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# Recent Developments of the Joint Crediting Mechanism(JCM)

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Seminar on the JCM Implementation in Thailand  
19 December 2024

Ministry of the Environment, Japan

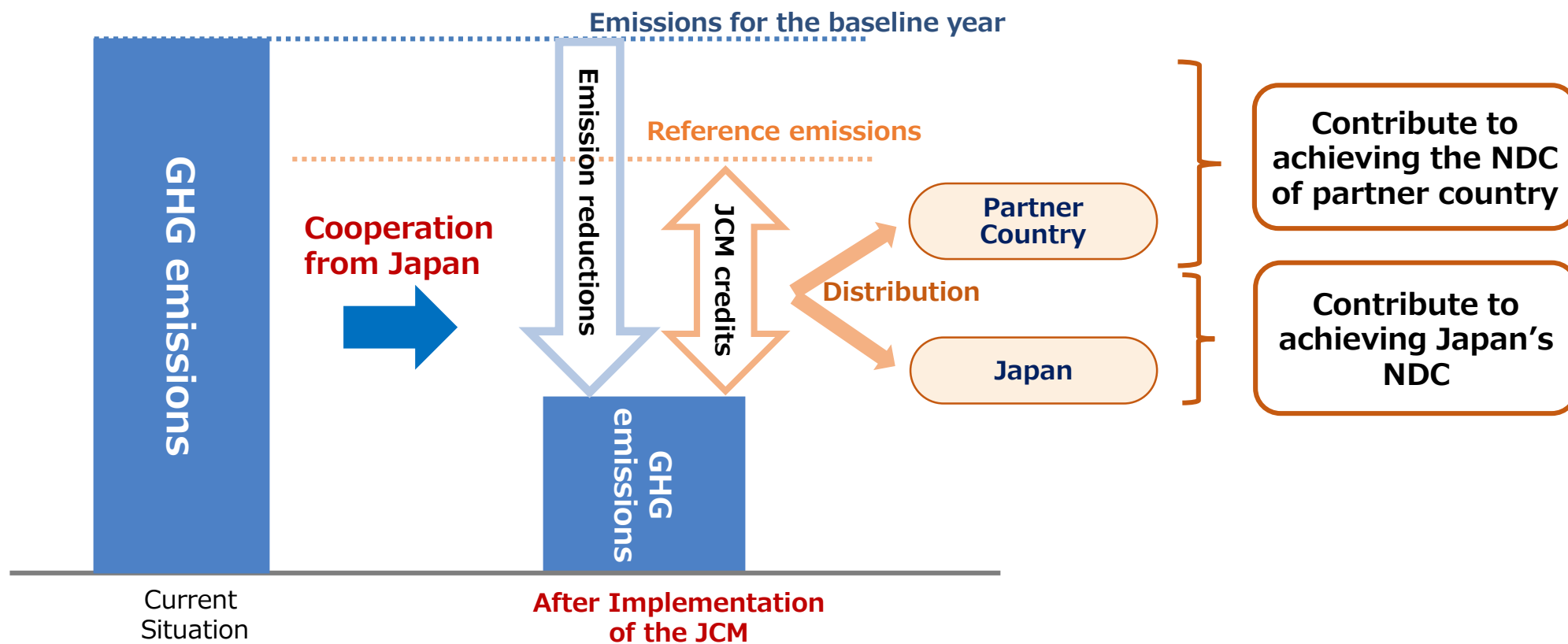


Ministry of the Environment

# Basic Concept of the JCM

- In partner countries mainly in the Global South, Japanese companies and the Japanese government collaborate on implementing mitigation measures in terms of **technology and financial investment**. **The part of the achieved GHG emission reductions or removals will be shared as JCM credits** between the partner countries and Japan.
- Japan has established the JCM with **29 countries** and over **250 projects** are currently being implemented .(\*JCM target: cumulative GHG emission reduction for 100 mil tons of CO2 eq. by 2030.)

## Basic Concept



# Benefits from the JCM



- The JCM offers **Social, Economic, Environmental Benefits** to both Japan and partner countries.

