



Ministry of the Environment



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# Recent Developments of The Joint Crediting Mechanism (JCM)

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COP27 Japan Pavilion -Promoting and expanding the Joint Crediting Mechanism (JCM)-

8<sup>th</sup> November 2022

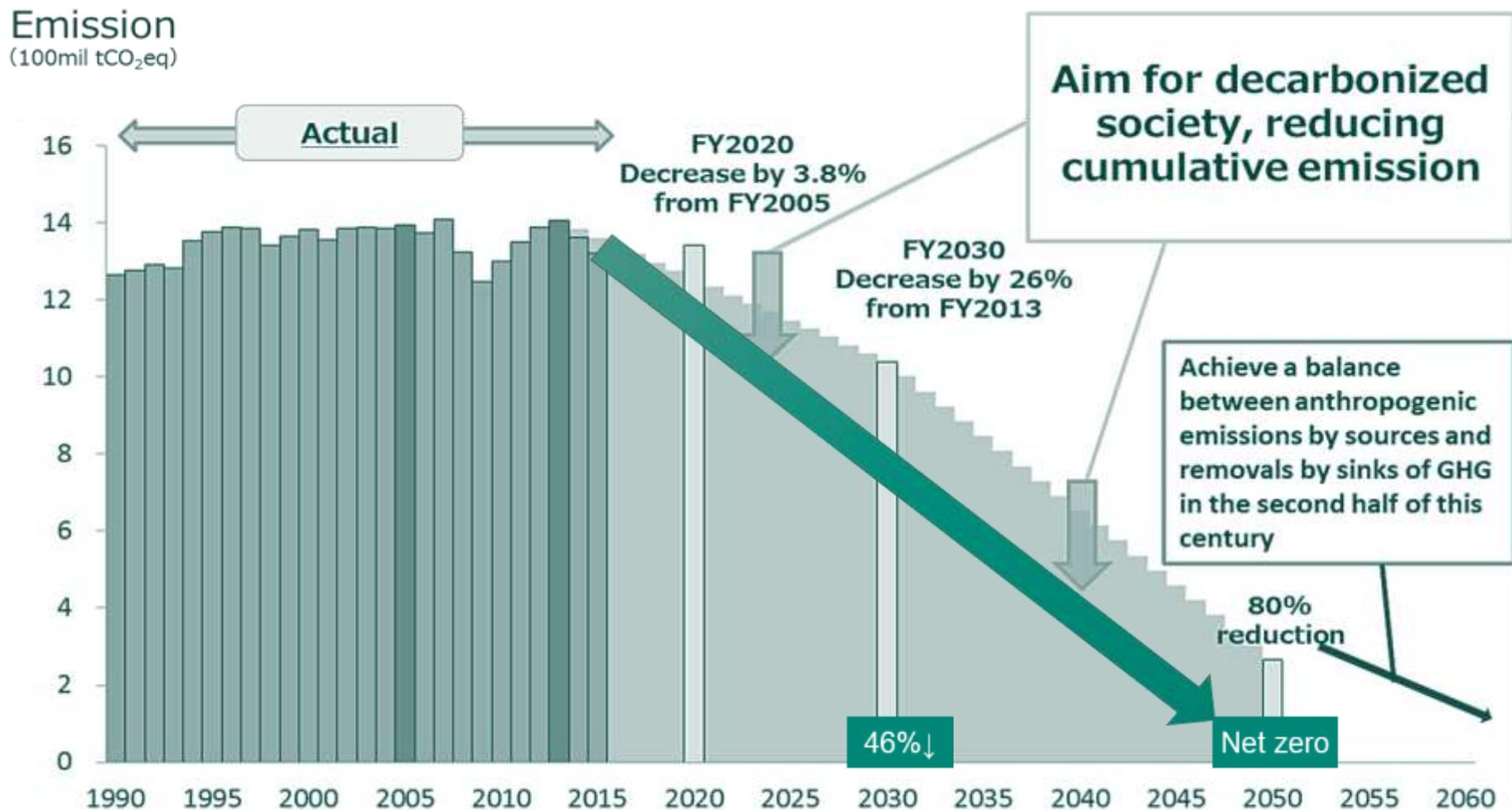
Eri Matsumoto

Ministry of the Environment, Japan



