MOEJ/GEC
BOCM DS/FS Programme 2012 for MRV Methodologies Development

UNFCCC SB 36 Side Event
17 May 2012, at Room METRO

Tomoya MOTODA, Carbon Management Dept.,
Global Environment Centre Foundation (GEC)
as the Secretariat of the BOCM FS Programme

GEC

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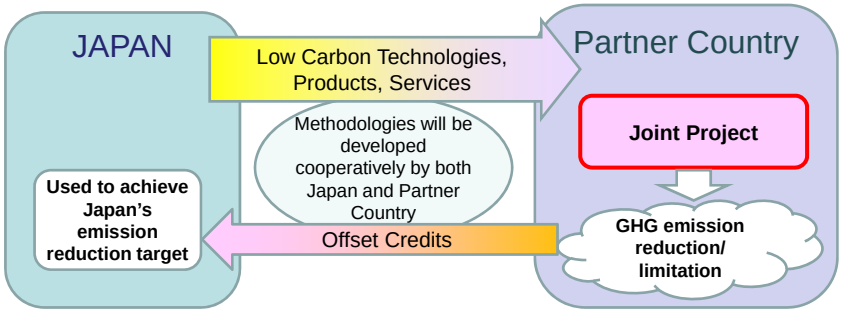
Bilateral Offset Credit Mechanism (BOCM)

Purposes of the Bilateral Offset Credit Mechanism (BOCM)

- Contribute to the ultimate objective of the UNFCCC through promotion of mitigation activities globally.
- Facilitate the bilateral cooperation in the field of climate change in such a way that best suits each country's national circumstances.
- Contribute to the sustainable development of developing countries.
- Appropriately evaluate the contribution to GHG emission reductions or removals.
- Facilitate diffusion of low carbon technologies, products and services and enhance capabilities to utilise them.



Source: Ministry of the Environment, Japan

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Initiatives for the Development of BOCM
under the Ministry of the Environment, Japan (MOEJ)

(1) Feasibility Studies (FS) for BOCM MRV Methodology Development **(GEC)**
- Called for study proposals focusing on BOCM MRV Methodology Development from Japanese entities, based on concrete potential BOCM projects/activities.
- Modelled MRV Demonstration Studies (DS) will be also undertaken, in order to acquire practical know-hows and experiences in 2012.

To establish the enabling environment for BOCM projects/activities in developing countries

(2) Information platform for the BOCM **(OECC)**
- New Mechanisms Information Platform website was established to provide the latest movements and information on the BOCM.

(3) Capacity Building (CB) for the BOCM **(IGES, etc.)**
- Consultations with government officials and private firms in developing countries for capacity building for new market mechanism implementation and MRV application (incl. development of MRV methodologies)

3

Source: modification based on the Ministry of the Environment, Japan

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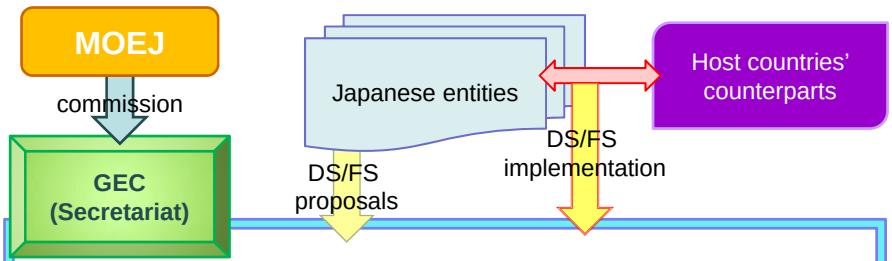
Overview of BOCM DS/FS Programme



- Invite public proposals on DS/FS from Japanese entities (private companies and NGO/NPOs)
- Select the proposals to be officially adopted as qualified DS/FS (funded to implement studies)
- Provide advice and supervision to the qualified DS/FS
  - Through an expert committee and task force teams
- Consult with host countries to promote cooperative relationships
  - Through meetings with host countries' governments and stakeholders
- Outreach the DS/FS results
  - Through GEC website, UNFCCC Side Events, etc.

4

Purposes of BOCM DS/FS

- To develop MRV methodologies applicable to BOCM projects/activities:
  - Eligibility criteria (positive list)
  - Minimized monitoring items and frequencies
    - As many default values and/or specific fixed values as possible should be found and set.
    - The default values should lead to conservative calculation results.

