

## Terms of reference



Empowered lives.  
Resilient nations.

### GENERAL INFORMATION

**Title:** Senior Specialist for Web Programmer

**Project Name:** Partnership for Market Readiness Indonesia

**Reports to:** PMR National Project Manager

**Duty Station:** PMR Office, Jakarta

**Expected Places of Travel (if applicable):** N/A

**Duration of Assignment:** September 2018 – December 2018 (70 working days)

### REQUIRED DOCUMENT FROM HIRING UNIT

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

### REQUIRED DOCUMENTATION FROM CONSULTANT

x	CV and Duly signed P11 with three referees
x	Copy of education certificate
x	Completed Technical proposal
x	Completed Financial proposal

### ***Need for presence of IC consultant in office:***

☐ partial (explain)

☐ Intermittent (explain)

☒ full time/office based (needs justification from the Requesting Unit)

Due to the high dynamic nature of the work required, the consultant need to be present at the office on daily basis.

### **Provision of Support Services:**

Office space: ☒ Yes ☐ No

Equipment (laptop etc): ☐ Yes ☒ No

Secretarial Services ☐ Yes ☒ No

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

## I. BACKGROUND

Climate change is an important issue in Indonesia. The country consists of thousands of islands with low-lying coastal areas liable to floods as well as arid lands and a fragile mountainous ecosystem. The country's GHG emissions is large and continuing to increase rapidly not only because of a growing population, but also the increasing growth rate of the economy. Indonesia continues to actively participate in international negotiations on formulating effective efforts in combating global GHG emissions. In 2016, Indonesia has published the first National Determined Contribution (NDC) and ratified the Paris Agreement under Law No.16 Year 2016, which has set unconditional reduction target of 29% and conditional reduction target up to 41 % of the business as usual (BAU) scenario by 2030. The BAU scenario is projected to be approximately 2.869 GtCO<sub>2</sub>e in 2030.

One of the biggest challenge to achieve the emission reduction target is funding. Government budget alone will not be sufficient to ensure deliverance of the NDC target. Government needs to leverage the private and public participations to scale up the mitigation actions, which could be done by utilizing market-based instruments. An MBI will work by putting economic value on every unit of emission reduction, either directly as carbon pricing or indirectly as through a carbon crediting mechanism. The Paris Agreement recognizes this need by providing references to link global ambition target of GHG emission reduction to market-based approaches. In its NDC, Indonesia welcomes this concept of scaling-up national mitigation efforts by facilitating a market-based approach to incentive emission reduction within developing countries, or between developed and developing countries.

### **Partnership for Market Readiness project background**

The Partnership for Market Readiness (PMR) is a platform designed to specifically help countries prepare for market-based policy choices and future implementation. As a PMR implementing country, Indonesia developed a Market Readiness Proposal (MRP), which was endorsed by the PMR's 7th Partnership Assembly meeting in Marrakech on October 22-23, 2013. PMR Indonesia programme has been kicked off on March 2017.

The World Bank, through the PMR project, provides funding for the implementation of the MRP, and the UNDP Indonesia Country Office has been appointed as the delivery agent responsible for project implementation. The Coordinating Ministry of Economic Affairs is the main government counterpart. Other key government stakeholders are the Ministry of Environment and Forestry (KLHK), the Ministry of Energy and Mineral Resources (ESDM), the Ministry of Industry (MOI), the Ministry of Finance, as well as the state-owned electricity state-owned enterprise, PLN and industry associations.

The ultimate project aims to support the government to determine an appropriate market-based instrument (MBI) to reduce GHG emissions. This will be achieved through activities which is categorized in five different components, as follow:

- Component 1. Profiling emissions in the power and industry;
- Component 2. Design of governance aspects of an MRV system;
- Component 3. Piloting an MRV system;
- Component 4. Development of a market-based instrument framework;
- Component 5. Organization, communication, consultation and engagement.

To support the implementation of the activities, CMEA has formed three working groups, namely Power Working Group, Industry Working Group, and Market-based Instrument Working Group. The power WG coordinates all activities related with power sector.

## Context of this TOR

Directorate General of Electricity (DGE) MEMR has been operating an MRV GHG emission system in power sector since 2009. The MRV system was developed to support the implementation of the Clean Development Mechanism in Indonesia. Through this system, DGE MEMR has collected and stored the power sector's GHG emission-related data from almost all the power generating units in Indonesia. In 2016, DGE MEMR have collected data from more than 1,140 power generating units which represent more than 90% of national data.

Currently, PMR programme is supporting DGE MEMR strengthening the MRV system in the power sector by developing guideline for MRV and an online platform of MRV GHG emission. DGE MEMR has launched the Guideline for MRV GHG emission on May 2018. The online platform of MRV GHG emission, named APPLE-Gatrik, is being developed based on this Guideline. APPLE-Gatrik is already online and can be accessed through [laporan-emisigatrik.id](http://laporan-emisigatrik.id). It is expected that by this year, power plant companies will start to use APPLE-Gatrik to calculate and report the GHG emission to the government.

To support this objective, DGE MEMR will conduct piloting activities in three different areas, which are JAMALI and Kalimantan area, Sumatra area and East Indonesia area by inviting all relevant power plants companies. The piloting activities will consist of socialization, training, data entry, validation, evaluation, and improvement.

In the other side, PMR is supporting Ministry of Environment and Forestry (MoEF) strengthening the National Registry System (Sistem Registri Nasional – SRN, <http://ditjenppi.menlhk.go.id/srn/>) of mitigation of GHG emission by developing features to facilitate the operation of Market-Based Instrument (MBI) in Indonesia. MoEF is going to develop and conduct MBI piloting in late 2018.

