# Overview of technology aspects of NAMAs in a MRV manner in the energy supply sector

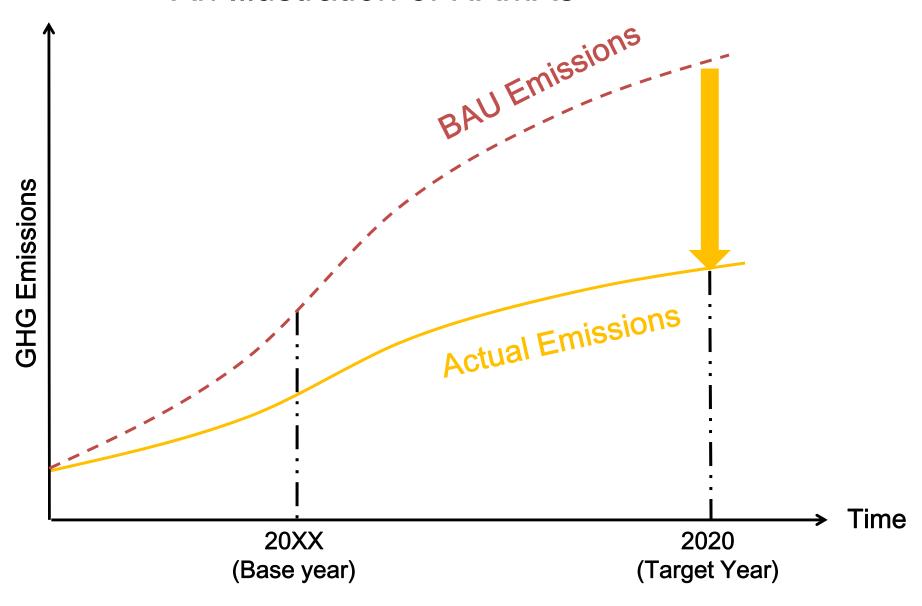
January 2013
Principal Researcher
Overseas Environmental Cooperation
Center, Japan (OECC)

## Outline of the Presentation

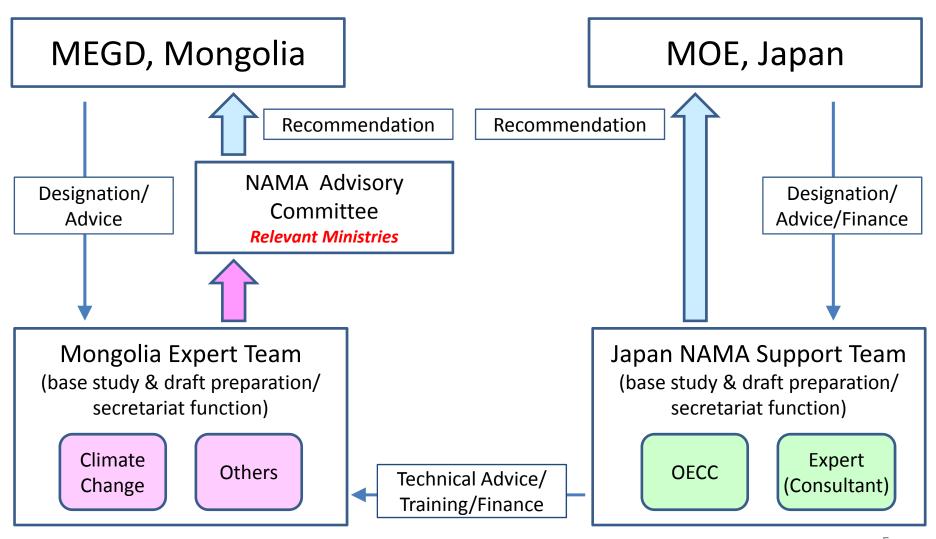
- Background of the Workshop on environmentally friendly technologies and measures
- Recent development on Joint Crediting Mechanism (JCM) between Mongolia and Japan
- 3. Expectations to the Workshop

1. Background of the Workshop on environmentally friendly technologies and measures

#### An Illustration of NAMAs



#### **Institutional Arrangement**



#### **Schedule**



Action 1. Identify BAU and NAMA scenario in the Energy Supply Sector

Action 2. Preparation for an Implementation Plan for NAMA

Action 3. Preparation for MRV

Action 4. Preparation for Institutional Arrangement for NAMA implementation

Action 5. Collection information on technology to be employed etc

#### **Steps for NAMAs Design**

## (1) Collection of Info on relevant policies and strategies

Collect and analyze relevant policy documents of development, climate change and related sector

### (3) Quantification GHG emissions of BAU

Quantify GHG emissions based on (2) data, and a) Identify the calculation formulas

- b) Calculate respective emission in BAU
- c) Aggregate respective emissions

## (5) Quantification GHG emission reduction by NAMAs

Quantify GHG emissions with (4)NAMAs assumptions

- a) Set the calculation formulas
- b) Calculation
- c) Aggregate potential with reduction by NAMAs

## (2) Collection data for BAU in the sector

Collect data for calculating BAU emission with bottom-up approach (eg. List all individual landfills, and collect respective waste volumes)

## (4) Examination and selection of NAMAs options

Select possible NAMAs options and technologies based on (1) policies and mitigation strategies and additional consideration.

