



**Ministry of Climate Change,
Environment and Energy**

Draft Technical Guideline for Roles and Responsibilities for GHG Inventory Data Collection

Consultancy Services to Review and
Strengthen the Institutional Arrangements for
Climate Change Reporting

CBIT Maldives

Capacity Building for Improved Transparency of Climate Change
Mitigation and Adaptation Actions in the Maldives





Ministry of Climate Change, Environment and Energy
Republic of Maldives

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CBIT MALDIVES
*Capacity Strengthening for Improved Transparency of
Climate Change Mitigation and Adaptation Actions in
the Maldives Project*





Ministry of Climate Change, Environment and Energy

Capacity Strengthening for Improved
Transparency of Climate Change
Mitigation and Adaptation Actions in
the Maldives Project (CBIT Maldives)



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Up Close
SOLUTIONS

Table of Contents

Executive Summary	3
1. Introduction	4
2. Roles and Responsibilities	4
3. Training and Support	9
4. Continuous Improvement	9

Executive Summary

This Draft Technical Guideline was prepared as Deliverable 1.1.2 (*Draft Technical Guideline which defines the roles and responsibility of all the stakeholders involved in GHG inventory data collection*) of the CBIT Maldives project.

It outlines a draft institutional structure, responsibilities, and coordination mechanisms for compiling the Maldives' national Greenhouse Gas (GHG) inventory, in alignment with the 2006 IPCC Guidelines and the Enhanced Transparency Framework (ETF) under the Paris Agreement. The scope of this guideline covers the Energy and Waste sectors and includes emissions from CO₂, CH₄, and N₂O.

The document introduces the roles of a dedicated GHG Inventory Team, comprising the Climate Change Department (CCD), the Utility Regulatory Authority (URA), and external consultants, as well as the responsibilities of numerous government entities, state-owned enterprises, and private sector stakeholders as data providers.

While this guideline serves as a foundational reference, the final and formalized institutional roles and responsibilities will be defined and adopted through the following deliverables of the CBIT Maldives project:

- Deliverable 2.1.3: *Regulation to formalize institutional arrangement for MRV of NDC mitigation action*, and
- Deliverable 1.2.2: *Guidelines and protocols for GHG data collection*.

1. Introduction

This guideline outlines the roles and responsibilities for compiling a greenhouse gas (GHG) inventory for in Maldives, in accordance with the 2006 IPCC guidelines for National Green House Gas Inventories. The GHG inventory will cover Carbon dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O) and the sectoral coverage includes energy and waste sector. The GHG inventory will be used to report in the national climate change reports.

2. Roles and Responsibilities

2.1 GHG Inventory Team

A dedicated GHG Inventory Team will be responsible for overseeing the entire inventory process. This team will be composed of:

- **Climate Change Department (CCD) GHG inventory Compiler:**
 - **Responsibility:** Coordination of GHG inventory data collection and coordination with Utilities Regulatory Authority (URA), inline ministries, private sector and external consultant. Develop Quality Control and Quality Assurance (QA/QC) plans for the data providers.
 - **Qualifications:** minimum qualification in bachelor's degree in environmental management, statistics or related field
- **Utility Regulatory Authority (URA) Energy sector data collector:**
 - **Responsibility:** collection of energy sector data and statistics from utilities company and tourism sector.
 - **Qualifications:** minimum qualification in bachelor's degree in environmental management, statistics or related field
- **External Consultants:**
 - **Responsibility:** Compilation of GHG inventory using the data collected by Climate Change Department (CCD) GHG inventory Compiler and Utility Regulatory Authority (URA) Energy sector data collector. Ensure the Quality Control and Quality Assurance (QA/QC) plans are implemented.
 - **Qualifications:** minimum qualification in bachelor's degree in environmental management, statistics or related field, familiarity with the 2006 IPCC guidelines for National Greenhouse Gas compilation.

2.2 Data Providers

Various inline ministries, state-owned enterprises and the private sector will be responsible for providing data to the GHG Inventory Team. These data providers include.

