

Current State of Joint Crediting Mechanism and Relevant JICA Cooperation in Indonesia

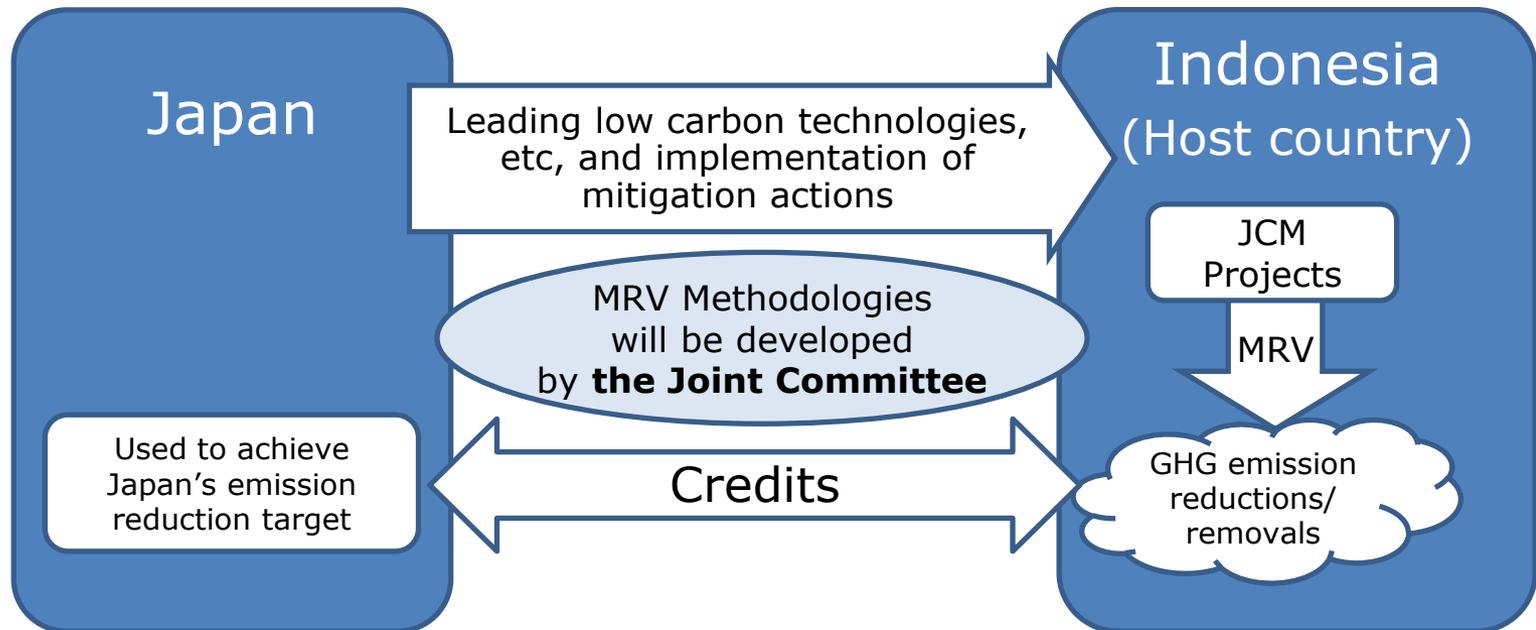
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Overview of JCM



Source: GOI with edit

Progress of JCM in Indonesia

- Bilateral agreement (Indonesia-Japan) on JCM was signed in Aug. 2013
- 3 JCM projects already registered in Indonesia

Progress of JCM (overall)

- 14 countries signed bilateral agreement on JCM
- Registered Projects: 7 (3 in Indonesia, 2 in Mongolia, 1 in Palau, 1 in Vietnam)

Purpose /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 from Japan to GHG emission reductions or removals in a quantitative manner and use them to achieve Japan's emission reduction target.
 - Japan INDC: by 2030, 50 to 100 million t-CO₂ from JCM is estimated
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals.

source: GOJ with edit

Why JCM?

JCM could deliver beyond GHG emission reductions to support low carbon development of both countries.