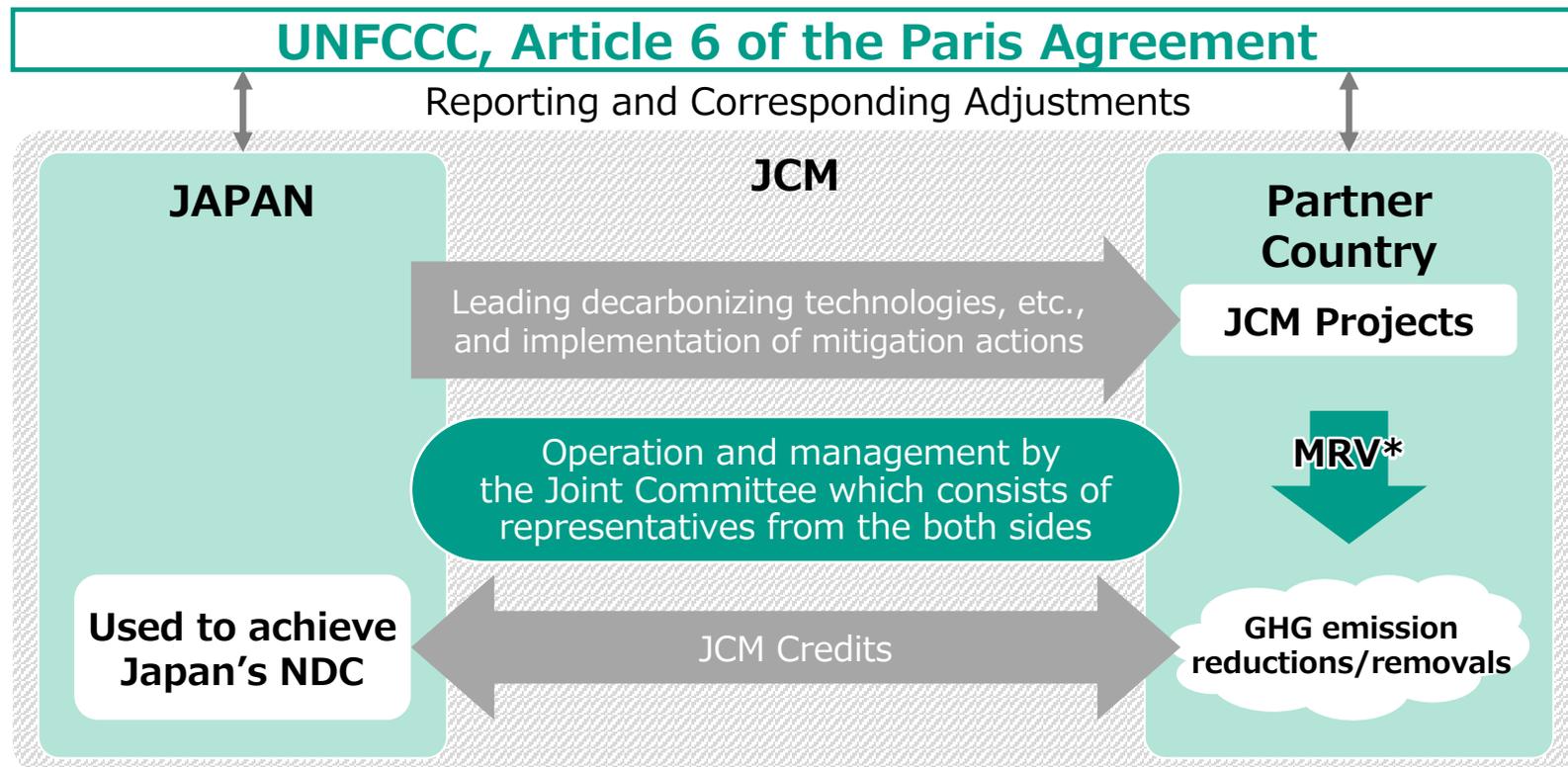
# GHG emissions and target in Japan

- ❑ **Long-term goal: Net zero emissions by 2050** compared to 2013
- ❑ **Mid-term target: 46% emission reduction by 2030** compared to 2013
- ❑ GHG emissions in 2020: 1,149 mil ton of CO<sub>2</sub> eq. (5.0% reduction to 2019, 18.4% reduction to 2013)
- ❑ **JCM target: cumulative GHG emission reduction for 100 mil tons** of CO<sub>2</sub> eq. by 2030



