



Ministry of the Environment



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

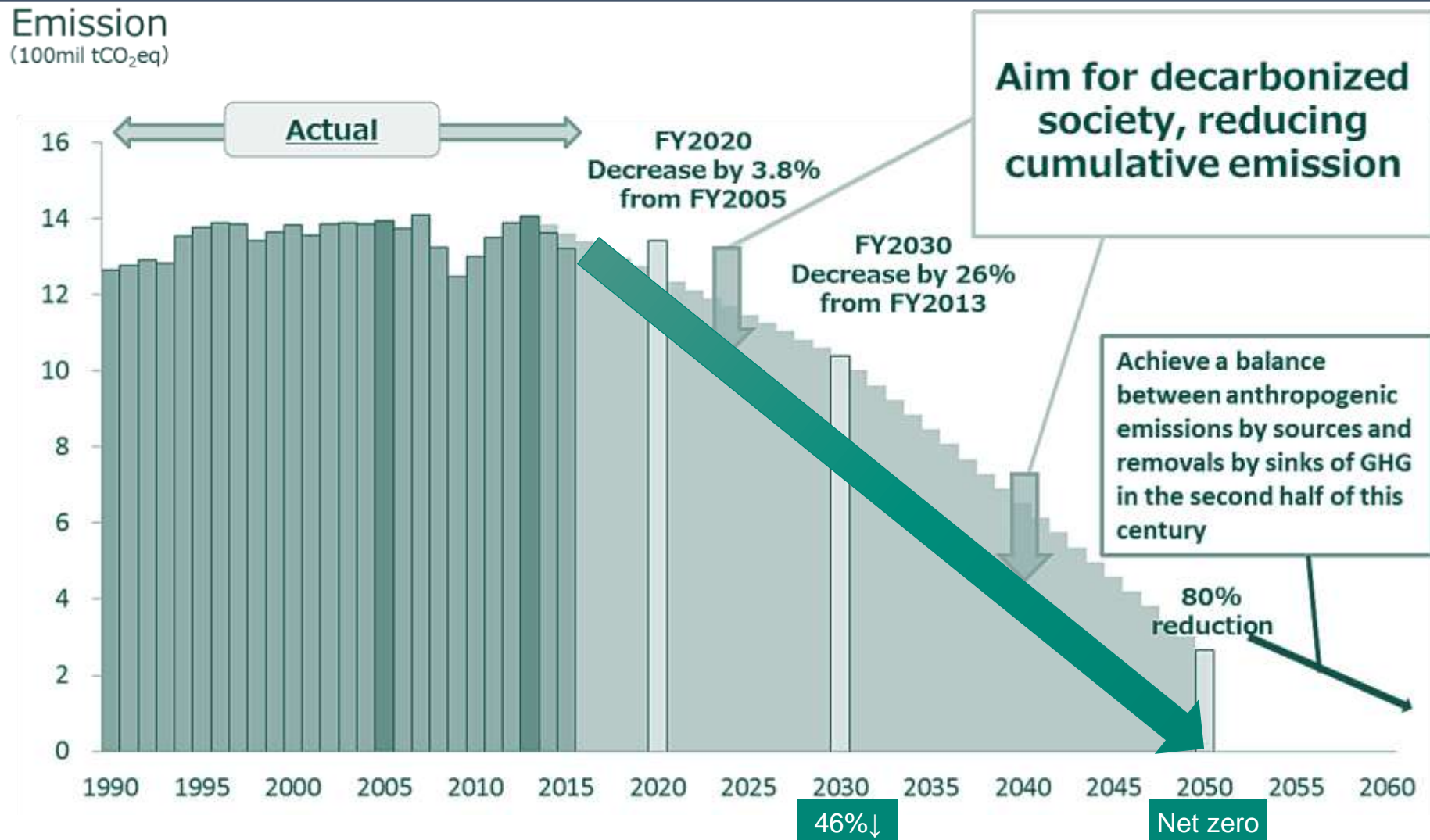
August 25, 2022

Ministry of the Environment ,Japan



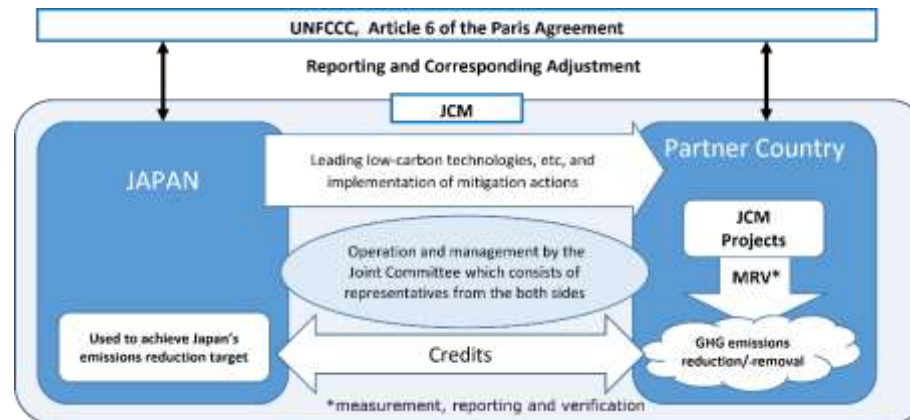
GHG emissions and target in Japan

- ❑ **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 CO₂ eq. (5.0% reduction to 2019, 18.4% reduction to 2013)
- ❑ **JCM target: cumulative GHG emission reduction for 100 mil tons** of CO₂ eq. by 2030



The Joint Crediting Mechanism (JCM)

- Since 2013, Japan has established the JCM with **17** partner countries and over **200** projects have been selected.
- Under the JCM scheme, Japan is facilitating diffusion of leading decarbonizing technologies and infrastructure, etc. as well as implementation of mitigation actions in partner countries. The JCM contribute to the achievement of both countries' NDCs while ensuring the avoidance of double counting through corresponding adjustments.



JCM targets

- Aiming to contribute to international emission reductions and removals at the level of **a cumulative total of approximately 100 million t-CO₂ by fiscal year 2030** through public-private collaborations. (October 2021, Cabinet Decision)
- As the implementation rules for Article 6 (market mechanisms) of the Paris Agreement was concluded at COP26, **utilization of the JCM will be further explored**.
- For achieving the target of the JCM, accelerating consultations to expand partner countries up to approximately **30 countries worldwide by around 2025 from the current 17 countries**. (June 2022, Cabinet Decision)

JCM Partner Countries

- 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



Bangladesh
Mar. 19, 2013
(Dhaka)



Ethiopia
May 27, 2013
(Addis Ababa)



Kenya
Jun. 12, 2013
(Nairobi)



Maldives
Jun. 29, 2013
(Okinawa)



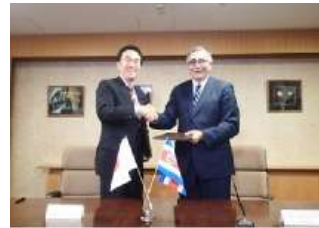
Viet Nam
Jul. 2, 2013
Oct.14, 2021 (Hanoi)



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)