  → Actual monitoring activity is practically workable for a project/activity owner in a developing country.
  - Quantifications of reference emissions, project/activity emissions, leakage emissions (if any), and emission reduction effects

  ➔ ***BOCM MRV Methodology equips Spreadsheet with automated calculation functions, which easily show the ER calculation results.***

- [DS] – To demonstrate the MRV process would be complete:
  - Based on existing project/activity
  - Through the practice of MRV process, with the application of abovementioned BOCM MRV methodology
  - Actual **M**onitoring activity → Creation of monitoring **R**eports → **V**erification by a third-party verifier (in the host country)

** Note: The existing project/activity would not be eligible to BOCM project/activity in the future. DS is to survey whether BOCM MRV methodology and MRV process is workable or not.*

5

Lessons Learnt from BOCM FS 2011

- **Summary of BOCM FS 2011 results:** Reference scenario setting, monitoring plan, calculation protocol and quantification of GHG emission reduction effects, possible MRV system, and other points were surveyed. However, different approaches were reported due to lack of standard template for BOCM projects/activities.
- **BOCM MRV Methodologies** applicable to BOCM projects/activities should be developed.

  → Since the basic concept of BOCM methodology template has been identified by the Government of Japan, FS in 2012 will develop draft BOCM methodologies.
- **BOCM MRV Methodologies** should ensure MRV, with simplifications and conservativeness:
  - Simplified monitoring (in terms of numbers of items, setting of default value(s), etc.)
  - Specific circumstances and/or conditions for each host country should be taken into account in the process of development of BOCM methodology.
- Some FS would continue their studies in FY2012, in order to:
  - improve the results, including the accuracy of GHG emission reductions, and/or
  - measure GHG emissions and their reductions **on the real implementation basis**, with draft BOCM MRV methodologies (as MRV demonstration studies (DS)).

The draft BOCM MRV methodologies as the results of DS/FS 2012 are expected to be input to bilateral consultations on BOCM establishment.

Toward this goal, the DS/FS Secretariat would like to share information with host counties based on the draft draft BOCM MRV methodologies (via the cooperation with IGES CB programme), in order to elaborate them with comments from host countries.

6

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A Sample of BOCM MRV Methodology

Calculation Spreadsheet for GHG Emission Reductions: Simplest example

Option 1-1: Bio-Diesel_Plant Oil_Result

1. Monitoring and input after project start

Description of data	Value	Unit
Projct consumption of biodiesel in year y		kl/y

2. CO2 emission reductions

CO2 emission reductions	Unit
0	tCO2/y

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Calculation Formula in the Sample Meth

Default Values = should be pre-set in the MRV methodology

Item	Value	Unit	Parameter
NCV of BDF	34.0	GJ/kl	$NCV_{BD,y}$
CO2 EF of Petro-Diesel	0.0687	tCO2/GJ	$EF_{f,i,y}$
Cultivation of plant feedstock	0.222	tCO2/kl	$APE_{cul,y}$
Transport of plant feedstock	0.111	tCO2/kl	$APE_{trm,y}$
Production of BDF	1.234	tCO2/kl	$APE_{pro,y}$
Transport of BDF	0.111	tCO2/kl	$APE_{tbdf,y}$

Reference Emissions = Productions of BDF (kl/y) x $NCV_{BD,y}$ (GJ/kl) x $EF_{f,i,y}$ (tCO2/GJ)
= [xxx,xxx kl] x 34.0 x 0.0687

Project/Activity Emissions = APEs ($_{cul,y + trm,y + pro,y + tbdf,y}$) (tCO2/kl) x Productions of BDF (kl/y)
= (0.222 + 0.111 + 1.234 + 0.111) x [xxx,xxx kl]

Emission Reductions = Reference Emissions – Project/Activity Emissions

Let's use it!

Calculation Spreadsheet for GHG Emission Reductions: Simplest example

Option 1-1: Bio-Diesel_Plant Oil_Result

1. Monitoring and input after project start

Description of data	Value	Unit
Projct consumption of		kl/y

2. CO2 emission reductions

CO2 emission reductions	Unit
0	tCO2/y

Points of MRV Meth Development

- Identification of the Reference Scenario
- Quantification of the Reference Emissions
  ← how to quantify the Reference Scenario
- **Setting of Default Values**
  - Specific to the project/activity?
  - Peculiar to the host country or the locality?
  - Subject to host country's approval?
  - Periodical update or review?
  - Big challenges in DS/FS 2011
- **Minimisation of monitoring items & frequencies**

➔ **Very easy to quantify GHG emission reductions**

<FYI> Final Reports of BOCM FS 2011

Final reports of BOCM FS 2011 are available through the GEC website, at http://gec.jp.

Enter from here!

11

Thank you very much for your attention!

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12