# Basic Concept of the JCM

- Facilitate diffusion of leading decarbonizing technologies and infrastructure, etc., through investment by Japanese entities, thereby contributing to GHG emission reductions or removals and sustainable development in partner countries.
- Contribute to the achievement of both countries' NDCs while ensuring the avoidance of double counting through corresponding adjustments.
- Implement the JCM consistent with the guidance on cooperative approaches, referred to in Article 6, paragraph 2 of the Paris Agreement.



\*measurement, reporting and verification

# Implementation of the Article 6 rules into domestic rules

## ■ Establishment of the **JCM Promotion and Utilization Council** consisting of five relevant Ministries\* (January 17,2022)

\* Ministry of the Environment; Ministry of Economy, Trade and Industry; Ministry of Foreign Affairs; Ministry of Agriculture, Forestry and Fisheries and Ministry of Land, Infrastructure, Transport and Tourism

The Council's duties include:

1. the authorization of JCM credits as a Party to the Paris Agreement,
2. the determination of a method to apply corresponding adjustments to prevent double counting,
3. the revision of the Guidelines for the Implementation of the JCM.

## ■ Formulation of **the procedures on the authorization and corresponding adjustments** (April 7, 2022)

- Establishment "Procedures for Authorization as a Party to the Paris Agreement regarding the Joint Crediting Mechanism (JCM)" and "Procedures for Corresponding Adjustments regarding the Joint Crediting Mechanism."

## ■ **Expansion of JCM Partner Countries** (June 7, 2022)

- The Grand-design and Implementation Plan/Follow-ups of the New Capitalism (Cabinet Decision on June 7, 2022) stipulates "For the expansion the JCM, the government accelerates consultations with relevant countries, aiming to increase the JCM partner countries up to **around 30 by 2025.**"

# JCM Partner Countries (24 countries)



Mongolia  
Jan. 8, 2013  
(Ulaanbaatar)



Bangladesh  
Mar. 19, 2013  
(Dhaka)



Ethiopia  
May. 27, 2013  
(Addis Ababa)



Kenya  
Jun. 12, 2013  
(Nairobi)



Maldives  
Jun. 29, 2013  
(Okinawa)



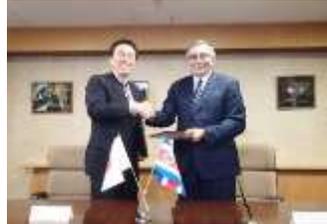
Viet Nam  
Jul. 2, 2013  
(Hanoi) \*The photo at the time of extension in Oct 2021.



Lao PDR  
Aug. 7, 2013  
(Vientiane)



Indonesia  
Aug. 26, 2013  
(Jakarta)



Costa Rica  
Dec. 9, 2013  
(Tokyo)



Palau  
Jan. 13, 2014  
(Ngerulmud)



Cambodia  
Apr. 11, 2014  
(Phnom Penh)



Mexico  
Jul. 25, 2014  
(Mexico City)



Saudi Arabia  
May. 13, 2015



Chile  
May. 26, 2015  
(Santiago)



Myanmar  
Sep. 16, 2015  
(Nay Pyi Taw)



Thailand  
Nov. 19, 2015  
(Tokyo)



Philippines  
Jan. 12, 2017  
(Manila)



Senegal  
Aug. 25, 2022  
(Dakar)



Tunisia  
Aug. 26, 2022  
(Tunis)



Azerbaijan  
Sept. 5, 2022  
(Baku)



Moldova  
Sept. 6, 2022  
(Chisinau)



Georgia  
Sept. 13, 2022  
(Tbilisi)



Sri Lanka  
Oct. 10, 2022  
(Colombo)



Uzbekistan  
Oct. 25, 2022  
(Tashkent)