Low-carbon technology survey

Examination MRV methods

Capacity-buildings in Mongolia for NAMAs implementation

Source: OECC 2012

#### Process of the survey to find the useful technologies for NAMAs

<1> Picking-up appropriate technologies from long-list and other source

<2> Short-listing

Long list → Short list



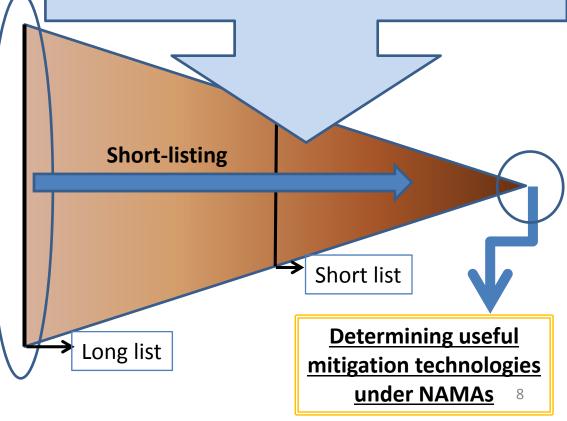
finding out the appropriate technology

> Selecting the appropriate technologies

Information collection through trade fair, Interview/meeting with stakeholders, utilization of database, etc.

## **Short-listing process**

- √ Surveying on needs and potentials of GHG mitigation technologies in Mongolia
- ✓ Interview with certain stakeholders and collecting technology information. Create a "long list".
- ✓ Research in Mongolia
- ✓ Revising the long list



# 2. Recent development on Joint Crediting Mechanism (JCM) between Mongolia and Japan

# Proposed Joint Crediting Mechanism/ Bilateral Offset Credit Mechanism (JCM/BOCM)

- To facilitate diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- To appropriately evaluate contributions to GHG emission reductions or removals from developed countries in a quantitative manner, through mitigation actions implemented in developing countries and use those emission reductions or removals to achieve emission reduction targets of the developed countries.
- To contribute to the ultimate objective of the UNFCCC by facilitating global actions for emission reductions or removals.





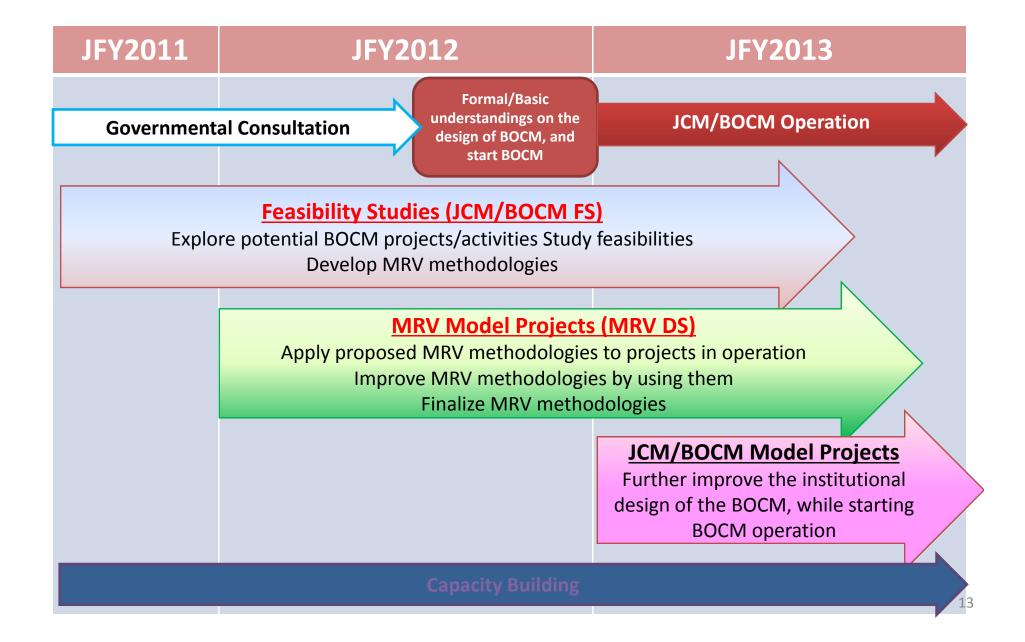
#### FY2012 MOEJ's Initiative on JCM/BOCM

