

Terms of Reference (TOR) for Green Energy Engineer OIMT/CIAS unit Individual Contractor (IC)

A. Project Title

Green Energy Solutions for Country Offices

B. Project Description

The Office of Information Management and Technology (OIMT) plays an active role in provision of Green Energy services, in conjunction with the Procurement Services Unit (PSU), to a variety of customers, particularly UNDP Country Offices. Since inception of these projects in early 2015, there has been an increase in demand for the various services on offer by the OIMT/CIAS. This follows a commitment by UNDP to minimize “...*environmental impact of its operations and to achieving overall climate neutrality*”. The green energy services, offered mainly to Country Offices, are provided through corporate Long-Term Agreements (LTAs) with selected vendors that went through a rigorous screening process. OIMT provides technical oversight, advisory, and coordination services from project definition, to project commissioning, to operations and maintenance, following a UN-wide recommended process. The end-to-end process entails 7 distinct steps (see 7-Step Solar Solution Process):

Step 1: Self-Assessment – covers installation of Power Consumption Monitoring & Measurement (PCMM) equipment, and completing an online self-assessment survey, including uploading pictures.

Step 2: Business Case – entails analysis of collected data, running simulations to come up with suitable solution for a given site, and, eventually, building a business case based on the recommended solution. The business case entails information on approximate payback time, annual savings, CO₂ reduction, and total cost of ownership in general. The business case is then presented for decision making by Country Office management.

Step 3: Procurement and Cost Proposal – entails conducting secondary bidding through an RfQ to the seven LTA holders, evaluation of quotations, and selection of technically suitable solution for a given site.

Step 4: Oversee Vendor Site Survey – coordinate the site survey in liaison with focal point on site and review site survey report for possible adjustments/improvements

Step 5: System Design – review technical design to ensure compliance with expected standards, as part of quality assurance and oversight

Step 6: Installation and Commissioning – continuous remote assessment of progress on the ground and review of documentation that forms part of commissioning

Step 7: Operation and Maintenance – monitor the system, follow up on outstanding issues, and provide second tier helpdesk services

Project scope is envisaged to cover above 100 offices across the organization and a number of other UN agencies, project offices, and host government departments.

C. Scope of Work

The Engineer is required to play a significant role as directed by the supervisor, under the overall guidance of the Global ICT Advisor, in achieving the following tasks:

- **Technical Oversight:** provide technical oversight in production of business cases, terms of reference to be used by vendors in individual projects, and other technical documentation as may be directed by the supervisor;

- **Energy Efficiency Audit:** conduct energy efficiency audits in offices of interest and compile reports with recommendations. Follow up on implementation of recommendations where a budget has been approved. Travelling to UNDP office or to project site in remote area may be required;
- **PCMM Roll-out:** lead roll out of power consumption monitoring and measuring (PCMM) devices in liaison with ICT Managers in respective offices. Provide tier 2nd technical support, with possibility of escalating to equipment manufacturer;
- **Promoting Adoption of Green Energy:** identifying opportunities for implementation of solar PV system and engaging with Country Offices, including possible expansion to project offices;
- **Solar PV Implementation:** provision of technical assistance to UNDP offices undergoing solar PV installation, as elaborated in the steps of the implementation process (see **Project Description** section above). This includes review of proposed designs, keeping track of implementation status of each office, and making necessary follow ups with relevant parties;
- **Green Energy Helpdesk:** regular monitoring of existing installations and attending to problems as may be reported by focal points or as may be detected from the monitoring systems. Take leadership in production of bi-annual report for allocated installation(s);
- **Green Energy Information:** play an active role in revamping communication materials and web-based platform to disseminate information more effectively, including conducting webinars in liaison with Regional ICT Coordinators. Contribution to actual content is a significant part of this aspect, targeting both technical and non-technical audiences;
- **Corporate Green Energy Initiatives:** actively participate in corporate green energy initiatives and forums as may be requested by the supervisor.

