

TERMS OF REFERENCE

Long Term Agreement

1. Assignment Information

Assignment Title:	National Expert on Energy Efficiency and Renewable Energy
Cluster/Project:	Policy and Advocacy Unit
Post Level:	National Expert
Contract Type:	Long Term Agreement (LTA) (possibility of extension up to two years)
Duty Station:	Phnom Penh
Expected Place of Travel:	Phnom Penh, Cambodia
Contract Duration:	Initial contract is from 1 February 2019 to 31 January 2020 (up to 80 days per year)

2. Project Description

Demands for energy consumption in Cambodia continue to rise as it begins a transition to Lower-Middle-Income status. Fuelling growing energy demands in a sustainable way is a priority for the Royal Government of Cambodia (RGC). The UNDP is supporting the RGC in achieving progress towards the sustainable development goals in Cambodia, including providing clean and sustainable energy to all.

The domestic demand for electricity in Cambodia grew at an average rate of over 19% per year from 2003 to 2017 and is projected to continually increase by 15% annually up to 2030. This growth in demand has largely been met by new large-scale hydropower and coal power plants to reach a total capacity of around 2,283 MW. Various stakeholders in Cambodia's energy sector have highlighted alternative solutions to meet this demand, amongst which include new sources of renewable energy (particularly solar) and energy efficiency. These proposed solutions are in line with RGC's Rectangular Strategy-Phase IV, as well as the National Strategic Plan on Green Growth.

In terms of energy access, significant progress towards its goal of connecting 100% of villages and 90% of households to the national grid by 2030 has been achieved. Household rates of electricity access grew from 32.5% in 2010 to 71.5% as of 2017. However, there remains today many challenges to electrify the remaining households, many of which are far off-grid and require alternative solutions. Solar home systems and DC/AC mini-grids are potential solutions. Also off-grid solar applications for productive use can support electrification of remote areas and reduce poverty.

Increasing the application of sustainable energy sources, increasing energy access and implementing energy efficiency measures can have a positive impact on the competitiveness of Cambodian companies, Cambodia's economic growth, as well as poverty reduction. As part of UNDP's support to the Royal Government of Cambodia, UNDP is seeking a National Expert on Energy Efficiency and Renewable Energy to support project identification, programming and implementation. The consultant will support the core programme team of UNDP Cambodia.

This solicitation is for a Long-Term Agreement (LTA) for one year and renewable up to two years linked to satisfactory performance of the individual consultant. LTA refers to a mutual arrangement whereby the Consultant will provide services as required, over a specific period of time. It specifies the unit price (daily rate), allowing for a framework agreement to be used when the Consultant's services are needed. A separate ToR will be developed for the specific services needed within the scope of the LTA.

3. Scope of Work

Under the direct supervision of the Technical Advisor on Energy, the national consultant will be

responsible for providing high quality technical inputs, based on an in-depth understand of the local context, related to renewable energy, energy access and energy efficiency:

1. scoping business opportunities for UNDP Cambodia and supporting resource mobilization;
2. supporting implementation of programmes;
3. supporting knowledge management and documentation of lessons learned;
4. supporting reducing the carbon footprint of UNDP operations.

Key work areas will include:

1. Scoping business opportunities for UNDP Cambodia and supporting resource mobilization:

- a) Analyzing developments in the energy sector in Cambodia;
- b) Identifying and collecting background information on developments in energy use and generation in various segments of the economy, including for instance number of establishments, employment figures, share of GDP and growth and sector trends;
- c) Liaising with local stakeholders to identify opportunities and where UNDP can add value;
- d) Analyzing barriers faced by market actors and conducting interviews and field visits, including identifying efficient ways to address the barriers;
- e) Identifying potential partners for implementation, including potential solution providers;
- f) Organize peer review particularly to seek validation from local stakeholders;
- g) Identifying measures in the energy sector which can reduce GHG emission reductions (including demand and supply side energy efficiency and demand response measures) as well as support grid stability.

2. Supporting Implementation of programmes:

- a) Provide high quality technical inputs to trainings and technical assistance to partners on matters related to renewable energy, energy efficiency and energy access;
- b) Conduct reviews of implementation of projects and programmes;
- c) Review of studies and reports and providing technical inputs to the reports;
- d) Conduct energy audits of buildings and businesses;
- e) Provide recommendations for reducing energy consumption in buildings and factories;
- f) Support the implementation of energy solutions in remote rural areas, including DC/AC mini-grids, solar home systems and solar applications for productive use (e.g. solar irrigation).

