



Ministry of Tourism and Environment
Republic of Maldives

Training Report

Piloting and Training on the Climate Data Portal

CBIT Maldives

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





Ministry of Tourism and Environment
Republic of Maldives

Piloting and Training on the Climate Data Portal

Training Report

CBIT MALDIVES

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





Ministry of Tourism and Environment

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



This document was developed under the project “Capacity Strengthening for Improved Transparency of Climate Change Mitigation and Adaptation Actions in the Maldives (CBIT Maldives)”, financed by the Global Environment Facility (GEF).

The project is executed by the Ministry of Tourism and Environment, with implementation support from the United Nations Environment Programme (UN Environment)

November 2025

Conducted by:

Ritariworks Private Limited

Contents

Executive Summary.....	4
1. Introduction	5
2. Objectives of the workshop	6
3. Presentations and Training	6
3.1 Session 1: GHG Inventory Overview	6
3.2 Session 2: Data Collection Portal Overview.....	6
3.3 Session 3: Portal Demonstration and Hands-On Piloting	7
3.4 Session 4: Technical Working Group Discussions.....	7
4. Feedback from Data Providers for the Climate Data Portal.....	7
Annex 1: Agenda	8
Annex 2: Presentations	9
Annex 3: Participant List	10
Annex 4: Photographs of the workshop	13

Executive Summary

The Climate Data Portal was launched by the Ministry of Tourism and Environment (MoTE), in collaboration with the Utility Regulatory Authority (URA), under the CBIT Maldives initiative to strengthen national systems for climate transparency. This centralized platform streamlines the collection, submission and management of climate-related data including GHG inventories, mitigation and adaptation actions, and climate finance flows in line with the Enhanced Transparency Framework of the Paris Agreement.

The Climate Data Portal Piloting Workshop, held on 5th November 2025 jointly with the BTR team to initiate data collection for the 2024 reporting cycle. The workshop aimed to familiarize participants with the portal's structure and functionality and prepare institutions for the upcoming GHG data submission process.

A total of 28 participants (11 male and 17 female) attended the workshop, representing a diverse group of national stakeholders involved in climate data collection and reporting. Participants included representatives from the Utility Regulatory Authority (URA), Maldives Water and Sewerage Company (MWSC), State Electric Company Limited (STELCO), FENAKA Corporation, Maldives Airports Company Limited (MACL), Maldives Ports Limited (MPL), Maldives Transport and Contracting Company (MTCC), Waste Management Corporation Limited (WAMCO), State Trading Organization (STO), Civil Aviation Authority, and the Ministry of Transport and Civil Aviation. Officials from the Energy Department, Climate Change Department, and Ozone Unit of the Ministry.

The workshop featured GHG Inventory, Climate Data Portal overview & live demonstration, and concluded with a detailed hands-on piloting for data providers.

The session resulted in valuable feedback regarding UI improvements, submission handling, and visibility of notifications.

The Workshop included presentations on:

- GHG Inventory Overview
- Climate Data Collection Portal Overview
- Portal Demonstration and Hands-On Piloting
- Technical Working Group Discussions

Participants engaged in hands-on piloting session on how to make a submission regarding a data request through the Climate Data Portal. This hands-on piloting session enabled participants to understand how the functionalities of the portal is used and helped by providing feedback for further refinement to the portal.

1. Introduction

The Climate Data Portal is a centralized digital platform developed under the CBIT Maldives project to streamline data collection, submission, verification, and management for national climate reporting. It integrates structured workflows for regulatory bodies, public utilities, and other entities contributing to greenhouse gas (GHG) inventories. The portal plays a key role in strengthening institutional data systems to meet the Maldives' reporting obligations under the Paris Agreement's Enhanced Transparency Framework (ETF), ensuring completeness, accuracy, and consistency of climate-related information.

This piloting workshop marks a major milestone in the portal's initial rollout phase. It is the first workshop where data providers were formally introduced to the portal's functionalities as part of the joint effort with the Biennial Transparency Report (BTR) team to initiate data collection for the 2024 GHG inventory cycle. The goal was to ensure readiness of the Data Providers to adapt the new Portal, gather data provider feedback, and identify technical refinements required for a seamless rollout. The workshop was organized by the Ministry of Tourism and Environment, in collaboration with the Utility Regulatory Authority (URA), and aligns with ongoing transparency enhancement activities supported through the CBIT Maldives initiative.

A total of 28 participants (11 male and 17 female) attended the workshop, representing a diverse group of national stakeholders involved in climate data collection and reporting. Participants included representatives from the Utility Regulatory Authority (URA), Maldives Water and Sewerage Company (MWSC), State Electric Company Limited (STELCO), FENAKA Corporation, Maldives Airports Company Limited (MACL), Maldives Ports Limited (MPL), Maldives Transport and Contracting Company (MTCC), Waste Management Corporation Limited (WAMCO), State Trading Organization (STO), Civil Aviation Authority, and the Ministry of Transport and Civil Aviation. Officials from the Energy Department, Climate Change Department, and Ozone Unit of the Ministry.

At the opening of the workshop, Ms. Fathimath Fizna Yoosuf, Director at Utility Regulation Authority, highlighted the development of the portal as a streamlined data collection medium from key sectors that will significantly improve the data collection process for the information used for national GHG inventories and international reporting obligations.

In addition, Mr. Ahmed Waheed, Director at Climate Change Department, emphasized the Ministry's commitment to strengthening national systems for climate transparency and data governance. He highlighted that the Climate Data Portal is a crucial tool for improving the consistency and reliability of data received from key sectors, ultimately supporting the Maldives in meeting its reporting obligations. He further noted that the portal will help streamline coordination between government agencies and data providers, ensuring a more efficient and accurate process for compiling the upcoming GHG inventory.

Following the opening remarks, the consultants delivered presentations covering:

- GHG Inventory Overview
- Climate Data Collection Portal Overview
- Portal Demonstration and Hands-On Piloting
- Technical Working Group Discussions

The workshop also included hands-on piloting of the portal where the participants engaged on how to make a submission regarding a data request through the Climate Data Portal. This hands-on piloting session enabled participants to understand how the functionalities of the portal is used, which was followed by feedbacks from data providers for further refinement to the portal.

This workshop report documents the main presentations, discussions, and feedback raised during the training. Its contents include:

- **Objectives of the workshop** – outlining the aims of the training session,
- **Presentations and training** – summarizing key materials, methods, and hands-on piloting delivered,
- **Discussions and feedback** – capturing participant feedback related to the Climate Data Portal

2. Objectives of the workshop

Following were the key objectives of the workshop:

- Introduce participants to the purpose, structure, and modules of the Climate Data Portal
- Demonstrate core workflows, including data submission, and review processes
- Provide hands-on practice for data providers using test accounts
- Gather feedback on usability, accessibility, clarity of processes, and technical improvements required prior to the roll-out

3. Presentations and Training

3.1 Session 1: GHG Inventory Overview

This presentation was given by Mr. Zammath Khaleel, GHG Inventory and Climate Change Mitigation Expert.

The presentation slides can be found in Annex 2 of this workshop report.

