



Ministry of the Environment

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# Japan's Policy for Carbon Neutrality and the Role of JCM (Joint Crediting Mechanism)

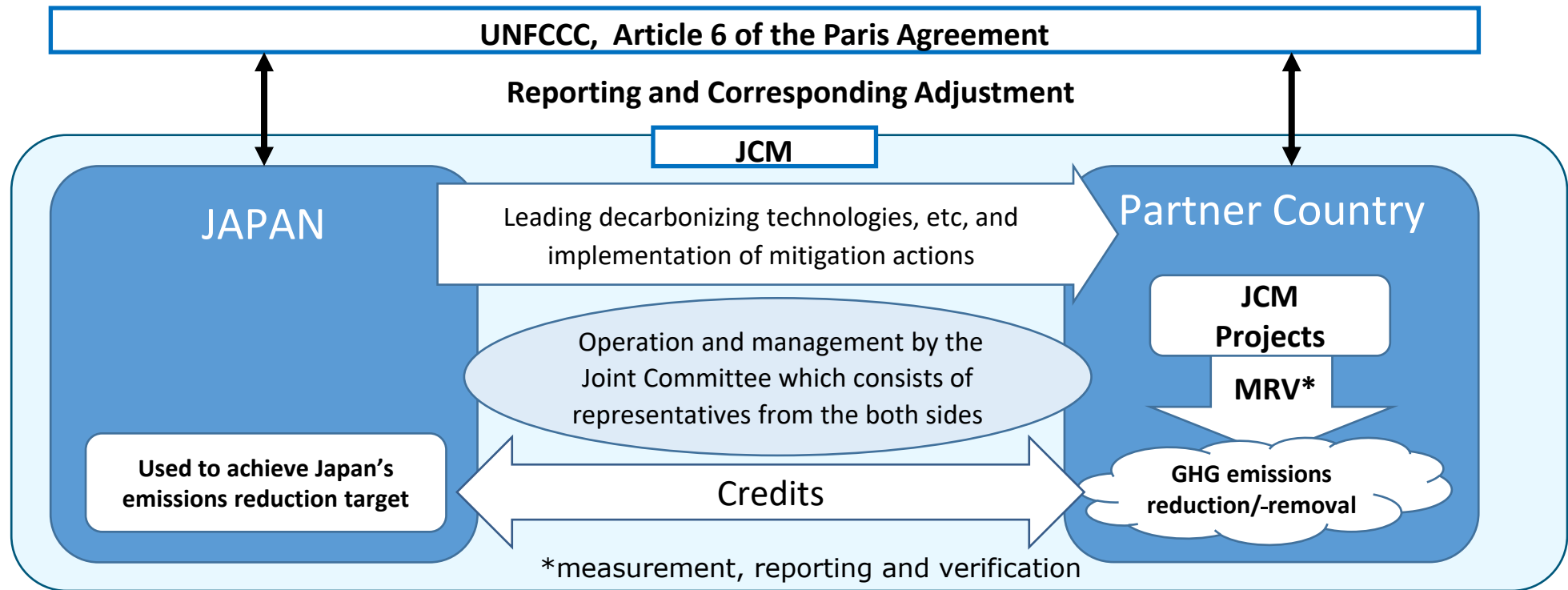
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September 2, 2021

Ministry of the Environment ,Japan



# Basic concept of JCM and contribution to carbon neutrality



## • Cooperation towards achieving carbon neutrality,

- With the expected agreement on Article 6 of the Paris Agreement at COP26 in this year, the market mechanism under the Article 6 include JCM will benefit not only for public sector but also for the private sector to utilize GHG reductions to achieve their own carbon neutrality goal.
- Growing expectation for JCM, allowing GHG emission reductions to be realized in partner countries and contributing to the achievement of Japan's emissions reduction goal at the same time.
- MoE Japan is strengthening key public-private partnerships to promote the development of "environmental infrastructures" overseas through JCM.