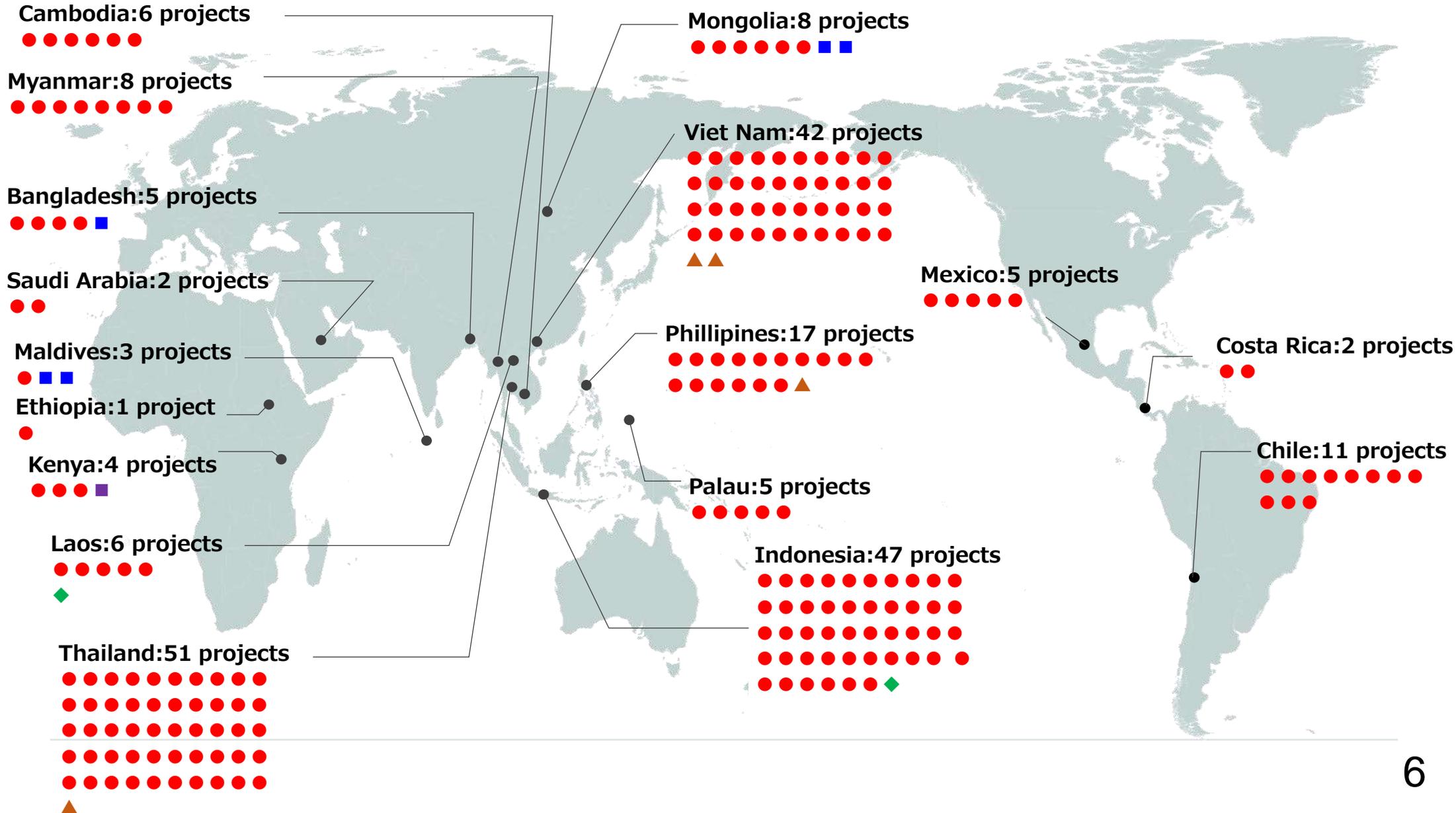
# JCM Financing Programme by MOEJ (FY2013~2022) as of October, 2022

Total **223** projects (**24** partner countries)

(● Model Project: 211 projects (including Eco Lease: 5 project), ■ ADB: 5 projects, ■ UNIDO 1 project, ◆ REDD+: 2 projects, ▲ F-gas: 4 projects)