Technology Transfer

Systems optimization;
Carbon Capture and Storage;
Solar PV; Supercritical coal;
MRV methodologies; etc

Production Efficiency

More cost-effective production,
energy saving, more effective system
monitoring, more efficient process

Environment

GHG emissions reduction, waste
management, Support for
industrial compliance to
environmental regulations

Investment

Additional clean technology
investment

Capacity Building

Carbon management for public
and private sectors; Cutting-edge
technologies

Public Welfare

Infrastructure building and
development, electrification,
water supply, waste
management

Support from Both Governments

Investment support and
facilitation, project proposal, etc.

Emissions Reduction Target Achievement

Support national effort in
achieving GHG emissions
reduction target

JCM support scheme by GOJ

Government of Japan provides following support

- Support to Feasibility Study
 - Provide study to promote potential JCM projects and to survey their feasibility
 - 96 studies approved in Indonesia so far
- JCM Finance Support (Model / Demonstration Project)
 - finance part of an investment cost / project cost
 - Around 20 projects approved in Indonesia

Capacity Building Activities

i.e. JICA supports JCM operation in Indonesia (i.e. secretariat)

Development of Rules and Institutions related to Indonesia

- 1) Established Relevant Institutions to implement JCM
 - Joint Committee
 - Indonesia JCM Secretariat
- 2) Developed Rules and Guidelines, for example:
 - Project Cycle Procedure
 - Rules of Procedures for the Joint Committee
 - Guidelines for Developing Proposed Methodology
 - Guidelines for Developing Project Design Document and Monitoring Report
 - Guidelines for Validation and Verification
- 3) Prepared Methodologies: 8 methodologies approved

Progress of JCM Project Development in Indonesia

The JCM Project Progress

- 96 Feasibility Study have been done from 2010-2015
- 3 projects are registered as JCM projects.
- 18 JCM projects are now in our pipeline.
- 19 projects on energy efficiency and 2 projects on renewable energy (registered and pipeline).
- All projects are being developed with the cooperation between Indonesia and Japan participants.

The Registered Projects

1. "Energy Saving for Air-Conditioning and Process Cooling by Introducing High-efficiency Centrifugal Chiller" (first registered project under the JCM worldwide)
2. "Project of Introducing High Efficiency Refrigerator to a Food Industry Cold Storage in Indonesia"
3. "Project of Introducing High Efficiency Refrigerator to a Frozen Food Processing Plant in Indonesia"



The 1st JCM registered project:

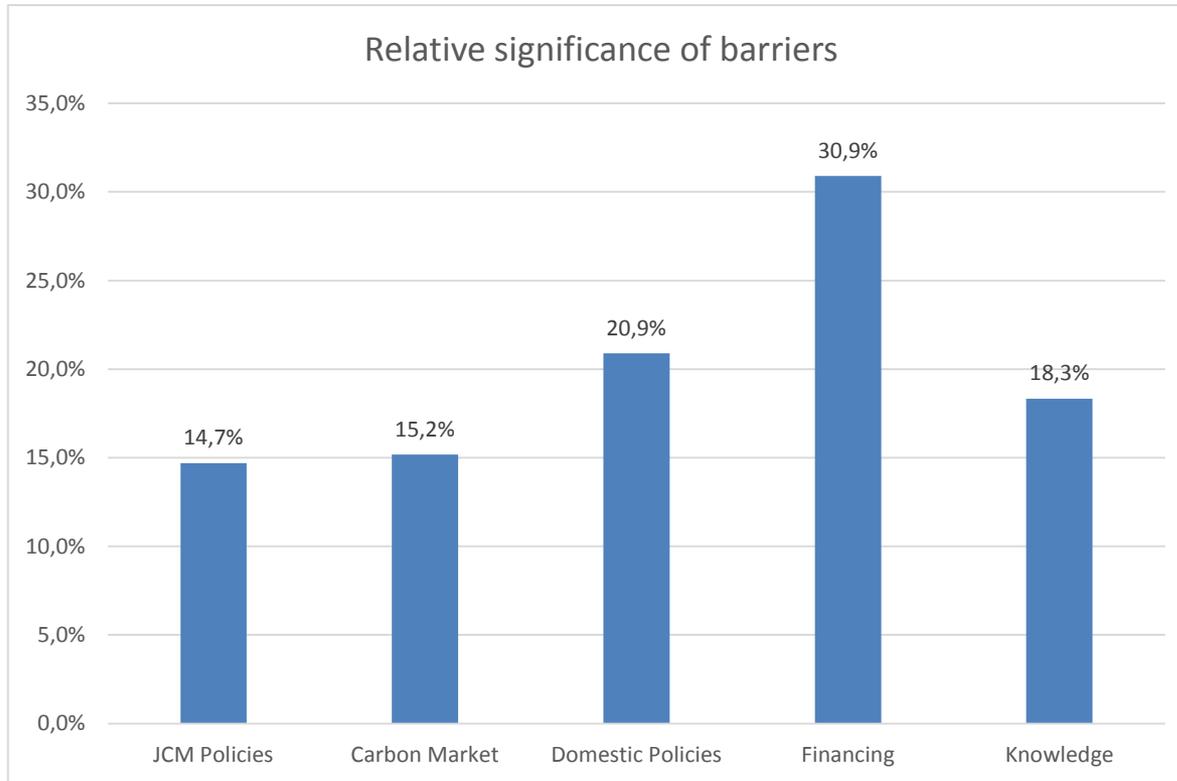
- Collaboration between **Ebara Equipment & Systems** and **PT Primatexco Indonesia**
- Location: Batang, Central Java
- Estimated total emissions reduction **799 tCO₂ eq.** by 2020
- Annual **965 MWh** energy saving

