



Ministry of the Environment

Expanding the Joint Crediting Mechanism (JCM)

8th November, 2021

Office of the Market Mechanism
Ministry of the Environment, Japan



The Plan for Global Warming Countermeasures



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- ✓ Established on the basis of the Act on Promotion of Global Warming Countermeasures (Law) - Cabinet Decision of the current plan : October 2021

Japan's emission reduction target (NDC)

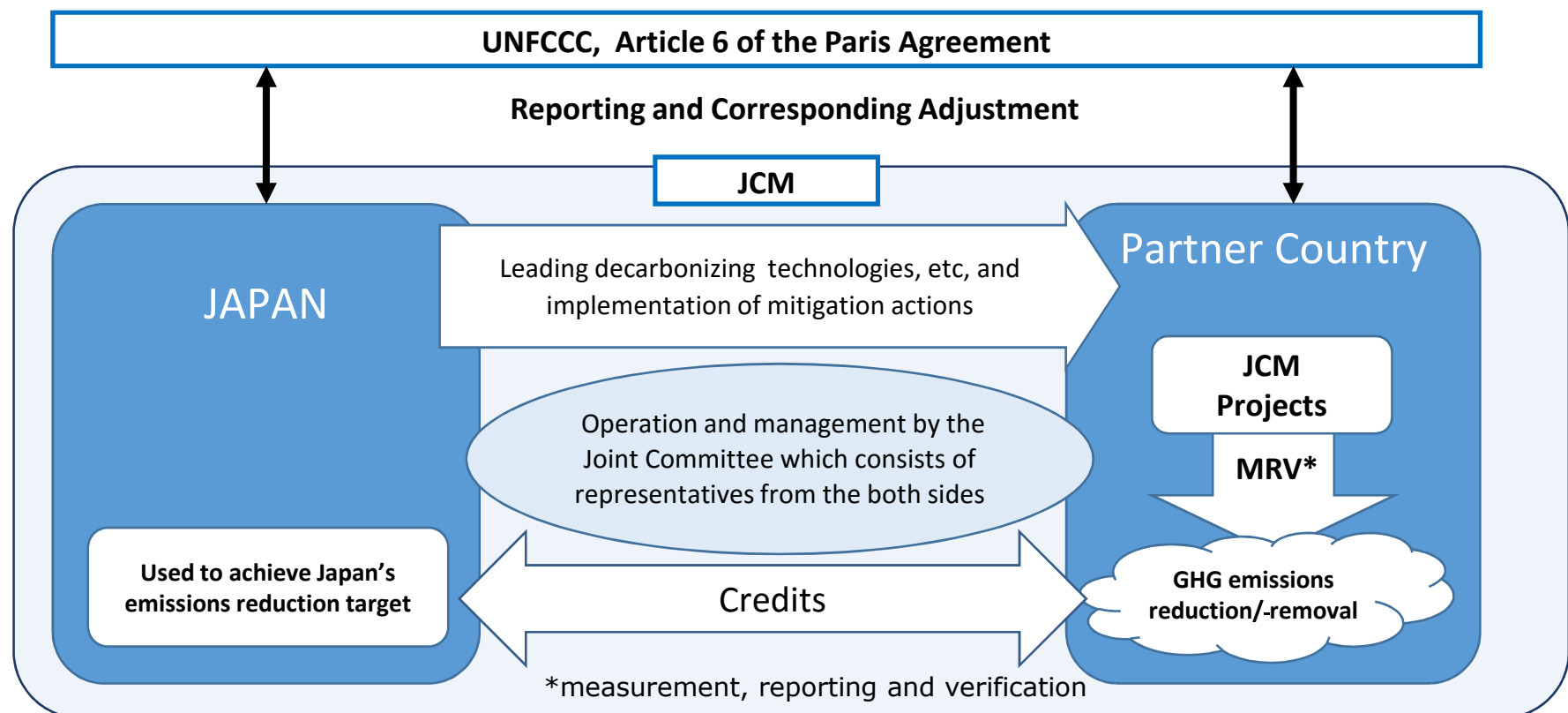
- Japan aims to reduce its greenhouse gas emissions by 46 percent in fiscal year 2030 from its fiscal year 2013 levels, setting an ambitious target which is aligned with the long-term goal of achieving net-zero by 2050. Furthermore, Japan will continue strenuous efforts in its challenge to meet the lofty goal of cutting its emissions by 50 percent.
- **the Joint Crediting Mechanism(JCM)**
 - ✓ Aiming for a cumulative GHG emission reduction of about 100 million tons of CO2 through public-private partnerships.

