



Ministry of Tourism and Environment
Republic of Maldives

Hand-on training for estimating greenhouse gas emissions from Energy sector in Maldives

Date: 14th July 2025 | Venue: Meeruma

Overview and Objectives of the training

Estimating a greenhouse gas (GHG) inventory is crucial for the Maldives, a nation particularly vulnerable to climate change due to its low-lying geography. A comprehensive and accurate inventory enables policymakers to assess emissions sources, track progress towards climate commitments, and design effective mitigation strategies. Given the Maldives' commitment to international climate action, precise estimation ensures transparency, supports informed decision-making, and strengthens resilience against environmental changes.

Estimation tools play a key role in this process, providing structured methodologies for data collection, calculation, and reporting. These tools enhance efficiency, standardization, and accuracy in GHG inventory assessments, ensuring consistency with internationally accepted guidelines such as those of the Intergovernmental Panel on Climate Change (IPCC). Their application in the Maldives fosters data-driven climate policies and strengthens national capacity for emissions tracking. The estimation tools for this workshop covers key energy sources of greenhouse gases, namely stationary and mobile combustion of fuel in Maldives.

Furthermore, this workshop aligns with the United Nations Framework Convention on Climate Change (UNFCCC) Enhanced Transparency Framework (ETF), which emphasizes systematic reporting, verification, and improvement of national climate data. By mastering estimation tools, participants will contribute to the Maldives' ability to fulfil its reporting obligations under the Paris Agreement, thereby enhancing the credibility and effectiveness of national climate action.

A critical aspect of this training is the data collection, handling, quality control and assurance, GHG estimation and archiving for energy sectors. Proper management of inventory data ensures accuracy, accessibility, and continuity of information, which is essential for long-term climate planning. During hands-on exercises, participants will gain practical experience in collecting, processing (including QA/QC), estimating GHG and safeguarding data, ensuring it remains useful for future assessments and reporting.

This training workshop will provide both theoretical knowledge and practical application of tools used in GHG inventory estimation for Maldives. **The participants of the training are required to bring their laptop with the IPCC software and Microsoft Excel installed.** The IPCC software can be downloaded from the official website: [Inventory Software - IPCC-TFI](#). Participants who complete all sessions will receive a certificate of participation.



Agenda

Participants Arrival and Registration	08:45 – 09:00
Opening Ceremony	09:00 – 09:10
Group photo and Tea / Coffee break	09:10 – 09:30
Session 1: Introduction to GHG inventory process	09:30 – 12:00
<ul style="list-style-type: none"> General guidelines, including IPCC methodologies 	
<ul style="list-style-type: none"> Introduction to IPCC inventory tool 	
<ul style="list-style-type: none"> Key category analysis for emission sources 	
<ul style="list-style-type: none"> Reference approach 	
<ul style="list-style-type: none"> <i>Hands-on exercise</i>: Reference approach 	
Questions and Answers	
Lunch	12:00 – 13:00
Session 2: Energy Sector	13:00 – 16:00
<ul style="list-style-type: none"> Stationary combustion (electricity generation) 	
<ul style="list-style-type: none"> <i>Hands-on exercise</i>: Fuel consumption data processing including QA/QC 	
<ul style="list-style-type: none"> Mobile combustion (transport, fisheries) 	
<ul style="list-style-type: none"> <i>Hands-on exercise</i>: Land/Marine/Aviation/ emissions including QA/QC 	
Closing Ceremony	16:00 – 16:15
<ul style="list-style-type: none"> Certificate Distribution 	
<ul style="list-style-type: none"> Closing Remarks 	
Tea	16:15

Participants

1. Climate Department, Ministry of Tourism and Environment
2. Energy Department, Ministry of Tourism and Environment
3. Tourism Statistics Section, Ministry of Tourism and Environment
4. Energy section of Utility Regulatory Authority (URA)
5. Ministry of Transport and Civil Aviation
6. Ministry of Fisheries Marine Resources and Agriculture
7. National Bureau of Statistics
8. Maldives Customs Services
9. Maldives National Defence Force
10. Maldives Airports Company Limited
11. State Trading Organization
12. STELCO
13. FENAKA
14. Maldivian Gas
15. Villa Gas
16. Regional Airports
17. MWSC



Background of the CBIT Maldives Project

Anthropogenic climate change is widely accepted as the most significant environmental challenge faced by the world in the 21st century. The Fifth Assessment Report (AR5) (2014) and the Global Warming at 1.5 °C (2018) special report by the Intergovernmental Panel on Climate Change (IPCC) confirm that climate change is an existential threat for low lying coral islands like Maldives. The Maldives is one of the most vulnerable countries for adverse impacts of global climate change.