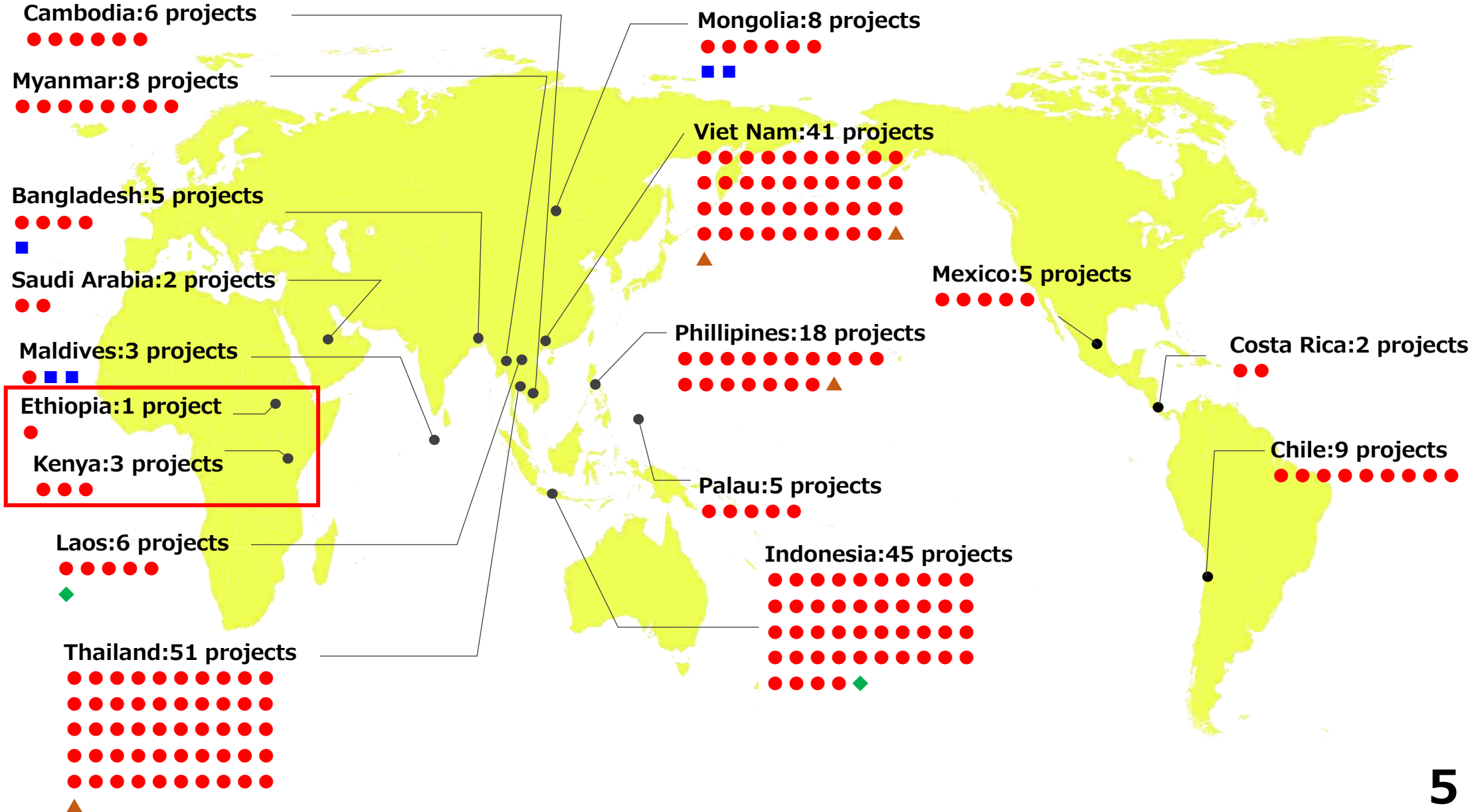
JCM Financing Programmes distribution (FY2013~2022) (August, 2022)

Total 218 projects (17 partner countries)

(● Model Project: 207 projects (including Eco Lease: 5 project), ■ ADB: 5 projects, ◆ REDD+: 2 projects, ▲ F-gas: 4 projects) Other 1 project in Malaysia

124 projects have been started operation.

65 projects with have been registered as JCM projects.



Examples of 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 Coporation, 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]



Regenerative Burners in industries, Toyotsu Machinery, Indonesia



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

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 218 JCM Projects being developed in 17 partner countries (August, 2022)
- 38% for energy efficiency, 52% for renewable energy, 4% for Effective use of Energy, Transport, Waste to energy, F-gas Recovery and Destruction and REDD+ project shares

