

**Special Report 1** New JCM signatory countries and signatory countries on the map

**Special Report 2** Lao PDR as a JCM signatory country

**Event Report** Open Seminar "Promoting Joint Crediting Mechanism (JCM) in Viet Nam", "Symposium on Global Warming 2014"

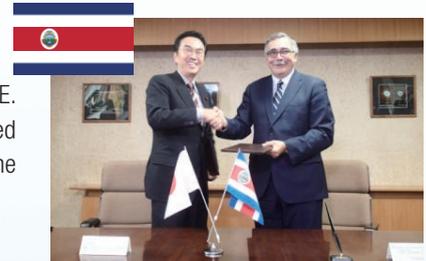
**New Mechanisms Information Platform** JC meeting reports of Viet Nam and JCM guidelines for Costa Rica, Palau, and Indonesia

## Special Report 1 New JCM signatory countries and signatory countries on the map

The new scheme proposed by Japan, the Joint Crediting Mechanism (JCM), contributes to global actions for emission reductions and removals by sinks. The JCM flexibly and quickly promotes technology transfer and facilitates implementation of mitigation actions, taking into consideration the specific national circumstances of developing countries.

### New JCM signatory countries: Costa Rica and Palau

December 9th, 2013, Mr. Nobuteru Ishihara, Minister of the Environment of Japan (MOEJ) and H.E. Dr. René Castro Salazar, Minister of Environment and Energy of the Republic of Costa Rica, signed the bilateral document of the Joint Crediting Mechanism (JCM) in Tokyo, Japan. Costa Rica is the first Latin American country to sign a JCM bilateral agreement.



Signing with Costa Rica

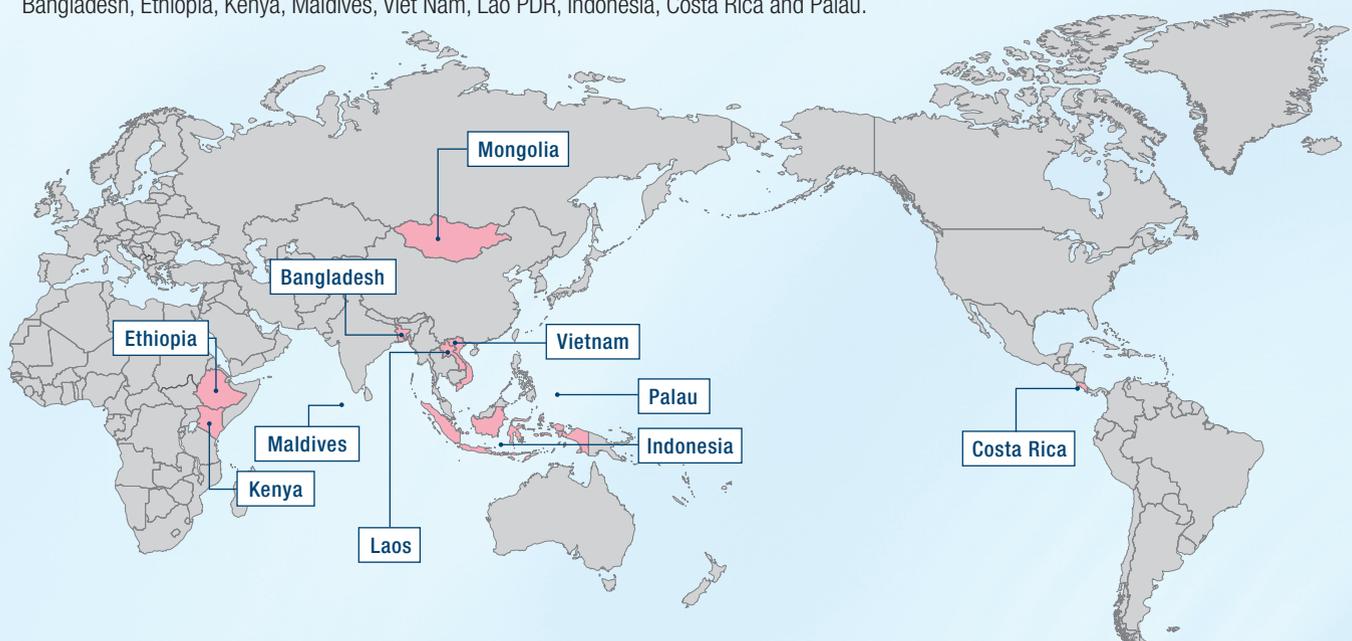


In addition, on January 13th, 2014, Mr. Nobuteru Ishihara, Minister of the Environment of Japan and H.E. Mr. Charles Obichang, Minister of Public Infrastructure, Industry and Commerce of the Republic of Palau, signed the bilateral document of the Joint Crediting Mechanism (JCM) in Ngerulmud, the Republic of Palau.

