Modelling and Projections Programme (MPP)

Caribbean Cooperative
MRV HUB
Measurement Reporting & Verification

Fourth Annual Meeting
11-12 May 2022
St George's, Grenada

Benise Joseph

Supported by:

Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

UNDP
Empowered lives.
Resilient nations.

GLOBAL SUPPORT PROGRAMME

The CCMRVH is part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag, with additional resources and technical support provided by the UNDP/UNEP Global Support Programme.

Presentation Outline

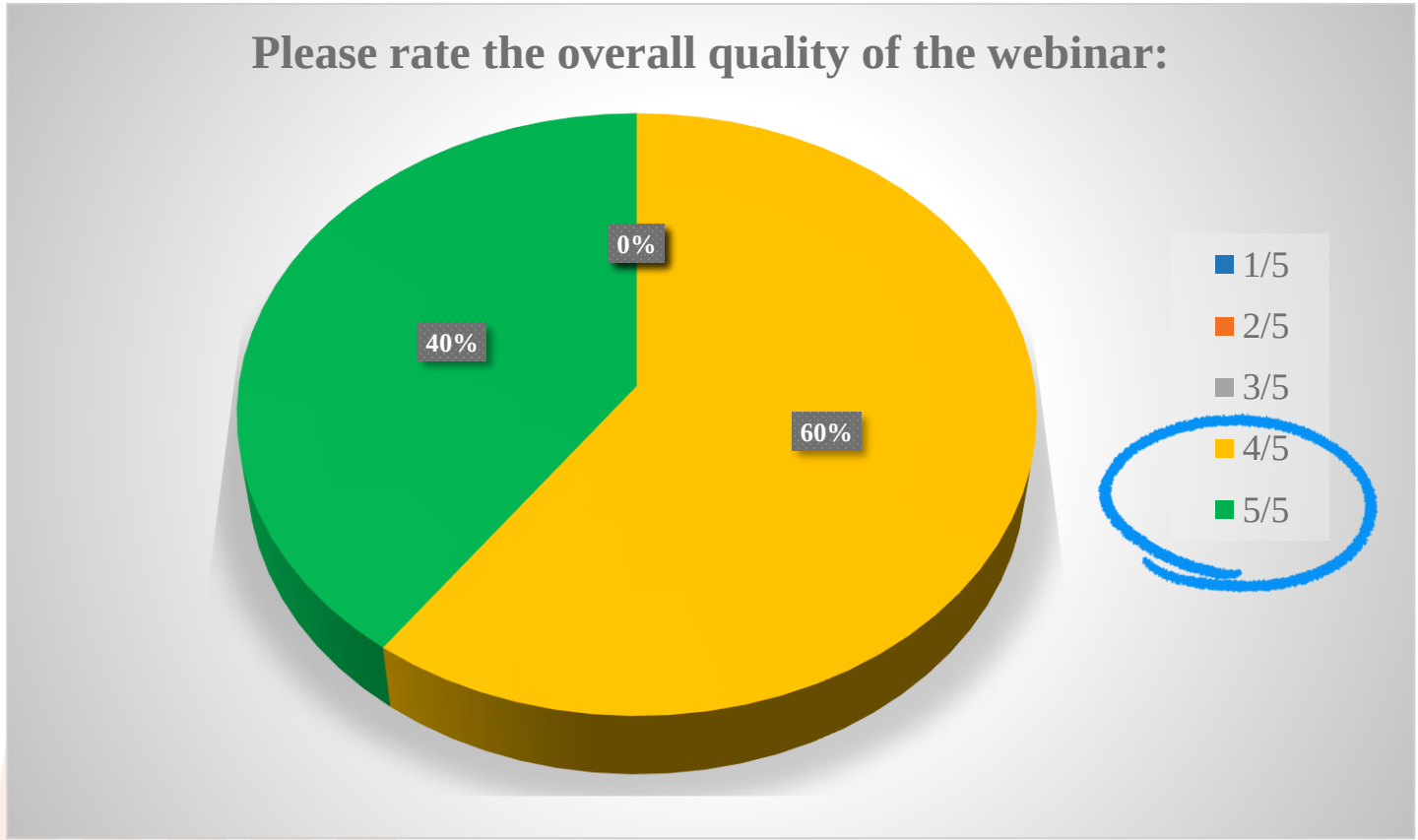
- Overview on MPP
- MPP Accomplishments
- Overview of Virtual LEAP Training Course
- Future MPP Outlook