Government Institutions

- **Utilities Regulatory Authority (URA)**
 - **Type of data to be provided:**
 - Fuel consumption data (segregated by fuel type, monthly and by station)
 - Energy produced data kWh (segregated by fuel type, monthly and by power station and usage).
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- **Ministry of Fisheries and Ocean Resources**
 - **Type of data to be provided:** emissions from fishing vessels including for transport, cooking and other auxiliary purposes on the fishing vessel.
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- **Ministry of Transport**
 - **Type of data to be provided:**
 - Vessel registration data, and survey to collect mileage for different classes of vessels.
 - Fuel consumption data from cars (segregated by engine/catalyst type) to derive Fuel consumption data through VKT method, need data on the fleet (age, model and make) and odometer indicator.
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- **Ministry of Defense/ Maldives National Defense Force (MNDF)**
 - **Type of data to be provided:**
 - Fuel use from stationary sources from MNDF
 - Fuel use from MNDF (Coastguard)
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- **Maldives Police Service (MPS)**
 - **Type of data to be provided:**
 - Fuel use from stationary sources from MPS
 - Fuel use from MPS (Marine Police)
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- **Maldives Bureau of Statistics (MBS)**
 - **Type of data to be provided:**
 - Population of the island - for inhabited islands

- Fuel use from MNDF (Coastguard) and MPS (Marine Police)
- **Frequency of Data Provision:** Need Basis
- **Quality assurance and Quality Control (QA&QC) procedure:** N/A

State-owned Enterprises (SOEs)

- State-Electric Company (STELCO)
 - **Type of data to be provided:**
 - Fuel consumption data (segregated by fuel type, monthly and by station)
 - Energy produced data kWh (segregated by fuel type, monthly and by power station and usage).
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- FENAKA Corporation
 - **Type of data to be provided:**
 - Fuel consumption data (segregated by fuel type, monthly and by station)
 - Energy produced data kWh (segregated by fuel type, monthly and by power station and usage).
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Male' Water and Sewerage Company (MWSC)
 - **Type of data to be provided:** Onsite power generation information
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- State Trading Organization (STO)
 - **Type of data to be provided:**
 - Onsite power generation information from cement facilities
 - Re-export of diesel
 - Quantity of petroleum products (diesel, gasoline and aviation fuel) storage and transported to refuelers.
 - Quantity of LPG gas storage and distributed
 - **Frequency of Data Provision:** Annual Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Maldives Ports Limited (MPL)
 - **Type of data to be provided:**
 - Information from workshops in MPL sites at three regional ports and K. Thilafushi (or) K. Gulheefalhu
 - Fuel use information for onsite vehicles (cranes, stackers, bowsters buses, shuttles, barges etc) from all ports with fuel disaggregation

- **Frequency of Data Provision:** Need Basis
- **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Housing Development Corporation (HDC)
 - **Type of data to be provided:** Onsite power generation information from concrete pre-casting facilities
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Fahi Dhiriulhun Corporation (FDC)
 - **Type of data to be provided:** Onsite power generation information from concrete pre-casting facilities
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Maldives Transport and Contracting Company (MTCC)
 - **Type of data to be provided:**
 - Fuel Consumption from dredger
 - Fuel use information for onsite vehicles (cranes, stackers, bowsers buses, shuttles, barges etc) with fuel disaggregation
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Maldives Airports Company Limited (MACL)
 - **Type of data to be provided:**
 - Fueling information segregated between domestic and international
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Regional Airports Company Limited (RACL)
 - **Type of data to be provided:**
 - Fueling information segregated between domestic and international
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Island Aviation Services Limited (IASL)
 - **Type of data to be provided:**
 - Fueling information segregated between domestic and international
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Maldives Industrial Fisheries Company (MIFCO)
 - **Type of data to be provided:** fuel combustion data (including power generation) in fish processing plants.

- **Frequency of Data Provision:** Need Basis
- **Quality assurance and Quality Control (QA&QC) procedure:** N/A

Private Sector

- Male' Aerated Water Company (MAWC)
 - **Type of data to be provided:** Onsite power generation information
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Island Beverages Maldives Pvt Limited
 - **Type of data to be provided:** Onsite power generation information
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Villa Cement Pvt Ltd
 - **Type of data to be provided:** Onsite power generation information on the cement facilities.
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Villa Air Pvt Ltd
 - **Type of data to be provided:** Fueling information segregated between domestic and international
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Trans-Maldivian Airways Pvt Ltd
 - **Type of data to be provided:** Fueling information segregated between domestic and international
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Horizon Fisheries Pvt Ltd
 - **Type of data to be provided:** fuel combustion data (including power generation) in fish processing plants.
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A
- Ensis Fisheries Pvt Ltd
 - **Type of data to be provided:** fuel combustion data (including power generation) in fish processing plants.
 - **Frequency of Data Provision:** Need Basis
 - **Quality assurance and Quality Control (QA&QC) procedure:** N/A

3. Training and Support

- The responsibility of training the data provider will be on the GHG inventory team.
- Ongoing support needs to be provided to data providers to ensure the inventory process is conducted effectively.

4. Continuous Improvement

This technical guideline for roles and responsibilities for GHG inventory data collection will be reviewed after a period of 5 years and updated to ensure its ongoing accuracy, relevance and effectiveness.