The Joint Crediting Mechanism (JCM)



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- Facilitating diffusion of leading decarbonizing technologies, etc. and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- Appropriately evaluating contributions from Japan to GHG emissions reduction or removal in a quantitative manner and use them to achieve Japan's emissions reduction target.
- Contributing to the ultimate objective of the UNFCCC and use of market mechanisms, including the JCM, is articulated under Article 6.



The Joint Crediting Mechanism (JCM)



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- Facilitating diffusion of leading decarbonizing technologies etc. through contributions from Japan and evaluating realized GHG emissions reduction or removal in a quantitative manner to use them for achieving Japan's emissions reduction target.
- Japan will address the high initial cost barrier of introducing advanced low-carbon technologies in the Partner countries (17 countries) through the JCM.



Waste heat recovery in Cement Industry, JFE engineering, Indonesia



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



Energy saving at convenience stores, Panasonic, Indonesia



Hydro Power Plant, Chodai Co., Ltd., Philippines



Power Generation with Methane Gas Recovery System, NTT DATA, Mexico



Upgrading air-saving loom at textile factory, TORAY etc., Indonesia, Thai, Bangladesh



Regenerative Burners in industries, Toyotsu Machinery, Indonesia



Amorphous transformers in power distribution, Hitachi Materials, Vietnam



Co-generation system at factory, Toyota, Nippon Steel Engineering, Indonesia, Thai



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



Solar power, Farmdo Co., Ltd., Mongolia



Waste to Energy Plant, JFE engineering, Myanmar



High-efficiency refrigerator, Mayekawa MFG, Indonesia



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



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

JCM Partner Countries



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- Japan has held consultations for the JCM with developing countries since 2011 and has established the JCM with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia, Mexico, Saudi Arabia, Chile, Myanmar, Thailand and the Philippines.



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)



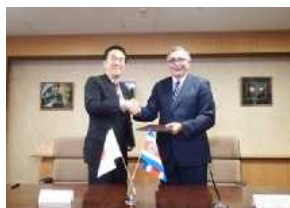
Viet Nam
Jul. 2, 2013
(Hanoi)



Lao PDR
Aug. 7, 2013
(Vientiane)



Indonesia
Aug. 26, 2013
(Jakarta)



Costa Rica
Dec. 9, 2013
(Tokyo)



Palau
Jan. 13, 2014
(Ngerulmud)



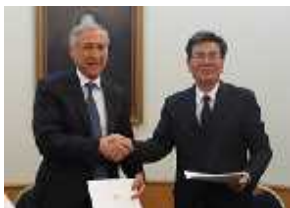
Cambodia
Apr. 11, 2014
(Phnom Penh)



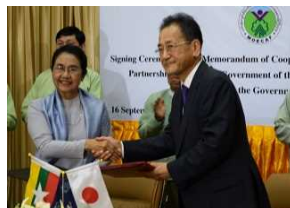
Mexico
Jul. 25, 2014
(Mexico City)



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)