3.2 Session 2: Data Collection Portal Overview

This presentation was given by Mr. Ahmed Shareef, Ritariworks Private Limited. The main content of this presentation included the following:

- What is Climate Data Portal – the purpose of the portal including its functions
- Modules of the Climate Data Portal – introduction to the modules from both Internal Users and Data Providers view
- Users of Climate Data Portal – the types of user roles for both Internal Users and Data Providers

The presentation slides can also be found in Annex 2 of this workshop report.

3.3 Session 3: Portal Demonstration and Hands-On Piloting

This session was given by Ms. Hawwa Maldha, Ritariworks Private Limited, where she demonstrated the features of the Climate Data Portal to the Data Providers. Which included the functionalities for (1) User Management, (2) Uploading Document regarding a data request, (3) Clarifications Request, and (4) Submission History.

The demonstration session was followed by hands-on piloting session where the participants engaged on how to make a submission regarding a data request through the Climate Data Portal. This hands-on piloting session enabled participants to understand how the functionalities of the portal is used, which was followed by feedbacks from data providers for further refinement to the portal.

The presentation slides can again be found in Annex 2 of this workshop report.

3.4 Session 4: Technical Working Group Discussions

This presentation was given by Mr. Zammath Khaleel, GHG Inventory and Climate Change Mitigation Expert.

The presentation slides can be found in Annex 2 of this workshop report.

4. Feedback from Data Providers for the Climate Data Portal

#	Feedback
1	Under Review Table - to see data submitted date instead of submission deadline
2	Upcoming Deadlines - once a submission is made, the specific submissions deadline should not be displayed on the upcoming deadlines table
3	Submission History - data provider should be able to see conversation history from the submission history table
4	Data Requests - Data Provider should be able to initiate communication once a data request is sent
5	Data Requests - once a submission is made, data provider wants to make a re-submission by uploading another file (maybe they uploaded a wrong file)
6	Data Requests - Once a submission is made, data provider to have a feature to delete the submitted file
7	Request: to include the user guideline to be accessible within the portal
8	Search & filter function - this function to be applicable for all tables; submission history, data request & under review
9	Data file size - what if the file size is larger than 10mb based on the amount of data requested?
10	Admin Role - what if the staff leave before assigning the admin role to another user through portal?
11	How many users can be created under each data provider?
12	What will happen to submissions made by the user if a data provider user is deleted?
13	Request from Civil Aviation Authority - to be able to view data submissions from specific data providers (as they do collect the same data from some of the data providers for reporting

Annex 1: Agenda

8:45 am – 9:00 am	Participants Arrival and Registration
09:00 am – 09:20 am	Introduction to the workshop Welcome address – Utility Regulatory Authority Opening remarks – Ministry of Tourism and Environment
09:20 am – 09:30 am	<i>Group photo and Tea / Coffee break</i>
9:30 am – 10:00 am	Session 1: GHG Inventory Overview – Role of sectoral data and institutional arrangements <i>Facilitated by DAS Private Limited (GHG Inventory Consultant – BTR Project)</i>
10:00 am – 10:20 am	Session 2: Data Collection Portal Overview – Purpose, Structure, and Functionality <i>Facilitated by Ritariworks Private Limited (Portal Developer)</i>
10:20 am – 11:00 am	Session 3: Portal Demonstration and Hands-On Piloting – User roles, data input process, Excel upload templates <i>Facilitated by Ritariworks Private Limited (Portal Developer)</i>
11:00 am – 12:00 pm	Session 4: Technical Working Group Discussions – Interactive discussion with sector representatives on data availability, gaps, formats, and institutional coordination required for the GHG Inventory <i>Facilitated by BTR Project</i>
12:00 pm – 1:00 pm	<i>Closing & Lunch Break</i>
1:00 pm – 3:00 pm	Discussion on Stakeholder Feedback – Internal discussion with project consultants to reflect on feedback and next steps

Annex 2: Presentations

Introduction to GHG Inventory

Prepared by Development Advisory
services

1

What are greenhouse gases



**Carbon dioxide
(CO_2)**



**Methane
(CH_4)**



**Nitrous Oxide
(N_2O)**

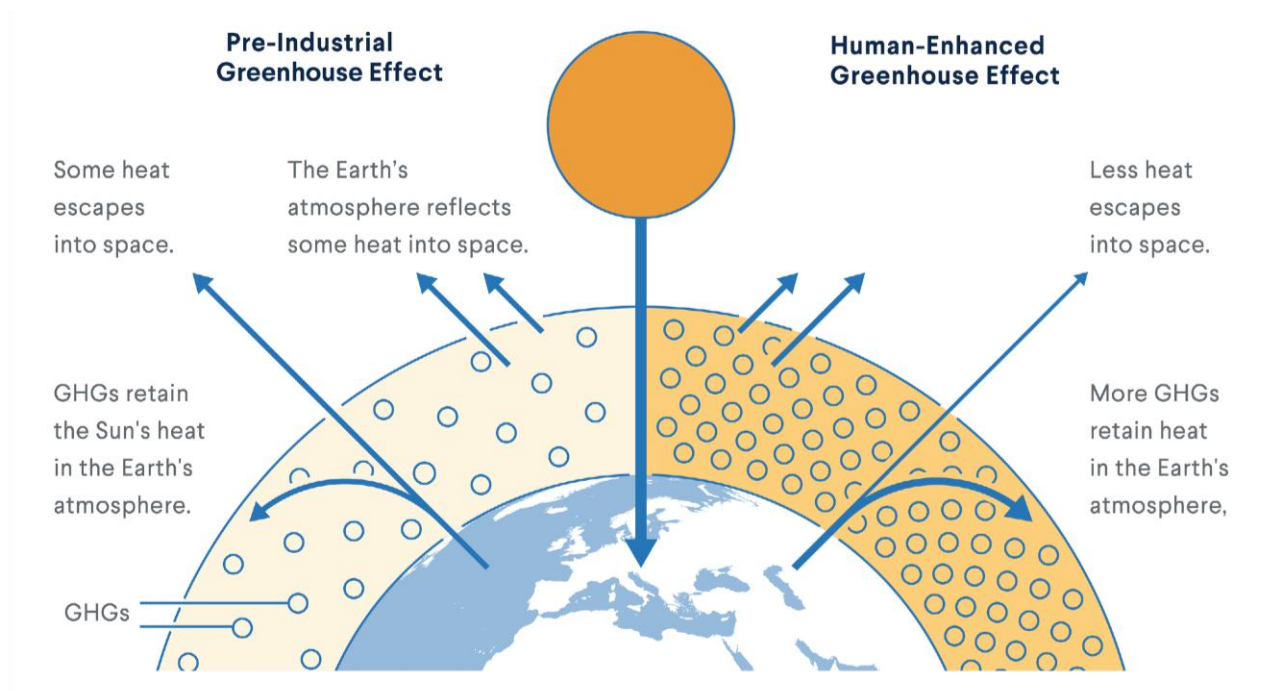


**Fluorinated
Gases**



**Water Vapor
(H_2O)**

2



3

Why make GHG inventories



- Reporting obligations under the UNFCCC
 - National Inventory Report
 - Track Progress of NDC
- National reporting obligations under the newly ratified Climate Emergency Act (9/2021)
 - Carbon Budget submission

