## **Ongoing JCM Projects (as in Nov 2015)**

Model/Demonstration Projects are promoted to follow the steps described in the JCM project cycle. Official MRV (measurement, reporting, and verification) of emissions reduction starts after a project is registered.

### **JCM Model Project**

1. Energy Saving at Convenience Stores

Lawson, INC. PT. Midi Utama Indonesia Tbk

2. Energy Saving for Air-Conditioning and Process **Cooling at Textile Factory** 

Ebara Refrigeration Equipment & Systems, Nippon Koei Co., Ltd. PT. Primatexco, PT. Ebara Indonesia

3. Energy Saving by Installation of Double **Bundle-type Heat Pump** 

Tovota Tsusho Corporation PT. TTI Residences

4. Power Generation by Waste-heat Recovery in **Cement Industry** 

JFE Engineering Corporation PT. Semen Indonesia Tbk







5. Solar Power Hybrid System Installation to Existing **Base Transceiver Stations in Off-grid Area** 

ITOCHU Corporation PT. Telekomunikasi Selular

6. Introduction of High Efficient Old Corrugated **Cartons Process at Paper Factory** 

Kanematsu Corporation PT Fajar Surya Wisesa Tbk.

7. Installation of Gas Co-generation System for **Automobile Manufacturing Plant** 

Toyota Tsusho Corporation Toyota Motor Manufacturing Indonesia

## JCM REDD+ Model Project

1. REDD+ Project in Boalemo District

Kanematsu Corporation Gobel group DKM (PT. Dharma Karyatama Mulia, Boalemo District)

### **JCM Demonstration Project**

1. Remote Auto-Monitoring System for Thin Film Solar Power Plant in Indonesia

SHARP Corporation PT. PLN

2. Energy Saving by Optimum Operation at Oil Refinery

Yokogawa Electric Corporation PT. Pertamina (Refinery Unit V)

3 Utility Facility Operation Optimization Technology

Azbil Corporation Azbil Berca Indonesia, PT. Pertamina







In cooperation with:

## **JCM Registered Project**

1. Energy Saving for Air-Conditioning and Process Cooling by Introducing High-efficiency Centrifugal

Ebara Refrigeration Equipment & Systems Co. Ltd. Nippon Koei Co. Ltd. PT. Primatexco Indonesia

2. Project of Introducing High Efficiency Refrigerator to a Food Industry Cold Storage in Indonesia

Mayekawa Manufacturing Co.,Ltd. PT. Adib Global Food Supplies, PT. Mayekawa Indonesia

3. Project of Introducing High Efficiency Refrigerator to a Frozen Food Processing Plant in Indonesia

Mayekawa Manufacturing Co.,Ltd. PT. Adib Global Food Supplies, PT. Mayekawa Indonesia

## Indonesia **JCM Secretariat**

Established by the Coordinating Ministry for **Economic Affairs** of the Republic of Indonesia in

February 2014 to support the JCM Joint Committee, to act as center of ICM information and communication, and to collaborate with all stakeholders to ensure smooth implementation for the achievement of JCM purpose.

## **For Further Information**

## **Indonesia JCM Secretariat**

BUMN Building 18th Floor Jl. Medan Merdeka Selatan 13, lakarta - 10110 Indonesia







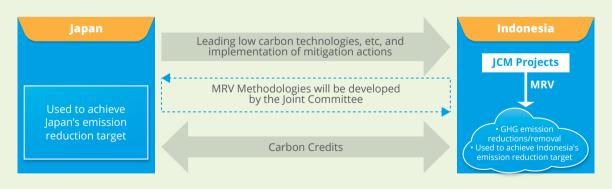
The Joint Crediting Mechanism(JCM) encourages cooperation between Japanese and Indonesian institutions to promote implementation of Low Carbon Development activities in Indonesia.

# History of the JCM in Indonesia

- 2010 : Initial discussions between National Council on Climate Change of Indonesia as JCM focal point and Japanese Government Delegation
- 2011: Formal meeting on the JCM between National Council on Climate Change of Indonesia and related ministries and Japanese Government Delegation
- 2012 : Establishment of Coordination Team for Inter-State Carbon Trade Negotiation (Tim Koordinasi Perundingan Perdagangan Karbon Antarnegara (TKPPKA))
- 2013 : Signing on JCM Cooperation between the Governments of Indonesia and Japan, and Establishment of JCM Joint Committee consisting of members from Indonesia and
- 2014: Establishment of Indonesia ICM Secretariat



# Basic Concept of the JCM Cooperation between Japan and Indonesia



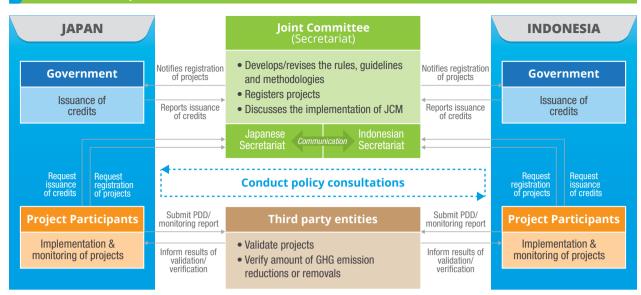
#### Purpose of the ICM

- 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 using them to achieve Japan's emission reduction
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals, complementing the Clean Development Mechanism (CDM).