## Japan

- Exploring **New Business Opportunities**
- Enhancing **Corporate Value**  
→ Attracting new investment
- Acquiring **JCM Credits**  
→ **Contribute to NDC(Reduction & Absorption Target)**  
→ Utilizing them for emission offset  
※Generating revenue from their sale
- **Enhancing Presence** through contributions to global decarbonization

## Partner countries

- Exploring **New Business Opportunities**
- Enhancing **Corporate Value**  
→ Attracting new investment
- Diffusion of superior decarbonization technologies and products
- Contribute to NDC (Reduction and absorption target) of partner countries
- **Solving Social, Economic, Environmental issues** such as air pollution and infrastructure development

# Variety of JCM project types

- So far, there have been **257 technology adoptions** in 18 countries.  
\*Note: The number of adoptions exceeds the number of projects because multiple technologies can be implemented within a single project.
- 56% of these are related to renewable energy, followed by 34% for energy efficiency, making up the majority.

## Renewable Energy

### Solar power



Solar power, FARMLAND Co., Ltd., Chile



Floating Solar PV, TSB Co., Ltd., Thailand

### Hydro power



Hydro Power Plant, Toyo Energy Farm Co., Ltd., Indonesia

### Biogas



Biogas Power Generation, ITOCHU Corporation, Philippines

### Geothermal power



Binary Power Generation Project at Geothermal Power Plant, MHI, Ltd., Philippines

# Variety of JCM project types

## Energy efficiency

### Consumer sector



Energy saving at convenience stores, Panasonic, Indonesia



High-efficiency refrigerator, Mayekawa MFG, Indonesia



Introduction of Amorphous High Efficiency Transformers in Power Grid, Yuko Keiso Co., Ltd., ①Vietnam, ②Lao PDR

### Industrial sector



Energy-saving of mobile communications base transceiver stations, KDDI Corp. Indonesia



Optimization in petroleum refining plant, Yokogawa Electric Corp. Indonesia



Introduction of High Efficiency Once Through Boiler to Garment Factory, Osaka Gas Co., Ltd., Thailand

# Variety of JCM project types

## Waste



Waste to Energy Plant,  
JFE engineering, Viet Nam

## Effective Use of Energy



Gas Co-generation System and  
Absorption Chiller, Kansai Electric  
Power, Thailand

## F-gas



Development of a Fluorocarbon Collection and  
Destruction Model Project in Metro Manila,  
Philippines Utilizing Mixed Combustion  
Technologies , Marubeni Corporation,  
Philippines

## Transport



CNG-Diesel Hybrid Public Bus,  
Hokusan Co., Ltd., Indonesia

## REDD+



REDD+ project in Luang Prabang  
Province through controlling slash-and-  
burn, Waseda University,

# List of JCM partner countries and projects supported by MOEJ (FY2013-2024) as of December 6, 2024



## Total 255 projects (29 partner countries)

(Model Project: 238 projects(including Eco Lease: 7projects), ADB: 8 projects, UNIDO: 1 project, REDD+: 2 projects, F-gas: 4 projects, New Technology : 2project)

### Eastern Europe

-  20. Azerbaijan
-  21. Moldova
-  22. Georgia
-  29. Ukraine

### Asia Pacific

-  1. Mongolia: 11 projects
-  2. Bangladesh: 5 projects
-  5. Maldives: 4 projects
-  6. Viet Nam: 50 projects
-  7. Laos: 6 projects
-  8. Indonesia: 52 projects
-  10. Palau: 7 projects
-  11. Cambodia: 5 projects
-  15. Myanmar: 8 projects
-  16. Thailand: 51 projects
-  17. Philippines: 20 projects
-  23. Sri Lanka: 3 projects
-  24. Uzbekistan
-  25. Papua New Guinea
-  27. Kyrgyz Republic
-  28. Kazakhstan

### Latin America

-  9. Costa Rica: 2 projects
-  12. Mexico: 5 projects
-  14. Chile: 16 projects

### Africa

-  3. Ethiopia
-  4. Kenya: 5 projects
-  18. Senegal
-  19. Tunisia: 2 projects

### Middle East

-  13. Saudi Arabia: 3 projects
-  26. UAE

# JCM projects in Thailand

- On November 19th, 2015, Japan and Thailand signed the bilateral document of the JCM.
- 51 projects and 58 technologies have been currently being implemented in Thailand. (Some projects introduce multiple technologies)
- Renewable energy accounts for the majority at 48%, followed by energy efficiency improvement at 40%.

