Introduction to Joint Crediting Mechanism - with case study of composting-

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Basic Concept of JCM

- Facilitating 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.

- Appropriately evaluating 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.

- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals, complementing the CDM.

Source: Ministry of the Environment Japan
Japan is currently making utmost efforts to achieve its target under the first commitment period of the Kyoto Protocol through domestic measures (GHG emissions reduction and carbon sinks) as well as acquiring credits of the Kyoto Mechanism.

Japan will continue to make emissions reduction efforts beyond 2012. Its concrete targets are currently reviewed and considered domestically.

The JCM can be an effective way to achieve Japan’s post 2012 targets, complementing the existing Kyoto Mechanism. Although Japan will not participate in the second commitment period of the Kyoto Protocol, it will remain in the Protocol and will intend to continue to use the Kyoto Mechanism to achieve its post 2012 targets.

Source: Ministry of the Environment Japan
Approaches of JCM

The JCM should be designed and implemented, taking into account the followings:

(1) Ensuring the robust methodologies, transparency and the environmental integrity:

(2) Maintaining simplicity and practicality;

(3) Promoting concrete actions for global GHG emission reductions or removals;

(4) Preventing uses of any mitigation projects registered under the JCM for the purpose of any other international climate mitigation mechanisms to avoid double counting on GHG emission reductions or removals.

Source: Ministry of the Environment Japan
Feature of JCM (1)

(1) JCM starts its operation as the non-tradable credit type mechanism.

(2) Both Governments continue consultation for the transition to the tradable credit type mechanism and reach a conclusion at the earliest possible timing, taking account of implementation of the JCM.

(3) The JCM aims for concrete contributions to assisting adaptation efforts of developing countries after the JCM is covered to the tradable credit type mechanisms.

(4) The JCM covers the period until a possible coming into effect of a new international framework under the UNFCCC.

Source: Ministry of the Environment Japan
Scheme of JCM

**Japan**

- **Government**
  - Issuance of credits
  - Notifies registration of projects
  - Reports issuance of credits

- **Project participants**
  - Implementation & monitoring of projects

- **Third party entities**
  - Validate projects
  - Verify amount of GHG emission reductions or removals
  - Inform results of validation/verification

- **Joint Committee**
  - Develops/revises the rules and guidelines
  - Registers projects
  - Discusses the implementation of JCM

- **Host Country**

- **Government**
  - Issuance of credits
  - Notifies registration of projects
  - Reports issuance of credits

- **Project participants**
  - Implementation & monitoring of projects

**Conduct policy consultations**

*Source: Ministry of the Environment Japan*
# Feature of JCM (2) in comparison with the CDM

<table>
<thead>
<tr>
<th>JCM</th>
<th>CDM</th>
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</thead>
<tbody>
<tr>
<td><strong>Governance</strong></td>
<td>- “de-centralized” structure (each government, joint committee)</td>
</tr>
<tr>
<td><strong>Sector/project Coverage</strong></td>
<td>- Broader coverage</td>
</tr>
<tr>
<td><strong>Validation of projects</strong></td>
<td>- In addition to Does, ISO14065 certification bodies can conduct checking whether a proposed projects fits eligibility criteria which can be examined objectively</td>
</tr>
<tr>
<td><strong>Calculation of emission reduction</strong></td>
<td>- Spreadsheet are provided - Default vales can be used in conservative manner when monitored parameters are limited</td>
</tr>
<tr>
<td><strong>Verification of projects</strong></td>
<td>- The entity which validated the project can conduct verification - Validation &amp; verification can be conducted simultaneously</td>
</tr>
</tbody>
</table>

Source: Ministry of the Environment Japan
## Comparison between the proposed JCM and the CDM