Importance: General energy/power challenges in developing countries, all of which have UNDP presence, has seen an upsurge in demand for sustainable energy solution for Country Offices. Failure to provide adequate and systematic assistance to COs on green energy adoption will compromise on value for money and consequently impact negatively on programme delivery. Risk for the recipient of our services is high, in case of emergency, crisis, or a prolonged power blackout in a given office location.

D. Expected Outputs and Deliverables

Deliverables/ Outputs	Estimated Duration	Target Due Dates	Review and Approvals
Technical oversight on proposals, business cases, RfQs, and other documents to ensure integrity and high accuracy	Ongoing	End of contract	Global ICT Specialist
Energy efficiency audits and implementation of suitable mechanisms	Ongoing	End of contract	Global ICT Specialist
Power Consumption Measurement and Monitoring (PCMM) installation in Country Offices with real-time online monitoring	Q3 2019	September 2019	Global ICT Specialist
Initiation of solar PV installation to at least step 2 (Business Case) in at least 10 COs where opportunities have been identified	Ongoing	End of contract	Global ICT Specialist
Coordinating project activities in conjunction with local focal point and vendor focal point throughout Site Survey, System Design, Installation, and project commissioning	Project duration	End of contract	Global ICT Specialist
Helpdesk functions and report compilation for existing installations	Ongoing	End of contract	Global ICT Specialist
Capacity building for CO focal points through webinars, coaching	Ad-hoc	End of contract	Global ICT Specialist

of interns within OIMT Green Team			
Substantive participation in UNDP corporate initiatives and forums as may be requested by the supervisor	On request	End of contract	Global ICT Advisor

Note: Deliverables listed above are not necessarily achieved in sequential order but spread over the contract duration

E. Institutional Arrangement

- On a day to day basis, the Contractor will be working with and directly reporting to the Global ICT Specialist;
- The Global ICT Advisor has the overall responsibility to direct provision of Green Energy services;
- Progress reporting will be done every Tuesday in the unit's weekly meetings and monthly Green Energy Meetings.

F. Duration of the Work¹

The duration of the contract is 12 months (counting only working days) starting from 01 May 2019, with a possibility of extension, depending on solar PV uptake by receiving offices.

G. Duty Station

The duty station for this contract is Copenhagen and duties will be carried out on a fulltime basis in the OIMT/CIAS office premises (UN City, 51 Marmorvej, 2100 Copenhagen)

H. Qualifications and Experience of the Successful Individual Contractor

- Master's Degree in Renewable Energy or similar relevant field
- A minimum of 2 years' experience in a similar capacity/environment
- Proficiency in solar PV simulation software (PV*Sol) and modeling software (HOMER)
- Experience in technical oversight on third party implemented projects
- Experience in technical assessment of premises for energy efficiency
- UN work experience will be an added advantage;
- Knowledge of a second UN language will be an added advantage

I. Scope of Price Proposal and Schedule of Payments

- Payment will be monthly but based on a daily US\$ fee paid at the prevailing UN rate
- The assignment should be implemented during working days, excluding weekends and UN official holidays.

J. Criteria for Selection of the Best Offer

In addition to minimum requirements, the following will be used to select the best candidate for

¹ The IC modality is expected to be used only for short-term consultancy engagements. If the duration of the IC for the same TOR exceeds twelve (12) months, the duration must be justified and be subjected to the approval of the Director of the Regional Bureau, or a different contract modality must be considered. This policy applies regardless of the delegated procurement authority of the Head of the Business Unit.

consultancy:

70% out of 100%

- Performance in oral interviews for shortlisted candidates (Shortlisting based on desk review of submitted documents);
- Brief description of approach to the assignment (Motivation letter);

30% out of 100%

- Proposed price level (daily fee in US\$)

To apply, send the following documents, completed and signed, to oitm.procurement.cph@undp.org

a) CV or Duly signed P11 Form, b) Brief Description of Approach to Work (Motivation) and c) Confirmation of Interest and financial proposal

K. Approval

This TOR is approved by:

Signature: _____



Name and Designation Gerald Demeules – Global ICT Advisor

Date: 02 04 2019