

Terms of reference



GENERAL INFORMATION

Title: Consultant for development MRV system of Renewable Energy (RE)-based energy generation and energy efficiency (EE) in commercial building (National)
Project Name: Market Transformation through Design and Implementation of Appropriate Mitigation Actions in Energy Sector (MTRE3)
Reports to: MTRE3 Project Manager
Duty Station: Home-based
Expected Places of Travel (if applicable): West Java / Central Java / East Java, Bali, West Sulawesi, East Nusa Tenggara, Riau, and Jambi
Duration of Assignment: January 2021 – October 2021 (120 working days)

REQUIRED DOCUMENTS FROM HIRING UNIT

4 – Senior Specialist	CONFIRMATION OF CATEGORY OF LOCAL CONSULTANT, please select: (1) Junior Consultant (2) Support Consultant (3) Support Specialist (4) Senior Specialist (5) Expert/ Advisor CATEGORY OF INTERNATIONAL CONSULTANT, please select: (6) Junior Specialist (7) Specialist (8) Senior Specialist
X	APPROVED e-requisition

REQUIRED DOCUMENTATION FROM CONSULTANT

X	P11 or CV with three referees
X	Copy of education certificate
X	Completed financial proposal
X	Completed technical proposal

Need for presence of IC consultant in office:

☒ intermittent (deliverables-based). The Consultant will be hired from January to October 2021 with duration of 120 working days.
☐ full time/office based (needs justification from the Requesting Unit)

Provision of Support Services:

Office space: Yes X No
Equipment (laptop, etc.): Yes X No
Secretarial Services Yes X No

If yes has been checked, indicate here who will be responsible for providing the support services:

Signature of the Budget Owner: Boyke Lakaseru

I. BACKGROUND

Market Transformation through Design and Implementation of Appropriate Mitigation Actions in Energy Sector (MTRE3) is a five-year project (2017-2022) funded by GEF, aims at supporting the design and implementation of appropriate climate change mitigation actions in the energy generation and energy end use sectors in Indonesia, focusing on renewable-based electricity generation and energy efficiency in buildings.

Indonesia faces a significant electricity challenge in the next coming years with an electricity demand of 6.8 % annually and over 30 million people without electricity access. Indonesia's primary energy mix consists mainly of fossil fuels such as crude oil, coal and natural gas while renewable energy generates only about 7% of the total energy. The heavy reliance on fossil fuels leaves Indonesia vulnerable to price fluctuations of imported oil and makes the energy sector one of the largest greenhouse gas (GHG) emitters, accounting for one-third of the country's total GHG emissions. Meanwhile, renewable energy resources have an abundant potential in Indonesia, and, together with energy efficiency technologies, can provide clean solutions necessary to address the country's electricity demand, increase access to modern energy, reduce the over-reliance on fossil fuels and contribute to GHG emission reductions.

Despite the Government of Indonesia's efforts in promoting renewable energy development and utilization and energy efficiency technology applications, the increased share of renewable energy in the national primary energy mix and the improved primary energy consumption index both remain much to be desired. Significant policy, institutional, financial and technical barriers remain that hinder the realization of the energy saving and GHG emission reducing potential of renewable energy and energy efficiency technologies in Indonesia.

The MTRE3 project addresses the barriers to investments in renewable based power generation and the application of energy efficient technologies in the energy end use sectors and is arranged around three components: 1) Climate change mitigation options for the renewable energy based energy generation and energy efficiency; 2) Market transformation through implementation of appropriate mitigation actions; 3) Measurement, Reporting, and Verification (MRV) system and national registry for mitigation actions.

The project is implemented by the Ministry of Energy and Mineral Resources (MEMR) in close coordination with the Ministry of Environment and Forestry (MoEF), Ministry of National Development Planning (Bappenas), Ministry of Finance and Ministry of Public Works and Housing. Local governments and the private sector are other key partners in implementing the project activities.

Strengthening the climate change mitigation action registry at the national level and the MRV system at the project level are among the important interventions in the MTRE3 Project. UNDP is seeking an experience consultant for development MRV system of Renewable Energy (RE)-based energy generation and energy efficiency (EE) in commercial building.

II. SCOPE OF WORK, ACTIVITIES, AND DELIVERABLES

Scope of Work

The MRV system developer for Renewable Energy (RE)-based energy generation and energy efficiency in commercial building consultant will assist with the following tasks:

- Assess existing monitoring, reporting and verification procedures of GHG mitigation action which has been officially published by the Government of Indonesia (GoI)
- Organize in consultation with the GoI including but not limited MEMR, MoEF, Bappenas, all activities related to the establishment of MRV system including summarize the meeting process and notes related to climate change mitigation action registry & MRV system
- Apply sufficient analytical and technical skills to acquire relevant information/knowledge from a variety of sources, in support of delivery of a good quality output
- Develop MRV guidelines for RE-based power generation project in accordance with the emission reduction calculation methodology that has been publish by the GoI
- Develop MRV guidelines for energy efficiency project in commercial building sectors in accordance with the emission reduction calculation methodology that has been publish by the GoI.
- Develop monitoring plan of the climate change mitigation action project (RE & EE Project) with basic communication procedure and organisation structure for the field operation team

- Describe the GHG emission reduction potential/projection and its monitoring system in Monitoring Plan of each pilot project (minimum 3 RE pilot project & 2 EE pilot project)
- Develop project based MRV report in accordance with MRV platform related to Renewable Energy Power Plant and Energy efficiency at commercial building, include but not limited National registry System (SRN); APPLE Gatrik; Pelaporan Online Management Energi.
- Develop training material and actively involved as a resource person in capacity building event for project developers/owners, government officials and third party GHG Auditors on the MRV and GHG Audit standard and procedures for the selected pilot projects in RE and EE.