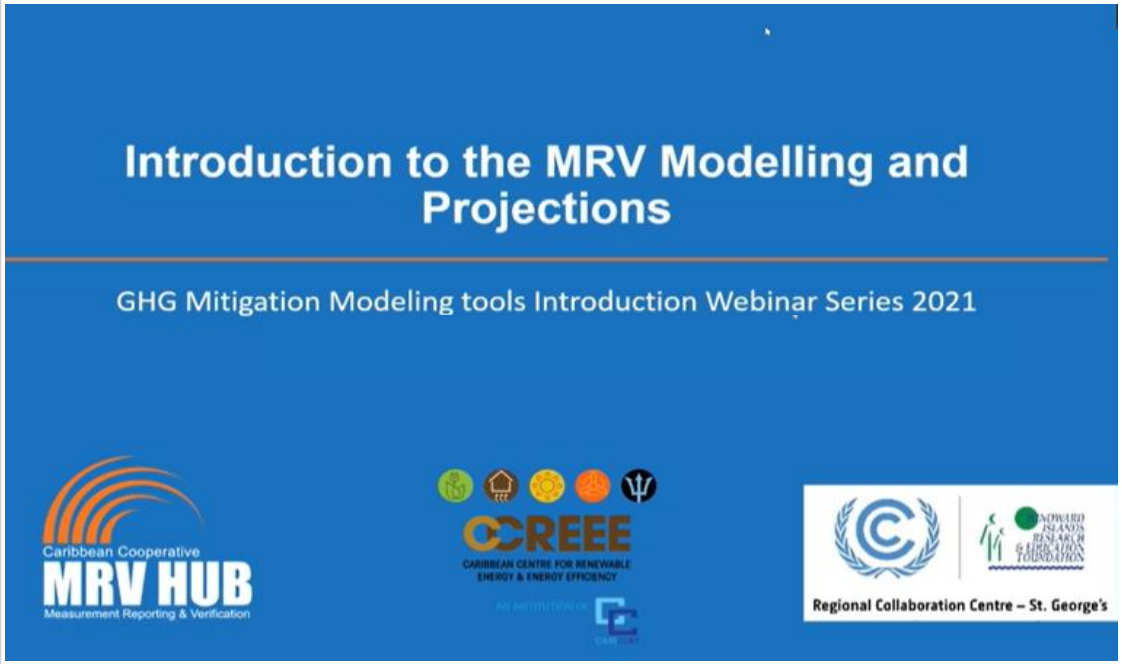
The Modelling & Projections Programme – Overview

- Launched: 2021
- Key focus areas:
  - **Capacity building in the region:** Education and Awareness on the importance of modelling and projections in the region
    - Mitigation Analysis
    - Updating & tracking NDCs
    - Long-term low emission development strategies (LT-LEDS)
  - **Identification of Gaps and Needs:** The major barriers and challenges for the region as it relates to modelling
  - **Providing Mitigation Analysis services to countries:** To aid their completion of NDCs, BTR's, LT-LEDS

of the MPP

GHG Mitigation Modelling Tools Introduction Webinar Series (April–July 2021)





Accomplishments of the MPP

GHG Mitigation Modelling Tools Introduction Webinar Series (April – July 2021)

1. Introduction to Modelling & Projections Tools
2. Introduction to Greenhouse Gas Abatement Cost Model (GACMO)
3. Introduction to LEAP (Low Emissions Analysis Platform)
4. Introduction to PROSPECTS+
5. Comparison of GHG Modelling & Projections tools and guidance for selection
6. Introduction to FAO suite of tools for modelling and projection of GHG emissions in AFOLU sector
7. Introduction to REmap tool

Accomplishments of the MPP

Modelling Tool Selection Guidance Document

- Excel Workbook which compares LEAP, GACMO & PROSPECTS+
- Geared toward Decision Makers for climate mitigation
- Applications:
  - Scope of the Mitigation Analysis
  - Data requirements for the software
  - Access to modelling software