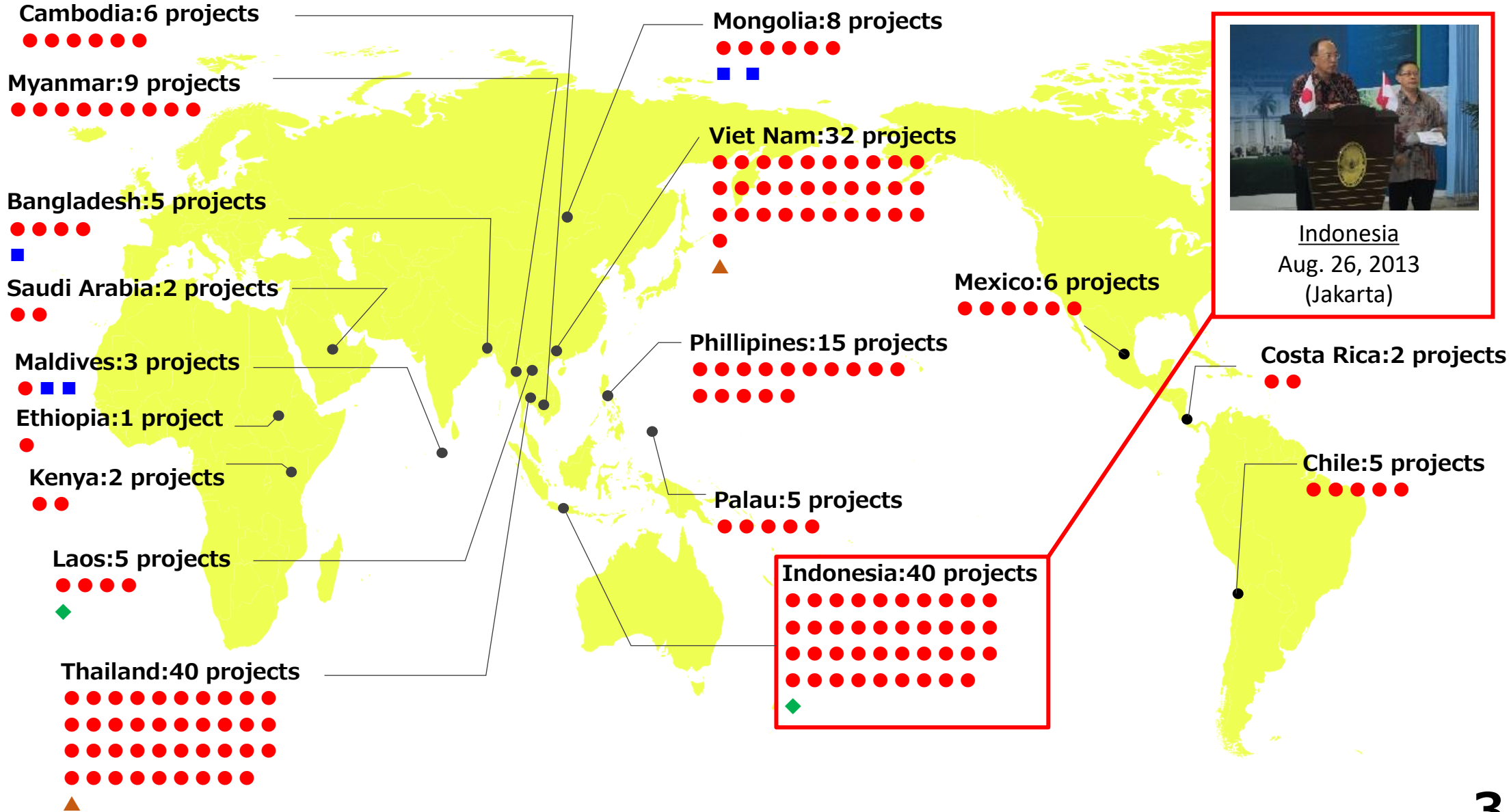
# JCM Financing Programmes distribution (FY2013~2020) (June, 2021)

## Total 186 projects (17 partner countries)

(● Model Project: 177 projects (including Eco Lease: 1 project), ■ ADB: 5 projects, ◆ REDD+: 2 projects, ▲ F-gas: 2 projects) Other 1 project in Malaysia

115 projects have been started operation.

57 projects with have been registered as JCM projects.



# Examples of the JCM Financing Programmes

- Facilitating decarbonizing technologies through contributions from Japan
- Evaluating GHG emissions reduction in quantitative manner to issue the credit shared by the partner country and Japan



**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**



**High-efficiency refrigerator, Mayekawa MFG, Indonesia**



**Regenerative Burners in industries, Toyotsu Machinery, Indonesia**



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



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



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



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



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



**Solar power, Farmdo Co., Ltd., Mongolia**



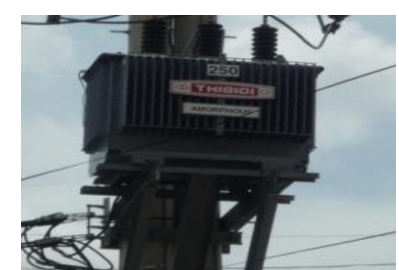
**Waste to Energy Plant, JFE engineering, Myanmar**



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



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



**Amorphous transformers in power distribution, Hitachi Materials, Vietnam**

# Technologies Transferred through JCM (FY2013-2021)

- Total of 186 JCM Projects being developed in 17 partner countries (June, 2021)
- 42% for energy efficiency, 48% for renewable energy, 10% 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) 2%

