

TERMS OF REFERENCE FOR INDIVIDUAL CONTRACT



*Empowered lives.
Resilient nations.*

Post Title:	National Engineer in Solar-PV Technology
Agency or Project Name:	UNDP Timor-Leste
Period of Assignment/ Services:	December 2020 – Sep 2021 (90 working days)
Country of Assignment:	Timor-Leste
Location:	UNDP Governance Unit
Duty Station:	Dili, Timor-Leste
Expected Places of Travel (if applicable):	Dili, Bobonaro and Manatuto municipalities

A. Project Title

The National Consultant in the position of International Engineer in Solar-PV Technology is required particularly during the first year of the project to assist the Project Management Unit (PMU) in preparation of procurement and monitoring the work of the Engineering, Procurement and Construction (EPC) company for the **Accelerating Clean Energy Access to Reduce Inequality (ACCESS) Project** in Timor-Leste.

B. Project Description

In alignment with the UNDP Strategic Plan to reduce inequality, the acceleration of access to electricity using locally available renewable resources is a feasible intervention. In Timor-Leste, about 76.5% of the villages have access to the electricity grid. It is estimated that about 29,000 families in remote areas of Timor-Leste already have energy supply through various use of renewable energy resources; however, there are still around 37,000 families who do not have access to electricity. The biggest challenge for the government in the coming years will be to reach those families living in isolated areas in the mountains or near the border with Indonesia. In addition, access to water supply is another challenge in Timor-Leste. While in urban areas the access to water supply reaches 91 %, in rural areas, access to improved water supply reaches only 60 % of the population.

UNDP, with funding support from KOICA Indonesia, implements a 4 years project titled **“Accelerating Clean Energy Access to Reduce Inequality (ACCESS).”** Under overall oversight from UNDP Indonesia, the project will be implemented in Indonesia and Timor-Leste in collaboration with UNDP Timor-Leste. The Ministry of Energy and Mineral Resources (MEMR) and KOICA Indonesia are the implementing partners of the ACCESS project in Indonesia, while the Ministry of State Administration (MSA) and KOICA Timor-Leste are the partners in Timor-Leste.

The ACCESS project's objective is for the poor and most vulnerable communities to have equitable and sustainable access to basic services required for improving livelihoods. In Indonesia, the ACCESS project locations are 23 villages in East Nusa Tenggara, West Sulawesi, Southeast Sulawesi and Central Kalimantan Provinces, while in Timor-Leste are 25 villages in Dili, Bobonaro and Manatuto municipalities.

The expected outputs of the ACCESS project are:

Output 1: Renewable-based energy infrastructures are constructed, providing access to electricity for households in 23 targeted villages of 4 Provinces in Indonesia that can be monitored remotely.

Output 2: Local capacity is in place to operate and maintain built energy infrastructures.

Output 3: Local institutions established to enhance sustainability and scaled-up use of built energy infrastructures.

Output 4: providing sustainable access to clean water and lighting in Timor-Leste in 25 remote villages by installing 11 solar PV water pumps and 1000 Highly Efficient Solar Lamp System (LTSHE).

Output 5: Results dissemination and reach-out for scaling up.

For the project implementation, UNDP establishes Project Management Unit (PMU) in both Indonesia and Timor-Leste. The PMU consists of National Project Manager, Technical Engineers, Municipal Technician, Finance and Admin Associate, Administrative Clerk and Driver. The CTA and the National Project Manager in Timor-Leste will supervise the National Project Manager and assure that the PMU of Timor-Leste delivers the project's outputs. A Project Board consisting of government partners, KOICA, and UNDP will be established to provide advisory and strategic guidance to the project. The position of the National Engineer is required to assist the International Engineer in assisting the PMU in preparation of procurement and monitoring the work of the Engineering, Procurement and Construction (EPC) company. For this purpose, UNDP Timor-Leste is seeking an National Engineer in Solar PV Technology.

Under the supervision of CTA and National Project Manager, the National Engineer is responsible to provide technical expertise to ensure quality of the engineering and construction of solar PV water pumps in Timor-Leste. The National Engineer is expected to have close collaboration with the National Project Manager and the International Technical Engineer in Timor-Leste.

C. Scope of Work

In collaboration with the National Project Manager and National Engineer in ACCESS project team, the National Engineer is responsible in:

1. Supporting the International Engineer in providing technical input and oversight to the design of work plans, detailed procurement plans, tender documents and TORs that include feasibility study, design, construction, stakeholder involvement, quality control and risk management for solar-PV water pumps;
2. Work closely with the UNDP procurement to develop the appropriate contract packaging and tender documents for works to be contracted; this includes review of technical documents for tender, technical review of all offers received as well as final technical recommendation of contractor selection based on the requirements of the project;
3. In collaboration with the International Engineer in providing technical inputs and guidance to the consultant team/company in conducting detailed feasibility study and engineering, procurement, and construction activities. Liaise with and direct the work of engineers and other technical staff employed on the project and develop appropriate solutions to overcome unforeseen construction difficulties. Negotiate modifications with contractors and other Engineers.
4. Inspect project sites to monitor progress and ensure conformance to design specifications and safety or sanitation standards;
5. Providing recommendation to the Project Manager to certify payments for contractors for stages completed;
6. Guiding and supporting the implementation of the Environmental and Social Management Plan (ESMP) of the project and observe a full compliance during the entire project duration. Providing guidance to the Project Manager with the implementation and monitoring of all construction risk mitigation measures and take necessary actions to mitigate the risks.
7. Providing guidance and technical support in creating a comprehensive overview of a good international practice of solar-PV power plants.
8. Assist the Project Manager in preparation of project reports for submission to KOICA and Project Steering Committee.

