

Recent Development of the JCM and Contribution to NDC

July 2017

Mr. Kazuhisa KOAKUTSU
Deputy Director
Office of Market Mechanisms
Global Environment Bureau
Ministry of the Environment of Japan

The Joint Crediting Mechanism

- Facilitating diffusion of leading low carbon technologies through contributions from Japan and evaluating realized GHG emission reductions or removals in a quantitative manner to use them for achieving Japan's emission reduction target.
- Japan will address the high initial cost barrier of introducing advanced low-carbon technologies in developing countries through the JCM (GoJ implements several supporting schemes)



Waste heat recovery in Cement Industry, JFE engineering, Indonesia



Eco-driving with Digital Tachographs, NITTSU, Vietnam



Energy saving at convenience stores, Panasonic, Indonesia



High efficiency air-conditioning and process cooling, Ebara refrigeration equipment & systems, Indonesia



High-efficiency Heat only Boilers, Suuri-Keikaku, Mongolia



Upgrading air-saving loom at textile factory, TORAY etc., Indonesia, Thai, Bangladesh



Installing solar PV system, PCKK, Palau Maldives



Amorphous transformers in power distribution, Hitachi Materials, Vietnam



Co-generation system at factory, Toyota, Nippon Steel & Sumikin Engineering, Indonesia, Thai



High efficiency air-conditioning system, Hitachi, Daikin, Vietnam



Solar PV System at Salt Factory, PCKK, Kenya



Waste to Energy Plant, JFE engineering, Myanmar



High efficient refrigerator, Mayekawa MFG, Indonesia



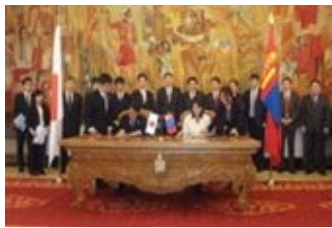
Regenerative Burners in industries, Toyotsu Machinery, Indonesia



LED street lighting system with wireless network control, MinebeaMitsumi, Cambodia

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, Thailand and the Philippines.



Mongolia
Jan. 8, 2013
(Ulaanbaatar)



Bangladesh
Mar. 19, 2013
(Dhaka)



Ethiopia
May 27, 2013
(Addis Ababa)



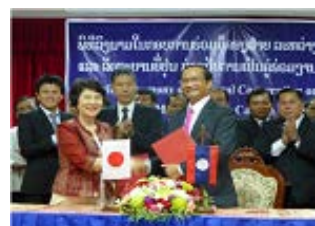
Kenya
Jun. 12, 2013
(Nairobi)



Maldives
Jun. 29, 2013
(Okinawa)



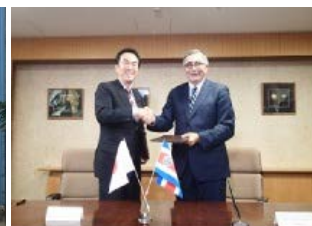
Viet Nam
Jul. 2, 2013
(Hanoi)



Lao PDR
Aug. 7, 2013
(Vientiane)



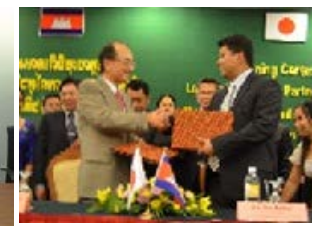
Indonesia
Aug. 26, 2013
(Jakarta)



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)



Myanmar
Sep. 16, 2015
(Nay Pyi Taw)



Thailand
Nov. 19, 2015
(Tokyo)