List of JCM implementation projects in Indonesia

Projects Name	Expected Emission Reduction
Demonstration Project	
Remote Auto-Monitoring System for Thin-Film Solar Power Plant in Indonesia	1.433 tCO ₂ /year
Energy Saving by Optimum Operation at Oil Refinery	3.400 tCO ₂ /year
Utility Facility Operation Optimization Technology	58.000 tCO ₂ /year
Model Project	
Power generation by waste heat recovery in cement industry	122.000 tCO ₂ /year
Energy Savings at Convenience Stores	33 tCO ₂ /toko/year
Energy saving through introduction of regenerative burners to the aluminum holding furnace of the automotive components manufacturer	856 tCO ₂ /year
Solar power hybrid System installation to existing base transeiver stations in off-grid area	2.786 tCO ₂ /year
Energy saving for textile factory facility cooling by high efficiency centrifugal chiller	118 tCO ₂ /year
Energy saving by double bundle-type heat pump	170 tCO ₂ /year
Introduction of High efficient Old Corrugated Cartons Process at Paper Factory	14.884 tCO ₂ /year
Reducing GHG emission at textile factories by upgrading to air-saving loom	566 tCO ₂ /year
Energy saving for air-conditioning and process cooling at textile factory	117 tCO ₂ /year
Installation of CHP (Combined Heat and Power) system in a hotel	3.200 tCO ₂ /year
Energy-saving Project by Utilizing Waste Heat at Hotel	1.936 tCO ₂ /year
Energy Saving for Shopping Mall with High Efficiency Centrifugal Chiller	925 tCO ₂ /year
Energy Saving for Industrial Park with Smart LED Street Lighting System	900 tCO ₂ /year
Energy Saving for Office Building with High Efficiency Water Cooled Package Air Conditioning Unit	714 tCO ₂ /year
Energy saving by introduction of high efficiency once-through boiler system in a film factory	428,5 tCO ₂ /year
Registered Project	
Energy saving for air-conditioning and process cooling by Introducing High-efficiency Centrifugal Chiller	114 tCO ₂ /year
Project of Introducing High Efficiency Refrigerators to a Food Industry Cold Storage in Indonesia	120 tCO ₂ /year
Project of Introducing High Efficient Refrigerator to a Frozen Food Processing Plant in Indonesia	21 tCO ₂ /year
21 Projects	204.618 tCO₂/year

Source: Indonesia JCM Sec

Survey Results on Potential JCM Barriers in Indonesia (at Business Forum)



Key barriers identified:

- Financing Barriers
- Domestic Policies and Rules not specifically related to JCM
- Knowledge and Capacity Barriers