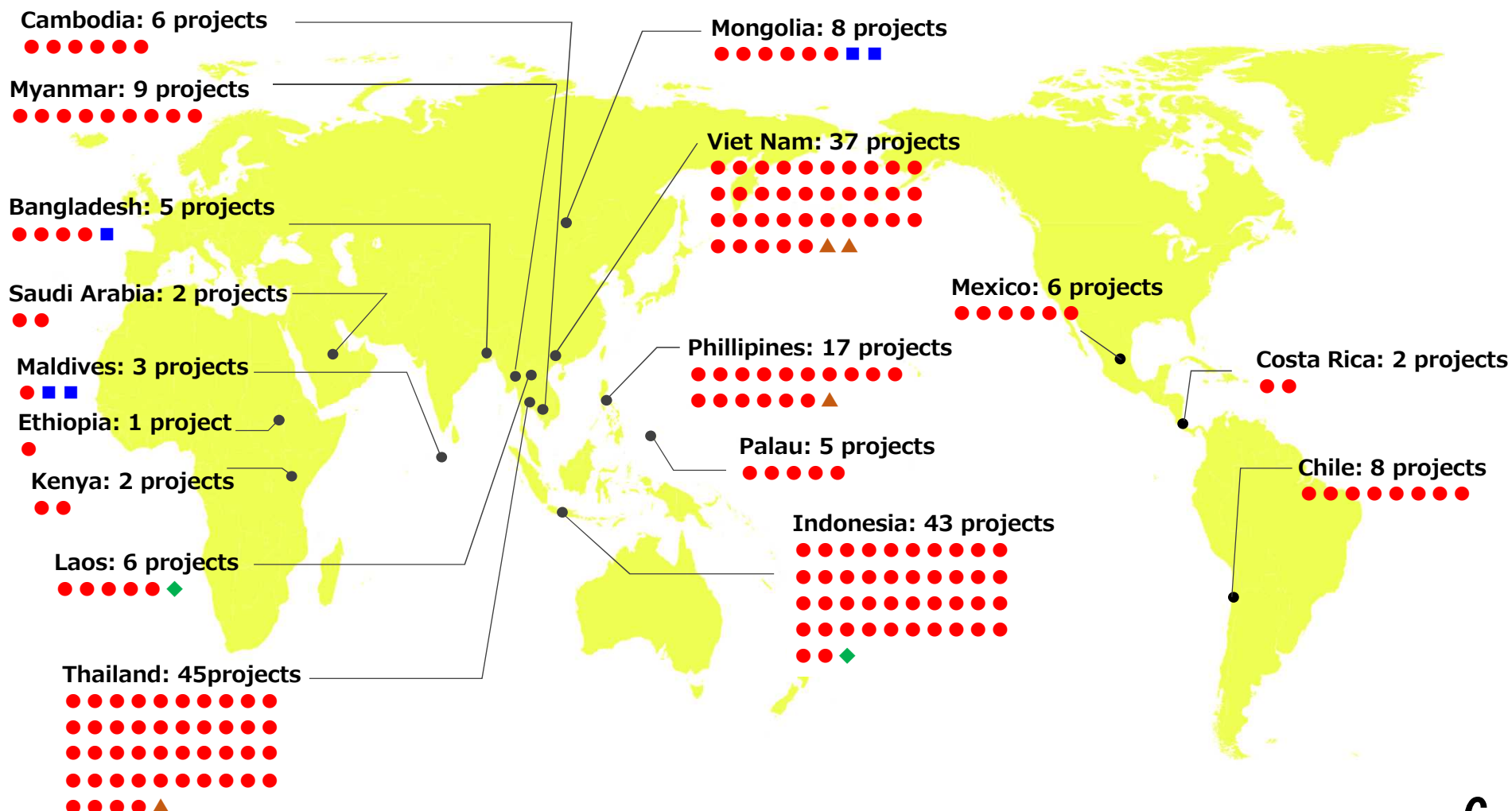
JCM Financing Programmes by MOEJ (FY2013~2021) (November, 2021)

Total 205 projects (17 partner countries)

(● Model Project: 194 projects (including Eco Lease: 3 projects), ■ ADB: 5 projects, ◆ REDD+: 2 projects, ▲ F-gas: 4 projects) Other 1 project in Malaysia

118 projects have been started operation.

58 projects with have been registered as JCM projects.



Technologies Transferred through the JCM (FY2013-2021)

- Total of **205** JCM Model Projects being selected by MOEJ's Finance Programme in **17** partner countries
- 50% for renewable energy, 40% for energy efficiency, 10% for Effective use of Energy, Transport, Waste to energy, F-gas Recovery and Destruction and REDD+ project