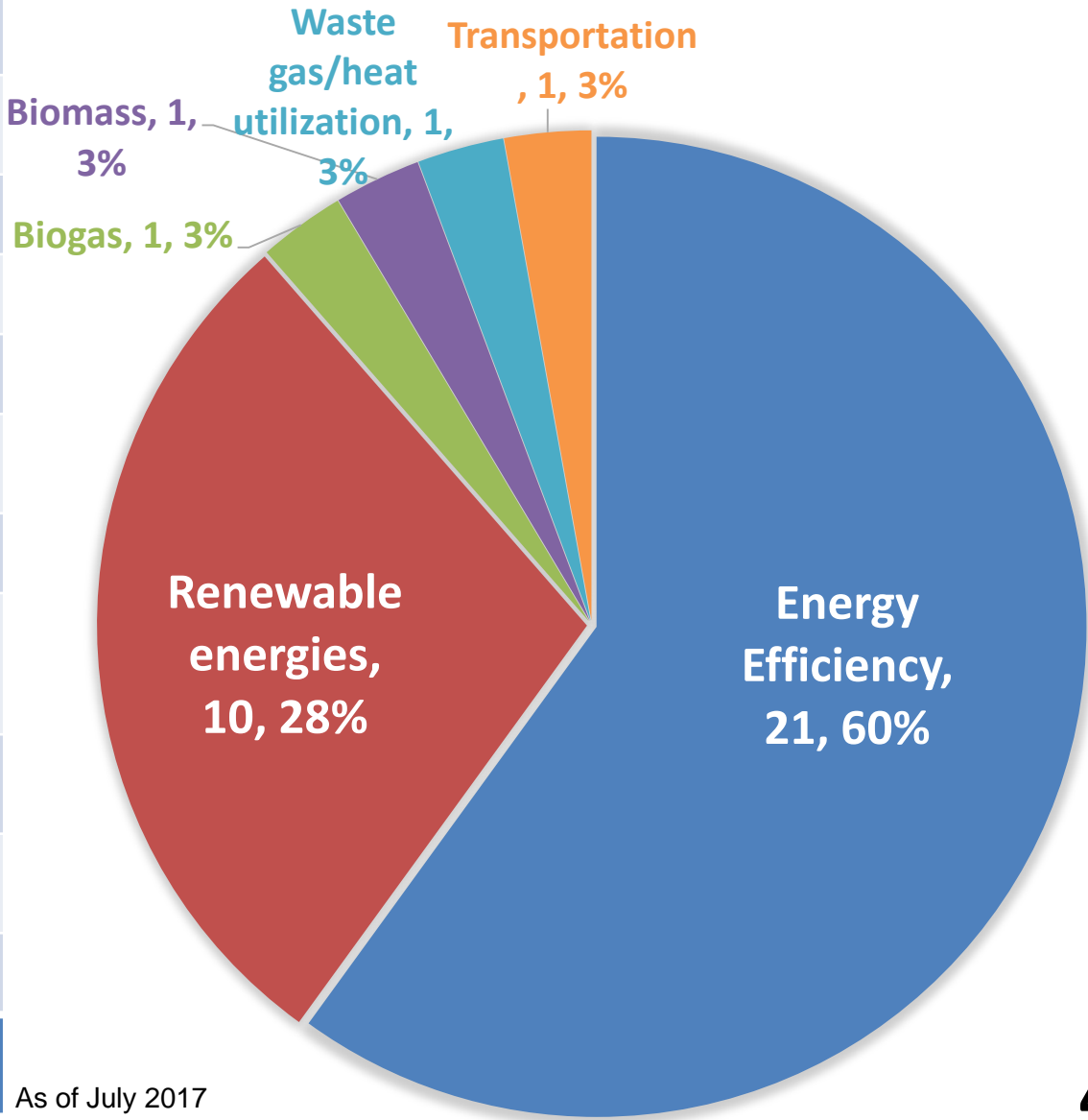


the Philippines
Jan. 12, 2017
(Manila)

Approved JCM methodologies

Partner country	No.
Indonesia	12
Viet Nam	6
Mongolia	3
Kenya	3
Ethiopia	3
Thailand	2
Cambodia	2
Palau	1
Maldives	1
Bangladesh	1
Lao PDR	1
11 countries	35

Project Types



As of July 2017

JCM Credits Issued

Partner country	Project title	Issuance Date	Amount (t-CO2) (Partner Country)	Amount (t-CO2) Japan)
Indonesia	Project of Introducing High Efficiency Refrigerator	2016/5/12	3	8
Indonesia	Project of Introducing High Efficiency Refrigerator	2016/5/12	6	23
Mongolia	Installation of high-efficiency Heat Only Boilers in 118th School of Ulaanbaatar City Project	2016/9/30	10	40
Mongolia	Centralization of heat supply system by installation of high-efficiency Heat Only Boilers in Bornuur soum Project	2016/9/30	22	85
Palau	Small scale solar power plants for commercial facilities in island states	2016/12/22	74	222
			115	378

JCM Model Projects by MOE

The budget for projects starting from FY 2017 is **6.0 billion JPY (approx. USD 60million)** in total by FY2019

(1 USD = 100 JPY)

※Includes collaboration with projects supported by JICA and other governmental-affiliated financial institute.

Finance part of an investment cost (less than half)

Government of Japan

Conduct MRV and expected to deliver at least half of JCM credits issued

International consortiums
(which include Japanese entities)



- 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.

ADB Trust Fund: Japan Fund for Joint Crediting Mechanism (JFJCM)

Budget for FY2017

JPY 1 billion (approx. USD 10 million) ※JPY 1.2 billion in 2016, and 1.8 billion in 2015 and 2014 respectively

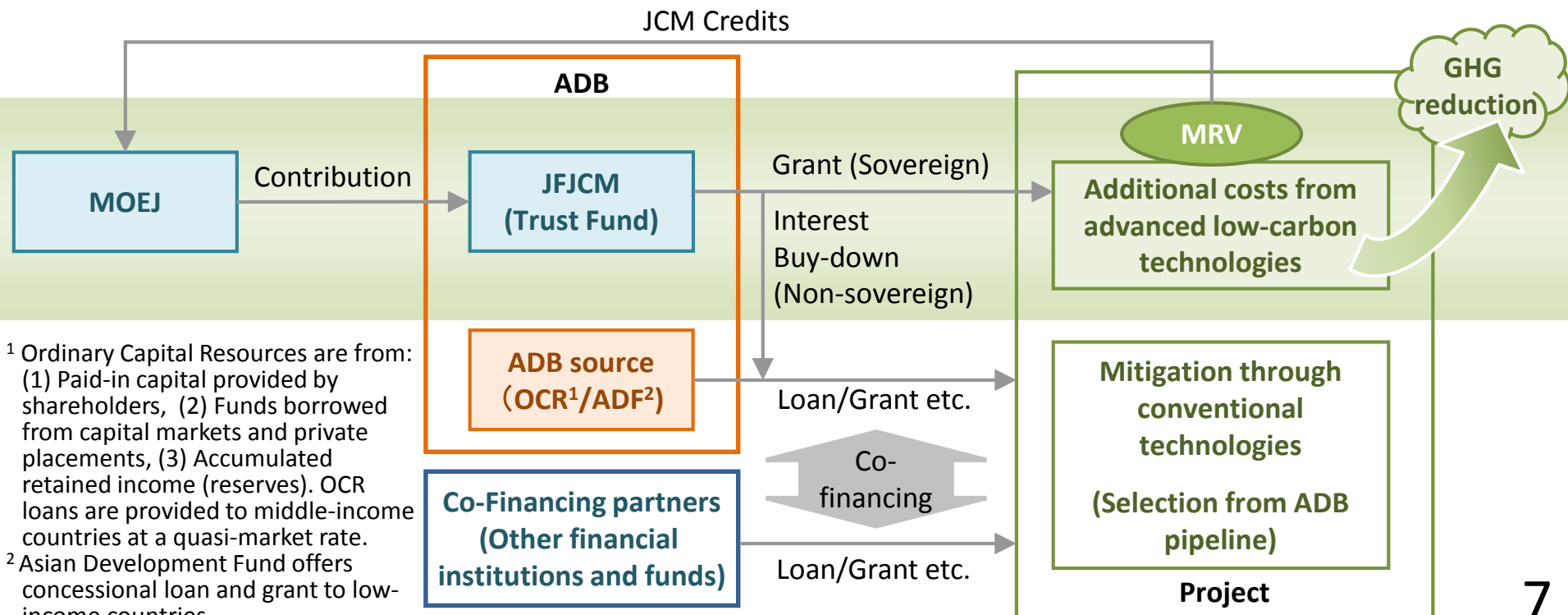
(1 USD = 100 JPY)

Scheme

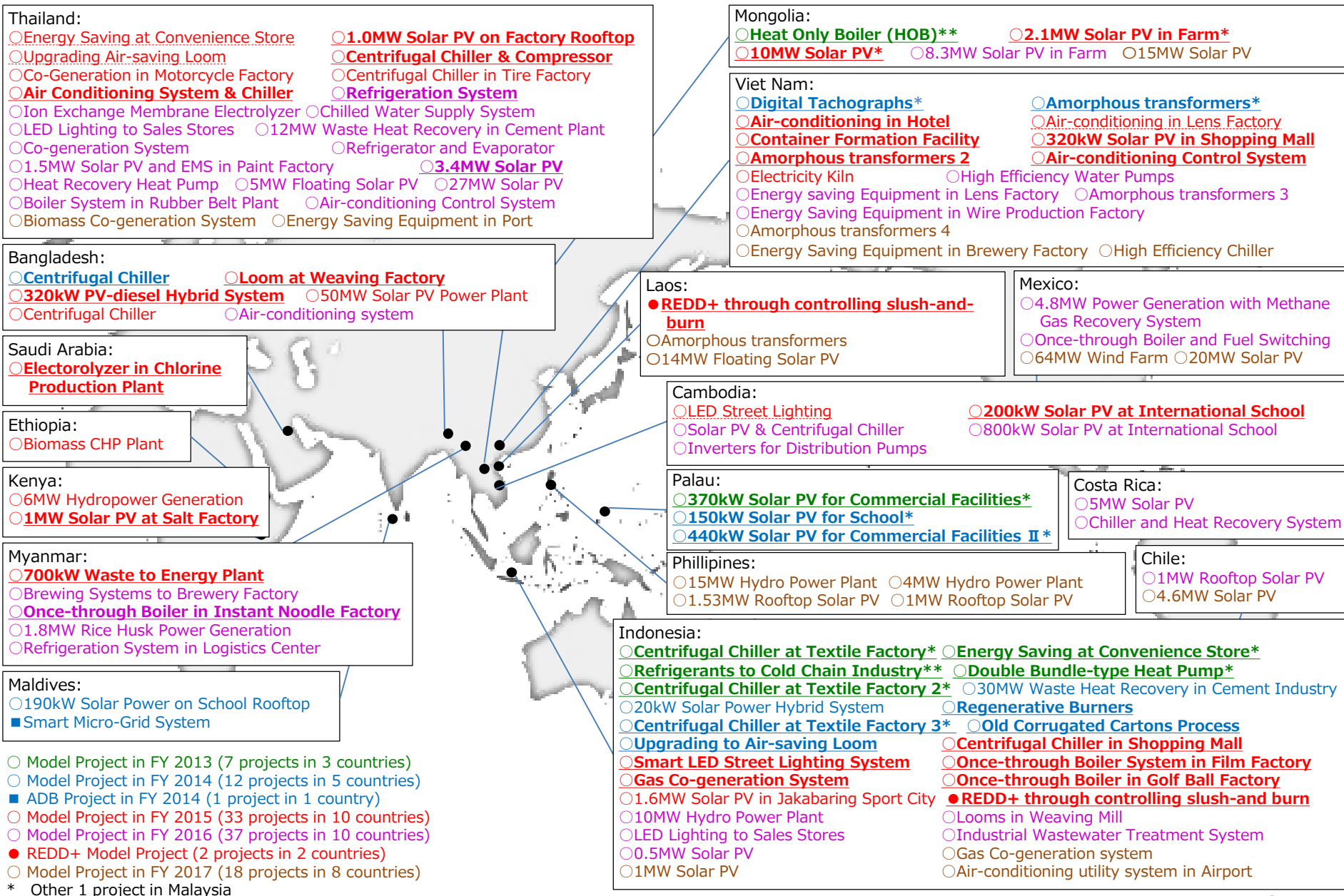
To provide the financial incentives for the adoption of advanced low-carbon technologies which are superior in GHG emission reduction but expensive in ADB(Asian Development Bank)-financed projects

Purpose

To develop ADB projects with sustainable and low-carbon transition perspective by introducing advanced low-carbon technologies as well as to acquire JCM credits