**129** projects have been started operation.

**68** projects with have been registered as JCM projects.



# Projects supported by the JCM financing programmes

## Renewable Energy



Solar power, FARMLAND Co., Ltd., Chile



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



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



Biomass Co-Generation System, Fuji-Foods Corporation, Thailand



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

## Energy efficiency [Consumer sector]



High-efficiency refrigerator, Mayekawa MFG, Indonesia



Energy saving at convenience stores, Panasonic, Indonesia



High-efficiency air-conditioning system, Hitachi, Daikin, Vietnam

## Energy efficiency [Industrial sector]



Optimization in petroleum refining plant, Yokogawa Electric Corp. Indonesia



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

## Energy efficiency [Urban sector]



LED street lighting system with wireless network control, MinebeaMitsumi, Cambodia



Amorphous transformers in power distribution, Hitachi Materials, Vietnam

## Waste



Power Generation with Methane Gas Recovery System, NTTDATA, Mexico



Waste to Energy Plant, JFE engineering, Myanmar

## Transport



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

# Technologies Transferred through JCM (FY2013-2022)

- Total of **223** JCM Projects being developed in 24 partner countries (October, 2022)
- 37% for energy efficiency, 53% for renewable energy, 4% for Effective use of Energy, Transport, Waste to energy, F-gas Recovery and Destruction and REDD+ project shares

Waste (4) 2%

- Waste to Energy
- Power Generation with Methane Gas

Transport (3) 1%

- Digital Tachographs
- Modal Shift
- CNG-Diesel Hybrid

REDD+ (2) 1%

- Controlling slush and burn

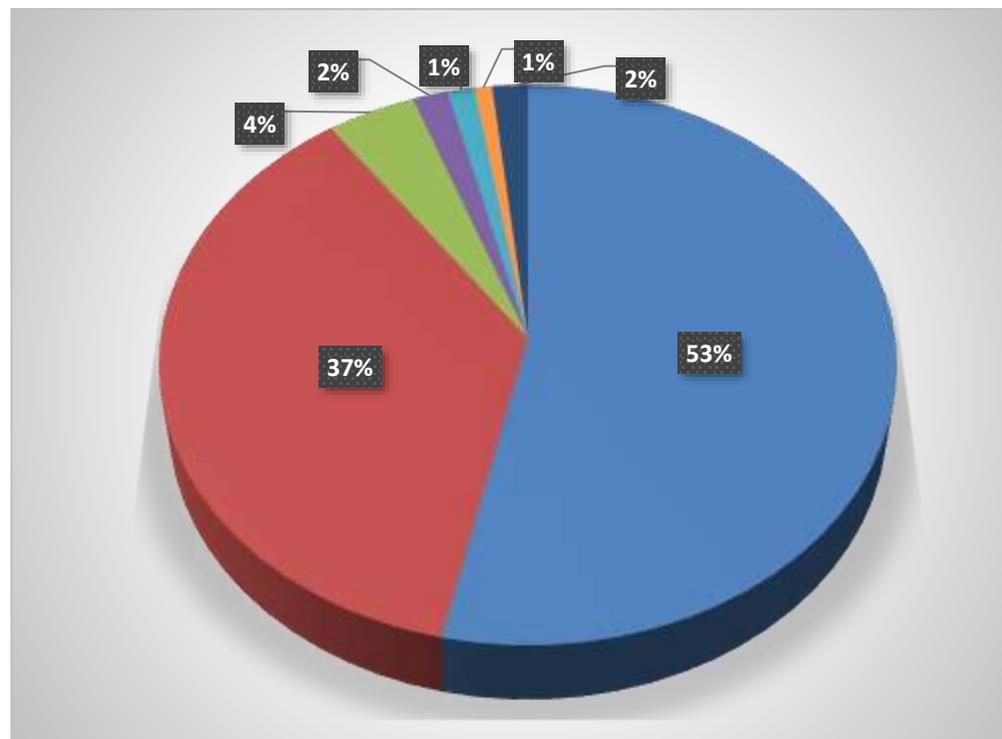
September, 2022

Effective Use of Energy (10) 4%

- Waste Heat Recovery
- Gas Co-generation

Energy efficiency (86) 37%

- Boiler
- Air Conditioning
- Refrigerating/Chiller
- Looms
- Transformer
- LED Lighting