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

November, 2021

Effective Use of Energy (8) 4%

- Waste Heat Recovery
- Gas Co-generation

Energy efficiency (86) 40%

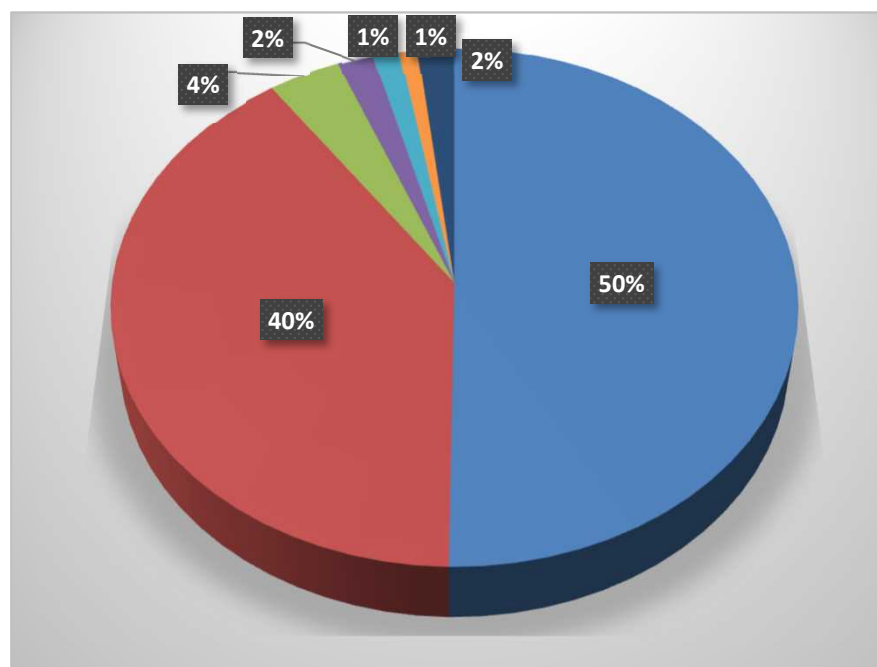
- Boiler
- Air Conditioning
- Refrigerating/Chiller
- Looms
- Transformer
- LED Lighting

F-gas (4) 2%

- Recovery & Destruction

Renewable energy (108) 50%

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



Arranging the conditions for the expansion of JCM



- ✓ FY2030 target : Aiming for a cumulative GHG emission reduction of about **100 million tons** of CO2 from JCM projects through public-private partnerships

1. Formulation of Global Rules

- Lead the discussion on Paris Agreement Article 6 (market mechanism)
- Make JCM a global de-facto standard and develop decarbonization markets



United Nations
Framework Convention on
Climate Change

2. Diversification of Financing

- Cooperate with public funds (co-financing with JBIC and JOIN)
- Cooperate with international organizations (JCM project creation with ADB, utilization of funds of the World Bank, and so on)
- Improve the conditions for JCM projects with a focus on private funds



3. Global and Regional Expansion

- Expand projects in the Indo-Pacific region target area
- Introduce advanced technologies through cooperation with third countries including the US and Australia
- Applicate JCM to Carbon Offsetting Reduction Scheme for International Aviation (CORSIA)



4. Facilitation of Decarbonization Market

- Promote the transition to decarbonization, from the formulation of a long-term strategy to its implementation
- Spread Japan's efforts on Zero Carbon Cities, environmental measures and standards (Decarbonization Domino Effect)
- Utilize "Japan Platform for Redesign: Sustainable Infrastructure" (413 members joined, as of now)



JCM Model Projects by MOEJ

Budget for projects starting from FY 2021 is approx. 8.3billion JPY (approx. USD 90million) in total by FY2023
(1 USD = 100 JPY)

Finance part of an investment cost
(less than half)

Government of Japan

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

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 CO₂ 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.