Important Tool Planning and informed decision making



4

Existing Methodologies and Guidances

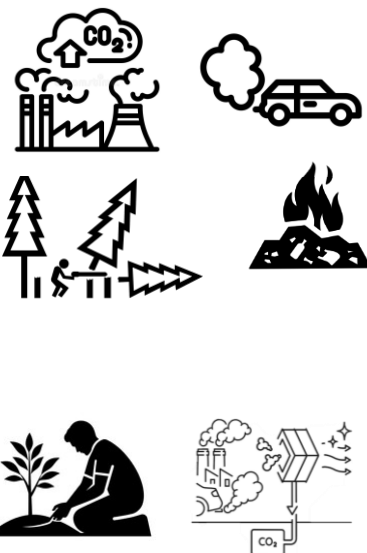


- 1996 IPCC Guidelines
- Revised 1996 IPCC Guidelines
- IPCC GPG 2000
- GPG-LULUCF
- **2006 IPCC guidelines**
- IPCC Wetlands Supplement
- IPCC KP supplement
- **2019 Refinement**

5

GHG Inventory concepts

- Anthropogenic emissions and removals: These are greenhouse gas emissions and removal processes, stemming from human activities.
- Anthropogenic activities that emit GHGs to the atmosphere in the Maldives include (not limited to):
 - Combustion of fossil fuels to produce energy.
 - Agricultural activities such as farming and crop production.
 - Deforestation.
 - Burning of waste and decomposition of organic waste in landfills.
- Although not entire relevant to the context of the Maldives, some anthropogenic interventions that can remove carbon dioxide from the atmosphere include:
 - Afforestation
 - Reforestation
 - Carbon Capture and Storage



6

GHG Inventory concepts

- **Greenhouse Gases:** The greenhouse gases covered depend on the national context and key category analysis. Based on previous inventories and assessments, the following three gases are the most relevant to the Maldives:
 - Carbon dioxide (CO₂)
 - Methane (CH₄)
 - Nitrous oxide (N₂O)
 - F-Gases
- **Sectors and Categories:** Greenhouse gas emission and removal estimates are categorized into primary sectors, each encompassing related processes, sources, and sinks [1]. These sectors are:
 - Energy
 - Industrial Processes and Product Use (IPPU)
 - Agriculture, Forestry, and Other Land Use (AFOLU)
 - Waste
 - Other (e.g., indirect emissions from nitrogen deposition originating from non-agricultural sources)

7

GHG Inventory concepts

- **Global Warming Potential (GWPs):** GWP is a metric that compares the radiative forcing of a metric ton of a particular greenhouse gas over a specified time-period (e.g., 100 years) to the radiative forcing of a metric ton of CO₂ over the same period [1].

Global Warming Potential (GWP ₁₀₀)		
CO ₂	CH ₄	N ₂ O
1	28	265

8

TACCC principles

- **Transparency:** Assumptions and methodologies should be clearly explained and documented
- **Accuracy:** Emission and removal estimates should be neither over nor under the true values
- **Consistency:** Inventories should be internally consistent with previous years' inventories
- **Completeness:** Inventories should be complete
- **Comparability:** Inventories should be comparable

9

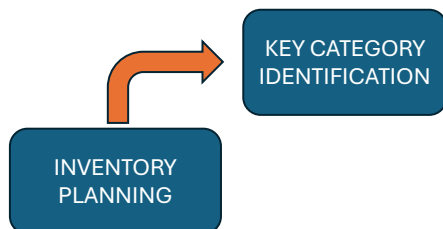
INVENTORY PROCESS



INVENTORY
PLANNING

10

INVENTORY PROCESS



11

Key Categories

- Most significant emission sources and sinks to prioritize resources
- For a new inventory, make rough estimates based on previous knowledge of activities, emission sources, and experience with similar inventories.
- For continuing inventory use the last national inventory to carry out Key category analysis



12

Key category analysis

Level assessment

- key categories are the ones that, when added together in descending order of magnitude, account for 95 percent of the total level of emissions and removals.

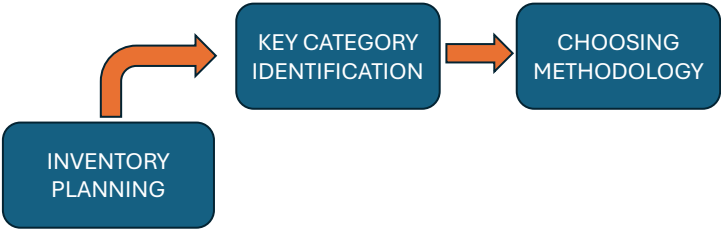
Trend assessment

- Key categories are those whose trend most significantly diverges from the overall trend

IPCC code	Category	Greenhouse gas	2011 Level	2022 Level	2022 Trend
1.A.4	Other Sectors - Liquid Fuels	CO ₂	X	X	X
1.A.1	Energy Industries - Liquid Fuels	CO ₂	X	X	X
1.A.3.d	Water-borne Navigation - Liquid Fuels	CO ₂	X	X	X
1.A.3.b	Road Transportation - Liquid Fuels	CO ₂	X	X	X
1.A.3.a	Civil Aviation - Liquid Fuels	CO ₂	X	X	X
1.A.3.e	Other Transportation - Liquid Fuels	CO ₂	-	-	X
4.C	Incineration and Open Burning of Waste	CH ₄	X	X	X

13

INVENTORY PROCESS



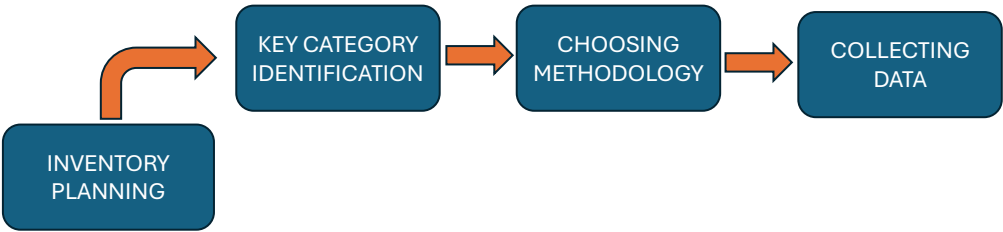
14

Choosing Methodologies

	Estimation Method	Example of Data collection required
Tier 1 - Basic	Default Emission factor x National Activity data (aggregated)	Total Fuel combusted for electricity generation
Tier 2 - Intermediate	Country Specific emission factor x Specific activity data	Fuels combusted for electricity generation together with the average combustion rates of the technology used
Tier 3 - Advanced	Emission measurements or models to estimate emissions accurately	Stack emissions for all the power houses

15

INVENTORY PROCESS



17

Best Practices in Data collection

- Prioritize collecting data that enhances estimates for the most significant key categories, considering their contribution, potential for change, and uncertainty.
- Choose data collection methods that progressively enhance inventory quality, aligning with data quality goals.
- Establish data collection practices (such as resource allocation, planning, documentation) that continuously enhance the inventory data.
- Gather data at an appropriate level of detail based on the chosen method.
- Regularly review data collection activities and methodological requirements to drive ongoing and efficient inventory improvement.
- Establish agreements with data providers to ensure consistent and continuous information flow.



