



Recent Developments of the Joint Crediting Mechanism(JCM)

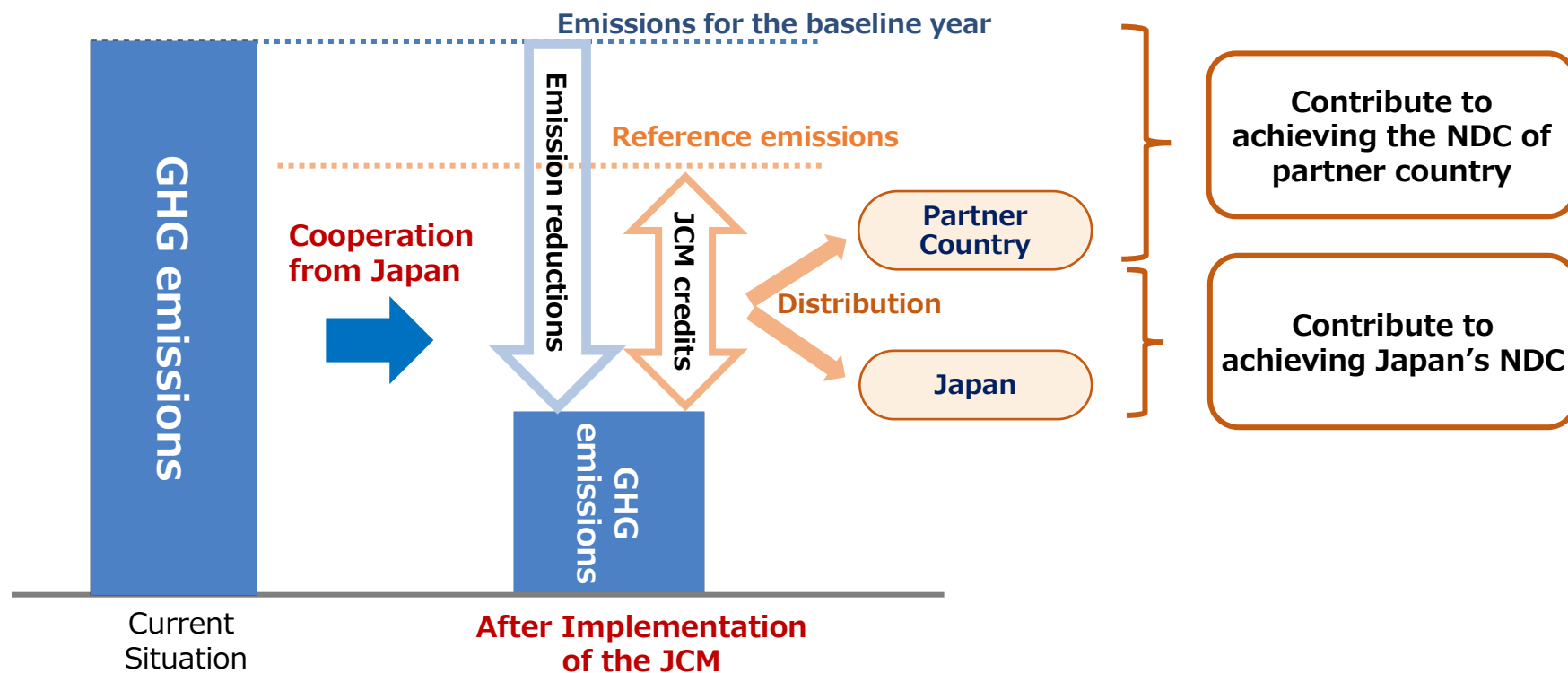
Session 4 ~Climate Change Mitigation and JCM~
15 January 2025

Ministry of the Environment, Japan

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.

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, Yuku 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