Menu of Activities	Implementation Institutes
<ul> <li>MRV/JCM</li> <li>● Strengthen the capacities of government officials of Mongolia in new market mechanisms</li> <li>● Assist the development of MRV methodologies for new market mechanisms in Mongolia</li> <li>● Identify and develop project ideas for new market mechanisms</li> <li>● To summarize the experience of implementing clean development mechanism (CDM) and lessons learned in Mongolia</li> </ul>	Institute for Global Environmental Strategies
<ul> <li>NAMA</li> <li>● To support identifying Reference and NAMA Scenarios, and NAMA as a potential JCM/BOCM project</li> <li>● To support drafting domestic guidelines for a NAMA selection and a MRV, domestic institutional arrangement for NAMA implementation</li> </ul>	Overseas Environmental Cooperation Center, Japan
● To disseminate information regarding JCM/BOCM as part of the MOEJ programme to support host countries as well as business operators	
<ul> <li>●Replacement of Coal-Fired Boiler by Geo-Thermal Heat Pump for Heating (Shimizu Corp.) and Upgrading and Installation of High-Efficient Heat Only Boilers (HOBs) (Suuri-Keikaku)</li> <li>→ MRV methodologies will be developed, through the MRV practices of model projects.</li> </ul>	Global Environment Centre Foundation
	MRV/JCM  Strengthen the capacities of government officials of Mongolia in new market mechanisms  Assist the development of MRV methodologies for new market mechanisms in Mongolia  Identify and develop project ideas for new market mechanisms  To summarize the experience of implementing clean development mechanism (CDM) and lessons learned in Mongolia  NAMA  To support identifying Reference and NAMA Scenarios, and NAMA as a potential JCM/BOCM project  To support drafting domestic guidelines for a NAMA selection and a MRV, domestic institutional arrangement for NAMA implementation  To disseminate information regarding JCM/BOCM as part of the MOEJ programme to support host countries as well as business operators  Replacement of Coal-Fired Boiler by Geo-Thermal Heat Pump for Heating (Shimizu Corp.) and Upgrading and Installation of High-Efficient Heat Only Boilers (HOBs) (Suuri-Keikaku)  MRV methodologies will be developed, through the MRV practices of

# MRV Demonstration Study and JCM/BOCM Feasibility Study in FY2012

- Developing streamlined MRV methodologies for JCM/BOCM projects/activities in each study, that should:
  - Be simplified, objective and practical, while lowering uncertainty and ensuring environmental integrity
  - Accelerate the deployment of low-carbon technologies, products and services, taking into account the national circumstances in host countries
  - Facilitate the NAMAs in host countries
- Holding consultative meetings on the studies with host countries' governments and relevant organizations
  - 5 countries including Mongolia in FY2012
  - 3 countries in FY2011

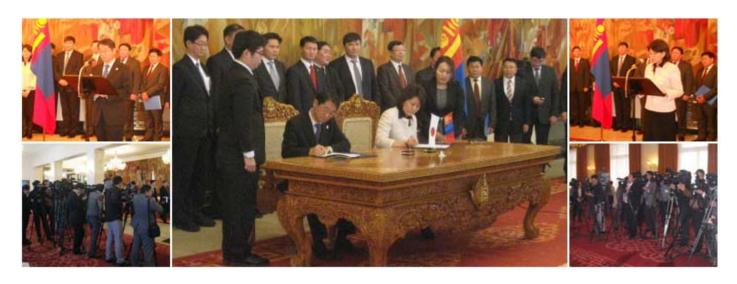
#### Schedule on JCM/BOCM



## Joint Crediting Mechanism

At the occasion of COP18 in Doha, Qatar, the Government of Japan and its partner countries, such as Mongolia, Indonesia, Viet Nam, Bangladesh, Cambodia, Lao PDR etc, met in view of early conclusion of an agreement for implementation.

In January 8, 2013, Mongolia and Japan concluded a Memorandum of Understanding on JCM at Ulanbaataar.



Source: New Mechanisms Information Platform: http://www.mmechanisms.org/e/initiatives/130108 mongolia.html

## 3. Expectations to the Workshop

## Expectations

- To identify and discuss possible measures and technologies under the Nationally Appropriate Mitigation Actions (NAMAs) in the Energy industry/supply sector
- To discuss current government policies and possibilities to link existing policies with NAMAs
- To facilitate networking among Mongolian and Japanese private sector for possible cooperation in the technology transfer
- To discuss further actions needed to implement NAMAs

## Thank you very much!

kato@oecc.or.jp