18

Collecting data

- Recommended existing data source prioritization
 - **National Statistical Agencies – Maldives Bureau of Statistics, MCS**
 - **Sectoral Experts/Government Agencies – URA, MOT, MPL . . .**
 - **Other National Experts –consultants**
 - **IPCC EFDB**
 - **International Organizations – World Bank, FAO**
 - **Historical references – FNC, SNC, BUR, Carbon Audit 2009**
 - **Academia – MNU**
 - **Inventory Reports of other similar countries**

Source	Type of Activity Data
Maldives Customs Services	Fuel import/export data
State Trading Organization (STO)	Fuel import/export/stock data
Fuel Supply Maldives	Fuel import/export/stock data
Maldives Gas	Fuel import/export/stock data
Villa Hakatha	Fuel import/export/stock data
Villa Gas	Fuel import/export/stock data
Hawks Pvt Ltd	Fuel import/export/stock data
Meridian Services	Fuel import/export/stock data
Asian Gas and Oil and Coastal Blocks	Fuel import/export/stock data
Hakatha One	Fuel import/export/stock data
Fuel Express Maldives	Fuel import/export/stock data
Maldives Airports Company Limited	Fuel stock/consumption data
Regional Airports	Fuel stock/consumption data
STELCO	Fuel Consumption Data
FENAKA	Fuel Consumption Data
MWSC	Fuel Consumption Data
Utility Regulatory Authority (Previously MEA)	Fuel Consumption data
Resorts	Fuel Consumption data and bed-nights or occupancy data
MIFCO	Fuel Consumption Data
MPL including Regional Ports	Fuel Consumption Data
MNDF/MPS	Fuel Consumption Data
Horizon Fisheries	Fuel Consumption Data
Ministry of Transport/ Transport Authority	Vehicle/vessel registry data
Ministry of Fisheries	Data on fishing trips/vessels
Ministry of Tourism	Bed nights/occupancy rates
Maldives Bureau of Statistics	Demography and socio-economic data/indices

19

Collecting data

- Define the data set including the disaggregation, time series, details about sectors and sub-sectors, national coverage, requirements for uncertainty data, emission factors, and units of activity data
- Define the format (e.g., spreadsheet) and the structure of the data set
- Description of the assumptions made in the data sets
- Specify how often the data set is updated and which elements are updated
- Documentation and QA/QC Procedures
- Contact Information



20

Generating new data

- May become necessary when representative emission factors, activity data, or other estimation parameters are unavailable
- Whenever possible, to generate the required data as an extension of existing programs rather than initiating entirely new ones
 - Example rather than have an independent survey incorporate new question into existing surveys like HIES, Census, Waste Accounting etc



21

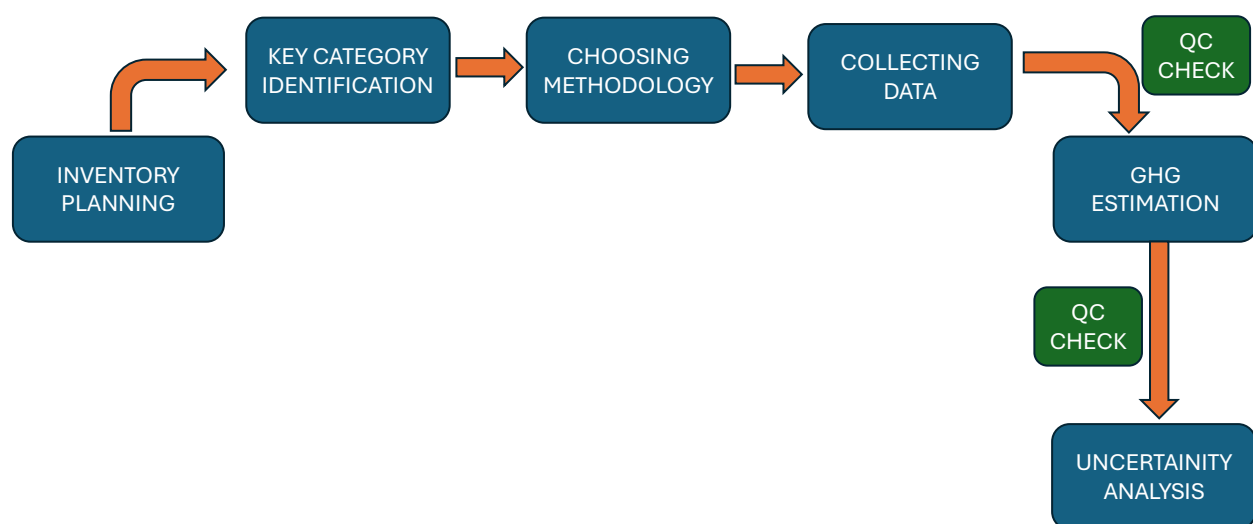
Adapting data for Estimation

- Filling Gaps in Periodic Data – When data collection intervals not aligning with annual inventory cycle (example waste audit data)
- Time Series Revision – when the data provider revises their historical data (example: data reconciliation process leading historical value revisions)
- Incorporating Improved Data - When new and improve data is available allowing higher tier estimated
- Incomplete Coverage: When data do not fully represent the entire country. Proxy data can be used to extrapolate (example use of bednights to estimate fuel use in resorts)



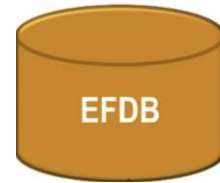
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INVENTORY PROCESS



23

GHG Estimation

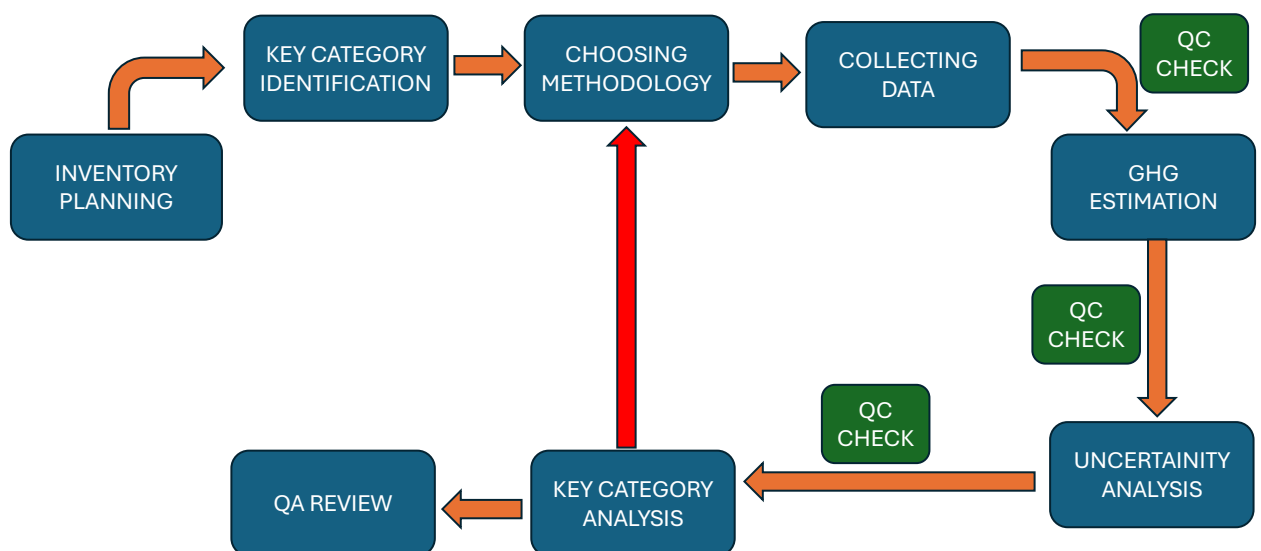


$$\text{Emissions} = \text{Activity Data (AD)} \times \text{Emission Factors (EF)}$$