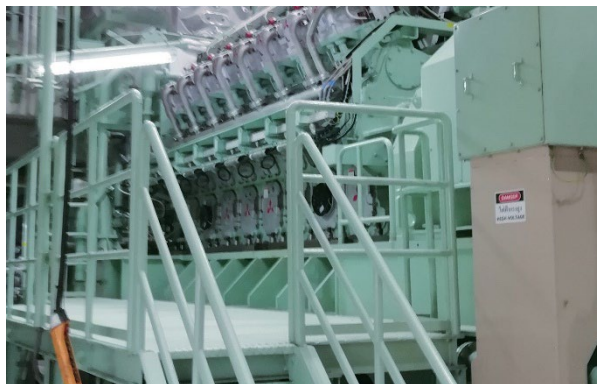
Variety of JCM project types

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

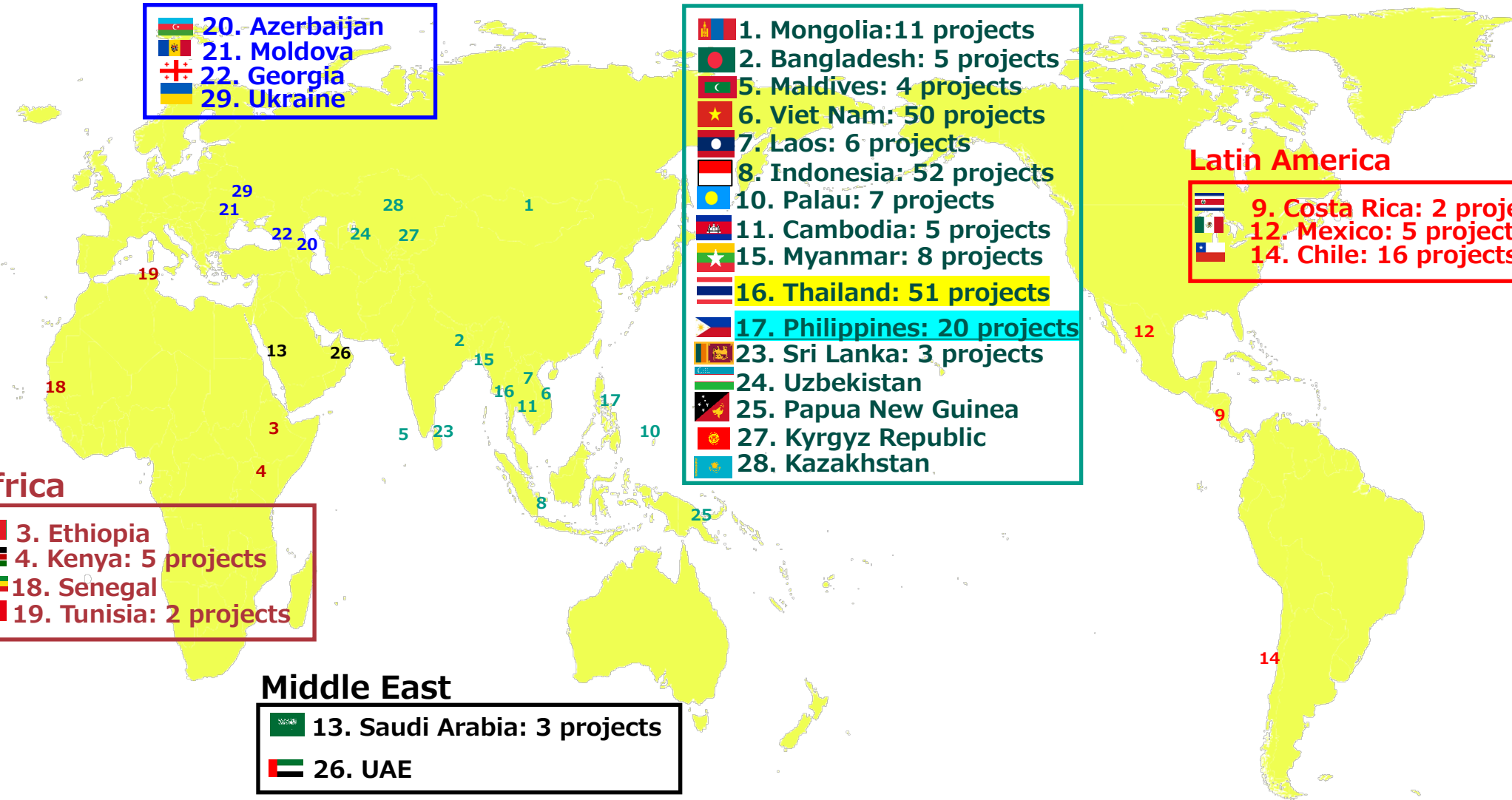
- 9. Costa Rica: 2 projects
- 12. Mexico: 5 projects
- 14. Chile: 16 projects

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 Philippines



- On January 12th, 2017, Japan and Philippines signed the bilateral document of the JCM.
- 20 projects and 20 technologies have been currently being implemented in Philippines.
- Renewable energy accounts for the majority at 90%.

as of January 15, 2025

Effective Use of Energy

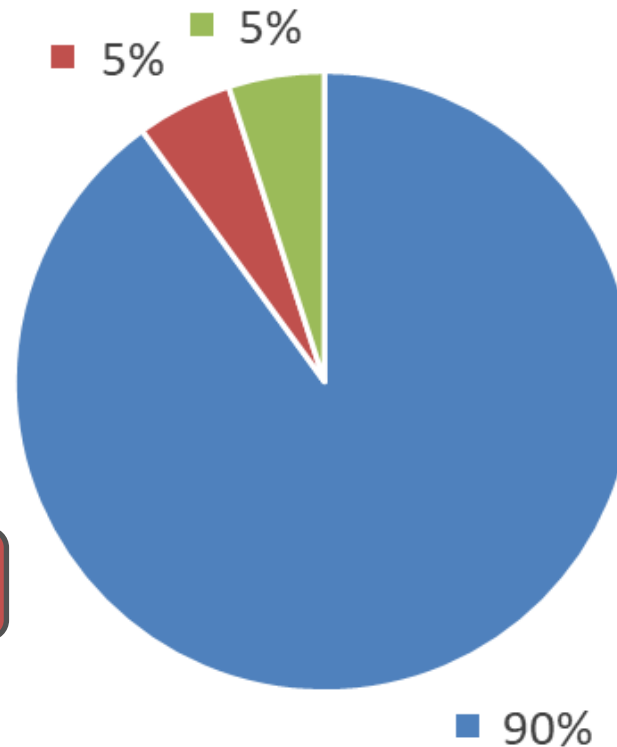
(1 project) 10%

- Waste Heat Recovery

Introduction of 6MW Power Generation System by Waste Heat Recovery for Cement Plant, GLOBAL ENGINEERING Co., Ltd

F-gas(1 project) 10%

- F-gas Recovery and Destruction



Renewable Energy(18 projects) 90%

- Solar power system
- Mini Hydro power
- Biogas Power Generation
- Geothermal
- Others



Biogas Power Generation, ITOCHU Corporation,



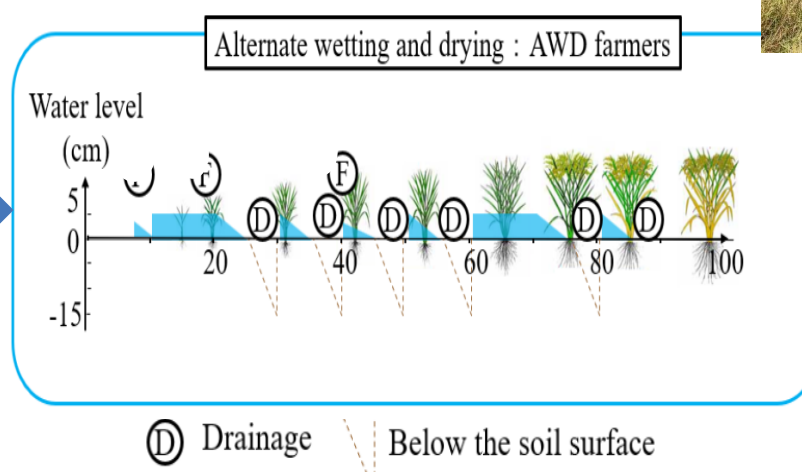
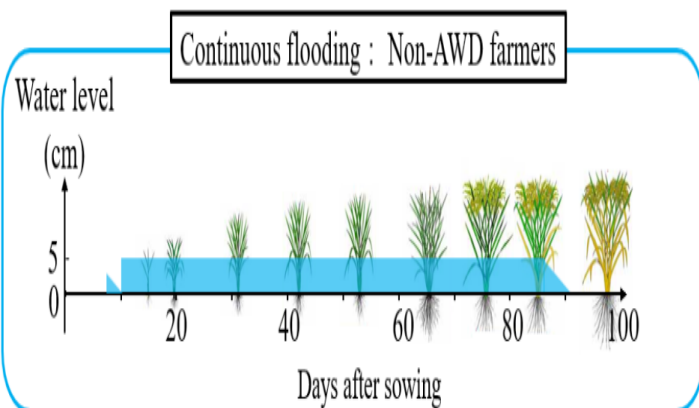
Binary Power Generation Project at Geothermal Power Plant, MHI, Ltd.,

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

New potential field of JCM in Philippines ~AWD~

- ✓ Japan has launched a project with Asian Development Bank to develop the first agricultural project on JCM in Japan/Asia.
- ✓ In June, draft JCM methodology for “Alternate Wetting and Drying (AWD)” in the Philippines was developed and published.
- ✓ By this methodology, Japan aims to issue the world’s first JCM credit in agriculture.

GHG Emission Reduction from Rice Paddies by Alternate Wetting and Drying (AWD)



“Alternate Wetting and Drying (AWD)” can **reduce about 30% of GHG emissions from rice fields** in general* and will be a significant solution in a wide area in the Asia-Monsoon region.