3. Supporting knowledge management and documentation of lessons learned:

- a) Documenting and synthesizing key lessons/insights from engaging with various stakeholders throughout lifetime of projects;
- b) Refining strategies and approaches for working with local partners, including approaching for identifying barriers, identifying promising innovations and incubation and acceleration support to businesses;

4. Supporting reducing the carbon footprint of UNDP operations

- a) In support of the work conducted by the Green Committee of UNDP, conducting further quick scans and audits to determine energy use and carbon emissions, savings potential and cost-effective measures to implement to reduce the carbon footprint of UNDP operations;
- b) Providing support in the implementation of identified measures.

A separate ToR will be developed for the specific services needed within the scope of the LTA. The consultant shall ensure confidentiality of all the information received during the assignment.

4. Institutional Arrangement

The national consultant will work under direct supervision of the Technical Advisor on Energy.

5. **Duration of the Work**

Person-days for the total assignment is up to 80 days per year. The initial assignment is expected from 1 February 2019 to 31 January 2020, with possible of extension up to two years based on the needs and satisfactory performance of the consultant. The proposed professional fee remains valid for up to two years.

6. **Duty Station**

The duty stations for this assignment is Phnom Penh. DSA, air ticket, and all other related actual costs (etc. local travels) will be covered by the project, prior to agreement made prior to each assignment taking place. The reimbursement of the associated costs will be made through F-10.

Selected individual contract(s) who is expected to travel to the Country Office (CO) to undertake the assignment in the country (Cambodia) is required to undertake the *Basic Security in the Field (BSIF) training*

(<https://dss.un.org/dssweb/WelcometoUNDSS/tabid/105/Default.aspx?returnurl=%2fdssweb%2f>)

prior to travelling. CD ROMs must be made available for use in environments where access to technology poses a challenge.ⁱ

7. **Minimum Qualifications of the Individual Contractor**

Education:	Master's degree, or equivalent, in engineering, economics, finance, energy, international affairs, or other related field
Experience:	<ul style="list-style-type: none"> -At least 5 years' of experience with energy efficiency, renewable energy and energy access -Hands-on experience with conducting energy audits and assessments in industrial facilities in Cambodia is a must, preferably including garment sector and hotels/buildings -Experience in liaising with stakeholders, in particular private sector/factories and government agencies -Experience with installing off-grid renewable energy applications (e.g. SHS, AC/DC mini-grids and solar applications for productive use) is preferred -Familiarity with international standards for energy management (e.g. ISO 50001 and HIGG index) is preferred
Competencies:	<ul style="list-style-type: none"> -Experience working with development agencies, such as WB and UN. -Strong analytical and communication skills -Flexibility and ability to operate in different cultural settings and with a variety of stakeholders; culturally and gender sensitive.
Language Requirement:	-English and Khmer are required.

8. **Criteria for Evaluation of Level of Technical Compliance of Individual Contractor**

Technical Evaluation Criteria	Obtainable
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	Score
Master's degree, or equivalent, in engineering, economics, finance, energy, international affairs, or other related field	20
At least 5 years' of experience with energy efficiency, renewable energy and energy access	20
Hands-on experience with conducting energy audits and assessments in industrial facilities in Cambodia is a must, preferably including garment sector and hotels/buildings	30
Experience with installing off-grid renewable energy applications (e.g. SHS, AC/DC mini-grids and solar applications for productive use) is preferred	20
Familiarity with international standards for energy management (e.g. ISO 50001 and HIGG index) is preferred	10
Total Obtainable Score:	100

9. **Payment Milestones**

The payment is made based on the actual number of days per each assignment agreed prior to each assignment is taking place. It will be calculated based on the number of actual working days as per assignment (exclude DSA, air-ticket, and other associated costs). The number of days of each assignment is expected to vary. The payment to be made to the contractor as per assignment is maximum 3 times as per agreed ToR.

The contractor can begin working only after a **purchase order (PO)** is issued to him/her each time a service is required and following discussion and agreement between the contractor and the Country Office. The contractor takes his/her own responsibility for performing any service which is out of the scope of this ToR.

Full payment amount is paid within 30 days after satisfactorily completion of work and receiving of original invoice/CoP. Each payment is subject to acceptance of work, receipt of Certification for Payment, and performance evaluation duly completed (for last payment) and signed by the head of the respective unit requesting the service. If additional work is needed due to the assignment not meeting the requirements, this will be at no cost to UNDP.

Offerors shall quote one rate of daily professional fee. The rate shall be all inclusive and fixed during the contract period.

The contractor will be paid on a lump sum basis as per agreed per assignment/ToR.

10. **Approval**

Signature:

Name:

Title/Unit/Cluster: Policy Unit

Date: