Capacity Building on development of MRV Methodologies for BOCM

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IGES Overview



Institute for Global Environmental Strategies (IGES) was established under an initiative by Japanese government in 1998. IGES conducts policy research to achieve a sustainable development in Asia Pacific Region. There are 5 Branch offices (Beijing, Bangkok, Tokyo, Kansai and Kita-kyusyu).

150 staffs in total Chair of the board of directors **President** Secretary general **Program Management Climate Change Vice Secretary general** Office **Sustainable Consumption & Market Mechanism Production** Administrative section **Economy & Environment Governance & Capacity** Research supporting unit **Natural resource management** (Forest Conservation, Adaptation, Freshwater)

IGES Capacity Building Activities

- ➤ Since 2003, Market Mechanism (MM) group has been conducting CDM/JI capacity building activities in cooperation with collaborating countries.
- ➤ In 2011 MM group started MRV capacity building for new market mechanisms including BOCM. Our activities have 4 components in 10 collaborating countries.
- > Bilateral Offset Crediting Mechanism
- Domestic market readiness

(Support of the designing of ETS & domestic carbon market and Research etc)

Reform of the CDM

(Development of standardized baselines, Policy proposals to CDM EB and UNFCCC secretariat)

Development of Database and Publication



Background of MRV capacity building

- MRV methodologies for GHG emissions reduction by new market mechanisms should:
 - Be simple, objective and practical
 - Have lower uncertainty and ensure environmental integrity
 - Accelerate deployment of low carbon technologies, products and services
 - Take into account specific national circumstances in individual host countries
- Such MRV methodologies are to be developed through this activity

What has been done in FY2011

Component of FY2011 activities

- Application of MRV methodologies developed in J-VER to Asian countries
- -Development of MRV methodologies using the concept of the standardized baseline (SB)
- –Development of GHG-MRV in transport sector NAMAs
- Development of GHG-MRV for co-benefit type of wastewater treatment plants
- –Development of GHG-MRV of urban development policy
- –Review of Existing MRV system for NAMAs in China and India

Approach for development of MRV methodologies

- Utilization of the current practice on data monitoring as much as possible in individual host countries
 - What is monitored? How to monitor? Who monitors?
 - Find out what data are actually monitored at what level of accuracy/uncertainty/traceability
 - Clarify what additional data are definitely necessary at the minimum cost to calculate appropriate reference emissions and project emissions
- Use of appropriate default values whenever applicable, in conservative manner within a certain level of uncertainty
- Utilize the concept of "standardized baselines" whenever applicable referring the guidelines under CDM to determine "reference emission"

Development of MRV methodologies: In case of Lao PDR

- Lao PDR (MONRE) and IGES singed MoU for implementation of capacity building on New Market Mechanisms
- Waste management sector is selected as a model case due to very low GEF and lower reduction potentials in energy related activities
- Standardized baseline for waste management to avoid CH4 formation has are developed, referring the SB guideline under CDM

Development of MRV methodologies: In case of Lao PDR

- Establishing SB for solid waste management
 - Level of aggregation: Municipalities who collect waste and manage landfill sites (36 towns)
 - Additionality demonstration: Currently no mandatory regulation taken any measures
 - Baseline identification: Open dumping in landfill site is the most commonly used way of disposal
 - BL emission factor (BE = Amount of Waste * EF) : EF can be a single default value per ton of solid waste to simplify calculating ERs
- In this year, we try to fix the default value for EF based upon on-site survey

Current issues

- Only 36 out of 163 municipalities offer solid waste collection service
 - Limitation of data availability
- Amount of waste is the only data currently monitored in a regular basis
 - Any other data (e.g. composition of waste etc) need to be monitored?
 - Can they be monitored without substantial additional cost?
- It is desired to simplify calculation ERs using default values where applicable, taking into account the current practice of data monitoring and limited data availability

In case of composting projects in Lao PDR

• It is necessary to adjust existing MRV methodologies to local conditions without compromising certain accuracy.



Set default value

Fuel consumption

Set Measurement and procedure for monitoring

- Waste amount
- Compost amount
- Waste composition

Set default value

Fuel consumption

Calculate emission reduction

Plan for FY2012

1. Development of MRV methodology for BOCM in Asian country (Industry, energy efficiency, waste management and biomass sector etc)

2. Capacity building for government staffs and project developers to disseminate the knowledge & expertise on MRV methodologies

3. Capacity building for government staffs and/or any potential GHG validation & verification bodies to assess the projects under BOCM

Next steps for FY2012's activity

- 1. Identify the potential projects under BOCM in Asian countries
- 2. Review the existing methodologies such as CDM and J-VER to develop the basic concept of BOCM methodologies
- Prepare the methodologies (eligibility criteria, calculation method and monitoring etc) with government staffs and/or project developers through the intensive consultation meetings and workshops
- 4. Apply the prepared methodologies to existing operated projects to adjust it and conduct trial MRV in Asian countries
- 5. Disseminate the knowledge and expertise on the prepared methodologies to government staffs, project developers and relevant stakeholders through the workshops
- Conduct the capacity building for the verification of potential projects under BOCM by government staffs and any other potential GHG validation and verification bodies