Signing with Palau

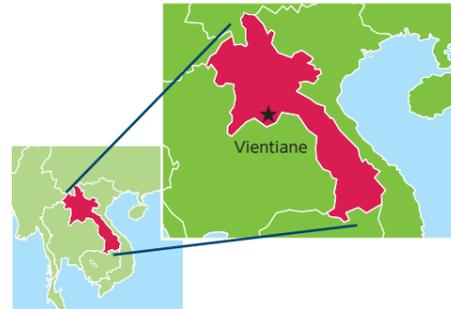
### JCM signatory countries

Japan has held consultations for the JCM with developing countries since 2011 and signed the bilateral document for the JCM with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica and Palau.



**Introduction of Lao PDR**

The Lao People's Democratic Republic has been founded as a socialist state on December 1975. Its population was estimated to be around 6.7 million and real GDP growth rate was 8.3% in 2013 (Source: IMF World Economic Outlook Database). Lao PDR introduced market principles and economic open-door policy in spite of an unstable economy, as a result they have achieved high economic growth through investment and support from foreign countries.



**JCM potential in Lao PDR**

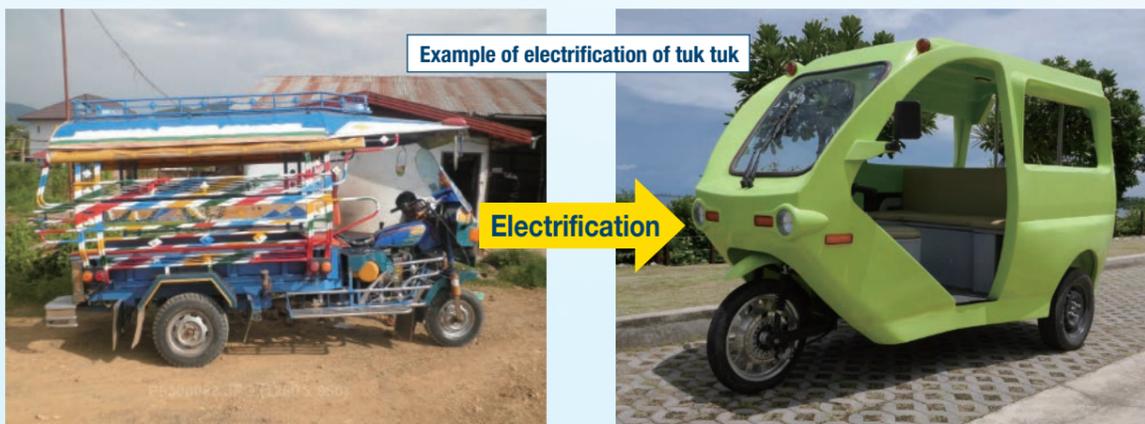
In August 2013, Lao PDR signed the bilateral document of the Joint Crediting Mechanism (JCM) with Japan. Lao PDR place high importance on the economic relationship with surrounding countries and is actively inviting foreign companies to invest. Establishment of a special economic zone is one example. Aside from the economy, a high literacy rate and low cost of electricity, water, and labor force are an advantage. Transport infrastructure is still required, however, if access to surrounding countries is improved like the ongoing improvement of the Kunming–Bangkok Expressway, it is expected to generate an increase in business opportunities. Also promotion of EV's and Biomass plant operation is interesting as a JCM project due to its rich natural resources.