24

INVENTORY PROCESS



25

QA Review– Completeness check (Notation Keys)

Notation Key	Definition
NO	(Not occurring) for activities or processes in a particular source or sink that do not occur within a country
NE	(Not estimated) for existing emissions by sources and removals by sinks of greenhouse gases which have not been estimated.
NA	(Not applicable) for activities in a given source/sink category that do not result in emissions or removals of a specific gas.
IE	(Included elsewhere) or emissions by sources and removals by sinks of greenhouse gases estimated but included elsewhere in the inventory instead of the expected source/sink category. Where “IE” is used in an inventory, the country should indicate, using the CRF completeness table (CRT 9?) where in the inventory the emissions or removals from the displaced source/sink category have been included and explain why they have placed these emissions or removals in a different category.
C	(Confidential) for emissions by sources and removals by sinks of GHGs where the reporting would involve the disclosure of confidential information
FX	(Flexibility) for cells where data are not available or reported because of a flexibility provision applied by a country that needed flexibility in the light of its capacity.

26

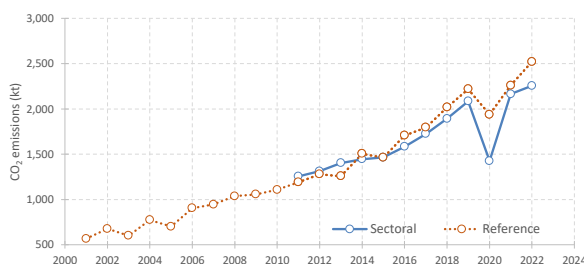
QA Review– Completeness check – (Units)

- **Consistency of Units:** Emissions and removals should be expressed in mass units consistently within each sector.
- **Preferred Unit: Gigagram (Gg):** Generally, emissions in summary and sectoral tables are expressed in gigagrams (Gg), but other SI mass units may be used for increased transparency.
- **Appropriate Significant Digits:** The number of significant digits in reported values should be appropriate to their magnitude. A precision of 0.1 percent of the national total is considered adequate for each gas.
- **CO2 Equivalents:** For certain gases specified in individual sector tables, emissions and removals should be reported in terms of carbon dioxide equivalents (CO₂e), which accounts for their global warming potential.
- **Transparency in Conversion Factors:** All conversion factors used to convert data from original units to the chosen reporting units should be documented transparently.

27

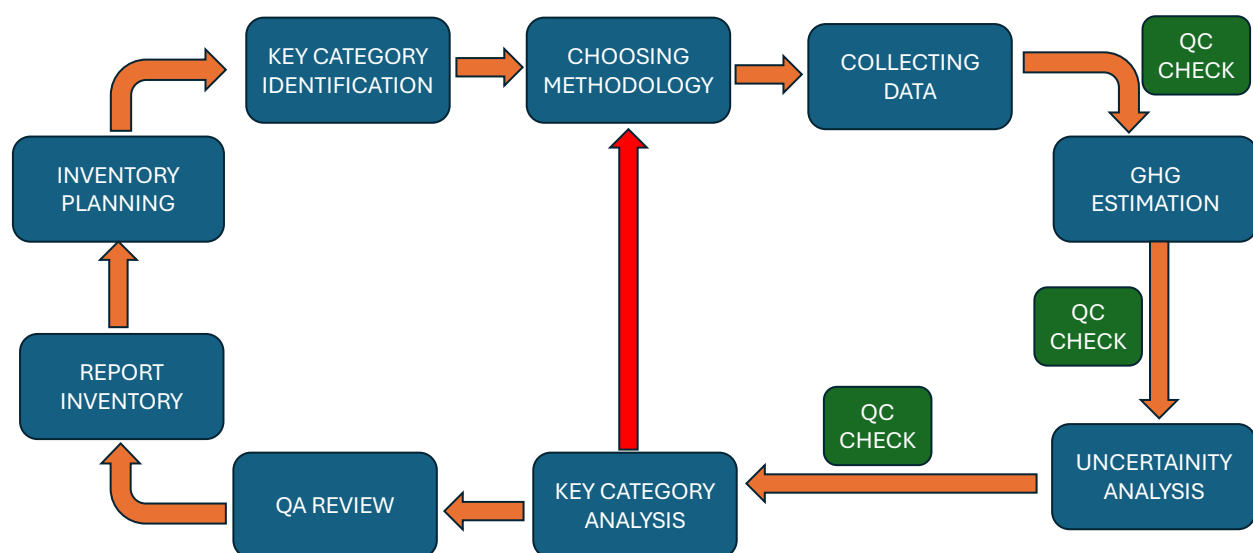
QA review– Completeness check – (time series)

- It is considered good practice to ensure that all reporting tables are complete for each year including
 - Summary table,
 - Sectoral table, and
 - cross-sectoral tables
- Create trend tables/graphs that summarize aggregated inventory data from different years.



28

INVENTORY PROCESS



29

GHG Inventory Reporting – Archiving

- **Use of IPCC Inventory Software:** The inventory is established using the IPCC inventory software, which ensures standardized and consistent calculations. This software also includes data backup features, contributing to data security.
- **Excel Sheets for Data Storage:** sector-specific data, raw and processed data are stored in Excel sheets.
- **Documentation and Comments:** the commenting feature in the IPCC software is utilized to input remarks in relevant fields. These comments serve as a valuable resource for maintaining continuity and improving the inventory in the future.
- **Centralized Data Storage:** all datasets used for inventory preparation are centrally archived at the Ministry
- **Cloud Storage for Redundancy:** This ensures data integrity and minimizes the risk of data loss.



31

Thank you

32



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Climate Data Portal - Overview

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What is Climate Data Portal?

