Recent Development of
The Joint Crediting Mechanism (JCM)

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Examples of JCM Projects and Model Projects

- Waste heat recovery in Cement Industry, JFE engineering, Indonesia
- Eco-driving with Digital Tachographs, NITTSU, Vietnam
- Geothermal power generation, Mitsubishi Hitachi Power Systems, Mexico
- Amorphous transformers in power distribution, Hitachi Materials, Vietnam
- Upgrading air-saving loom at textile factory, TORAY, Indonesia, Thai
- Solar power plant for commercial facilities, Kyocera, Palau
- High efficiency air-conditioning and process cooling, Ebara refrigeration equipment & systems, Indonesia
- Energy saving at convenience stores, Panasonic, Indonesia
- Waste to Energy Plant, JFE engineering, Myanmar
- High efficiency air-conditioning system, Daikin, Hitachi, Panasonic, Vietnam, Indonesia
- Co-generation system at factory, Toyota, Nippon Steel & Sumikin Engineering, Indonesia, Thai
- High efficient refrigerator, Mayekawa MFG, Indonesia
JCM Partner Countries

- Japan has held consultations for the JCM with developing countries since 2011 and has established the JCM with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia, Mexico, Saudi Arabia, Chile, Myanmar and Thailand.

- In addition, the Philippines and Japan signed an aide memoir with intent to establish the JCM.
The second component of Japan’s new set of contribution is innovation. The key to acting against climate change without sacrificing economic growth is the development of innovative technologies. To illustrate, there are technologies to produce, store and transport hydrogen towards realizing CO2–free societies, and a next-generation battery to enable an electric car to run 5 times longer than the current level. By next spring Japan will formulate the “Energy and Environment Innovation Strategy.” Prospective focused areas will be identified and research and development on them will be strengthened. (snip)

**In addition, many of the advanced low-carbon technologies do not generally promise investment-return to developing countries. Japan will, while lowering burdens of those countries, promote diffusion of advanced low carbon technologies particularly through implementation of the JCM.**
Ministers and Representatives from 16 JCM partner countries and Japan have participated the “3rd JCM Partner Countries’ High-level Meeting” held in 8 December, 2015 at Japan Pavilion in COP21 (Paris) as a side event.

The Ministers and Representatives welcomed the progress in the JCM and shared their continuous will to further implement the JCM through mutual cooperation.
The JCM related Articles in the Paris Agreement

**Article 6 of the Agreement**

2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve *the use of internationally transferred mitigation outcomes towards nationally determined contributions*, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

3. **The use of internationally transferred mitigation outcomes to achieve nationally determined contributions** under this Agreement shall be voluntary and authorized by participating Parties.

- Use of market mechanisms, including the JCM, is articulated under Article 6 which prescribes for the use of emission reductions realized oversees towards national emission reduction targets.

- The amount of emission reductions and removals acquired by Japan under the JCM will be appropriately counted as Japan’s reduction in accordance with the Paris Agreement.

- Japan is going to contribute to the development of the guidance for robust accounting including for avoidance of double counting to be adopted by the CPA*.  

*the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement*
Japan’s INDC (Excerpt)

Japan’s INDC

- Japan’s INDC towards post-2020 GHG emission reductions is at the level of a reduction of 26.0% by fiscal year (FY) 2030 compared to FY 2013 (25.4% reduction compared to FY 2005) (approximately 1.042 billion t-CO$_2$eq. as 2030 emissions), ensuring consistency with its energy mix, set as a feasible reduction target by bottom-up calculation with concrete policies, measures and individual technologies taking into adequate consideration, *inter alia*, technological and cost constraints, and set based on the amount of domestic emission reductions and removals assumed to be obtained.

Information to facilitate clarity, transparency and understanding

- The JCM is not included as a basis of the bottom-up calculation of Japan’s emission reduction target, but the amount of emission reductions and removals acquired by Japan under the JCM will be appropriately counted as Japan’s reduction.

Reference information

GHG emissions and removals
JCM and other international contributions

- Japan establishes and implements the JCM in order both to appropriately evaluate contributions from Japan to GHG emission reductions or removals in a quantitative manner achieved through the diffusion of low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions in developing countries, and to use them to achieve Japan’s emission reduction target.

- Apart from contributions achieved through private-sector based projects, accumulated emission reductions or removals by FY 2030 through governmental JCM programs to be undertaken within the government’s annual budget are estimated to be ranging from 50 to 100 million t-CO$_2$. 

