**National GHG Inventory Scope of Work Template**

***Description***

This document provides a template for drafting a **Scope of Work** (SOW) that a lead inventory agency may use to develop a solicitation, e.g., Request for Proposal/Terms of Reference (RFP/ToR). The lead inventory agency, upon customizing this SOW to reflect national circumstances, may distribute it to seek a consultant with whom to contract to develop emission/removal estimates for the National GHG Inventory. This document is part of the GHG data repository tool, and may apply to the consultants listed in the completed Template: Institutional Arrangements. (depending on the sector).

***Purpose***

The purpose of this template is to assist the lead inventory agency in drafting a SOW used to issue a Request for technical support services to develop emission/removal estimates for the National GHG Inventory. This template can be used as a guide to outline the goals, expectations, roles and responsibilities, work plan, and anticipated cost of consultants during the development of an Inventory.

Throughout the SOW, example text is provided in each section, and text that should be modified by the lead inventory agency is provided in GREEN. This template is provided as an example; each lead inventory agency is strongly encouraged to modify as much text as they feel appropriate for their country’s national circumstances, and based on the work the consultants will accomplish for the GHG Inventory. It may be helpful to use the customized work plan in the Supporting Template for developing a National Inventory Inception Memorandum as a source of the tasks, deliverables, and due dates that should be included in the scope of work.

This template consists of the following main sections:

* Introduction
* Background and Purpose
* Scope of Work Tasks
	+ Task 1: Project Management
	+ Tasks 2–6: Development of Category Estimates
	+ Task 7: Development of GHG Inventory Report
	+ Task 8: GHG Inventory Analyses and Quick–Turn Around Response
* Products (Deliverables)
* Appendix I: Placeholder where the National Inventory Coordinator may insert the customized work plan and schedule from the National Inventory Inception Memorandum as soon as it is complete)
* Appendix II: Potential areas of coordination between sector leads

**SCOPE OF WORK**

*The information in the table below will need to conform to procurement procedures set by your Inventory Agency or GEF implementation Agency issuing the solicitation for experts or firms to bid on providing these technical services, but helpful to collect here for reference.*

|  |  |
| --- | --- |
| **Title:**  | Greenhouse Gas Inventory Development and Technical Support |
| **Contractor and Contract #:** |  |
| **Request for proposal #:**  |  |
| **Estimated Budget:**  |  |
| **Key Management Personnel (from Lead Inventory Agency, e.g. Office Directors, etc.):** |  |
| **Lead Inventory Agency Project Officer (PO):**  | *[Insert name of inventory coordinator]* |
| **Lead Inventory Agency Deputy Project Officer (DPO):**  |  |
| **Subject Matter & Technical Experts (SMTE):** |  |
|  |  |

**I. INTRODUCTION**

All countries that are signatories to the United Nations Framework Convention on Climate Change (UNFCCC) are mandated to develop a national inventory of anthropogenic greenhouse gas (GHG) emissions and removals. In accordance with the commitment to the UNFCCC and the reporting requirements for Non–Annex I Parties under the Convention, [insert coordinating/lead agency issuing request for proposal/task order request (RFP/ToR)] calculates and submits estimates of emissions and removals [specify, e.g. as part of National Communications and/or Biennial Update Reports[[1]](#footnote-1)] occurring in [insert country].

The emission and removal estimates produced in the greenhouse gas inventory by [coordinating/lead agency issuing RFP/ToR] represents a robust data analysis and conform to the UNFCCC standards of transparency, accuracy, consistency, comparability, and completeness.

**II. BACKGROUND AND PURPOSE**

In accordance with the commitment to the UNFCCC, and as part of the global effort to collect information about national emissions of greenhouse gases and other precursor gases, [insert country] is obligated to prepare a national GHG inventory. Under this contract, the Contractor will assist [insert country and coordinating/lead agency] in developing its greenhouse gas inventory submission to the UNFCCC as part of its [National Communication (NC) and/or Biennial Transparency Report (BTR)] and the related work necessary to improve and build the GHG Inventory program.