- Centralized platform for climate-related data;
 1. Submission,
 2. Management; and
 3. Reporting
- Streamline & strengthen data collection process
- Enables collaboration between
 1. MoTE,
 2. URA; and
 3. Data providers



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Functions of Climate Data Portal

- Role-based access for URA, MoTE, and Data Providers
- Transparent submission and review cycles
- Automatic tracking of progress and deadlines



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Modules of Climate Data Portal

1. Data Request Module
2. Data Submission Module
3. Review & Clarification
4. Data Repository
5. User Management
6. Dashboard & Notifications



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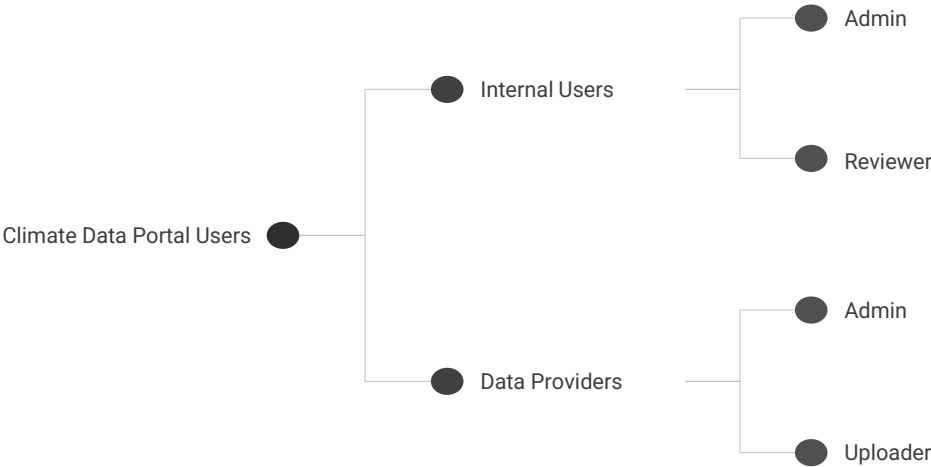
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Users of Climate Data Portal



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Climate Data Portal - Demo of Features

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Ritariworks

Log-in Details

URL: climate.ritariworks.com

Users

Group 1: administrative.user@fsm.com

Group 2: administrative.user@sto.com

Group 3: administrative.user@macl.com

Group 4: administrative.user@fenaka.com

Group 5: administrative.user@stelco.com

Group 6: administrative.user@mwsc.com

Password: Welcome123\$



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Hands-on Training Contents

- User Management
 - Add new User
- Data Request
 - Upload Document
- Clarifications Request
 - Submit Clarification Response
 - Submit Clarification Document
- Submission History



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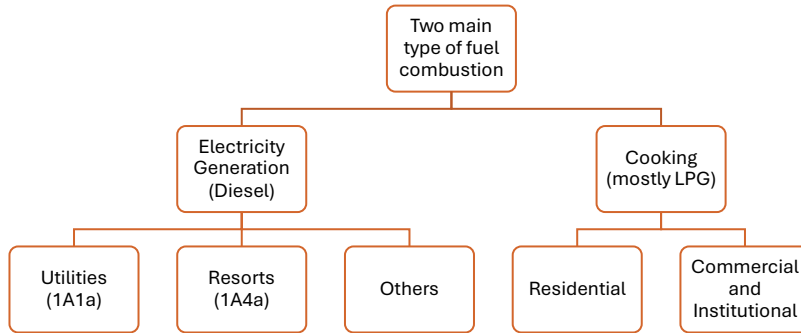
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data for sectoral approach



Fuel	Default Emission factor (EF) kg/TJ		
	CO ₂	CH ₄	N ₂ O
Gas/Diesel Oil	74100	3	0.6
LPG	63100	1	0.1

1

1

Categories of stationary emission for sectoral approach

Category Code	Category	Relevance to Maldives Context
1A	Fuel Combustion Activities	Refer to subcategories for relevance
1A 1	Energy Industries	Refer to subcategories for relevance
1A 1 a	Electricity and Heat Production	Refer to subcategories for relevance
1A 1 a i	Electricity Generation	This category should cover all electricity generation from public utilities. The activity data should cover data on electricity generated to be sold as well as own on-site use
1A 1 a ii	Combined Heat and Power Generation (CHP)	There is no operational Combined Heat and Power Generation in Maldives
1A 1 a iii	Heat Plants	There is no heat production plants that generates heat to sold to retailers or customers in Maldives
1A 1 b	Petroleum Refining	This activity does not occur in Maldives
1A 1 c	Manufacture of Solid Fuels and Other Energy Industries	This activity does not occur in Maldives

2

2

Category Code	Category	Relevance to Maldives Context
1A	Fuel Combustion Activities	Refer to subcategories for relevance
1A2	Manufacturing Industries and Construction	Some activities under this category does occur in Maldives. Details given below
1A2 a	Iron and Steel	This activity does not occur in Maldives
1A2 b	Non-Ferrous Metals	This activity does not occur in Maldives
1A2 c	Chemicals	This activity does not occur in Maldives
1A2 d	Pulp, Paper and Print	This activity does occur however printing press does not have stand-alone power generation and draws power from the utility producers
1A2 e	Food Processing, Beverages and Tobacco	This activity does occur and would cover all food processing fuel combustion with the exception of fish processing plants. This would entail bottling activities done by MAWC, MWSC, Island beverages etc that uses own fuel combustions to operate.
1A2 f	Non-Metallic Minerals	This activity does occur and should cover on site power generation for cement factories operated by Villa and STO
1A2 g	Transport Equipment	This activity does occur and should cover onsite power generation at boat building, boat yards and slipways operating across Maldives
1A2 h	Machinery	This activity does occur however does not have standalone power generation and draws power from the utility producers and therefore included in 1A1ai
1A2 i	Mining (excluding fuels) and Quarrying	Sand mining activity for dredging, harbour and reclamation projects
1A2 j	Wood and Wood Products	This activity does occur however does not have stand-alone power generation or onsite fuel combustion
1A2 k	Construction	This activity does occur however does not have stand-alone power generation and draws power from the utility producers
1A2 l	Textile and Leather	This activity does occur however does not have standalone power generation and draws power from the utility producers
1A2 m	Non-specified Industry	Any GHG emitting activity via fuel combustion from any manufacturing industrial activity not listed above. Note that emissions from fisheries industry is covered under 1A4c and therefore this sub-category for Maldives is assumed to be Not Occuring

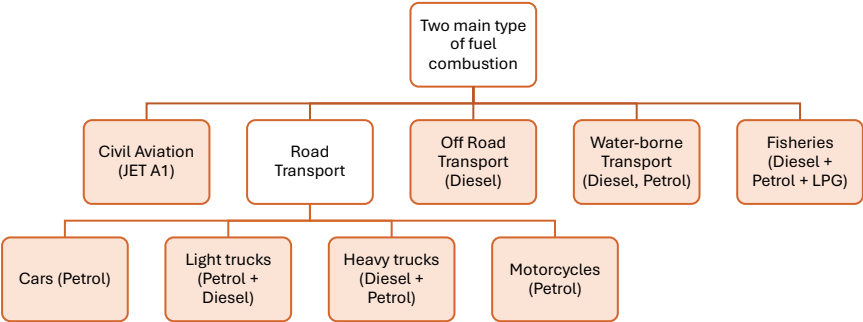
3

Category Code	Category	Relevance to Maldives Context
1A4	Other Sectors	Refer to subcategories for relevance
1A4 a	Commercial / Institutional	This occurs in Maldives and covers onsite fuel combustion activities in all commercial and institutional buildings. This covers fuel combustion for cooking, heating at restaurants, hotels, resorts and any other commercial buildings. In Maldivian context it covers mostly LPG use for cooking in commercial context The fuel use for electricity generation in industries such as resorts should be included under this sub-catgarory
1A4 b	Residential	This occurs in Maldives and covers all onsite fuel combustion activities in residential dwellings. Mostly covers LPG use of for cooking
1A4 c	Agriculture/Forestry/Fishing/Fish farms	Refer to subcategories for relevance
1A4 c i	Stationary	This occurs in Maldives and covers onsite fuel combustion activities (including power generation) in fish processing plants and agricultural islands
1A4 c ii	off-road vehicles and other machineries	This occurs in Maldives and covers all mobile fuel combustion in agricultural islands including off road transport, land tilling. However the information is likely going to scattered to very small quantities and needs a survey to collect
1A5	Non-Specified	Refer to subcategories for relevance
1A5 a	Stationary	This occurs in Maldives and covers stationary fuel combustion onsite at military facilities/training facilities (eg. Girifushi etc) including cooking, power production.

