

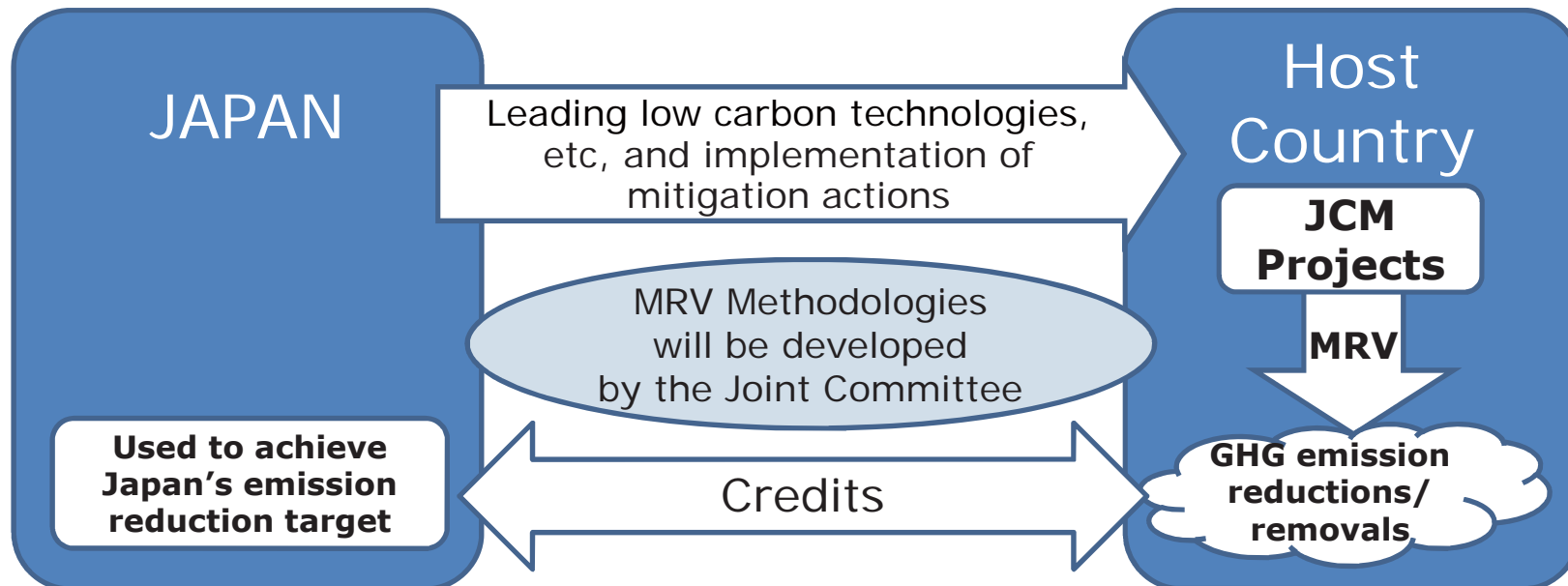
Recent Development of The Joint Crediting Mechanism (JCM)

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Dr. Yuji Mizuno
Ministry of the Environment, Japan

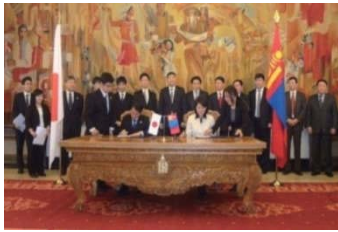
Basic Concept of the JCM

- 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 from Japan to GHG emission reductions or removals in a quantitative manner, by applying measurement, reporting and verification (MRV) methodologies, and use them to achieve Japan's emission reduction target.
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals, complementing the CDM.



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 and Chile.



Mongolia
Jan. 8, 2013
(Ulaanbaatar)



Bangladesh
Mar. 19, 2013
(Dhaka)



Ethiopia
May 27, 2013
(Addis Ababa)



Kenya
Jun. 12, 2013
(Nairobi)



Maldives
Jun. 29, 2013
(Okinawa)



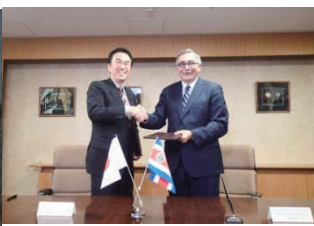
Viet Nam
Jul. 2, 2013
(Hanoi)



Lao PDR
Aug. 7, 2013
(Vientiane)



Indonesia
Aug. 26, 2013
(Jakarta)



Costa Rica
Dec. 9, 2013
(Tokyo)



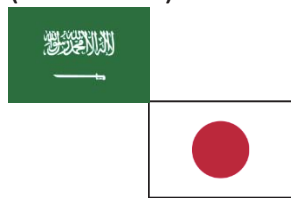
Palau
Jan. 13, 2014
(Ngerulmud)



Cambodia
Apr. 11, 2014
(Phnom Penh)



Mexico
Jul. 25, 2014
(Mexico City)



Saudi Arabia
May 13, 2015



Chile
May 26, 2015
(Santiago)

- Three (3) JCM projects have been registered between Indonesia and Japan and one (1) JCM project has been registered between Palau and Japan.

