

MRV Capacity Building in Asia for the development of New Market Mechanisms

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Background

- "New market mechanism" in a post-2012 framework have not been well defined yet
- However, irrespective of whatever new market mechanisms are, <u>robust but practically applicable</u> <u>MRV</u> of GHG reductions will be absolutely necessary
- It highlights the <u>need for development of robust</u>
 <u>MRV system</u> by the time new market mechanisms are actually operated
- In the beginning of this year, <u>IGES started MRV</u>
 <u>capacity building activities in Asian countries</u> for
 the development of new market mechanisms based
 upon the rich experiences in CDM capacity building
 over the past 8 years

Objectives

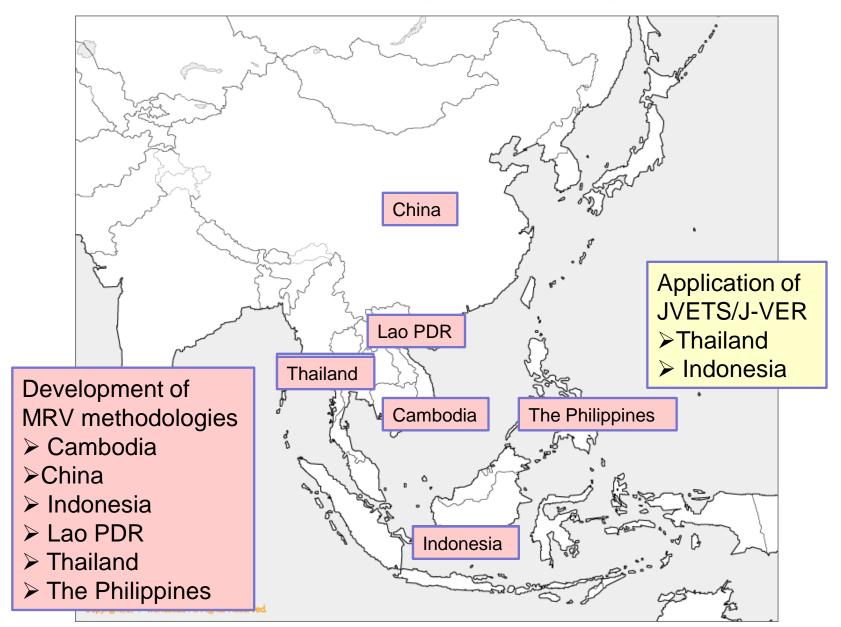
- To develop robust but practically applicable MRV methodologies being employed in new market mechanisms in a post-2012 framework
- To establish institutional structure to operate actual MRV for new market mechanisms in Asian developing countries

Activities in this year

- Development of robust but practically applicable MRV methodologies for new market mechanisms in various sectors
- Capacity building for the application of JVETS/J-VER* and implementation of their MRV system in Asian developing countries

* JVETS: Japan's Voluntary Emissions Trading Scheme J-VER: Japan Verified Emission Reduction

Selected Countries



Activity1: Development of MRV methodologies

- Improvement of existing CDM methodologies including parameters with difficulty of actually monitoring or required data is unavailable
- Development of draft MRV methodologies based upon the real experiences in CDM to eliminate shortcomings of CDM meth.
- Selected sectors:
 - Transport, waste/wastewater management, energy efficiency, biomass and others

Development of MRV Meth for transport in China

Activities

- To develop simplified transport MRV methodologies
- To map out data gaps between data periodically collected by government agencies and data required to conduct MRV
- To develop tools complementing the transport MRV methodologies

Case study

- Transport governance and data collection at different level
- Focus on road-based transport emissions in the city level in Beijing and Wuhan City

	National	Provincial	City	
Transport Activity	•Who collec			
Modal structure		nd authority of eporting and co	ntrol?	
Energy intensity	Action plan	with target?		
Carbon content	•Other polici	es and measure	es?	

Development of Draft MRV Methodologies in Philippines

1. Transport sector

Background

- •60,000 jeepneys are operating In Manila equipped with old lower energy efficiency diesel engine with higher pollutant gases
- Transport sector has not fully explored by CDM
- Needs for simpler and practically applicable MRV system for the sector

Case study

•A potential project is identified in replacement of old diesel engines currently installed in jeepneys with gasoline engines with LPG kits



Objectives

- Uptake mitigation project in transport sector
- •Reduced GHG emission and air pollution at once

2. Municipal solid waste (MSW) management

Background

- Only 5 projects (one is in Philippines) are registered as CDM MSW composting including residential waste
- Appropriate MSW management is one of key policy objectives

Case study

•Identification of gaps and difficulties in MRV of the composting CDM projects in reality



Objectives

- •Proposal of appropriate MSW management system leading to GHG emission reduction with robust MRV
- Capacity development of local government unit

Development of Draft MRV Methodologies in Thailand

1. Urban Solid Waste Management

Activities

- 1.Investigate barrier of CDM for urban solid waste management.
- 2. Field study on greenhouse gas emissions from urban solid waste management in studied cities in Thailand.
- 3. Conduct a training workshop for local governments

Expected outcome

- •Increasing in capacity of local governments to implement waste management practices with GHG emission reductions
- •Development of MRV methodology for GHG reduction from waste management by local governments

2. Co-benefit type wastewater treatment plants (WTPs)

- Development of MRV of GHG reduction in co-benefit type of WTPs
- Potential co-benefits from WTPs (biogas, energy and water reuse) are considered

together for assessing appropriate MRV for wastewater sector

Surveys in WTPs

- -WTPs with existing MRV (CDM projects)-Identify barriers and
- -Identify barriers and potentials for MRV in WTPs



Capacity building WS

- Experts of WTPs management
- Experts of CDM projects
- Government stakeholders
- NGOs, INGOs
- WTPs managers

Feedback

Outcome

Guideline for MRV of GHG reduction and co-benefits in wastewater sector

Activity2: Application of JVETS/J-VER

- Responding to an increasing interest in Asian developing countries to establish own domestic market mechanisms
- Selected countries: Thailand and Indonesia
- Based upon the Japanese experiences to establish JVETS/J-VER with robust MRV systems
 - ➤ Identification of appropriate MRV options applicable to each intended country
 - ➤ Development of implementation rules and guidelines for MRV
 - Capacity building of key stakeholders

Application of JVETS/J-VER (cont.)

Operation body

Capacity building of the government:

Workshop on JVETS/J-VER scheme, consultation meetings to identify potential issues in operation of the scheme

Guidelines

Implementation rules

Registry system

Preparation of MRV meths for VETS/VER

scheme: Assessment of applicability of JVETS/J-VER MRV guidelines/ rules to intended countries

Participants in the scheme

GHG verifiers

Trial MRV: Conducting actual MRV at a trialbasis for GHG emission/reduction of voluntary participants in selected certain sectors

Capacity building for local potential GHG verifiers: A series of workshops on international standards required for qualified GHG validator/verifier

Identified issues

- How to determine default values instead of monitoring parameters?
- How to simplify the existing CDM methodologies?
- How to consider and reflect country-specific conditions to MRV methodologies/rules?
- How to create incentives to potential participants in the VETS/VER scheme (esp. for VETS)?
- How to ensure the balance between supply and demand for allowances/credits?
- How to develop a strong basis to conduct robust MRV?

Further Steps

- Application of draft MRV methodologies to actual projects to assess their feasibility
- Modification of JVETS/J-VER MRV guidelines and methodologies well reflecting the reality of intended countries
- Conducting trial MRV on GHG emission/reduction
 - → Capacity building for potential participants
 - → Understanding common practice of monitoring
- Designing of VETS/VER scheme in details