



# Measurement, Reporting and Verification (MRV)

Mitigation Division's Sub-Output 4.7



**Outputs, sub-outputs & Staff allocation**

**1. National Greenhouse Gas Inventory (NGHGI)**

- \*Sectoral GHGI
- 1. Energy
- 2. AFOLU
- 3. Waste
- 4. IPPU
- \*GHGI Database Management System
- \*Awareness Materials

All Division's Staff

**2. Nationally Determined Contributions (NDC)**

- \*INDC, Second NDC
- \*NDC Review
- \*Implementation Roadmap
- \*Investment Plan
- \*Project Pipeline
- \*NDC mainstreaming
- \*Gender Analysis
- \*Progress Report
- \*Awareness Materials
- \*Policy Paper/Action plan on MPAs and Food and Agriculture
- \*NDC Finance Strategy
- \*Capacity Building Trainings

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**3. Long-term Low Emissions Development Strategy (LT-LEDS)**

- \*Phase I
- \*Phase II
- \*LEDS Document
- \*Awareness Materials
- \* Initial implementation steps

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**4. Mitigation Projects**

- \*Development of Project Concept Notes & Proposals
- \*Support for external Mitigation Project in & outside of DCC

All Division's Staff

**5. Fourth National Communication**

- \*National Circumstances
- \*NGHGI
- \*Vulnerability & Adaptation Assessments
- \*Mitigation Analysis
- \*Technology Transfer
- \*Research & Systematic Observation
- \*Education, training and public awareness
- \*Capacity-building
- \*Information & Networking
- \*Constraints, gaps and related needs
- \*Awareness Materials

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**6. First Biennial Update Report**

- \*National circumstances
- \*NGHGI
- \*Mitigation actions & effects
- \*Constraints, gaps and related needs
- \*Any other info

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**7. National Measurement, Reporting and Verification System**

- \*Sectoral MRV
- \*MRV framework
- \*MRV of – emissions, policies, actions and mitigation-related support
- \*Awareness Materials

All Division's Staff

**8. Others**

Other Tasks

All Division's Staff



# Outline

- What is MRV?
- Purpose of MRV
- Why MRV?
- Different types of MRV
- Tonga's MRV System

WITH AN ADULTHOOD, RETURNED, AND REFINANCING



<https://www.youtube.com/watch?v=ilmbXYPM3O8>

# Measurement



- Measure data and information on emissions, mitigation actions and support.

# Reporting



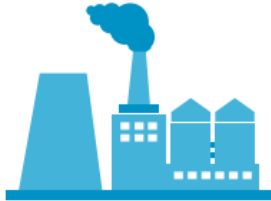
- Compile data and information in standardized formats for various users

# Verification



- Periodically subjecting the reported information to some form of review or analysis / independent assessment, for completeness and reliability

# TYPES OF MEASUREMENT, REPORTING, AND VERIFICATION (MRV) OF MITIGATION



## EMISSIONS



Total GHG emissions at a **national level**

Total GHG emissions at an **organization level**

Total GHG emissions at a **facility level**



## MITIGATION ACTIONS (e.g. NDCs)



**GHG effects**, i.e., change in GHG emissions, due to mitigation actions

**Sustainable development effects**, i.e., changes in environmental, social, and/or economic conditions, due to mitigation actions

**Progress made toward implementing** mitigation actions



## SUPPORT



**Support provided** by donor countries

**Support received** by countries

**Results and impact of support** provided or received

# Types of MRV

## MRV of GHG emissions

- refers to estimating, reporting, and verifying actual emissions over a defined period of time. This type of MRV can be performed at national level, or by organizations and facilities.

## MRV of mitigation actions

- involves assessing GHG emissions reductions and/or sustainable development (non-GHG) effects of policies, projects, and actions, as well as monitoring their implementation progress. It also involves assessing progress toward mitigation goals

## MRV of support

- focuses on monitoring the provision and receipt of financial flows, technical knowledge, and capacity building, and evaluating the results and impact of support.
- Eg. developing countries tracking climate-specific finance received through bilateral or multilateral channels.

# Benefits of MRV

## Domestically

- Understand key sources & sinks of emissions
- Design effective mitigation strategies eg. NDCs
- Assess impacts of mitigation policies and projects
- Track progress toward climate goals
- Meet stakeholders demands for disclosure of GHG information
- Enhance credibility & promote good governance

## Internationally

- Enable countries to meet their international reporting obligations
- Compare national mitigation commitments
- Track emissions trends
- Build trusts in their actions and reported data
- Unlock new sources of finance by demonstrating impact



# Tonga's National MRV System



Funded by the NDC  
Partnership – GGGI &  
IRENA



Establish Sectoral  
MRV (Energy,  
AFOLU, IPPU &  
Waste) to feed into  
the National MRV



Help prepare Tonga  
for the transition to  
the ETF under the  
Paris Agreement

Timeline:  
Starts: Q4, 2020  
End: Q4, 2021





Thank You