Under component 2, 3, and 4 of PMR programme, UNDP seeks to hire a web programmer to support the pilot activities of MRV GHG emission in power sector and MBI piloting activities. The consultant will also be responsible to support the management and improvement of PMR website.

## II. SCOPE OF WORK, ACTIVITIES AND DELIVERABLES

Under the overall guidance and supervision of the National Project Manager – PMR Indonesia, the consultant is expected to accomplish the following tasks:

- Support the implementation of piloting APPLE-Gatrik and provide inputs for necessary improvement. Before the piloting activities, the Consultant shall familiarize with APPLE-Gatrik features and its programming. During piloting activities, the consultant shall ensure APPLE-Gatrik is running and perform necessary immediate improvement when errors occurred. Based on the inputs gathered during piloting activities, the consultants shall adjust and improve APPLE-Gatrik.
- Support data integration and or synchronization between APPLE-Gatrik and others GHG reporting system, i.e. SIMPEL, SRN, and POME. The consultant shall identify the prerequisites of system integration and or synchronization and provide recommendations. The consultant shall provide technical inputs to the power working group meeting on data synchronization. The consultant shall perform necessary adjustment and improvement of APPLE-Gatrik prior to the system integration. The consultant shall provide recommendation for system integration.
- Support the MBI piloting activities by providing technical inputs to strengthen the SRN. The consultant shall familiarize with SRN features and its programming prior to the assignment.
- In cooperation with knowledge management consultant, support the management and improvement of PMR's website, including necessary upgrading and/or installing necessary plugins/modules/components required for smooth running of PMR website.

**Expected Outputs and Deliverables:**

No	Deliverables/ Outputs	Estimated number of working days	Completion deadline	Review and Approvals Required
1.	<ul style="list-style-type: none"> <li>Deliverable 1: Improved APPLE-Gatrik based on inputs and comments gathered during piloting activities. The consultant shall document the improvement and adjustment.</li> </ul>	17 days	28 September 2018	PMR NPM
2.	<ul style="list-style-type: none"> <li>Deliverable 2: Report on system integration.</li> </ul>	18 days	31 October 2018	PMR NPM
3.	<ul style="list-style-type: none"> <li>Deliverable 3: Technical input report on PMR website management and improvement.</li> </ul>	17 days	30 November 2018	PMR NPM
4.	<ul style="list-style-type: none"> <li>Deliverable 4: <ul style="list-style-type: none"> <li>Technical input report on strengthening the SRN.</li> <li>Comprehensive report on system integration and improvement of APPLE-Gatrik.</li> </ul> </li> </ul>	18 days	31 December 2018	PMR NPM
	Total	70 days		

**1. WORKING ARRANGEMENTS****Institutional Arrangement**

- The consultant will carry out his/her functions under the direct supervision of PMR National Project Manager and PMR Technical Officer for Power Working Group and will coordinate closely with Power WG and other relevant stakeholders.
- Any other tasks that are not included above but during the assignment period later deemed important to ensure the quality of the deliverables could be proposed by the incumbent and shall be agreed jointly.

**Duration of the Works**

The duration of this work is expectedly for 4 months with total of 70 working days and could be extended depend on the need of the PMR as well as the satisfactory of consultant's performance.

**Duty Station**

The consultant is stationed in PMR office, Jakarta.

## 2. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

### Academic Qualifications:

- Bachelor's Degree in computer science, IT, Information System, or others with equivalent relevant works in website development.

### Years of experience:

- Minimum 6 years of experience in planning and delivering website development platforms used across multiple sectors and organizational units.
- Experience with Web Applications, SQL Server, and programming languages such as HTML, CSS, JavaScript, J Query and API's.
- Experience in working with government particularly with Energy and Environmental institution and/or have professional experiences in working with international organization, or high-level decision maker in the country.

### Other Competencies:

- Language skills: good spoken and written in English and Bahasa Indonesia;
- Strong grasp of security principles and how they apply to E-Commerce applications, cross-browser compatibility, Web User Interface Design (UI), Security Principles, Object-Oriented Design, Web Services (REST/SOAP), Multimedia Content Development, API's
- Good interpersonal and communication skills, with the ability to effectively interact with people in a multi-disciplinary and multi-cultural environment;
- Demonstrated ability to take initiative and work independently while also having the skills and interests to work effectively within teams;
- Familiarity with issues related to development and climate change.

## 3. EVALUATION METHOD AND CRITERIA

Individual consultants will be evaluated based on the following methodologies:

### Cumulative analysis

*When using this weighted average method, the award of the contract will 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*

<b>Criteria</b>	<b>Weight</b>	<b>Maximum Point</b>
<b>Technical (70%)</b>		
<i>Criteria A: qualification requirements as per TOR:</i>	<b>70</b>	
1. Bachelor's Degree in computer science, IT,		10

	Information System, or others with equivalent relevant works in website development.			
	2. Minimum 6 years of experience in planning and delivering website development platforms used across multiple sectors and organizational units.		20	
	3. Experience with Web Applications, SQL Server, and programming languages such as HTML, CSS, JavaScript, J Query and API's.		20	
	4. Experience in working with government particularly with Energy and Environmental institution and/or have professional experiences in working with international organization, or high-level decision maker in the country.		20	
	<b>Criteria B: Brief Description of Approach to Assignment</b>	<b>30</b>		
	1. <b>Comprehensiveness:</b> Have the important aspect of the task been addressed in sufficient detail?		10	
	2. <b>Suitability:</b> Is the scope of task well defined and does it correspond to the TOR?		10	
	3. <b>Clarity and logic:</b> Is the presentation clear and is the sequence of activities and the planning logical, realistic, and promise efficient implementation to the project?		10	
	<b>Financial Criteria (30%)</b>			