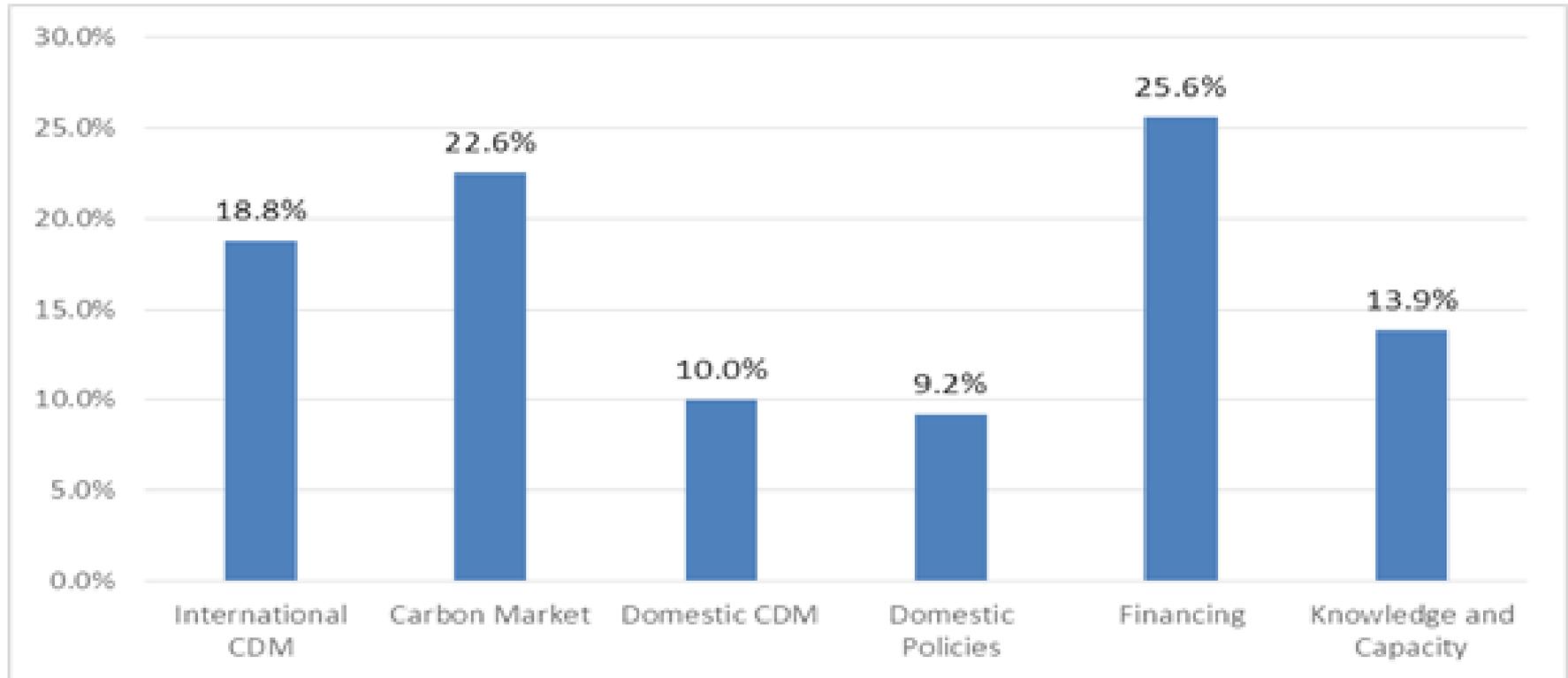
- Financing barriers are potential key issues in Indonesia (as experienced in CDM).

Lessons from CDM in Indonesia

- Early period of CDM implementation (until 2008), major barriers are identified by interviews:
 - Financing barriers
 - Domestic policy Issues not specific related to CDM
 - knowledge and capacity barriers
- Our survey results in 2013 shows that key barriers of CDM implementation in Indonesia are:
 - Financing Barriers
 - International CDM Policies and Rules
 - Carbon Market Barriers

(see next slide for more details)

3 Significant Barriers to CDM project implementation in Indonesia



- Financing Barriers
- Carbon Market Barriers
- International CDM Policies and Rules

Overview JICA's Technical Cooperation on Climate Change

- Mainstreaming climate change mitigation and adaptation
- Strengthening climate change projection and vulnerability assessment
- Accelerating climate policy and its implementation
- Strengthening MRV institutional capacity
- Strengthening inter-ministerial coordination and cooperation