4

4

data for sectoral approach



5

5

RELEVANT IPCC CATEGORIES for mobile fuel combustion

IPCC Category Code	CRT category code	Category	Relevance to Maldives Context
1A		Fuel Combustion Activities	
1A3	1A3	Transport	
1A3a		Civil aviation	
1A3ai	memo item	International Aviation (International Bunkers)	This covers all international aviation. Data should be collected from all international airports in Maldives regarding the refueling. For tier 2 the method would requires flight movements which would be available from the airports. Note only flights departing to or arriving from foreign airport should be considered in this calculation
1A3aii	1A3a	Domestic Aviation	This covers all domestic aviation including sea plane operations. Data should be collected from all airports in Maldives regarding the refueling. For tier 2 the method would requires flight movements which would be available from the airports. Note no flights departing to or arriving from foreign airport should be considered in this calculation

6

6

RELEVANT IPCC CATEGORIES for mobile fuel combustion

IPCC Category Code	CRT category code	Category	Relevance to Maldives Context
1A		Fuel Combustion Activities	
1A3b	1A3b	Road Transportation	
1A3bi	1A3bi	Cars	This covers all road transport through cars as defined by IPCC. This includes public and private cars fuel consumption
1A3bii	1A3bii	Light duty trucks	This covers all road transport through Light duty trucks as defined by IPCC. This includes public and private trucks and buses fuel consumption
1A3biii	1A3biii	Heavy duty trucks and buses	This covers all road transport through trucks and buses as defined by IPCC. This includes public and private trucks and buses fuel consumption
1A3biv	1A3biv	Motorcycles	This covers all road transport through Motorcycles as defined by IPCC. This includes public and private motorcycles fuel consumption
1A3bv		Evaporative emissions from vehicles	This covers evaporative emissions from vehicles including lubricants evaporation
1A3bvi		Urea-based catalysts	This is assumed to be not occurring in Maldives

7

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Ipcc DEFINITIONS OF VEHICLES

<i>Cars</i>	Emissions from automobiles so designated in the vehicle registering country primarily for transport of persons and normally having a capacity of 12 persons or fewer.
<i>Light duty trucks</i>	Emissions from vehicles so designated in the vehicle registering country primarily for transportation of light-weight cargo or which are equipped with special features such as four-wheel drive for off-road operation. The gross vehicle weight normally ranges up to 3500-3900 kg or less.
<i>Heavy duty trucks and buses</i>	Emissions from any vehicles so designated in the vehicle registering country. Normally the gross vehicle weight ranges from 3500-3900 kg or more for heavy duty trucks and the buses are rated to carry more than 12 persons.
<i>Motorcycles</i>	Emissions from any motor vehicle designed to travel with not more than three wheels in contact with the ground and weighing less than 680 kg.

8

8

RELEVANT IPCC CATEGORIES for mobile fuel combustion

IPCC Category Code	CRT category code	Category	Relevance to Maldives Context
1A		Fuel Combustion Activities	
1A3d		Water-borne Navigation	
1A3di		International Water-borne Navigation (International Bunkering)	This covers all emissions related to international maritime vehicles that is either coming from or going to a foreign port. The reexport value for diesel is considered as data
1A3dii	1A3d	Domestic Water-borne Navigation	This covers all domestic transport excluding fishing. This means all passenger and cargo transport irrespective of economic sector.
1A3e	1A3e	Other Transportation	
1A3ei	1A3ei	Pipeline Transport	This does not occur in Maldives
1A3eii		Off-road	This occurs in Maldives and covers all transport activity undertaken within all ports, harbours and off-road activities taking place at reclamation sites covering land and sea vehicles.

9

9

RELEVANT IPCC CATEGORIES for mobile fuel combustion

IPCC Category Code	CRT category code	Category	Relevance to Maldives Context
1A		Fuel Combustion Activities	
1A4	1A4	Other Sectors	
	1A4a	Commercial/institutional	
	1A4aii	Off-road vehicles and other machinery	IPCC category 1A3eii commercial/institutional component is reported here.
	1A4b	Residential	
	1A4bii	Off-road vehicles and other machinery	IPCC category 1A3eii residential component is reported here. In the Maldives there are no residential off road transport to be considered
1A4c	1A4c	Agriculture/Forestry/Fishing/Fish farms	
1A4cii	1A4cii	off-road vehicles and other machineries	This occurs in Maldives and covers all mobile fuel combustion in agricultural islands including off road transport, land tilling. However, the information is likely going to scattered to very small quantities and needs a survey to collect
1A4ciii	1A4ciii	Fishing (mobile combustion)	This occurs in Maldives and is key category. It covers all emissions from fishing vessels including for transport, cooking and other auxiliary purposes on the vessel.

10

10

RELEVANT IPCC CATEGORIES for mobile fuel combustion

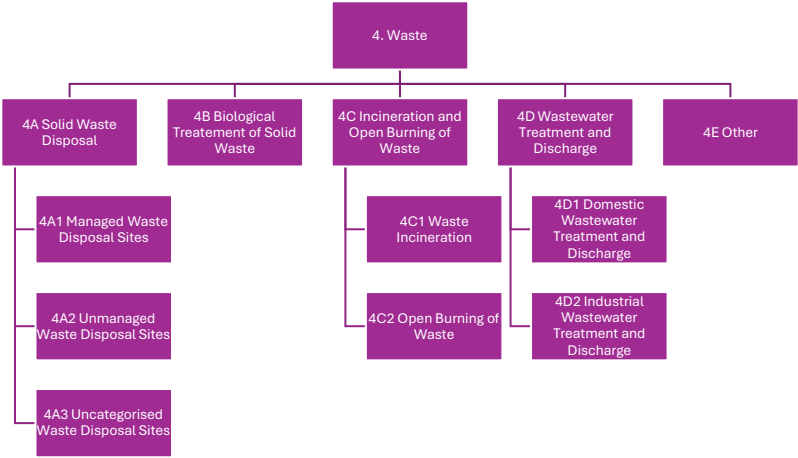
IPCC Category Code	CRT category code	Category	Relevance to Maldives Context
1A		Fuel Combustion Activities	
1A5	1A5	Non-Specified	
1A5b	1A5b	Mobile	In the CRT all of the sub categories under this is reported together
1A5bi		Mobile (aviation component)	This occurs in Maldives and covers aviation fuel combustion by MNDF military flights/drones and search and rescue operations
1A5bii		Mobile (water-borne component)	This occurs in Maldives and covers water-borne fuel combustion by coastguard and Marine Police services and any other marine based fuel combustion carried out by military including search and rescue operations
1A5biii		Mobile (other)	
		Multi-lateral Operations	This could include refueling of vessels and air crafts for military operations by non-Maldivian military. This should not be included in the national total but reported as a memo-item.