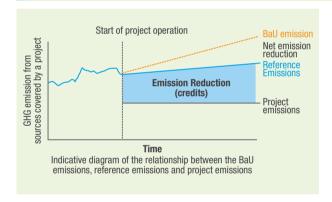




# The JCM Cooperation Scheme



# **MRV Methodology**



The reference emissions are calculated to be below or at least on the same level business-as-usual (BaU) emissions, by conservatively estimating/identifying plausible emission or by other methods determined in the methodologies to be approved by the Joint Committee.

The net emission reductions from ICM projects are accounted as Indonesian domestic emission reductions.



Approved ICM MRV methodologies (as of November 2015):

- 1. Power Generation by Waste Heat Recovery in Cement Industry
- 2. Energy Saving by introduction of High Efficiency Centrifugal Chiller
- 3. Installation of Energy-efficient Refrigerators Using Natural Refrigerant at Food Industry Cold Storage and Frozen Food Processing Plant
- 4. Installation of Inverter-Type Air-Conditioning System for Cooling for Grocery Store
- 5. Installation of LED Lighting for Grocery Store
- 6. GHG emission reductions through optimization of refinery plant operation in Indonesia
- 7. GHG emission reductions through optimization of boiler operation in Indonesia
- 8. Fridge-freezer showcase by using natural refrigerant for grocery store
- 9. Replacement of conventional burners with regenerative burners for aluminum holding furnaces
- 10. Introducing double-bundle modular electric heat pumps to a new building

Methodology update and public comments are available on www.jcmindonesia.com

# **Project Cycle of the JCM**

The image describes the steps to follow for project participants, third-party entities (TPEs), the loint Committee, the secretariat, both Government sides, and other stakeholders, for approval of a methodology, registration of JCM project, issuance of credits and related actions.

## ICM Promotion Scheme

## **Financing Programme for** JCM Model Project by MOEJ

• Scope of the financing: facilities, equipment, vehicle, etc. which reduce CO<sub>2</sub> from fossil fuel combustion as well as construction cost for installing those facilities, etc.



## **Promotion Scheme for** JCM Demonstration Projects by METI/NEDO

- JCM Demonstration Projects are funded by METI Japan and implemented by NEDO (New Energy and Industrial Technology Development Organization), which supports the project costs necessary to verify the amount of GHG emission reduction in line with JCM rules and guidelines.
- Coverage of project cost: Cost of the JCM Demonstration Projects necessary for MRV: e.g. Cost of design, machines, materials, labor, travel, etc.

## New Support Program Enabling "Leapfrog" Development (Fund/ADB) by MOEJ

## **Collaborative Financing Programme**

#### Scheme

To finance the projects which have the better efficiency of reducing GHG emission in collaboration with other projects supported by JICA and other governmental-affiliated financial institute

#### Purpose

Sectoral

Scope

To expand superior and advanced low-carbon technologies for building the low carbon society as the whole city wise and area wise in the wider fields, and to acquire credits by the JCM.

# **ADB Trust Fund (JF JCM)**

#### Scheme

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

#### Purpose

To develop ADB projects as the "Leapfrog" developments by the advanced technologies and to show the effectiveness of the JCM scheme by the acquisition of credits of the

#### Financial assistance/financial investments for overseas investment and lending IICA, other · Waste to Energy Plant Renewable Energies Supported Project · Water Supply and by JICA, etc Sewage System Transportation Collaboration JCM Project MOEJ Finance GHG Emission Reduction Contribution Superior Advanced Low Carbon Technologies **ADB Trust Fund ADB Projects**

JCM REDD+ Model Projects by MOEJ

· Participatory monitoring of illegal logging, disaster prevention and forest

Finance a par

of the cost

Deliver JCM

credits issue • Expected to deliver at least half of JCM credits except partner country's

Degradation of forests in developing countries

• 17 demonstration feasibility studies from 2011 to 2014



energy industries (renewable/non wahle sources





metal production

production



**Background** 

**Expected outcome** 

Provision of alternative livelihood

restoration.

Project Outline





transport

fugitive emissions from

production

and consumption of halocarbons and sulfu

## allocation which is based on the law • These projects may be carried out with the cooperation of other organization such as like JICA.

# JCM Feasibility Study (FS) by MOEJ and METI/NEDO

The study to promote potential JCM projects, survey their feasibility, check the practicality of the MRV methodology, and elaborating investment plan.

METI : Ministry of Economy, Trade and Industry

NEDO: New Energy and Industrial Technology