**III. SCOPE OF WORK**

The consultant will be responsible for designing the National Greenhouse Gas Inventory (NGHGI) for the Energy, IPPU, Agriculture Forestry and Other Land Use (AFOLU), and Waste sectors, and the development of the Chapters on GHG Inventory as part of the [National Communication (XNC)/ Biennial Transparency Report (XBTR) for period YYYY to YYYY. This includes working together with stakeholders, including capacity building activities and trainings on data collection, analysis, indicators, the use of 2006 IPCC guidelines on national greenhouse gas inventories, the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories the IPCC good practice guidance on the National GHG inventories and Uncertainty Management, the IPCC Good Practice Guidance on Land use, land-use change and forestry and implementing and maintaining a National Greenhouse Gas Inventory system.

The national GHG inventory report is meant to be an update of the most recent National Communication submitted in YYYY covering the inventory years YYYY to YYYY. This includes the NGHGI data covering the Energy/IPPU/Agriculture/LULUCF/Waste sectors. To generate this information, the consultant will be responsible for analyzing the national available information for the year of the inventory to estimate the emission of the year based on the IPCC 2006 IPCC Guidelines.

Activity data collected should be combined with available country specific emission factors. If information on this is missing, default emission factors from the 2006 IPCC Guidelines can be used. In any case the origin of the data needs to be documented.

The following Methodologies for inventories should be considered:

1. 2006 IPCC Guidelines for National Greenhouse Inventories.
2. 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories
3. Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventory (2000) as the reference and standards for performing inventory estimates in the present work.
4. Good Practice Guidance on LULUCF (2003).
5. Emission Factor Database (EPDB).
6. The 2003 UNFCCC User manual for the guidelines on national communication from NAI countries.
7. Field surveys, depending on the need to compile or verify data for the inventory calculation.
8. Self-Completion Questionnaire to be sent to concerned institutions that can provide activity data.
9. Default IPCC spread sheets of GHG inventory, and where possible, incorporate national data .

## TASKS:

1. Prepare a detailed work plan with milestones that will ensure a final NIR can be completed by agreed date and the final GHG Inventory Chapter of XNC can be completed by agreed date.
2. Undertake the Key Source Analysis to determine priority areas of inventory work (e.g., those sources that are more significant in terms of their contribution to national GHG emissions so that resources and efforts are prioritized).
3. Choose the estimation methods as appropriate.
4. Determine if the recalculation of inventories carried out under the XNC and YNC would be needed to ensure consistency of a time series (to be reported under the XNC/XBTR).
5. Identification and collection of new activity data needed for estimates of GHG emissions for period 2006 to 2022 (XNC) for the sector (Energy/IPPU/Agriculture/LULUCF/Waste).
6. Carry out GHG emission calculation as per 2006 IPCC Guidelines for National GHG Inventory in the five sectors of emissions and removals for period YYYY to YYYY (XNC/XBTR) by using the IPCC GHGI software (updated version).
7. Consider country specific emission factors in comparison with international averages, if applicable.
8. Undertake or design of surveys or stakeholder consultations for the base year and the years to be considered if no activity data is available. Specific institutions and/or individuals may be interviewed for the purpose of getting of compiling data and ensure support.
9. Recalculations may be carried out for previous inventory based on higher tier methodologies and refined activity and emission factor data.
10. Selection of emission factors to be utilized. Determine the application of Tier 1, 2, or 3 for the sector as appropriate (following the IPCC guidelines).
11. Determine if the establishment of country specific emission factors is feasible (dependent on whether emission factors at country level are available).
12. Improve system for archiving, managing and updating the inventory for the country.
13. Calculating the level of uncertainty associated with the inventory data for each considered sector, if feasible.
14. Sectoral tables will be produced using the excel sheets recommended by the IPCC Guidelines.
15. Address quality assurance and quality control procedures.
16. Determine data gaps and future needs.
17. Prepare training materials and provide GHG Inventory workshops as trainer and participate in stakeholder workshops to raise awareness among them.
18. The training materials to be developed and used should be suitable for national experts and stakeholders with beginner to intermediate level knowledge of national GHG Inventory development. Following this thematic training, the target audience should:
	1. Have an overview of how emissions inventories are developed;
	2. Have a general understanding of the methods available, as well as of the main challenges in particular areas;
	3. Be able to determine which methods suits Republic of Palau’s situation best; and
	4. Know where to find more detailed information on the topics discussed.
19. Training and capacity building of the thematic working groups and stakeholders for efficient and timely development and submission of GHG inventories, trainings on data collection, analysis, indicators, the use of 2006 IPCC guidelines on national GHG inventories, the 2019 Refinement to the 2006 IPCC guidelines, the IPCC good practice guidance on the National GHG inventories and Uncertainty Management, the IPCC Good Practice Guidance on Land use, land-use change and forestry and implementing and maintaining a National Greenhouse Gas Inventory system.
20. Organize validation workshop for presentation and discussion on the results obtained from the GHG inventory for the sector.
21. Provide Inventory Improvement plan and highlight key improvement areas where technical support would be needed.
22. Incorporate comments and prepare final GHG Inventory Report following the UNFCCC guidelines for inclusion in the XNC/XBTR.