11

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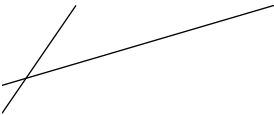
introduction

The waste sector accounts for emission resulting waste management practices for all types of waste including solid waste and wastewater.



12

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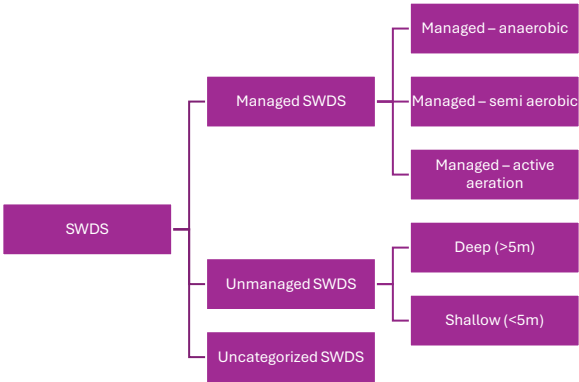


Solid waste disposal sites

Activity Data Required:

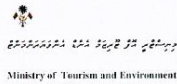
percentage of waste deposited at SWDS segregated by type of SWDS (WAMCO)

Methane recovery information (if any)



13

Annex 3: Participant List



Date: 05th November 2025		Time: 0900 hrs	Venue: Meeramaa	Project: Maldives BTRI Project & CBIT Maldives Project		
Workshop on Piloting and Training on the Climate Data Portal						
Name	Designation	Organization	Contact no	Email Address	Signature	
1. Ali Shareef	Special Envoy for Climate Change	President's Office		shareef.ali@gmail.com		
2. Nushy Mohamed Rasheed	Assistant Director	President's Office				
3. Zannath Khaleel	GBI Inventory and Climate Change Mitigation Expert	Development Advisory Services Pvt Ltd (DAS Pvt Ltd)	7990634	zannat@gmail.com		
4. Aminath Fizza	Environmental Analyst	Utility Regulatory Authority	9819184	aminath.fizza@ura.gov.mv		
5. Aminath Mohamed	Director	Utility Regulatory Authority	7504494	aminath.m@ura.gov.mv		
6. Mohamed Nazim Naseer	Energy Engineer	Utility Regulatory Authority	7872335	mohamed.nazim@ura.gov.mv		
7. Hasna Jameel	Senior IT Technicians	Utility Regulatory Authority		hasna.jameel@ura.gov.mv		
8. Ahmed Rasof Mohamed	Senior IT Technician	Utility Regulatory Authority				
9. Wafiyah Abdulla	Senior Administrative Officer	Utility Regulatory Authority	7611328	wafiyah.abdulla@ura.gov.mv		
10. Fathimath Fizza Yousuf	Director	Utility Regulatory Authority	9474646	fathima.yousuf@ura.gov.mv		
11. Zayan Adam Shareef	Assistant Machine Learning Engineer	MWSC	7780778	zayan.adam@mwsc.com.mv		
12. Mariyam Ali	Chief Project Engineer	State Electric Company Limited (STELCO)	7900906	150128@stelco.com.mv		
13. Mohamed Fathim Fina	<div>Aishath Yamna</div> <div>Assistant Engineer Manager</div>	State Electric Company Limited (STELCO)	7556821 W411772	aminath.yamna@stelco.com.mv Mohamed.Fatin@stelco.com		
14. Ms. Shahuma Abdul Razzaq	Assistant Director	Min of Transport and civil aviation	7884842	shahuma.abdulrazzaq@transport.gov.mv		
15. Mariyam Loyal Shukir	Engineer, Green Energy Department	FENAKA Corporation Limited	7414842	loyal@fenaka.mv		
16. Mohamed Riza	Manager, Green Energy Department	FENAKA Corporation Limited	7785884	riza@fenaka.mv		
17. Shaniya Mohamed	Senior Officer, Operations Center	FENAKA Corporation Limited	7690989	Shaniya@fenaka.mv		
18. Rizza Rasheed	project coordinator	MoTE	9355323	rizza.rasheed@environment.gov.mv		

18	Almoud Refaifi	Manager Sales	State Trading Organization	
19	Almoud Shah	Terminal Supervisor	State Trading Organization	
20	Mohamed Naji Waleed	Senior Environment Officer	Civil Aviation Authority	
21	Hussain Ibrahim	Air Transport Officer	Civil Aviation Authority	
22	Imanul Ubaidi	General manager	Waste Management Corporation Limited (WAMCO)	
23	Almoud Shafiu	General manager, Southern Ops	Waste Management Corporation Limited (WAMCO)	
24	Haniffa Ali	Manager, Donor Engagement and Resource Mobilization	Waste Management Corporation Limited (WAMCO)	
25	Mariyam Makha Shareef	Senior Business Development Officer	Waste Management Corporation Limited (WAMCO)	
26	Aishath Fara	Assistant Manager, Business Development and Marketing	Waste Management Corporation Limited (WAMCO)	
27	Aamee Ismail		Villa Hakatha	
28	Yameen Hussain Rasheed		Villa Hakatha	
29	Abdulla Shafif	Specialist Engineer	Maldives Ports Limited	
30	Hussain Ibrahim	Department Manager - Training & Strategic Development Division	Maldives Transport and Contracting Company Plc	
31	Abdulla Zulfan Saeed	Section Manager - Training & Strategic Development Division	Maldives Transport and Contracting Company Plc	
32	Almoud Waleed	Director	Ministry of Tourism and Environment, Climate Change Department	
33	Fathimath Ramiya Moosa	Project Technical Coordinator- BTR Project	Ministry of Tourism and Environment, Climate Change Department	
34	Almoud Masoon	Programme Officer	Ministry of Tourism and Environment, Climate Change Department	
35	Mohamed Inaz	Project Technical Coordinator- CHIT Project	Ministry of Tourism and Environment, Climate Change Department	
36	Zainab Cadishum	Project Coordinator - National Adaptation Project (NAP)	Ministry of Tourism and Environment, Climate Change Department	
37	Rafieena Mohamed	Project Finance and Admin - BTR Project	Ministry of Tourism and Environment, Climate Change Department	
38	Jamath Nafiz	Programme Officer	Ministry of Tourism and Environment, Climate Change Department	
39	Mohamed Arzan Abdulla	Environment Analyst	Ministry of Tourism and Environment, Climate Change Department	
40	Fathimath Zaini Shareef	Assistant Director	Ministry of Tourism and Environment, Climate Change Department	
41	Rameya Hameed Al Suwad	Programme Officer	Ministry of Tourism and Environment, Climate Change Department	

Atishath Shuaib	Rikheed PC	Drone unit			
Mohamed Javed	HSE management	Maldives Airport CL			
Hanna Mulla		Rikheed works			
Ahmed Munir		Rikheed works			
Ahmed Shariq		Rikheed works			

Annex 4: Photographs of the workshop