1 st Deliverable: Report on detailed work plan and overview of climate change mitigation action MRV and registry system in Indonesia	January 2021 10 working days (9%)	National Project Manager MTRE3
2 nd Deliverable: Guideline for implementation of the Measurement, Reporting and Verification (MRV) system in Renewable Energy Power Plant in Bahasa Indonesia, summary in English	February 2021 15 working days (12.5 %)	National Project Manager MTRE3
3 rd Deliverable: Guideline for implementation of the Measurement, Reporting and Verification (MRV) system at energy efficiency project in commercial building in Bahasa Indonesia, summary in English	March 2021 15 working days (12.5 %)	National Project Manager MTRE3
4 th Deliverable: Training material on the MRV standard, guideline and procedure for the selected pilot projects in RE and EE (in Bahasa Indonesia, summary in English)	April 2021 10 working days (8%)	National Project Manager MTRE3
5 th Deliverable: Training report on the MRV standard, guideline and procedure for the selected pilot projects in RE and EE	May 2021 10 working days (8%)	National Project Manager MTRE3
6 th Deliverable: Three (3) draft MRV report in renewable energy power plant project, one report for each type of RE (Water, Bioenergy, Solar, Geothermal) submitted to registry platform managed by GoI (in English, summary in Bahasa Indonesia)	July 2021 25 working days (21 %)	National Project Manager MTRE3
7 th Deliverable: Two (2) draft MRV report in energy efficiency at commercial building project submitted to registry platform managed by GoI (in English, summary in Bahasa Indonesia)	September 2021 25 working days (21 %)	National Project Manager MTRE3
8 th Deliverable: Comprehensive report on recommendation for improvement of MRV System for selected project (in English & Bahasa Indonesia)	October 2021 10 working days (8%)	National Project Manager MTRE3
Total	120 working days	

III. WORKING ARRANGEMENTS

Institutional Arrangement

The MRV system developer for Renewable Energy (RE)-based energy generation and energy efficiency in commercial building Consultant will report to the National Project Manager UNDP-MTRE3 and work in close collaboration with the Technical Working Group #3 of MTRE3 and other key parties, such as Ministry of Energy and Mineral Resources, Ministry of Environment and Forestry, Bappenas. The success of the project depends on the timely delivery of each component. The Consultant should ensure timely identification of potential risks and signal any delays in deliverables. The contract will be effective immediately upon signature by UNDP.

The contract and payments will be performance-based and regularly assessed by the UNDP MTRE3 Project. The present ToR may be subject to modification, without changing the overall objective and the scope of work, on the basis of mutual consultations. UNDP will hold the copyright of the assignment deliverables.

Duration of the Work

- a) The duration of work is 120 working days from January 2021 to October 2021.
- b) The expected starting date is January 2021 with expectation of completion on 31 October 2021.
- c) The unforeseen delay will be further discussed by UNDP as basis for possible extension.
- d) The feedback from UNDP and government partners to the submitted reports can be expected within 10 working days from the date of submission.

Duty Station

- a) The contractor's duty station will be home-based with possibility of travel to West /Central / East Java; Bali; West Sulawesi; East Nusa Tenggara; Riau; and Jambi provinces.

Travel Plan

During the Consultant's assignment, he/she will be required to conduct field visit for data verification. All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents (travel expenses will be facilitated by MTRE3 Project).

Travel cost to project sites as below detail;

No	Indicative Location	Frequency	No. of travel days
1	West / Central / East Java	2	4
2	Jambi	2	4
3	Kupang	2	4
4	Mamuju	2	4
5	Pekanbaru	2	4
6	Bali	2	4

IV. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

Academic Qualifications:

A Master's degree or Bachelor's degree in a field related to Energy, Environment, Climate Change, Development, or other closely related field from an accredited college or university.

Years of experience:

- Minimum 2 years of experience for Master Degree or 6 year of experience for Bachelor Degree in fields related to Environment, Energy, Climate Change, or related fields;
- Work experience in monitoring, evaluation and verification and knowledge management within GHG emission reduction, especially energy sector
- Experience in working with national and local development policies, programs and projects of the Government of Indonesia
- Experience working with international organizations and/or major donor agencies will be an advantage

III. Competencies and special skills requirement:

- Demonstrated understanding of issues related to gender and climate change mitigation and/or promotion of sustainable development and modern energy services in communities; experience in gender sensitive evaluation and analysis;
- Excellent communication skills and report writing;
- Demonstrate analytical skills;
- Fluency in Indonesian and English languages, written & spoken

V. EVALUATION METHOD AND CRITERIA

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 point** would be considered for the Financial Evaluation

Criteria	Weight	Maximum Point
<u>Technical</u>		
Criteria A: qualification requirements as per TOR:	50%	
1. A Master's degree or Bachelor's degree in a field related to Energy, Environment, Climate Change, Development, or other closely related field from an accredited college or university.		10
2. Minimum 2 years of experience for Master Degree or 6 year of experience for Bachelor Degree in fields related to Environment, Energy, Climate Change, or related fields;		15
3. Work experience in monitoring, evaluation and verification and knowledge management within GHG emission reduction, especially energy sector		15
4. Experience in working with national and local development policies, programs and projects of the Government of Indonesia		5
5. Experience working with international organizations and/or major donor agencies will be an advantage.		5
Criteria B: Brief Description of Approach to Assignment	50%	
1. Understands the task and applies a methodology appropriate for the task?		15
2. Important aspects of the task addressed clearly and in sufficient detail?		20
3. Is planning logical, realistic for efficient project implementation?		15
Criteria C: Further Assessment by Interview		