Accomplishments of the MPP

Snapshot of Modelling Tool Selection Guidance document

FUNCTIONALITY	GACMO	PROSPECTS	LEAP
Coverage of emission sources	High-level	Mid / High-level	More detailed, particulary for energy sector
Breadth/ granularity of technology	Mid breadth / limited granularity	Low-Mid	Low to high (user defined)
Sectoral interlinkages	No	Energy supply and demand	Energy and some material flows
Temporal granularity	2020, 2025, 2030, 2050	Annual to 2050	Annual, unlimited timeframe. Within-year breakdown for seasonal and hourly variations.
Representation of costs	Yes (limited variation over time)	No	Yes (annual variation)
Optimisation functionality	No	No	Within electricity supply sector
Summary	Low	Low	Mid

LEGEND for this TAB
Typical Data Inputs
Available in Modelling tool Database
User Defined - Depending on the type of model required
Do not necessarily require input from users as they can be acquired in the modelling tools or via established links to other websites

Modelling Tool - Input Data Comparisc

ID	GACMO	PROSPECT +
1	**Demographic Data** (historical and projected population size)	**Demographic Data** (historical and projected population size)
2	**Macroeconomic Data** -local currency - exchange rates -discount rate	**Macroeconomic Data** (GDP (historical and Projections)
3	**Energy Balances**	**Energy Balances**
4	**Electricity Generation Data** energy by fuel type and GHG emissions; Generation and consumption data on each type of generator (solar, hydro); Grid Emission Factor; Losses	**Electricity generation Data /Heat Generation** electricity/heat generation by fuel type including renewables; emission intensity for each fuel type; electricity imports and exports; own use and losses

Method: Group Quantitative Weighting			User Input Rankings from 1-3	See Rankings Legend Below Table
			User Input Intensity Weightings	Must add up to 100
	04-Jul-21		User Input Notes	As applicable
AREAS ASSESSED (Based on Specific Project Nee	INTENSITY WEIGHTINGS	GACMO	LEAP	PROSPECTS + (with published add-ons)	NOTES - Based on co
Emission Sources/Sectoral Coverage	12%	12%	12%	12%	
	1-3	3	3	3	
Granularity of Technology	12%	12%	12%	8%	
	1-3	3	3	2	
Temporal Granularity (Annual and Sub-Annual)	12%	4%	12%	8%	
	1-3	1	3	2	
Cost Representation	12%	12%	12%	4%	
	1-3	3	3	1	
Assessment of non-climate SD Impacts	12%	4%	12%	12%	
	1-3	1	3	3	
Accessibility	20%	20%	13%	20%	
	1-3	3	2	3	
Reporting	20%	7%	20%	13%	
	1-3	1	3	2	
Weighted Suitability Score % (100%)		71%	93%	77%	

Accomplishments of the MPP

Mitigation Analysis Work

- The Bahamas
- St. Kitts and Nevis
- Antigua and Barbuda (ICAT)
- Saint Lucia

Work was also done supporting the CCREEE sponsored training in LEAP across the region

Overview of Virtual LEAP Training Course

MODULE 1
(General Introduction to GHG Modelling and Projections)
May 23rd – June 1st

↓

MODULE 2
(Building Mitigaion Models in LEAP - Basic)
June 1st – June 29th

↓

MODULE 3
(Building Mitigation Models in LEAP - Advanced)
June 29th – July 27th

Course Schedule

Module	Topic	Duration
Module 1	Welcome & Introduction to GHG Modelling & Projections	May 23rd – June 1st
Module 2	Building Mitigation Models in LEAP – Basic	June 1st – June 29th
Module 3	Building Mitigation Models in LEAP – Advanced	June 29th – July 27th
Closing & Certificates		July 27th – August 6th

