# **Terms of reference**



#### **GENERAL INFORMATION**

Title: Expert for Development of GHG Inventory Information System for Forestry and Industrial Process and Product use (IPPU)

**Project Name:** Third national Communication to the United Nations **Framework** Convention on Climate Change (TNC)

**Reports to:** National Project Manager (NPM) and the Coordinator of the GHG Inventory Working Group TNC

Duty Station: Home Based

**Expected Places of Travel (if applicable):** Provinces in Indonesia if required **Duration of Assignment:** 9 Months (170 man days)

## REQUIRED DOCUMENT FROM HIRING UNIT



v APPROVED e-requisition

### **REQUIRED DOCUMENTATION FROM CONSULTANT**

- v CV v Copy of education certificate v Completed financial proposal
  - Completed tochnical proposal ( if applicab
  - Completed technical proposal ( if applicable )

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

\_\_\_\_partial (explain),

v

Sintermittent (meetings at KLH office if required)

 $\Box$  full time/office based (needs justification from the Requesting Unit)

#### **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: N/A

Signature of the Budget Owner:

I.	BACKGROUND
	Indonesia signed the Climate Change Convention (UNFCCC, United Nation Framework
	Convention on Climate Change) in Rio in 1992, which was then ratified in 1994 through Law no.
	6/1994. Under this framework, Indonesia, which is a non-Annex 1 country, is committed to fully
	implementing the convention. Under one of the requirements of the convention, Indonesia has

to report its activities aimed at addressing the climate change to the UNFCCC through the National Communication on Climate Change. The National Communication contains information on national circumstances, GHG inventory and projection, mitigation action plan (including related cost, expected funding and relevant policies), vulnerability and adaptation assessment (including action plan for adaptation, related costs, expected funding and relevant policies), institutional arrangement, and plan for improvement of future national communication.

Following the Decision 1/CP.16, paragraph 60, the Conference of the Parties decided to enhance the reporting in national communications, including *inventories from non-Annex I Parties, on mitigation actions and their effects, and support received*. In this regards as defined in the Decision 2/CP.17, the non-Annex I Parties should also submit Biennial Update Report (BUR) consistent with their capabilities and the level of support provided for reporting. The Purpose of the BUR is to provide an update to the most recently submitted National Communication. The BUR will provide: (i) updates of national GHG inventories including a national inventory report; (ii) information on mitigation actions including a description, analysis of the impacts and associated methodologies and assumptions, progress in implementation and information on domestic measurement, reporting and verification; and (iii) needs and support received. Indonesia is now preparing its First BUR and the Third National Communication (TNC).

The Presidential Regulation no. 71 of 2011 provides guidance on the obligation to conduct an inventory of GHG emissions in Indonesia, to be reported to the UNFCCC. GHG inventoryis an activity to obtain data and information on the level, status and trends of GHG emissions changes periodically from various emission sources (source) and absorption (sink) including carbon storage (carbon stock). Information collected at regular periods on the level, status and trends of changes in GHG emissions and uptake including carbon storage in Indonesia. Presidential Decree 71/2011 mandates GHG emissions inventory to the level of district/city. Inventory includes GHG emissions from Energy utilization and generation (ENERGY), Industrial Process and Product Use (IPPU), Agriculture, Forestry and Land Use (AFOLU) and waste management (WASTE).

There are four major challenges in GHG Emissions Inventory in Indonesia, including:

- 1. How to improve the quantity and quality of activity data?
- 2. How to maintain the continuity of data?
- 3. How to ensure information collection activities meet the principles of transparency, accuracy, completeness, consistency and comparable?
- 4. How to ensure the entire Ministry / Agency, and provincial or district / city collects information in a compact and integrated approach?

To address this challenge, an information technology infrastructure is required. Infrastructure on Information Technology (IT) in both hardware and software, and the supporting infrastructure is a strategic asset to support inventory activities, and also has a high investment value. Given its strategic value, then the use of IT should be promptly utilized to avoid higher maintenance costs in the future.