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

Budget for FY2021

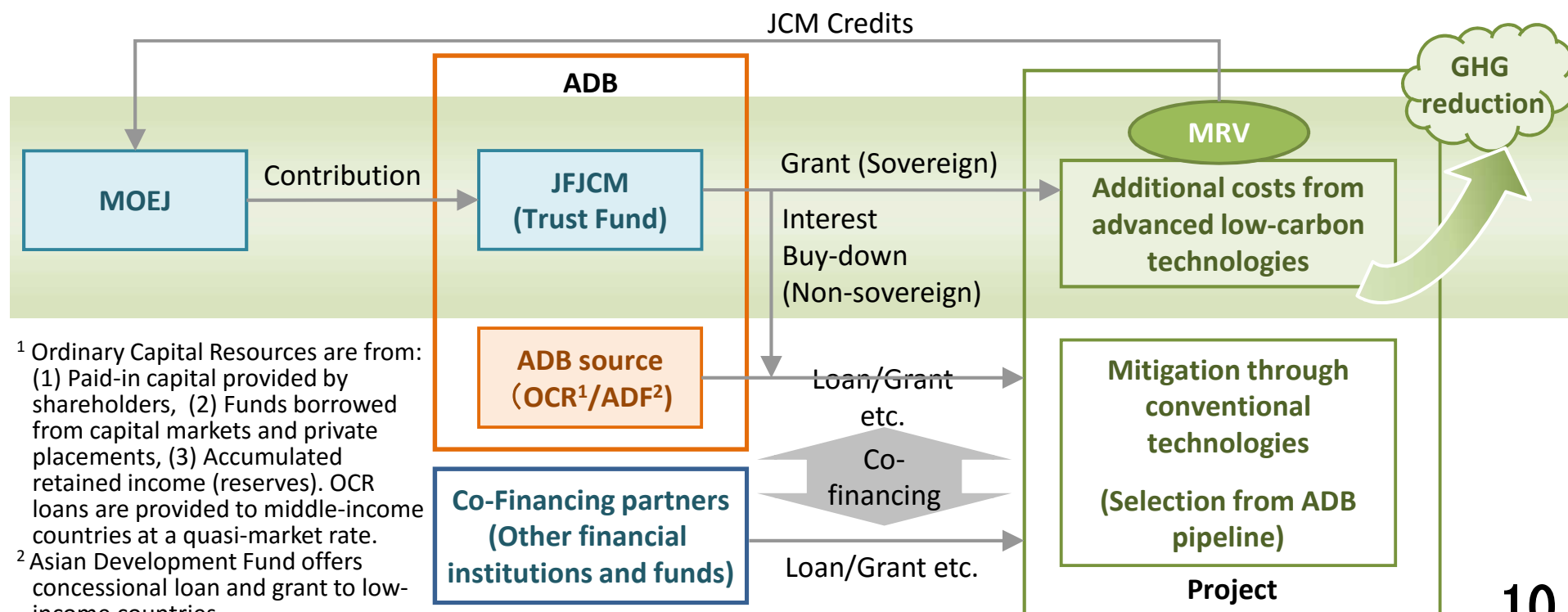
JPY 1 billion (approx. USD 10 million)

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



JCM F-gas Recovery and Destruction Model Project by MOEJ

【Budget for FY 2021】

60 million JPY (approx. 0.60 million USD) (1 USD = 100JPY)

Finance part of the cost in flat-rate

Government of Japan

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 CO₂, 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)



Collaboration with International Organizations



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■ ADB

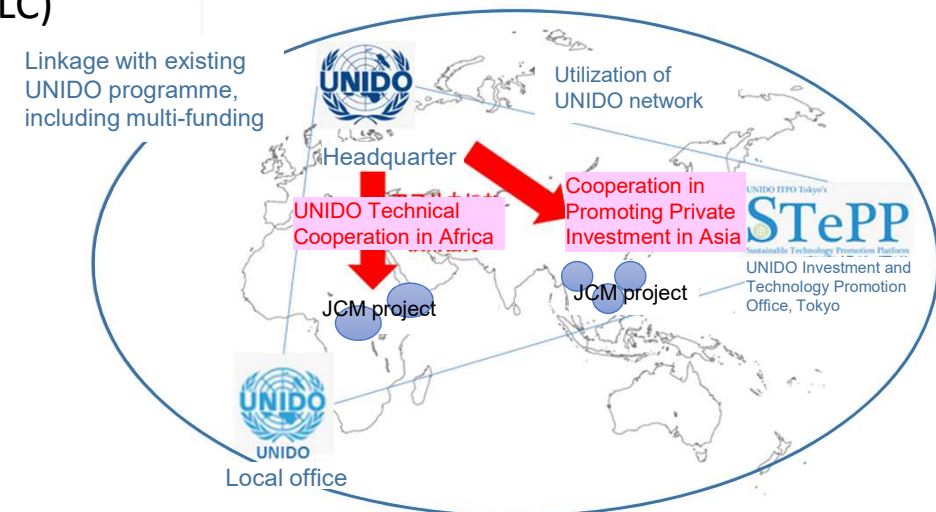
- Cooperation on Japan Fund for the JCM since 2013
- Collaboration on Paris Agreement Article 6 and SDGs
- Participation in WS held by ADB

■ World Bank

- Memorandum of Cooperation for scaling-up of the JCM. (Aug.27.2019)
- Develop the JCM by utilizing various World Bank's initiatives and programs
 - Partnership for Market Implementation(PMI), Innovate 4 Climate (I4C), Carbon Pricing Leadership Coalition (CPLC)

■ UNIDO

- Signed Joint Declaration on Environmental Cooperation in order to support the JCM. (Nov.10.2020)
- Cooperation in the formation of the JCM project in Africa and Asia
- Japan-UNIDO Week “PARTNERING FOR ISID: New challenges and opportunities for the UNIDO-Japan cooperation” (June 29, 2021)