- Digital Tachographs
- Modal Shift
- CNG-Diesel Hybrid

## REDD+ (2) 1%

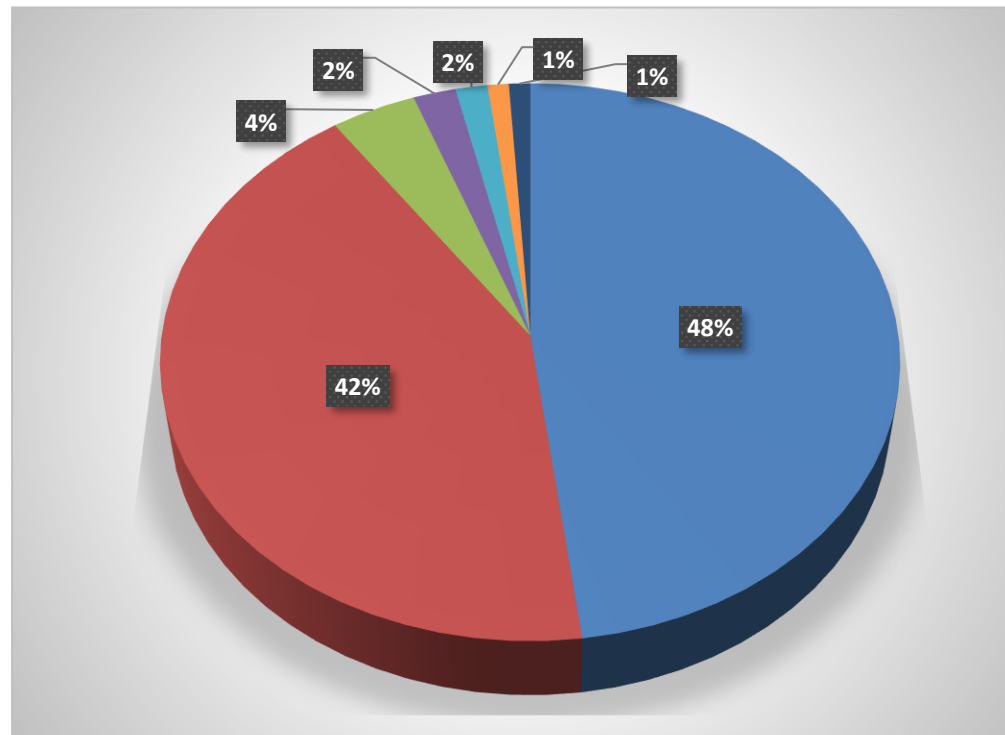
- Controlling slash and burn

## Effective Use of Energy (8) 4%

- Waste Heat Recovery
- Gas Co-generation

## Energy efficiency (83) 42%

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



## F-gas (2) 1%

- Recovery & Destruction

## Renewable energy (94) 48%

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

# Facilitating global expansion of Environmental Infrastructure through JCM

## <FY2030 Target >

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

(maximum project size of about 1 trillion Japanese Yen (approx. ten billion USD) through public-private partnerships with a diversification of funds accelerating the implementation of projects).

- The project will also be used for Japan's emission reduction goal.

⇒To realize above, MOEJ will proceed condition arrangement for JCM expansion

## 1. Renewable Energies

(Solar Power, Wind Power, Hydro Power, Geothermal Energy, Biomass Energy, Green Hydrogen, and so forth)



Solar Power



Wind Power

## 2. Green Logistics (Including Cold Chain)

(Non-Fluorocarbon Cooling System, Modal Shift, Airports, Ports and Harbors, and so forth)



High-Efficient Freezer



Modal Shift

## 3. Waste management Infrastructure

(Waste to Energy, Recycling system, Landfill and so forth)



Waste to Energy



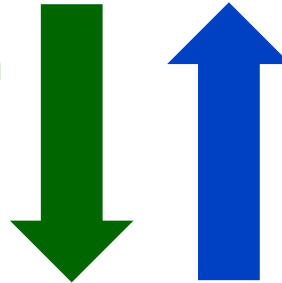
Improvement of landfill  
(Fukuoka method)

※ Further including energy efficient facilities, effective use of energies, CCUS, fluorocarbons recovery and destruction, Johkasou, and REDD+, in addition to the above

# FY2021 JCM Finance Scheme proposed by MOEJ

Government of Japan

Finance part of an investment cost (less than half)