**Initiatives of Japanese private companies**

**Promotion of use of electric vehicles (EVs) JCM methodology demonstration study (DS) (ALMEC VPI)**

**Summary of the methodology demonstration study**

The purpose of this study is to introduce hundreds of electric tricycles as an alternative of existing tricycles (tuk tuk) in capital city Vientiane and the ancient city of Luang Phabang. In this study, ALMEC VPI developed a draft JCM methodology and introduced four EVs in Luang Phabang as demonstration with monitoring and calculation of emission reduction. As a result, it has been confirmed methodology including the monitoring system is practical and applicable. Most electricity in Lao PDR is generated by hydroelectric power, which makes a lower grid emission factor. This leads to a significant CO<sub>2</sub> emission reduction because project emissions from EVs is quite low. Moreover, reduction in the usage of gasoline which depends fully on imports is likely to make improvements in the environment, national economy and energy security.



Existing tuk tuk

Electric tuk tuk

**The way forward for EV project**

JICA has been working since 2012 to promote usage of EV's in Lao PDR. This project will be positioned as a model project in the road-map for the promotion of EV's. In addition, this project includes not only introduction of EVs but also infrastructure improvements, establishment of a system for a diffusion of safe EVs, capacity building of human resources at EV related organizations, cooperation with drivers and project related people. We are aiming to contribute with a sustainable EV society integrally through the JCM and the ODA.

The Ministry of the Environment, Japan (MOEJ) and Overseas Environmental Cooperation Center, Japan (OECC) co-organized the seminar "Promoting Joint Crediting Mechanism (JCM) in Viet Nam" on 4 March 2014 in Tokyo. The seminar aimed at sharing recent updates of the JCM scheme, which is an initiative promoted by the government of Japan. The seminar focused on JCM activities conducted in Viet Nam and invited a Vietnamese representative of the JCM Secretariat, Mr. Le Ngoc Tuan.

**Potential of GHG Mitigation in Viet Nam: Proposed Projects and Programs**

A survey on GHG emissions reduction in Vietnam has been conducted. Development of policies and mechanisms has been promoted on a priority basis. In addition, efforts to carry out methodologies, registration and implementation of pilot projects as part of the NAMA framework of Viet Nam. There are difficulties in developing mitigation activities due to limited capacity in the current management system and support from developed countries is necessary. The JCM is expected to strengthen the capacity of Viet Nam negotiations on technical assistance, financing, capacity building, and implementation of GHG mitigation projects. That also leads to co-benefits such as job creation, environmental improvement, awareness and capacity building. Although mitigation potential from the industrial sector is not yet assessed thoroughly. At the moment, 28 (FS) and (DS) projects were carried out by Japanese businesses for the JCM. Viet Nam looks forward to cooperate cooperation between Governments and businesses of Viet Nam and Japan in order to achieve a low carbon society.



Viet Nam side's Chief of Secretariat for the JCM, Mr. Le Ngoc Tuan

**JCM Model Projects and JCM Project Planning Studies (PS) in Viet Nam**

**High Efficiency Heat Pump (NH<sub>3</sub>) for Seafood Processing (Mayekawa Manufacturing Co., Ltd.)**

This project aims at boiling water while using exhaust heat from refrigerant cooling systems for seafood processing in an efficient manner in Viet Nam. The project strives to reduce GHG emissions with the introduction of highly efficient and natural non-CFC refrigerant heat pump (NH<sub>3</sub>). Developed technology for energy saving and non-CFC contribute to address energy and environmental problems in Viet Nam, based on our company's core technologies such as compression, cryogenic, heat exchange, and fluid technology.



Ryohei Kise General Manager Global Project Sales Group

**Integrated Energy Efficiency Improvement at Beer Factories (Renova, Inc.)**

The purpose of this project is to set up an integrated energy saving system – composed of biogas boilers, high performance scrubbers, heat exchangers, Pasteuriser - at a beer brewery in Viet Nam. An energy structural elucidation simulator is employed to analyze the total energy consumption of the plant and identify potential for energy efficiency.



Sotaro Noda Manager Climate and Energy Solutions

In terms of the methodology, we have prepared a positive list of technologies, taking into account its diffusion rate in the host country, to avoid complicated additionality issues. In order to measure the mitigation effect of each specific energy conservation system within an integrated mechanism, quantification of GHG emission reductions per unit volume of beer produced has been employed. Technology and financial support from Japan is expected to shorten payback period and promote energy saving at local level.

