barriers related to social aspects in the development and implementation of renewable energy projects (both public and private sector projects) and develop effective strategies to address these barriers as an integral part of the overall awareness and promotional activities.

D. DELIVERABLES

The following deliverables shall be committed during the contract period as per the tentative schedule presented in table.

1. Program rollout plan

A comprehensive plans need to be laid out based on the policy directive and projective objectives, in consultation with the relevant stakeholders. As this is a national level program the activities shall be dispersed over different regions and target groups, and rolled out as based on the stakeholder level consultations and policy level consultations.

2. Awareness Portfolio

The awareness portfolio shall address frequently asked questions by the general public with regard to installation of PV systems, its purchase, operational activities, etc. and also regulatory factors governing grid connected PV systems. As this will require technology specific knowledge, collaboration with other team members of the project will be required in fulfilling this task. Portfolio development shall be regarded as a continuous developmental work and awareness sessions shall be imparted based on these materials. The awareness sessions can be incorporated into the program roll out plan devised by the RE promotor.

3. Monthly progress reports

The consultant will be required to submit monthly progress reports listing the activities carried out, planned activities for the next month, and issues to be addressed.

4. Feedback surveys

Periodic feedback surveys need to be conducted as to monitor the effectiveness of the promotional program and to gain an overall view of people's perceptions towards renewable technologies and associated policies developed for uptake of these technologies. Analysis of these surveys shall be submitted to the department as to streamline the existing policies based on the needs of the target groups.

5. Final completion report

The final completion report shall provide an overview of the programs that have been delivered throughout the contract period and also present effectiveness of the programs measured through indicators such as the level of technology diffusion over the period of the contract and how people's interest towards these technologies has grown and how much of actual solar technology consumption had grown.

Activity	Schedule/ Frequency
Program rollout plan	10 weeks from contract date
Monthly progress reports	Monthly
Feedback surveys	As planned by the Awareness Officer
Final completion report	End of contract period

E. REPORTING OBLIGATIONS

The Consultant will report to the PMU and the Energy Department and shall work in close coordination with the MEE, ASPIRE PMU, Utility Companies, Banks and other stakeholder groups in developing coordinating and delivering the program to public. For technical sessions, involvement of field specialized people from these stakeholder groups will be important.

F. KEY QUALIFICATIONS AND EXPERIENCE

The Awareness Officer shall hold a minimum qualification level of a Bachelor's degree, specializing in marketing, business management or any related field along with relevant work experience of a minimum of 3 years. Exposure to work similar work in the utility sector will be given preference along with design skills, including graphics and web design.

G. SCHEDULE FOR THE ASSIGNMENT

The duration of the assignment is initially for <u>12</u> months from the commencement of the consultancy with potential extension based on performance and need. The successful candidate must be available to commence the position in **April 2017.**

H. FACILITIES TO BE PROVIDED BY THE CLIENT

The Client shall make available to the Consultant Office space and other facilities such as computers at the MEE. Local transport for official travel between Male', inter-Atolls and interislands and food and accommodations for the trips will be provided from the project.