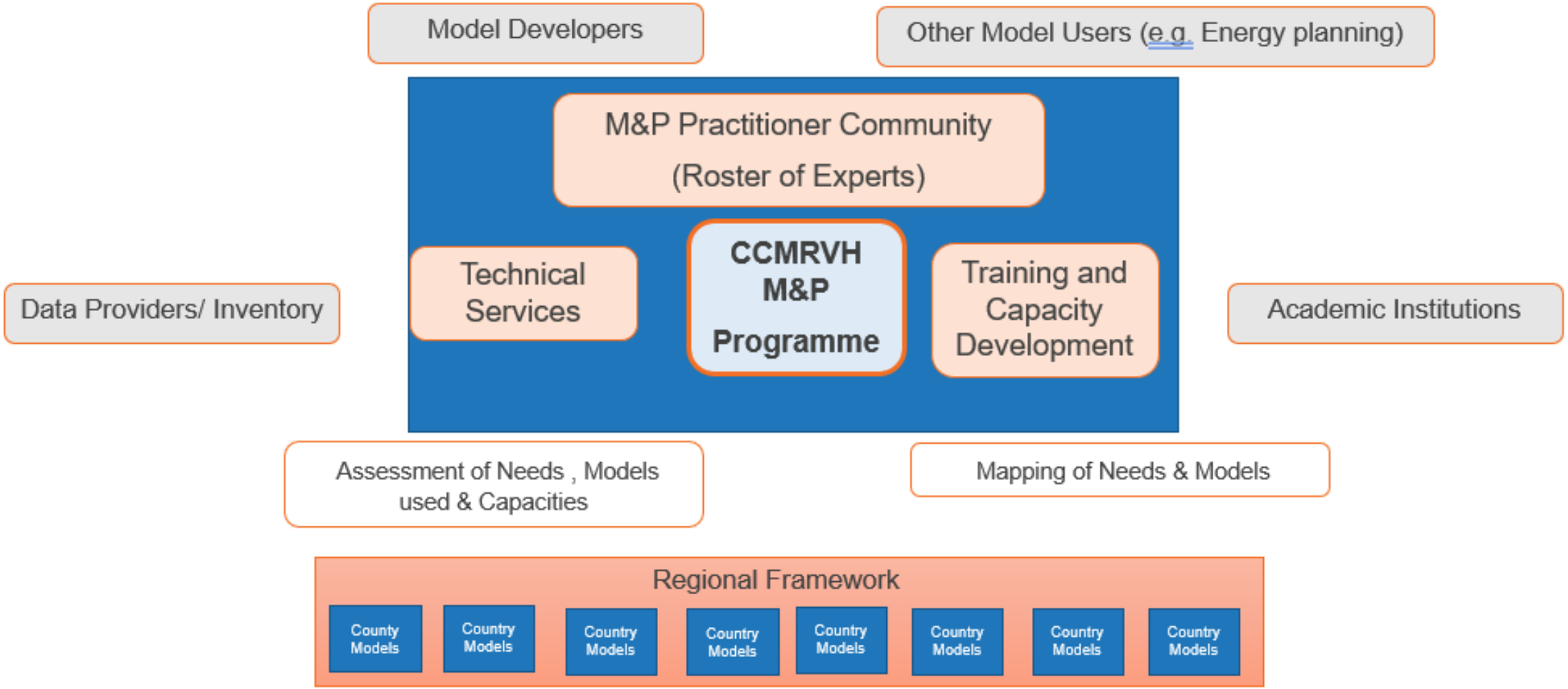
Future Outlook: The Modelling & Projection Programme

- Continuous development of training courses
- Continued education & awareness through various webinars
- Modelling & Projections Work Crew establishment
- Support to specific modelling project work in HUB Countries
- Modelling for Waste , IPPU & AFOLU Sectors

What does the future hold for the MPP?

- National and/or regional pooled technical experts for modelling NDCs, BTRs, Projects and others.
- Partnerships with other organisations, both regional and international.
- Development of guidance documents on data collection systems for modelling that will enhance MRV systems and enhance transparency.
- Provision of modelling & projections services to countries on a as needs-basis.
- Support to countries for mitigation assessments & analysis using the new Enhanced Transparency Framework (ETF) and Information for Clarity, Transparency and Understanding (ICTU) guidelines.

Future Outlook: The Modelling & Projection Programme



Thank You

The Caribbean Cooperative MRV Hub (CCMRVH) is part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag. And through support from the UNDP/UNEP Global Support Programme.

Supported by:

Federal Ministry
for the Environment, Nature Conservation,
Building and Nuclear Safety

based on a decision of the German Bundestag