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## Progress of the JCM in each partner country

**As of February 2016**

<table>
<thead>
<tr>
<th>Partner countries</th>
<th>Singing</th>
<th>Number of JC meeting</th>
<th>Number of registered JCM project</th>
<th>Number of approved JCM methodology</th>
<th>Number of JCM model &amp; demonstration project (H25-27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mongolia</td>
<td>Jan. 2013</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Bangladesh</td>
<td>Mar. 2013</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>Ethiopia</td>
<td>May 2013</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td>Kenya</td>
<td>Jun. 2013</td>
<td>2</td>
<td></td>
<td>1</td>
<td>3</td>
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<tr>
<td>Maldives</td>
<td>Jun. 2013</td>
<td>2</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Jul. 2013</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>15</td>
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<tr>
<td>Lao PDR</td>
<td>Aug. 2013</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
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<tr>
<td>Indonesia</td>
<td>Aug. 2013</td>
<td>5</td>
<td>3</td>
<td>10</td>
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<td>Costa Rica</td>
<td>Dec. 2013</td>
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<tr>
<td>Palau</td>
<td>Jan. 2014</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Cambodia</td>
<td>Apr. 2014</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
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<tr>
<td>Mexico</td>
<td>Jul. 2014</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Saudi Arabia</td>
<td>May 2015</td>
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<tr>
<td>Chile</td>
<td>May 2015</td>
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<td></td>
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<td></td>
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<tr>
<td>Myanmar</td>
<td>Sep. 2015</td>
<td>Not yet</td>
<td></td>
<td></td>
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<tr>
<td>Thailand</td>
<td>Nov. 2015</td>
<td>1</td>
<td></td>
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<td>7</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16 countries</strong></td>
<td><strong>29</strong></td>
<td><strong>8</strong></td>
<td><strong>20</strong></td>
<td><strong>68</strong></td>
</tr>
</tbody>
</table>
Merits for Partner Country by the JCM Financing Program by MOEJ

Incentivize selecting low-carbon technologies by the financial support to initial cost for GHG emissions.

Japan will acquire a part of JCM credits (in return to the financial support).

Select Low-carbon equipment & facility

Initial cost

GHG emissions

Emission reductions

Financial support

Credits

Partner Country

Japanese government & entities

Conventional equipment & facility

Initial cost

GHG emissions

Select

Japan will acquire a part of JCM credits (in return to the financial support)
The draft budget for projects starting from FY 2016 is 6.7 billion JPY (approx. USD 56 million) in total by FY2018

Scope of the financing: facilities, equipment, vehicles, etc. which reduce CO2 from fossil fuel combustion as well as construction cost for installing those facilities, etc.

Eligible Projects: starting installation after the adoption of the financing and finishing installation within three years.

Includes collaboration with projects supported by JICA and other governmental-affiliated financial institute.
ADB Trust Fund: Japan Fund for Joint Crediting Mechanism (JFJCM)

**Draft Budget for FY2016**
1.2 billion JPY (approx. USD 10 million)

**Scheme**
To provide the financial incentives for the adoption of advanced low-carbon technologies which are superior in GHG emission reduction but expensive in Asian Development Bank (ADB)-financed projects.

**Purpose**
To develop ADB projects as the “Leapfrog” developments by the advanced technologies and to seek to acquire JCM credits for achievement of Japan’s GHG emission reduction target.

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* OCR: Ordinary Capital Resources, ADF: Asian Development Fund
**Background**
- Deforestation and forest degradation in developing countries
- 17 demonstration feasibility studies from 2011 to 2014

**Expected outcome**
- Participatory monitoring of illegal logging, disaster prevention, and forest restoration
- Provision of alternative livelihoods

**Purpose**
Implement activities for REDD+ and seek to acquire JCM credits for achievement of Japan’s GHG emission reduction target

**Project budget and implementation term**
Up to 40 million JPY/year (fixed)

**Eligible Companies**
Japanese corporation (the representative of international consortiums)

**Projects outline**
- The draft budget for FY 2016: 80 million JPY (approx. USD 0.67 million)
- Government of Japan: Finance part of the cost
- International consortiums (which include Japanese entities): Deliver JCM credits issued*

*At least half or ratio of financial support to project cost of JCM credits issued are expected to be delivered to the government of Japan except the amount which is allocated to the partner country based on its legislation.

※These projects may be implemented in cooperation with other organizations such as JICA