JCM Implementation in Indonesia

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## Market Based Mechanism (MBM) experiences in Indonesia

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Total Registered Projects</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDM</strong></td>
<td>121</td>
<td>Total of 121 registered projects, 2% of total global CDM registered project</td>
</tr>
<tr>
<td><strong>VCS</strong></td>
<td>12</td>
<td>Total of 12 registered projects, Project registered included forestry project</td>
</tr>
<tr>
<td><strong>JCM</strong></td>
<td>28</td>
<td>Total of 28 projects covering sectors in forestry, energy efficiency, and renewable energy (in 3 years of its development)</td>
</tr>
<tr>
<td><strong>Gold Standard</strong></td>
<td>19</td>
<td>Total of 19 projects in energy efficiency, renewable energy, forestry, waste handling and disposal</td>
</tr>
<tr>
<td><strong>Plan Vivo</strong></td>
<td>6</td>
<td>Total of 6 projects in the forestry and ecosystem sector</td>
</tr>
</tbody>
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*Gold Standard and Plan Vivo has lower degree of assurance compare to other schemes*
<table>
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<tr>
<th>Initiative</th>
<th>Description</th>
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| **PMR**                                        | • Indonesia is one of the first countries who join this initiative in 2010.  
• Still in preparation stage.  
• Coordinating Ministry of Economic Affairs is the focal point |
| **APCMR**                                      | • Indonesia is actively involved in Asia Pacific Carbon Market Roundtable initiated by New Zealand.  
• The roundtable is intended to seek the possibilities of regional market based. |
| **Carbon Market Platform**                     | • The newest international initiative on market based mechanism dialogue initiated by the G7 countries.  
• A high level dialogue and discussion intended to create common understanding in the MBM implementation. |
| **Ministerial Declaration on Carbon Market**   | • The declaration was made to support the Paris Agreement implementation.  
• Support a strong role for carbon markets to enhance the ambition and facilitate the delivery of mitigation under the Paris Agreement.  
• Committed to environmental integrity, transparency and the avoidance of double counting when market mechanisms are used |
Market Based Mechanism

Mechanism which utilizes market, price and other economic variables to provide incentives for emitters to reduce or eliminate negative externalities.

Benefit of Market-based Mechanism

- Provide financial support for climate change mitigation action
- Facilitate the diffusion of advance low-carbon technology
- Enabling higher ambition in climate change mitigation
- Accelerate technology transfer and capacity building in low-carbon technology and mitigation action
JCM (Joint Crediting Mechanism)

JCM is a G-to-G scheme which encourages private sector organizations to invest in low carbon development activities in Indonesia through incentive from the government of Japan. JCM scheme has been proven to support the Government of Indonesia's effort to reduce its carbon emission and to implement low carbon development.
Legal basis of JCM:

Bilateral Cooperation Document on the JCM for the Low Carbon Growth Partnership between the Republic of Indonesia and Japan

Para 3
Both sides, in order to promote investment and deployment of low carbon technologies, products, systems, services and infrastructures to achieve low carbon growth in Indonesia, establish a Joint Crediting Mechanism (hereinafter referred to as the “JCM”) and implement it in accordance with the relevant domestic laws and regulations in force in respective countries.

Para 13
This partnership covers the period from the signing of this document until the operationalization of a new international framework under the convention. Both sides consider possible extension of this partnership and reach a conclusion before its termination, taking into account, inter alia, the progress of negotiations under the convention.
JCM Stakeholders in Indonesia

1. Coordinating Ministry for Economic Affairs
3. Ministry of Environment & Forestry
4. Ministry of Foreign Affairs
5. Ministry of Finance
7. Ministry of Industry
JCM Financing in Indonesia
(Based on July 2016 data)

Subsidy and grant from Government of Japan for JCM scheme in Indonesia

- Grant for Feasibility Studies
  ± US$ 10 million

- Subsidy for implementation of low carbon development projects
  ≥ US$ 37 million

The subsidy has mobilized fundamental

- Low carbon investment from private sectors & Indonesian State-owned company
  ≥ US$ 113 million

- Current total JCM project investment in Indonesia
  ± US$ 150 million

*Calculation based on estimation
JCM Project Implementation in Indonesia

22 Projects in pipeline
6 JCM registered projects
2 Registered projects which already issuing the credit
108 Feasibility studies have already implemented in Indonesia

Types of implemented projects
- energy efficiency in industry
- renewable energy
- waste handling and utilization
- low carbon infrastructure development
- energy efficiency in building
- sustainable forest management
JCM project example 1:
Energy efficient refrigerants to cold chain industry

The first two JCM projects have issued credits
Project participants: PT Adib Global Food Indonesia & Mayekawa MFG

Karawang site:
• Installed technology: Compressor (43 kW) and Intelligent Quick Freezer.
• By using Intelligent Quick Freezer, production capacity in Karawang site has increased from 2 tpd to 4 tpd.
• Total amount of credit issued: 11 tCO₂

Bekasi site:
• Installed technology: Compressor (2x43 Kw)
• The chillers were used for the cooling room purposes.
• For Bekasi site 20% reduction of energy consumption is expected than the reference scenario.
• Total amount of credit issued: 29 tCO₂
JCM project example 2:
Waste Heat Recovery Power Generation

The participant:
PT Semen Indonesia Tbk is a state-owned company and the biggest cement producer in Indonesia & JFE Engineering

The project:
Project is utilizing the waste heat gases of exit preheater and cooler to generate electricity. The WHR power generation capacity is 30.6 MW

The benefit:
Expected CO$_2$ emission reduction: 122,358 tCO$_2$/year

The characteristic:
Currently is the biggest JCM project in Indonesia in terms of investment value and estimated emissions reduction
JCM project example 3: Installation of air jet loom

The participant
PT. Century Textile Indonesia, PT Indonesia Synthetic Textile Mills, PT Easternex, PT. Toray Industries Indonesia & Toray Industries, Inc

The project
Installation of 96 units of Toyota JAT 810 air jet loom at 3 textile factories. Air jet loom is able to reduce 20% air consumption for weft insertion compare to conventional loom.

The benefit
Expected emission reduction: 707 tCO2/year
JCM Funding Scheme

Model Project by MoEJ
- Up to 50% Subsidy
- 50% Investment from the participant
  - Covers up to 50% of the installation cost of the installed emission reduction equipment.
  - Establishment of Joint Venture is mandatory.

Demonstration Project by METI
- Up to more than 50% Subsidy
- Investment from the participant
  - Within certain period, the equipment will be owned by METI, subsequently it will be transferred to the participant.

MOEJ Contribution
ADB
JFJCM (Trust Fund)
OCR/ADF*
MRV
Additional costs with adoption of advanced low-carbon technologies
Mitigation through conventional technologies (Selection from pipeline projects)
GHG Emission Reduction

ADB - Japan Fund for JCM (JFJCM)

Source: Ministry of Environment Japan, 2016
Thank you