Maldives' Nationally Determined Contribution (NDC) highlights food security, critical infrastructure, public health, water security, coastal protection, and coral reef biodiversity as key vulnerabilities of the country. In addition to these vulnerabilities, Maldives, like other Small Island Developing States (SIDS), face specific developmental challenges. They include high transportation and logistical costs, exploitation of natural resources, poor management of waste and pollution, and a small population leading to unsustainable economies of scale for different development agendas.

The 21st Conference of the Parties (COP21) was a key milestone for the international climate negotiations due to adoption of the Paris Agreement (PA), which came into force in 2016. Maldives was among the first countries to sign and ratify the PA in April 2016. One of the unique aspects of the PA is the contribution of both Annex 1 Parties and non-Annex 1 Parties in climate change mitigation and adaptation efforts in the form of NDCs. Article 13 of the PA outlines the transparency framework relating to the transparency of action and support. The main purpose of the transparency framework is to improve mutual accountability amongst the Parties in terms of their efforts for emissions reduction, adaptation efforts and support needed and received for addressing climate change.

Parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed on the Katowice climate package during the 24th Conference of the Parties (COP24) held in Katowice in December 2018. The Katowice climate package included eight guiding principles for the modalities, procedures and guidelines (MPGs) of the Enhanced Transparency Framework (ETF) under the PA, these include 1) Building on and enhancing the transparency arrangements under the Convention, recognizing the special circumstances of the Least Developed Countries (LDCs) and Small Island Developing States (SIDS), and implementing the transparency framework in a facilitative, non-intrusive, non-punitive manner, respecting



national sovereignty and avoiding placing undue burden on Parties; 2) The importance of facilitating improved reporting and transparency over time; 3) Providing flexibility to those developing country Parties that need it in the light of their capacities; 4) Promoting transparency, accuracy, completeness, consistency and comparability; 5) Avoiding duplication of work and undue burden on Parties and the secretariat; 6) Ensuring that Parties maintain at least the frequency and quality of reporting in accordance with their respective obligations under the Convention; 7) Ensuring that double counting is avoided; and 8) Ensuring environmental integrity. Furthermore, the ETF requires all Parties to compile national greenhouse gas (GHG) inventories and to report on the implementation of mitigation actions (tracking of NDC implementation) on a regular basis.

The Maldives is committed to meet the requirements of the ETF, despite of the flexibility provided for SIDS. There is need, therefore, for the Maldives to (i) establish a permanent institutional arrangement for GHG inventory compilation and tracking of NDC commitments, (ii) develop a centralized climate data management system for GHG data, tracking of mitigation actions, adaptation actions and support received and needed and (iii) develop tools and train experts to meet the enhanced transparency framework under the Paris Agreement.

This CBIT project has been developed with the objective of strengthening institutional capacity for tracking mitigation and adaptation actions and establishing climate finance tracking system in the Maldives. It aims to establish and enhance the Maldives' transparency system, in line with ETF of the PA. To achieve this objective, the following efforts are needed:

- (i) strengthening and formalizing long-term institutional arrangements.
- (ii) systemizing data collection and processing.
- (iii) developing indicators and advancing methodologies, as well as improving the overall data quality and management procedures, for preparing GHG inventories, tracking mitigation and adaptation actions and climate finance in an integrated manner. The final goal is to inform the national decision-making process as well as regularly report to the UNFCCC process.



The project includes two components:

- Component 1: The Maldives' National Greenhouse Gas (GHG) Inventory System improved.
- Component 2: The Maldives' Transparency Framework for mitigation and adaptation actions and resilience building, including tracking support for implementation.

Component 1 is designed to enable Maldives to meet the GHG inventory reporting requirements under the Modalities, Procedures and Guidelines (MPGs) outlined under the ETF of PA. Particularly, Chapter II of the MPGs contained in the annex of decision 18/CMA.1.

Component 2 is designed to meet the NDC tracking requirements of MPGs and both components are aimed to enable Maldives to submit the Biennial Transparency Reports (BTRs) in a timely and regular manner.