### OBJECTIVES

Under the supervision of the Coordinator of the GHG Inventory Working Group TNC and the National Project Manager (NPM), the assigned individual consultant will be responsible to establish an online information system that supports the activities of GHG Emissions Inventory for <u>forestry</u>, <u>Industrial Process and Product Use (IPPU) sectors</u> in the Ministry of Environment that meets the principles of transparency, accuracy, completeness, consistency and comparable.

## II. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK

Under the supervision of the National Project Manager (NPM) and the Coordinator of the GHG Inventory Working Group TNC, the consultant will have the following tasks:

- 1. To build an online reporting system in the national GHG emission inventory activities for forestry, Industrial Process and Product Use (IPPU), including its workflow.
- 2. To build format data for data input activity from emission sources from forestry, Industrial Process and Product Use (IPPU), according to IPCC (Intergovernmental Panel on Climate Change) 2006 guidelines.
- 3. To develop data processing system that is able to present the latest data at any time required, including; description of the activity data on forestry, Industrial Process and Product Use (IPPU) emission status and Current Reporting Format (CRF) IPCC 2006 guideline.
- 4. To establish data collection system that is able to collect and control the data continuously for forestry, Industrial Process and Product Use (IPPU).

## DELIVERABLES

- 1. Online reporting system in the national GHG emission inventory activities for forestry, Industrial Process and Product Use (IPPU), including its workflow.
- 5. Format data for data input activity from emission sources from forestry, Industrial Process and Product Use (IPPU), according to IPCC (Intergovernmental Panel on Climate Change) 2006 guidelines.
- 6. Data processing system that is able to present the latest data at any time required, including; description of the activity data on forestry, Industrial Process and Product Use (IPPU) emission status and Current Reporting Format (CRF) IPCC 2006 guideline.
- 7. Data collection system that is able to collect and control the data continuously for forestry, Industrial Process and Product Use (IPPU).

### **REPORTING AND MONITORING**

For administrative and operational matters, the selected individual consultant will report to the Project Assistant of the TNC.

For substantive matters and to ensure overall cohesiveness of the work process, the selected individual consultant will also need to communicate regularly with the National Project Manager (NPM) of TNC Project and the Coordinator of the GHG Inventory Working Group TNC.

### III. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

The successful Individual Consultant shall have the following qualification:

- 1. Education: Bachelor degree in information technology;
- 2. Experience in information technology services at least 10 years. Strong network with national government institutions;
- 3. High quality report writing skills in English and Bahasa Indonesia;
- 4. Experience in IT project management with the central government (ministries/ agencies).

# IV. EXPECTED RESULTS

Duration of Assignment: 170 man days (December 2014-September 2015)

Mile	estones	Time frame	Payment	
Approved design for the GHG Inventory Forestry, Industrial Process and Product Use (IPPU) Information System.		20 Dec 2014	17 working days (10%)	
Inte	rim Report, consist of the following:	20 April 2015	68 working days	
1.	Draft online reporting system in the national GHG emission inventory activities for forestry, Industrial Process and Product Use (IPPU), including its workflow.		(40%)	
2.	Draft format data for data input activity from emission sources from forestry, Industrial Process and Product Use (IPPU), according to IPCC (Intergovernmental Panel on Climate Change) 2006 guidelines.			
3. 4.	Draft data processing system that is able to present the latest data at any time required, including; description of the activity data on forestry, Industrial Process and Product Use (IPPU) emission status and Current Reporting Format (CRF) IPCC 2006 guideline. Draft data collection system that is able to collect and			
	control the data continuously for forestry, Industrial Process and Product Use (IPPU).			
Fina	Il report, consist of the following:	20 September	85 working days	
1.	Online reporting system in the national GHG emission inventory activities for forestry, Industrial Process and Product Use (IPPU), including its workflow.	2015	(50%)	
2.	Format data for data input activity from emission sources from forestry, Industrial Process and Product Use (IPPU), according to IPCC (Intergovernmental Panel on Climate Change) 2006 guidelines.			
3.	Data processing system that is able to present the latest data at any time required, including; description of the activity data on forestry, Industrial Process and Product Use (IPPU) emission status and Current			
4.	Reporting Format (CRF) IPCC 2006 guideline. Data collection system that is able to collect and control the data continuously for forestry, Industrial Process and Product Use (IPPU).			