**Anaerobic Digestion of Organic Waste for Cogeneration at Market (Hitachi Zosen Corporation/K.K. Satisfactory International)**

This study using a methane fermentation system analyzes the feasibility of anaerobic digestion of source-separated organic waste generated in a wholesale market in Ho Chi Minh City. Electricity and heat generated by a cogeneration system with collected biogas is supplied to a wholesale market. Also, compost and liquid fertilizer are produced from residues after methane fermentation.

Acquisition of an investment license has been applied. And constructions are started from April 2014 for one and a half years. In addition, with a view to contribute to agricultural businesses through promotion of activities such as revision on spills of hazardous substances.



Masanori Tsukahara Senior Manager Global Business Promotion Department

# Symposium on Global Warming 2014 - Development for JCM projects and its methodologies -

The Global Environment Centre Foundation (GEC) organized the open seminar "Symposium on Global Warming 2014 - Development for JCM projects and its methodologies -" on 25 February 2014 in order to introduce initiatives for the JCM from the Japanese government and final reports of JCM studies for JFY 2013, commissioned to the GEC by the MOEJ

## ● Initiatives for the JCM by MOEJ

The MOEJ presented an outline of the JCM, JCM partners roundtable in COP19, and JCM related programs for JFY 2014.



Side Event

## ● Reports of JCM studies for JFY 2013

Four Japanese private companies, commissioned by the MOEJ, reported JCM project planning studies with issues, including budgetary measures, laws and regulations, and licenses at host countries. In addition, some of them are considering the potential to expand into other sectors and/or countries based on these studies.

## ● Proposed improvement of JCM studies

GEC proposed improvements of JCM studies for JFY 2013 as follows;

### <Proposal to improve JCM methodologies>

- In the proposal stage of the study, draft methodologies should be submitted in advance. It illustrates concrete ways to address main issues, including eligibility criteria, reference emissions reduction, and default values.
- Statistical data for the methodology should be collected, although most of them are not sorted out at host countries. In addition, default values are developed in cooperation with counterparts.

### <Proposal to improve JCM studies for projects>

- In JCM project planning studies, priority is put on those projects with high potential to implement at JCM signatory countries.
- As a research outcome, specific project plans for JCM model projects are required. Also, based on the agreement about its project with counterpart, business consortium is ready to establish.
- Barriers to introduce low carbon technologies and products are identified.

## New Mechanisms Information Platform



The Viet Nam JC meeting report has been uploaded on the New Mechanisms Information Platform website.

1st Joint Committee in Hanoi, September 18th, 2013
Meeting Report
2nd Joint Committee in Tokyo, February 17th, 2014
Adopted Documents
Meeting report
Annex 1 Joint Crediting Mechanism Project Cycle Procedure
Annex 1.1. JCM Modalities of Communication Statement Form ver01.0

## What's New

Joint Committee
1st Joint Committee in Jakarta, October 16-17, 2013
Meeting report
Annex 1: Joint Crediting Mechanism Rules of Procedures for the Joint Committee
Annex 2: Rules of Implementation for the Joint Crediting Mechanism (JCM)
Annex 3: Joint Crediting Mechanism Project Cycle Procedure
Annex 3.1. JCM Modalities of Communication Statement Form
Annex 3.2. JCM Validation Report Form
Annex 3.3. JCM Project Registration Request Form
Annex 3.4. JCM Verification Report Form
Annex 3.5. JCM Credits Issuance Request Form

Information on JCM guidelines for Cost Rica, Palau, Indonesia have been listed on the New Mechanisms Information Platform website.

<http://www.mmechanisms.org/e/initiatives/index.html>

Published by

**Overseas Environmental Cooperation Center, Japan (OECC)**

Shibakoen Annex 7th floor, 3-1-8 Shibakoen,  
Minato-ku, Tokyo, 105-0011 JAPAN

E-mail: [info@mmechanisms.org](mailto:info@mmechanisms.org)  
Website: <http://www.mmechanisms.org/e/>



The publication of this brochure is a part of commissioned to the OECC by the MOEJ.



古紙/リサイクル配合率100%再生紙を使用  
Utilizing 100% post-consumer recycled paper pulp