D. Expected Outputs, Deliverables and Payment Schedule

Expected Deliverables/Outputs	Indicative due date	Review and Approvals Required	Percentage of contract price paid on delivery
Deliverable no. 1 Consolidated inputs & best practices from stakeholders (TL Ministry of public works; Indonesia Ministry of Energy; Indonesia ACCESS project team; UNDP procurement unit) for development of Invitation to Bid for procurement of company for construction of solar-PV power plants.	20 working days (Dec 2020)	National Project Manager	20%
Deliverable no. 2 Field report on solar-PV power plant construction supervision.	30 working days (Mar-May 2021)	National Project Manager	30%
Deliverable no. 3 Inputs from beneficiaries from the three targeted municipalities for development of Manual for operation and maintenance of solar PV water pump based on assessment of the local capacity.	10 working days (May 2021)	National Project Manager	20%
Deliverable no. 4 Report on field testing of the manual for operation and maintenance of solar PV water pumps in sample locations in the three targeted municipalities.	30 working days (Jul-Sep 2021)	National Project Manager	30%

E. Institutional Arrangement

Under the supervision of the CTA and the National Project Manager, UNDP Timor-Leste, the Consultant must ensure the completion of the above deliverables through high quality advocacy, consultations, coordination with various parties internally and externally. The Consultant is also expected to interact with the Ministry of Public Works in Timor-Leste, Ministry of Energy and Mineral Resources in Indonesia, Indonesia ACCESS project team, project site municipalities and other relevant institutions

F. Duration of the Work¹

The assignment will be delivered within 10 (ten) months in intermittent scheme with total of 90 days. The payment will be made to the consultant at each payment schedule, upon technical clearance from the CTA and the Project Manager. Travel costs occurred to support the above assignment can be reimbursed upon advance approval of ACCESS Project, UNDP Timor-Leste.

G. Duty Station

The duty station/location for the consultant will be in Dili, with field visits to project sites in Dili, Bobonaro and Manatuto municipalities.

H. Travel Plan

Below is an indicative travel plan for the duration of the assignment. The Consultant will be required to travel to the below indicated destinations and include the relevant costs into the proposal. There may be also unforeseen travel that will come up during the execution of the contract which will be agreed on ad-hoc basis.

No	Destination	Frequency	Duration/days
1	Dili (Atauro)	2	4
2	Bobonaro	2	4
3	Manatuto	2	4

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.

H. Qualifications of the Successful Individual Contractor

Recruitment Qualifications	
Education	✓ A Master's degree or equivalent in Engineering other related disciplines.
Experience and Personal Attributes	<ul style="list-style-type: none">✓ Minimum 2 years of work experience in solar-PV power plants project development or construction;✓ Experience in dealing with Engineering, Procurement and Construction (EPC) companies;✓ Experience in monitoring power plant construction projects;✓ Familiarity working with quantitative and qualitative data;✓ Demonstrated experience presenting work to both technical and non-technical audiences
Language Requirements	✓ Excellent written and oral communication skills in English. Ability to communicate in Bahasa Indonesia, Portuguese or Tetum will be an advantage.
Other Competencies	<ul style="list-style-type: none">✓ Excellent interpersonal and networking skills, including the ability to liaise effectively at project management levels;✓ Ability to communicate and function effectively in an international, multicultural environment;✓ Ability to work effectively in a team.

I. Scope of Price Proposal and Schedule of Payments

The proposal shall consist of a Lump Sum Amount cost for each deliverable.

J. Presentation of Offer

- Duly accomplished Letter of Confirmation of Interest and Availability
- P11 Form, indicating all past experience from similar projects;
- Financial Proposal that indicates the all-inclusive fixed total contract price, supported by breakdown of costs, as per template provided.

K. CRITERIA FOR SELECTION OF THE BEST OFFER

Individual consultants will be evaluated based on the following methodologies:

Cumulative analysis

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

- a) responsive/compliant/acceptable, and*
- b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.*

** Technical Criteria weight; 70%*

** Financial Criteria weight; 30%*

Only candidates obtaining a minimum of 70 points would be considered for the Financial Evaluation

Criteria	Weight	Maximum Point
<u>Technical Criteria</u>		100
<ul style="list-style-type: none"> • Criteria A: qualification requirements as per TOR: <ol style="list-style-type: none"> 1. A Master's degree or equivalent in Engineering other related disciplines. 2. Minimum 2 years of work experience in solar-PV power plants project development or construction; 3. Experience in dealing with Engineering, Procurement and Construction (EPC) companies; 4. Experience in monitoring power plant construction projects; 5. Familiarity working with quantitative and qualitative data; 6. Demonstrated experience presenting work to both technical and non-technical audiences 7. Excellent written and oral communication skills in English. Ability to communicate in Bahasa Indonesia, Portuguese or Tetum will be an advantage. 	70%	10 15 10 10 10 10 5
<ul style="list-style-type: none"> • Criteria B: Brief Description of Approach to Assignment <ol style="list-style-type: none"> 1. Understands the task and applies a methodology appropriate for the task? 2. Important aspects of the task addressed clearly and in sufficient detail? 3. Is planning logical, realistic for efficient project implementation? 	30%	10 10 10

L. Approval

This TOR is approved by:

National Project Manager

Signature

: 

Name and Designation

: Bernardino Da Costa Pereira, National Project Manager

Date of Signing

: 14 / Oct / 2020