*Ai LEON and Taro IZUMI, JIRCAS, “Impacts of alternate wetting and drying on rice farmers’ profits and life cycle greenhouse gas emissions in An Giang Province in Vietnam” Journal of Cleaner Production, Volume 354, 2022

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
<u>Finance Programme for JCM Model Projects*</u>	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

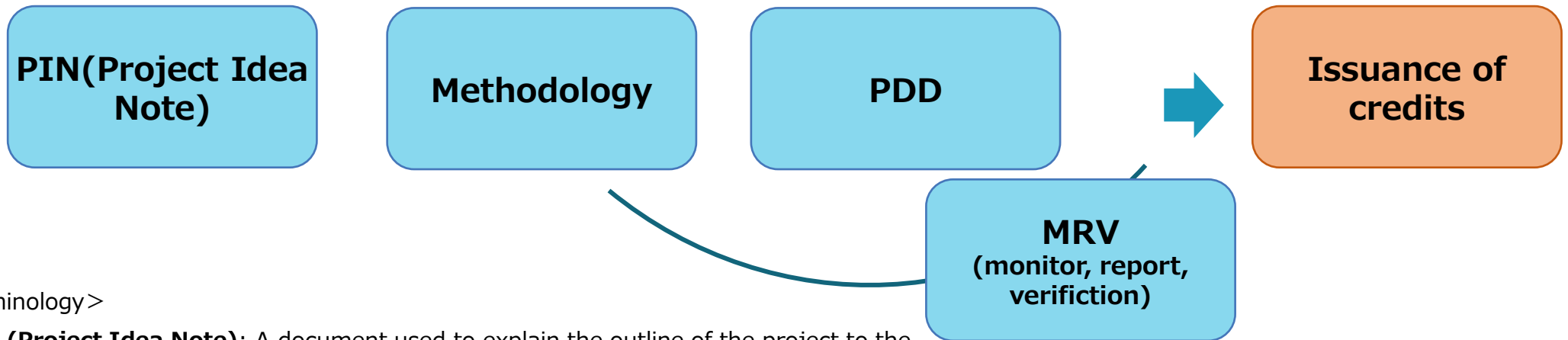
JCM Feasibility Study	Technical cooperation
JCM Demonstration Programme	Government-commissioned project
New JCM methodologies development study/ JCM Crediting support / MRV application study	Technical cooperation

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

Scheme of the JCM

Flow 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.

Key Players and Roles in the JCM

Project Participants

- Implementation & monitoring of projects

Joint Committee (Secretariat)

- Confirmation of no objection to PIN
- Registration of projects
- Decision of issuance of credits

Government

- Issuance of credits by JC decision

Third party entities

- Validation of projects
- Verification of amount of GHG emissions reduction or removal

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

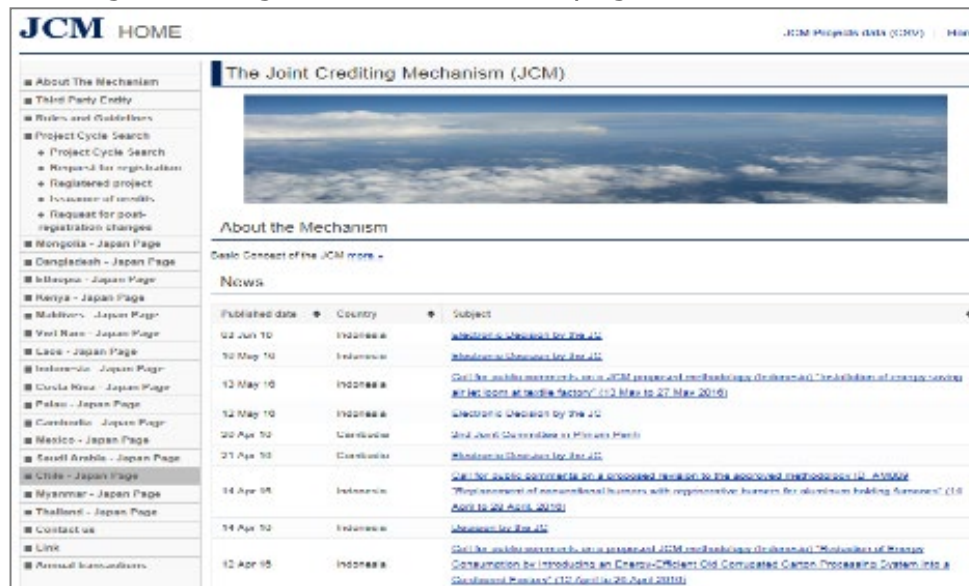
Contents

- General information page
- 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