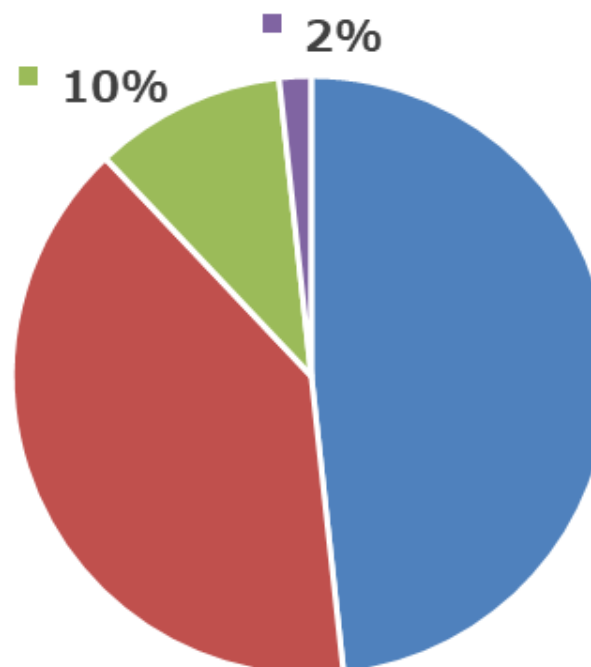
as of December 6, 2024

Effective Use of Energy  
(6projects) 10%

- Waste to Energy
- Co-generation System

Energy Efficiency Improvement  
(23projects) 40%

- Boiler
- Air conditioning
- Chiller
- Others



F-gas(1projects) 1%

- F-gas Recovery and Destruction

48%

Renewable Energy(28projects) 48%

- Solar power system
- Biomass Power Generation
- Others



# Overview of Japan's support for the JCM partner countries



## Ministry of the Environment

Programme	Type of support
Project development/capacity building/MRV support	Technical cooperation
<b><u>Finance Programme for JCM Model Projects*</u></b>	Subsidy(Grant)
Finance Programme for F-gas Recovery and Destruction Model Projects*	
Japan Fund for the JCM (JF JCM) - managed by ADB	
JCM support programme by UNIDO*	
Demonstration Programme for Application of New Decarbonizing Technology*	

\* These programmes can support projects implemented by government-owned companies but not those implemented by the government itself.

## Ministry of Economy, Trade and Industry

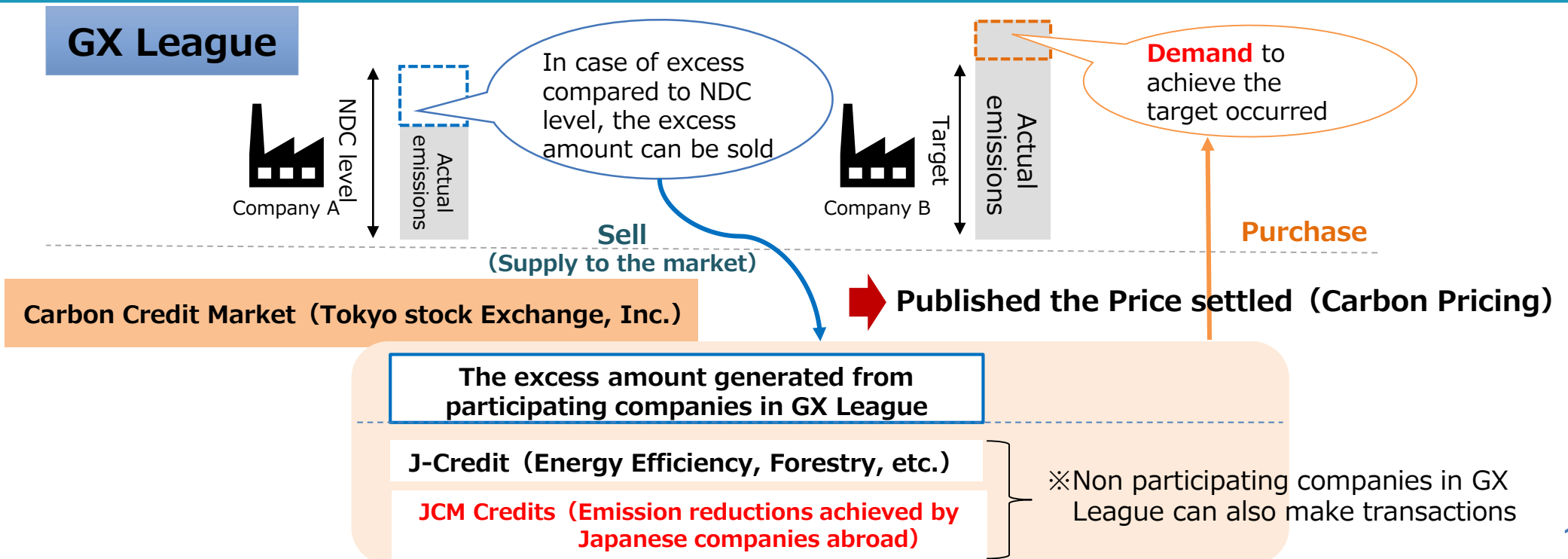
JCM Feasibility Study	Technical cooperation
JCM Demonstration Programme	Government-commissioned project
New JCM methodologies development study/ JCM Crediting support / MRV application study	Technical cooperation