F-gas (4) 2%

- Recovery & Destruction

Renewable energy (125) 53%

- Solar(&Storage battery)
- Micro hydro
- Wind
- Biomass
- Geothermal

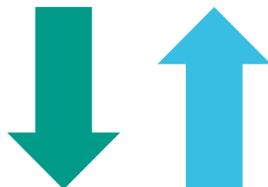
# JCM Model Projects by MOEJ

Budget for projects starting from FY 2022 is approx. **17.1 billion JPY** (approx. **USD 158 million**) in total by FY2024 (1 USD = 108 JPY)

**Government of Japan**

\* Includes collaboration with projects supported by JICA and other governmental-affiliated financial institute.

Finance part of an investment cost (up to half)



Conduct MRV and expected to deliver JCM credits issued

**International consortiums**  
(which include Japanese entities)



- Scope of the financing: facilities, equipment, vehicles, etc. which reduce CO<sub>2</sub> from fossil fuel combustion as well as construction cost for installing those facilities, etc.
- Eligible Projects: starting installation after financing is awarded and finishing installation within three years.

# JCM F-gas Recovery and Destruction Model Project by MOEJ

【Budget for FY 2022】  
60 million JPY (approx. 0.56million USD)  
(1 USD = 108 JPY)

**Government  
of Japan**

Finance part of the cost in flat-rate  
(up to 40 million JPY/year)

Conduct MRV to estimate GHG emission reductions.  
At least half or ratio of financial support to project cost  
(larger ratio will be applied) of JCM credits issued are  
expected to be delivered to the government of Japan

## International consortiums (which include Japanese entities)

Manufacturers of  
equipment which  
uses F-gas

Users of  
equipment which  
uses F-gas

Entities for recovery and  
transportation of used F-gas  
(recycling or scrap entities)

Entities for destruction of used  
F-gas (may use existing  
facility for destruction)

### Purpose

To recover and destroy F-gas (GHG except for energy-related CO<sub>2</sub>, etc) from used equipment instead of releasing to air, and reduce emissions

### Scope of Financing

- Establish scheme for recovery and destruction
- Install facilities/equipment for recovery/destruction
- Implementation of recovery, transportation, destruction and monitoring

### Project Period

Three years in maximum  
(Ex. 1st year for scheme, 2nd year for facilities, 3rd year for recovery/destruction)

### Eligible Projects

- After financing is awarded, start implementation of recovery/destruction within three years
- Aim for the registration as JCM project and issuance credits

