

# Capacity Building on development of MRV Methodologies for New Market Mechanisms: In cases of Lao PDR and Mongolia

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May 2012

## Background of this activity

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

## Overview of approach for development MRV methodologies

- Utilisation 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

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## Overview of approach for development MRV methodologies

- Use of appropriate default values whenever applicable, in conservative manner within a certain level of uncertainty
- Utilise the concept of “standardised baselines” whenever applicable referring the guidelines under CDM to determine “reference emission”
- Critical review of the existing MRV methodologies in CDM and other GHG schemes as a basis of further development

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## Development of MRV methodologies: In case of Lao PDR

- Lao PDR (MONRE) and IGES signed 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
- Standardised baseline for waste management to avoid CH<sub>4</sub> formation has been developed, referring the SB guideline under CDM

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## 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 further on-site survey

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## Issues identified

- 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

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## Development of MRV methodologies: in case of Mongolia

- Mongolia (MNET) and IGES signed MoU to collaborate in establishing new market mechanisms
  - to establish mechanisms suitable for domestic situation of Mongolia through the consultation with Mongolian government
  - Supporting the development of MRV methodology in Mongolia
  - Establishing the standardized baseline: Boiler replacement projects-supply side energy efficiency

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## Development of MRV methodologies: in case of Mongolia

- Efficiency improvement/replacement of districted heat-supply boilers is selected as a model case
- Standardized baseline has been developed
  - Level of aggregation: Mongolia
  - Additionality demonstration: Boiler with more than 80% of fuel efficiency and more than 10 years of remaining lifetime
  - Baseline identification: BL is coal use with 80% of fuel efficiency
  - BL emission factor: Default values will be developed in this year based on further on-site survey

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## Issues identified

- Available data (e.g. 80% of fuel efficiency) need to be further examined?
- Enhanced on-site survey is necessary to clarify:
  - What data are actually monitored?
  - How are they monitored (e.g. monitoring device, uncertainty level, traceability level etc) ?
  - Who is monitoring them?
  - What data are needed be monitored additionally?
- Taking into account current practice of data monitoring, it is needed to identify simplified calculation ERs with default values ensuring traceability at international level

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