## Ministry of Agriculture, Forestry and Fisheries

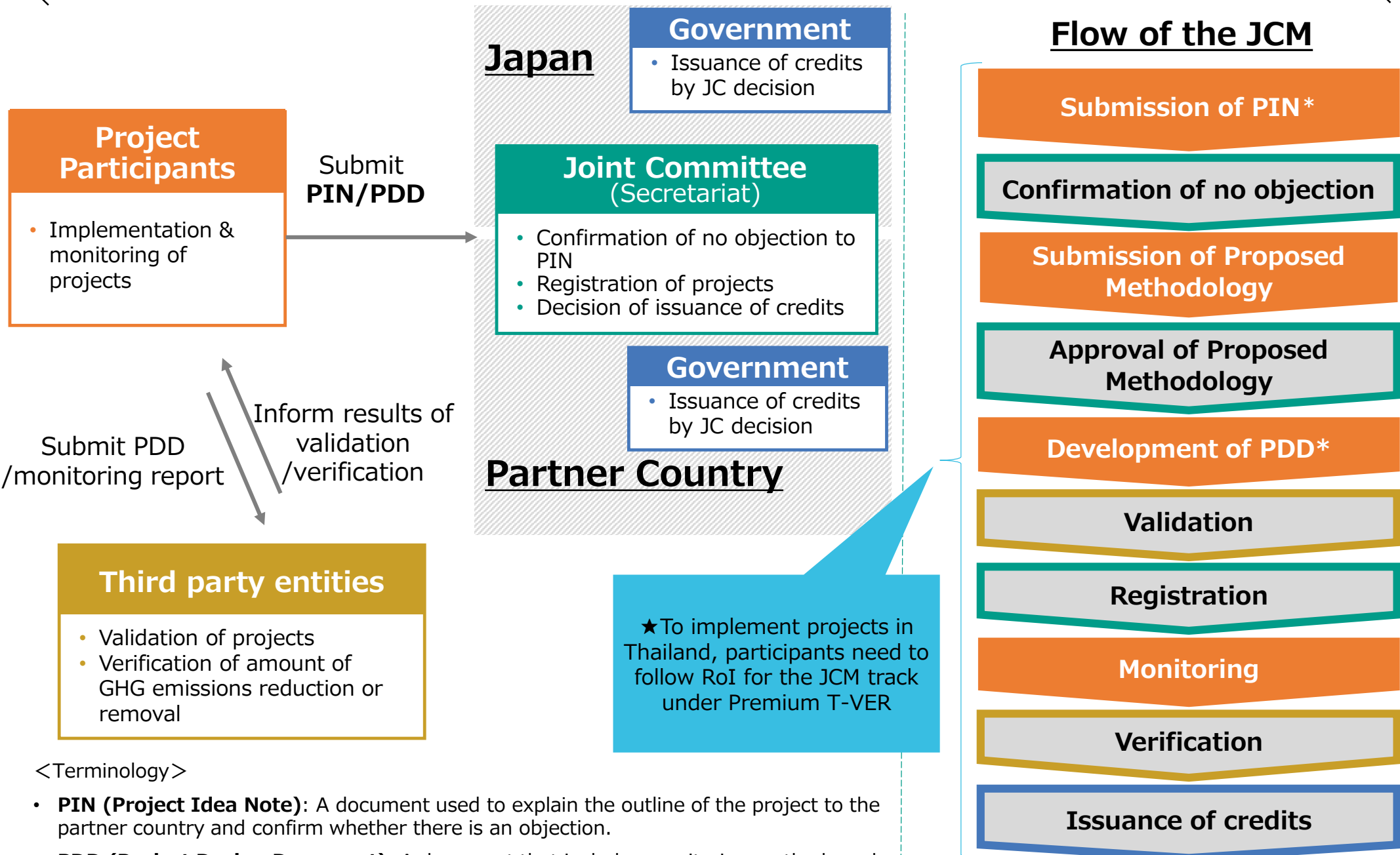
Development of MRV for JCM projects in Agriculture –implemented by ADB	Technical cooperation
Field studies for JCM REDD+	Government-commissioned project