## Key outputs:

1. Schedule showing the likely time frame/workplan for the delivery of this consultancy
2. GHG emissions calculations using 2006 IPCC guidelines
3. National GHG Inventory
4. Carbon sink inventory report
5. Training and capacity building of technical working groups, national experts, and stakeholders.
6. An updated draft national inventory report for the time series XXXX- XXXX prepared and submitted to the XNC Project Management Unit (PMU).
7. A final updated national inventory report based on the stakeholder’s feedback and comments completed and submitted to the XNC/XBTR PMU.

## DELIVERABLES AND PAYMENT SCHEDULE:

|  |  |
| --- | --- |
| Signing of Contract & Acceptance of workplan | X% |
| Hands on training on general inventory practices as per the IPCC 2006 guidelines completed | X% |
| GHG emissions calculations using IPCC guidelines and tools, National GHG Inventory, and Carbon Sink Inventory report | X% |
| Updated draft GHG inventory report for XNC/XBTR prepared for time series XXXX- YYYY submitted to PMU | X% |
| Validation workshop | X% |
| Final GHG inventory report for 3NC prepared for time series XXXX-YYYY submitted to PMU | X% |

**DURATION OF THE ASSIGNMENT:**

The consultancy work will be for XX days over a period of X months with the work completed by **XXXXXXXXXX YYYY**. Phasing of the consultancy work is at the consultant’s discretion and is based on the work methodology that forms part of the workplan.

**QUALIFICATIONS:**

|  |  |
| --- | --- |
| **Education:** | Master’s degree or equivalent as in energy science, climate change, natural resource management or any relevant qualification in related field. |
| **Experience:** | A minimum of 5 years of relevant experience in conducting GHG Inventories for National Communications (NC) and/or Biennial Update Reports (BUR), presentation of NC,BUR and BTR to the UNFCCC and related activities;Substantial experience with the 2006 IPCC guidelines for GHG-I and the IPCC GHGI Software.Proven experience in designing and/or providing professional trainings for the GHG Inventory staffProven experience in working with international or local organizations on similar assignments.Successful experience in working with UN agencies is an asset |
| **Competencies:** | Good analytical and communication skills, including the ability to draft and to articulate ideas in a clear and concise manner;Good interpersonal skills and ability to work well in a team whilst also having the capacity and initiative to work independently;Highly developed oral and written communications skills with excellent writing skills in English. |

1. For Non-Annex 1 countries, the United Nations Framework Convention on Climate Change (UNFCCC) requires the biennial development and submission of a National Inventory of GHG sources and removals (http://unfccc.int/national\_reports/non-annex\_i\_natcom/items/2716.php). [↑](#footnote-ref-1)