Approved JCM Methodologies

| No. | Country | Sectoral Scope | Methodology Title | GHG Emission Reduction Measures |
|-----------|-----------|---------------------|---|---|
| MN_A M001 | Mongolia | Energy distribution | Installation of energy-saving transmission lines in the Mongolian Grid | Replacing the existing conductors in transmission lines with Low Electrical Power Loss Aluminum Conductors, Aluminum-Clad Steel Reinforced, which have lower transmission loss compared to the existing conductors. |
| MN_A M002 | Mongolia | Energy industry | Replacement and Installation of High Efficiency Heat Only Boiler (HOB) for Hot Water Supply Systems | This project involves the installation of new HOB for hot water supply system and the replacement of existing coal-fired HOB. The Boiler efficiency of the reference HOB is typically lower than that of the project HOB. |
| MV_A M001 | Maldives | Energy industries | Displacement of Grid and Captive Genset Electricity by Solar PV System | Displacement of grid electricity and/or electricity using diesel fuel as a power source by installation and operation of the solar PV system(s). |
| VN_A M001 | Viet Nam | Transport | Transportation energy efficiency activities by installing digital tachograph systems | Improvement of driving efficiency by installation of digital tachograph system to freight vehicle fleets providing to the drivers a real-time feedback against inefficient driving. |
| VN_A M002 | Viet Nam | Energy demand | Introduction of Room Air Conditioners Equipped with Inverters | Energy saving achieved by introduction of RACs equipped with inverters. |
| VN_A M003 | Viet Nam | Energy demand | Improving the energy efficiency of commercial buildings by utilization of high efficiency equipment | Reduction of electricity and fossil fuel consumed by existing facilities is achieved by replacing or substituting these facilities with high efficiency equipment. |
| ID_AM 001 | Indonesia | Energy industries | Power Generation by Waste Heat Recovery in Cement Industry | Replacing the electricity from the grid with the one to be generated by waste heat recovery system with suspension preheater boiler and air quenching cooler boiler. |
| ID_AM 002 | Indonesia | Energy demand | Energy Saving by Introduction of High Efficiency Centrifugal Chiller | Saving energy by introducing high efficiency centrifugal chiller for factories, commerce facilities, etc. |
| ID_AM 003 | Indonesia | Energy demand | Installation of Energy-efficient Refrigerators Using Natural Refrigerant at Food Industry Cold Storage and Frozen Food Processing Plant | Saving energy by introducing high efficiency refrigerators to the food industry cold storage and frozen food processing plants. |
| ID_AM 004 | Indonesia | Energy demand | Installation of Inverter-Type Air Conditioning System for Cooling for Grocery Store | Saving energy by introducing inverter-type air conditioning system for cooling for grocery stores. |
| ID_AM 005 | Indonesia | Energy demand | Installation of LED Lighting for Grocery Store | This methodology applies to the project that aims for saving energy by introducing LED (Light Emitting Diode) lighting for grocery store in Indonesia. |
| PW_A M001 | Palau | Energy industries | Displacement of Grid and Captive Genset Electricity by a Small-scale Solar PV System | Displacement of grid electricity and/or electricity using diesel fuel as a power source by installation and operation of the solar PV system(s). |

Registered JCM Projects

| Registration No. | Country | Sectoral Scope | Registration Date | Project Title | Emission Reduction (average ton per year) |
|------------------|-----------|-----------------|-------------------|--|---|
| ID001 | Indonesia | Energy demand | 31 October, 2014 | <u>Energy Saving for Air-Conditioning and Process Cooling by Introducing High-efficiency Centrifugal Chiller</u> | 114 |
| ID002 | Indonesia | Energy demand | 29 March, 2015 | <u>Project of Introducing High Efficiency Refrigerator to a Food Industry Cold Storage in Indonesia</u> | 120 |
| ID003 | Indonesia | Energy demand | 29 March, 2015 | <u>Project of Introducing High Efficiency Refrigerator to a Frozen Food Processing Plant in Indonesia</u> | 21 |
| PW001 | Palau | Energy industry | 21 April, 2015 | <u>Small scale solar power plants for commercial facilities in island states</u> | 227 |



(ID001)



(ID002)



(ID003)



(PW001)

JCM project pipelines (Selected projects under Financing Programme and Demonstration Projects)