JCM x SDGs : Recent Development



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- ✓ **Contribute to the SDGs through JCM and create JCM projects**

JOINT CREDITING MECHANISM CONTRIBUTIONS TO SDGs

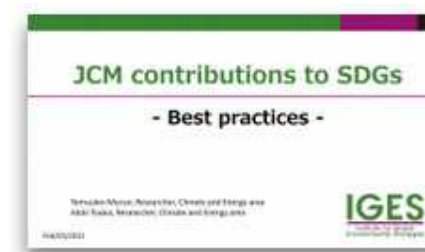
- **Guidance** : The first publication to analyze the interlinkage between the JCM and SDGs. It aims to clarify how the JCM contributes to SDGs.

<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 action toward gender equality. < Start to apply from FY2020>

JCM Business Matching Site “JCM Global Match”



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Features of the “JCM Global Match”

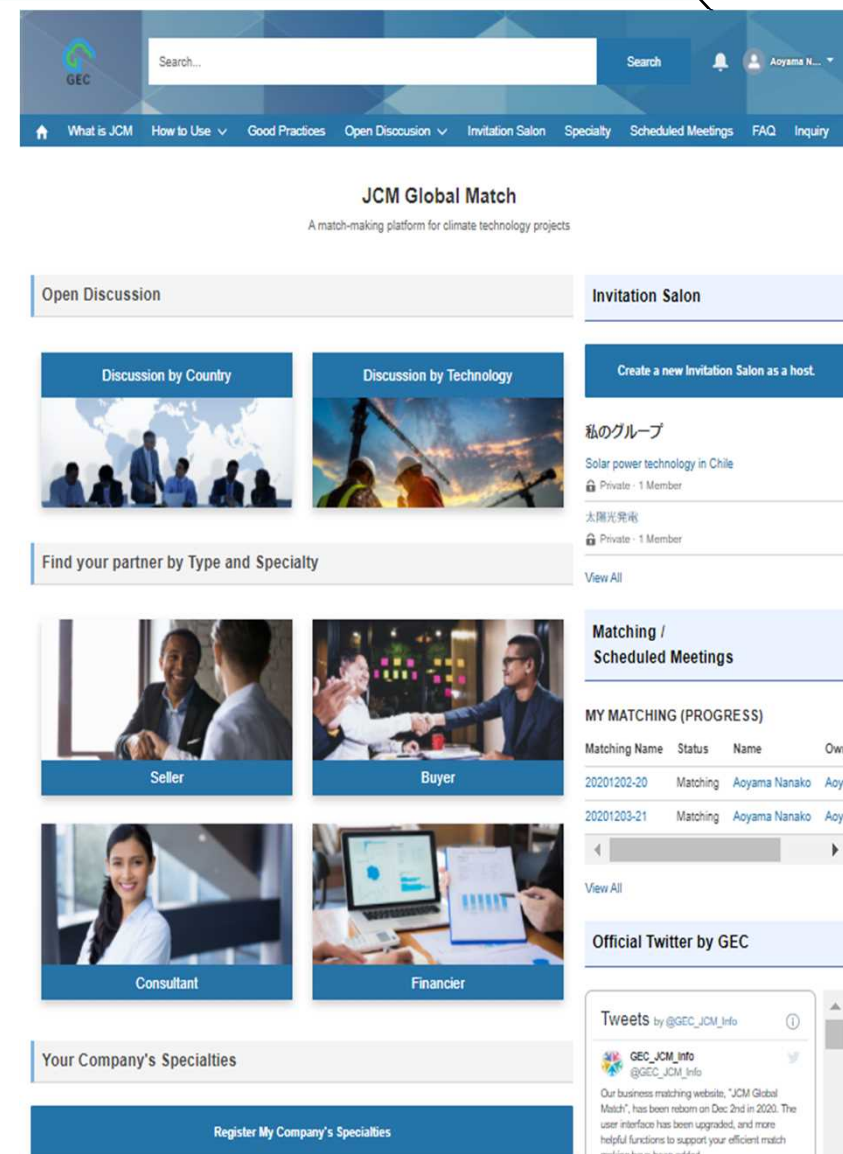
Launched in July 2019

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

Reformed on December 2nd 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.



☆**Sign it up now from here→** <https://gec.force.com/JCMGlobalMatch/s/>



Thank you for your kind attention



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