# ADB Trust Fund: Japan Fund for Joint Crediting Mechanism (JFJCM)

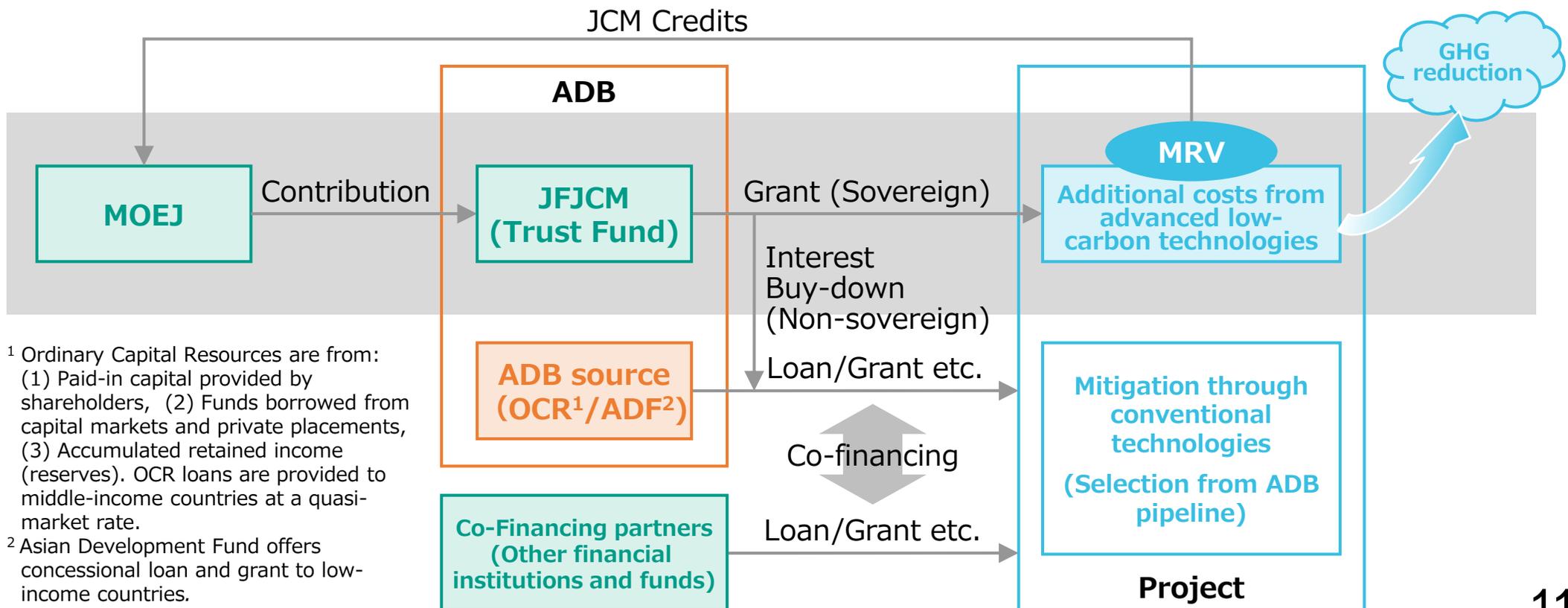
**Budget for FY2022** JPY 1 billion (approx. USD 9.3 million)

**Scheme**

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

**Purpose**

To develop ADB projects with sustainable and low-carbon transition perspective by introducing advanced low-carbon technologies as well as to acquire JCM credits



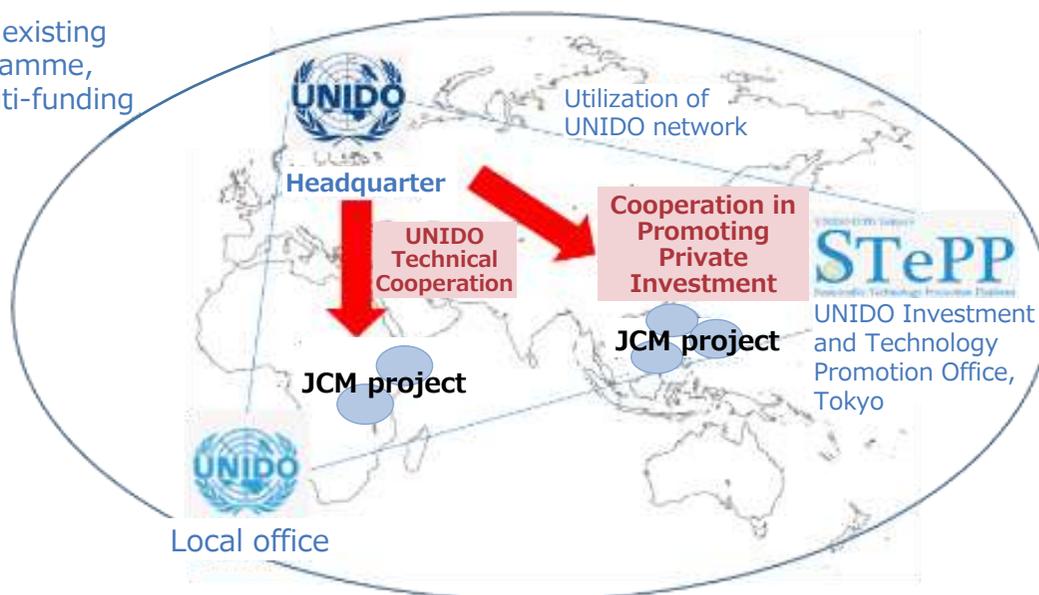
<sup>1</sup> Ordinary Capital Resources are from: (1) Paid-in capital provided by shareholders, (2) Funds borrowed from capital markets and private placements, (3) Accumulated retained income (reserves). OCR loans are provided to middle-income countries at a quasi-market rate.