<table>
<thead>
<tr>
<th>Project participants/ Each Government, Joint Committee can develop by itself</th>
<th>Submission of Proposed Methodologies</th>
<th>Project Participants (PPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Committee</td>
<td>Approval of Proposed Methodologies</td>
<td>CDM Executive Board (CDM EB)</td>
</tr>
<tr>
<td>Project Participants</td>
<td>Development of PDD</td>
<td>PPs</td>
</tr>
<tr>
<td>Third-party entities</td>
<td>Validation</td>
<td>Designated Operational Entity (DOE)</td>
</tr>
<tr>
<td>Joint Committee</td>
<td>Registration</td>
<td>CDM Executive Board</td>
</tr>
<tr>
<td>Project Participants</td>
<td>Monitoring</td>
<td>PPs</td>
</tr>
<tr>
<td>Third-party entities</td>
<td>Verification</td>
<td>DOE</td>
</tr>
<tr>
<td>- JI decides the amount - Each Government issues the credit</td>
<td>Issuance of credits</td>
<td>CDM EB</td>
</tr>
</tbody>
</table>

Source: Ministry of the Environment Japan
Overview of composting project

Baseline (reference) scenario

Solid Waste

Centralized composting

Composting product

Credit from CDM or investment from new market mechanisms

Project scenario

Solid Waste

Agriculture

Benefits

• Reduce waste to landfill site
• Reduce GHG emission
• Increase productivity of crops
Requirement for MRV methodology under JCM

Eligibility criteria
- Provide positive list
- Not require demonstration of additionality like CDM

Calculation of GHG emission reduction
- Set default values to take into account the condition of host parties in order to reduce burden of monitoring implementation
- Consider trend of GHG emissions

Monitoring
- Apply the default values in PDD (if any, project participants can monitor corresponding parameters by themselves)
- Apply sampling and simulation
- Utilize credible documents, e.g. invoice or bill
## Data items of composting projects in the Philippines

<table>
<thead>
<tr>
<th>Parameters to be monitored</th>
<th>CDM project1</th>
<th>CDM project2</th>
<th>Non-CDM project1</th>
<th>Non-CDM project2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of waste</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Number of truck to composting site</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>Waste composition</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fuel consumption of truck</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>Power consumption of the site</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>Production of compost</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>GHG abatement cost</td>
<td>-</td>
<td>-</td>
<td>Around 600US$/tCO₂</td>
<td>Around 500US$/tCO₂</td>
</tr>
</tbody>
</table>
Our proposal for MRV Meth.

Eligibility criteria

- The area that cannot accordance with RA9003 is eligible
- Composting project should have programme to facilitate waste separation practice at household level
- Collected wastes are from household and food market

Calculation of GHG emission reduction

- Set default value for waste composition based on CDM methodologies and JICA research

Monitoring

- For the most simplified case, the participant are required to monitor amount of waste to be composted

Demonstration of proposed MRV methodology: If most of waste (50t/day = 18,250t/year) is composted….
Roadmap for the JCM

<table>
<thead>
<tr>
<th>JFY2011</th>
<th>JFY2012</th>
<th>JFY2013</th>
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</table>
| **Feasibility Studies**
- Explore potential JCM projects/activities
- Study feasibilities
- Develop MRV methodologies |
| **MRV Model Projects**
- Apply proposed MRV methodologies to projects in operation
- Improve MRV methodologies by using them
- Finalize MRV methodologies |
| **JCM Model Projects**
- Further improve the institutional design of the JCM, while starting JCM operation |

**Governmental Consultation**

**Signing Bilateral Document**

**JCM Operation**
- Establishment of the JC
- Development of rules and guidelines

**Capacity Building**

**Un negotiations on Framework for Various Approaches**

Source: Ministry of the Environment Japan
Governmental Consultations

- Japan has held consultations for the JCM with developing countries (e.g. Mongolia, Bangladesh, Indonesia, Viet Nam) since 2011 and made similar briefing to interested countries as well. Japan will continue consultations/briefing with any countries which are interested in the JCM.
- Japanese and Mongolia governments signed the bilateral document for the JCM on 8th January 2013. (first case of signature of the bilateral document for the JCM)

Source: MNET (http://mne.mn/v3/?p=5276)