# Potential use of JCM Credits

- JCM credits acquired by companies through private JCM can be utilized for the purpose of carbon offsetting.
  - The domestic calculation, reporting, and publication system (SHK system)
  - Use for the achievement of companies' voluntary targets in the GX League
  - Carbon offsetting
- In the GX League, participating companies are supposed to be engaged in emission trading in the Carbon Credit Market under Tokyo Stock Exchange, Inc in order to achieve their targets. Pricing and monetization of the JCM credits will be expected through trading JCM credits in the Carbon Credit Market.



# Scheme of the JCM



## <Terminology>

- **PIN (Project Idea Note):** A document used to explain the outline of the project to the partner country and confirm whether there is an objection.
- **PDD (Project Design Document):** A document that includes monitoring methods and estimated emission reductions. Required for project registration.

URL: <https://www.jcm.go.jp/>

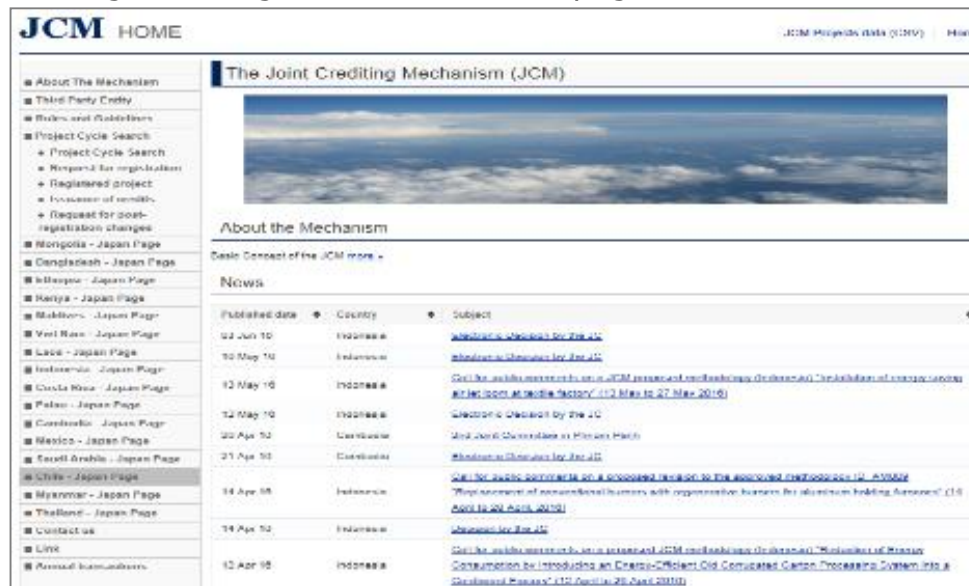
## Contents

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- Individual JCM Partner countries-Japan page

## Function

- Information sharing to the public, e.g.,
  - the JC decisions
  - rules and guidelines
  - methodologies and projects
  - issuance of JCM credits
  - call for public inputs/comments
  - status of TPEs, etc.
- Internal information sharing for the JC members, e.g.
  - File sharing for electric decisions by the JC

### ▼Image of the general information page



### ▼Image of the individual JCM Partner countries-Japan page



Thank you for your kind attention



Contact: [info@jcm.go.jp](mailto:info@jcm.go.jp)