<sup>2</sup> Asian Development Fund offers concessional loan and grant to low-income countries.

# Collaboration with UNIDO by the JCM

- Signed **Joint Declaration** on Environmental Cooperation in order to support the JCM. (Nov.10.2020)
- The UNIDO-MOEJ Project to support JCM related activities, including financial support for deploying the decarbonizing technologies in Africa and Asia.
  - UNIDO Technical Cooperation
  - Cooperation in Promoting Private Investment

Linkage with existing UNIDO programme, including multi-funding



- Aiming to facilitate close cooperation between UNIDO and MOEJ on
- **climate change**
  - **the circular economy**
  - **fluorocarbon life cycle management**
  - **the reduction of industrial pollution**
  - **the elimination and reduction of persistent organic pollutants**
  - **life cycle management of mercury**

## Comprehensive Set of Assistances from Upper Stream to Lower Stream

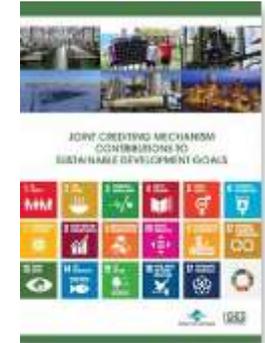


# JCM x SDGs : Recent Development

## JOINT CREDITING MECHANISM CONTRIBUTIONS TO SDGs

### ■ Guidance :

- The first publication to analyze the interlinkage between the JCM and SDGs. It aims to clarify how the JCM contributes to SDGs.



<https://www.iges.or.jp/en/pub/joint-crediting-mechanism-jcm-contributions-sustainable-development-goals-sdgs/en>

### ■ Best practices

- This report summarizes the best practices of the JCM contributions to the SDG achievement, which shows how each project links with the SDG Goals. (Publication Date: February 2021)



<https://www.iges.or.jp/jp/pub/jcm-sdgs-best-practices/en>

## Guideline on Gender Equality for the Joint Crediting Mechanism (JCM)\*

- MOEJ developed the “**Guideline on Gender Equality for the Joint Crediting Mechanism (JCM)**” with the aim of encouraging mainly representative participants and partner participants of the JCM Model Projects to take actions toward gender equality.

\*Start to apply from FY2020.

# JCM Business Matching Site “JCM Global Match”

## Features of the “JCM Global Match”

Launched in July 2019

Many participants all over the world including Japan and the JCM partner countries have already signed up.

Reformed on December 2<sup>nd</sup> 2020 with a lot of improvements!

1. Faster registration (takes 1 min only!)
2. Search bar to find your partners by names of technologies or companies
3. Useful communication among all participants via chat rooms
4. Opportunity to promote your company by Profile and Specialties sections
5. 1 to 1 Communication by private chat and Email addresses exchange
6. Reservation of your Scheduled Meetings

\*Google Chrome and Firefox are recommended browsers.

The screenshot shows the JCM Global Match website interface. At the top, there is a search bar and navigation links: What is JCM, How to Use, Good Practices, Open Discussion, Invitation Salon, Specialty, Scheduled Meetings, FAQ, and Inquiry. The main heading is "JCM Global Match" with the subtitle "A match-making platform for climate technology projects". Below this, there are two main sections: "Open Discussion" and "Invitation Salon". The "Open Discussion" section includes "Discussion by Country" and "Discussion by Technology". The "Invitation Salon" section includes a button to "Create a new Invitation Salon as a host" and a list of groups, such as "Solar power technology in Chile" and "太陽光発電". Below these, there is a section for "Find your partner by Type and Specialty" with categories like "Seller", "Buyer", "Consultant", and "Financier". The "Matching / Scheduled Meetings" section shows a table of "MY MATCHING (PROGRESS)" with columns for Matching Name, Status, Name, and Own. The table lists two matching entries for "Aoyama Narako" with status "Matching". At the bottom, there is a section for "Your Company's Specialties" with a button to "Register My Company's Specialties".

☆**Sign it up now from here**→

<https://gec.force.com/JCMGlobalMatch/s/>



Thank you for your kind attention



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