Project of Capacity Development for Climate Change Strategies in Indonesia (October 2010 – October 2015)

SUB-PROJECT1 Mitigation Adaptation
 Integration of Climate Change Mitigation and Adaptation into National Development Planning

SUB-PROJECT2 Adaptation
 Capacity Development for Climate Change Adaptation Actions in Agriculture and Other relevant Sectors

SUB-PROJECT3 Mitigation
 Capacity Development for Developing National GHG Inventories

Project of Capacity Development for Green Economy Policy in Indonesia (December 2013 – October 2015)

Enhancement of capacity of Ministry of Finance to formulate fiscal and financial incentives in promoting low carbon and green economy Mitigation

Project of Capacity Development for the National Focal Point on Climate Change to Enhance the Coordination and Evaluation of Climate Change Policies in Indonesia (November 2012 – December 2014)

Strengthening institutional capacity of National Council on Climate Change as the National Focal Point on Climate Change in Indonesia, through enhancing coordination and evaluation of climate change policies Mitigation Adaptation

Capacity Development Assistance for Low Carbon Development in Indonesia (May 2014 – March 2016)

Promotion of investment and deployment of low carbon technologies, products, services, and infrastructure through Joint Crediting Mechanism (JCM) Mitigation

Indonesia-Japan Project for Development of REDD+ Implementation Mechanism (IJ-REDD+) (June 2013 – June 2016)

Development of REDD+ implementation mechanism by the Project to be integrated into national REDD+ mechanism Mitigation 12

Overview

JICA's Technical Cooperation on JCM

- Technical cooperation projects with
 - National Council on Climate Change (NCCC / DNPI) (Sep 2013 – Mid 2014)
 - Coordinating Ministry of Economic Affairs (CMEA) (Mid 2014 – Mar 2016)

- Aim to strengthen capacity to effectively perform the duties related to JCM
 1. To operationalize JCM Indonesia Secretariat
 2. To enhance the capacity to monitor and evaluate the implementation of JCM
 3. To promote JCM for low carbon growth to potential project proponents and other related parties/stakeholders, and enhance their capacities
 4. To enhance additional capacities to assess policy issues relevant to JCM for low carbon growth

Progress: JICA's Technical Cooperation

- Domestic institutionalization and operationalization of JCM
 - Indonesia JCM Secretariat set-up
 - facilitating JCM processes including organization of meetings / stakeholder dialogues and conduct of technical assessments.



- Monitoring and Evaluation activities on JCM projects started



Progress: JICA's Technical Cooperation

Awareness Raising and Capacity Building

- Seminars and workshops
 - Celebration of 55 Years of Indonesia-Japan Diplomatic Relations (Dec. 2013)
 - 1st and 2nd Business Forum (April 2014, 2015)
- Indonesia JCM website and PR materials
- Information dissemination and capacity development strategy
- Participation in international conferences and seminars



Policy Studies on JCM

- Linkage with other domestic mitigation schemes
- Financing barriers and options
- others



Indonesia's JCM at COP19, 20 (Indonesia Pavilion)



Lessons learnt from JCM cooperation

- JCM institutional development including the secretariat in Indonesia could:
 - Raise awareness on JCM
 - Conduct monitoring of individual projects and provide guidance for proceeding smoothly
 - Facilitate processes to advance bilateral policies, rules and guidelines by enhancing coordination within government and relevant stakeholders
- Strong ownership in host country would be one of the key factors to smooth JCM implementation

Possible Next Steps

- Further address financing barriers
- Investigate key domestic policy issues
 - i.e. assessment on relation between RAN-GRK (National Mitigation Action Plan) and JCM
- Further streamlining relevant domestic policies and regulations related to JCM
- Identify capacity development needs/gaps and provide activities toward them

JICA cooperation with Government of Indonesia will continue working on the above by conducting policy assessments and necessary capacity building activities.

Further Information

- JCM website
<https://www.jcm.go.jp/>
- New Mechanisms Information Platform
<http://www.mmechanisms.org/e/index.html>
- JCM Indonesia
<http://www.jcmindonesia.com/>

**Rules and Guidelines, Project information and
Relevant materials are available**