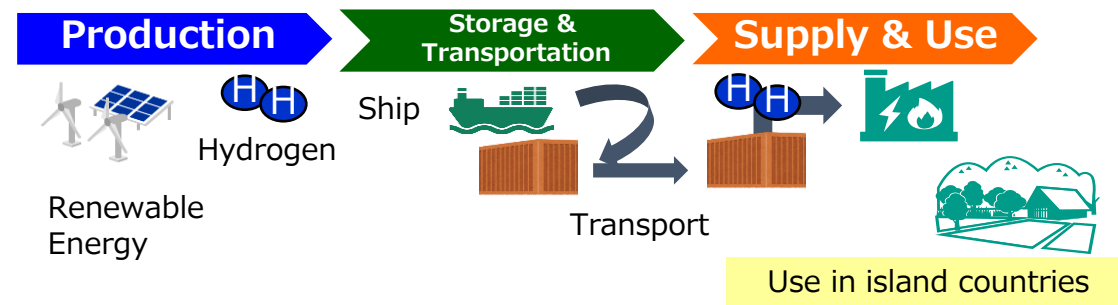
Conduct MRV and expected to deliver JCM credits issued

International consortiums  
(which include Japanese entities)

**Budget for projects starting from FY 2021 is about 8.8 billion JPY (approx. USD 88 million) \* in total by FY2023**

\*including

- Financing Program to Demonstrate Decarbonization Technology for Realizing Co-Innovation
- Pilot project for comprehensive support throughout the whole hydrogen supply chain abroad



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

## Budget for FY2021:

JPY 1 billion (approx. USD 10 million)

## Scheme:

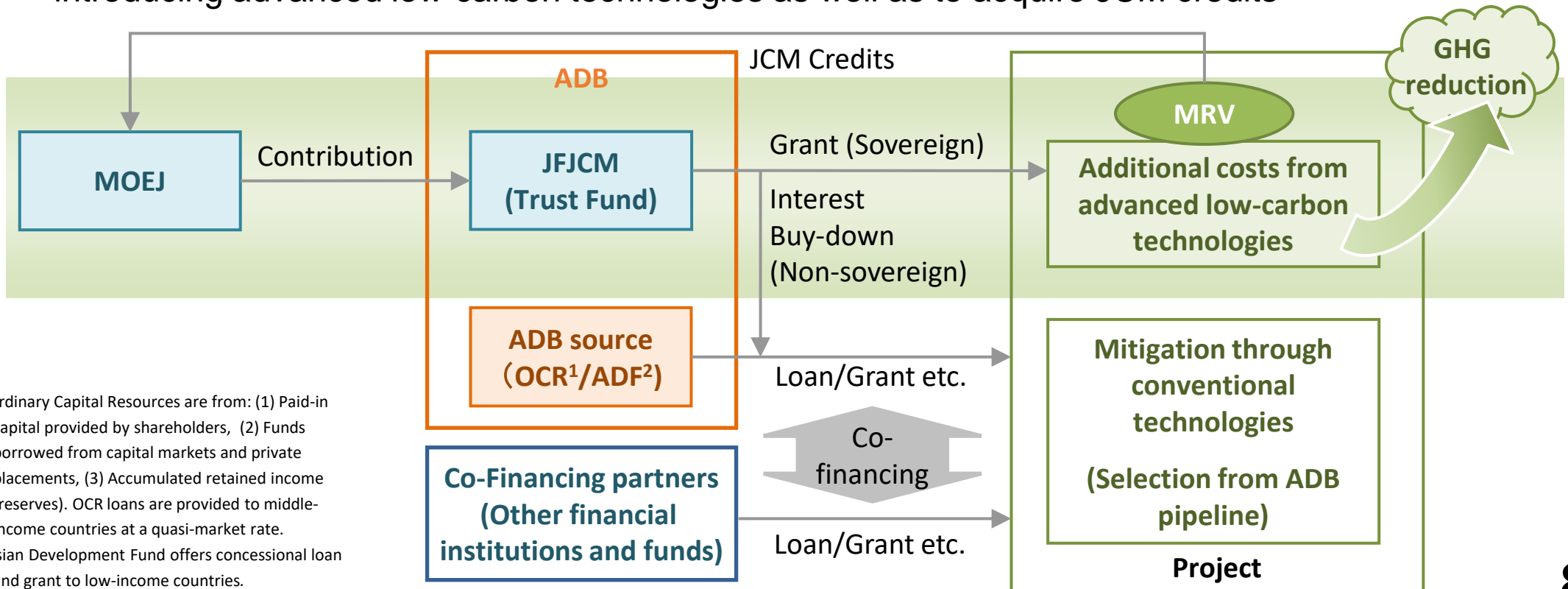
To provide the financial incentives for the adoption of advanced low-carbon technologies which are superior in GHG emission reduction but expensive in ADB(Asian Development Bank)-financed projects

## 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



Maldives, POISED PJ



<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.



Thank you for your kind attention



**Ministry of the Environment**