JCM Financing programme by MOEJ (FY2013~2017) as of June 26, 2017



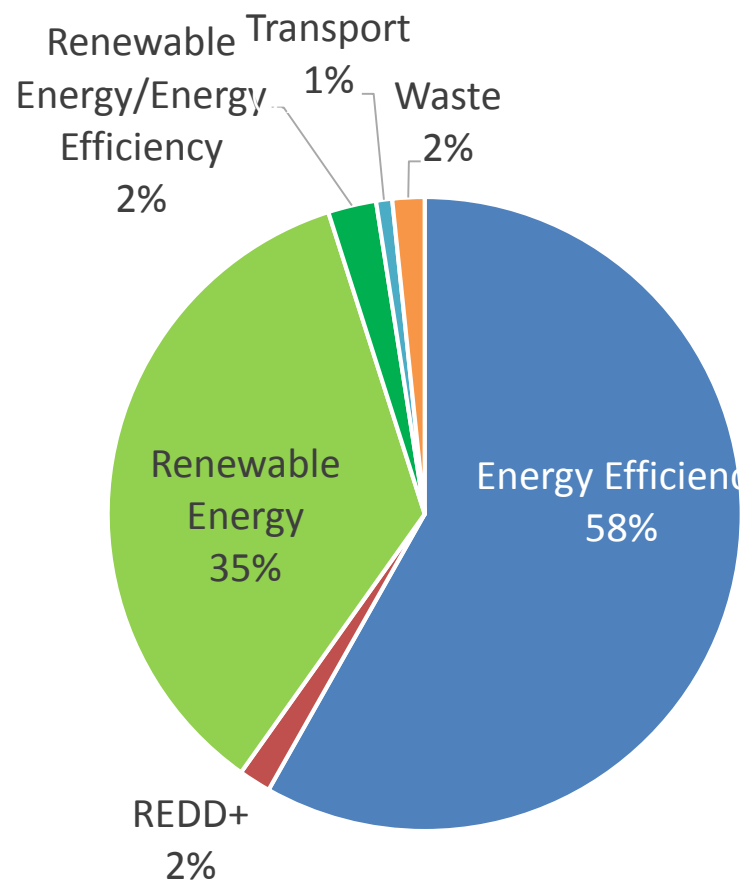
Total 110 projects in 17 partner countries

Underlined projects have started operation (48 projects, including 4 partially started projects)
Projects with * have been registered as JCM projects (16 projects)

JCM Financing Programme by MOEJ (FY2013-2017)

Total of 110 projects in 17 partner countries

Renewable Energy
Solar
Micro hydro
Biomass
Renewable Energy/Energy Efficiency
Co-generation System
PV and Refrigerating
PV and Production line
Transport
Digital Tachographs
Waste
Waste to Energy
REDD+
Controlling Slush and burn



Energy efficiency
Looms
Equipment
Steam boiler
Burner
Electrolysis tank
LED
Production line
Optimization
Pump
Water heater
Air-conditioning
Refrigerating
Transmission/Transformer
LED Streetlights
Boiler (heating)
Smart Grid

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 overseas 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 CMA*.

*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-CO₂eq. 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

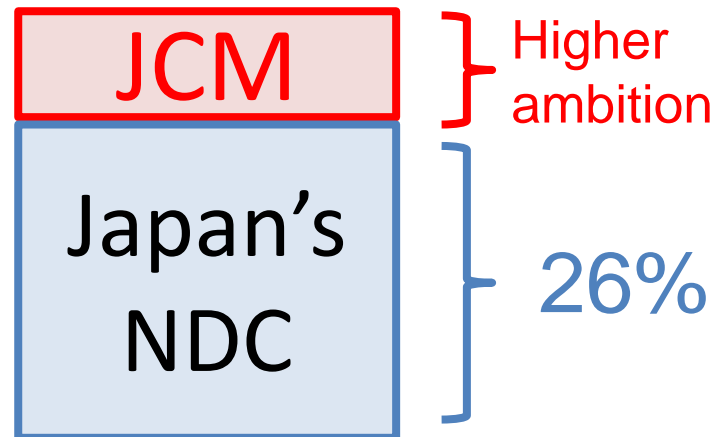
GHG emissions and removals

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-CO₂**

Japan's INDC and JCM

- As stated in Japan's INDC, the 26% reduction target is set based on the amount of domestic emission reductions and removals assumed to be obtained. It is therefore anticipated that Japan will achieve the target through domestic emission reductions and removals without using international reductions and removals (credits).
- The amount of emission reductions and removals acquired by Japan under the JCM will be appropriately counted as Japan's reduction.



JCM's Contribution to NDC

- JCM's conservative emission reduction calculation (reference emissions below BaU emissions) will ensure a net decrease and/or avoidance of GHG emissions.
- This part of emission reductions will automatically contribute to the achievement of NDC to both country.