August, 2022

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

Effective Use of Energy (10) 4%

- Waste Heat Recovery
- Gas Co-generation

F-gas (4) 2%

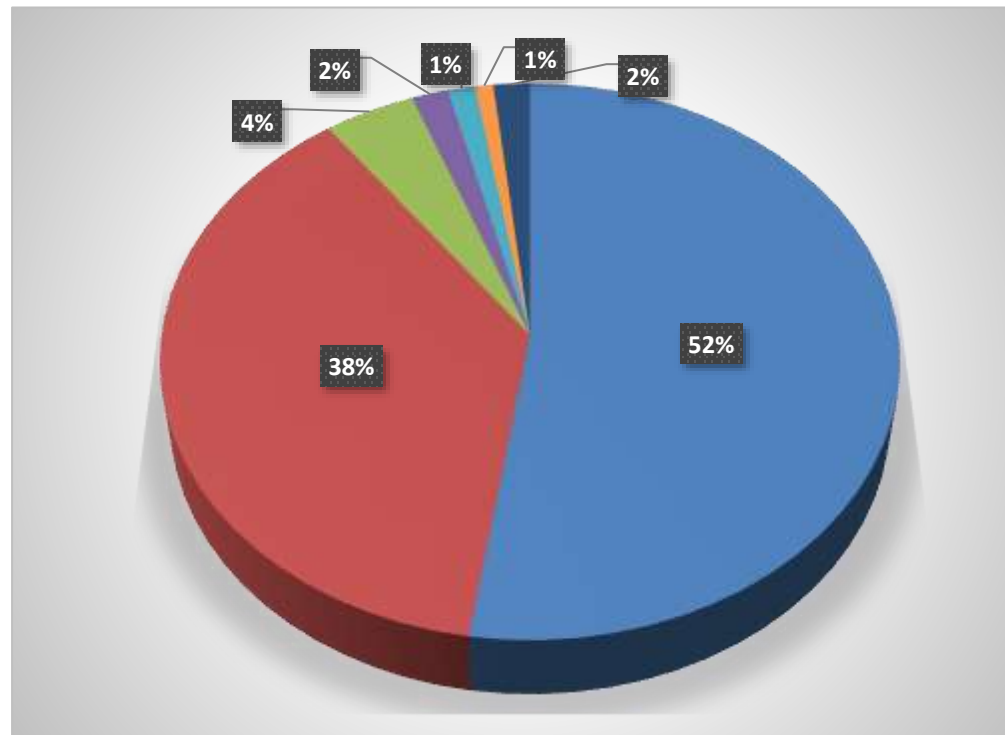
- Recovery & Destruction

Energy efficiency (86) 38%

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

Renewable energy (120) 52%

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



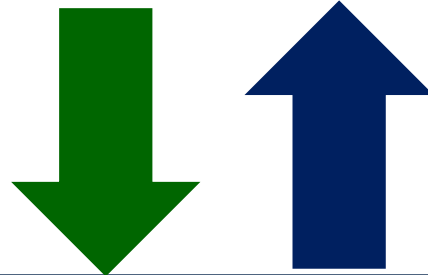
FY2022 JCM Finance Scheme proposed by MOEJ

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 (less than half)

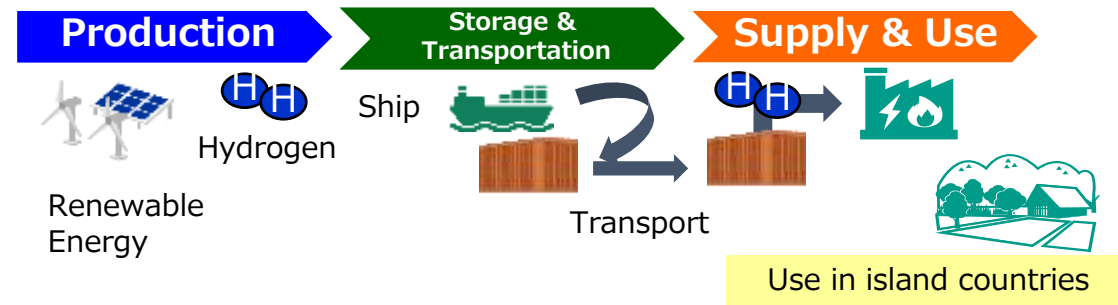


Conduct MRV and expected to deliver JCM credits issued

International consortiums
(which include Japanese entities)

*including

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



MOEJ - Implementation of Article 6 following COP26

- At COP26, the Rulebook for the Article 6 (market mechanism) of the Paris Agreement was concluded, paving the way for utilizing market mechanisms to reduce global emissions.
- Leading Article 6 negotiations and being a frontrunner with the experience of the Joint Crediting Mechanism (JCM), Japan will take the following three actions to contribute to global decarbonization.



< 3 Actions >

1. **Expanding JCM partner countries, and strengthen project development and implementation in collaboration with international organizations;**
 - Accelerate expansion of the JCM partner countries, **mainly in the Indo-Pacific region and strengthen in African region**
 - Strengthen cooperation with **the Asian Development Bank (ADB), the UN Industrial Development Organization (UNIDO), the World Bank, and others**
2. **Scale up the JCM by mobilizing further private finance**
3. **Contribute to the global operationalization of market mechanisms.**
 - Supporting capacity building for related officials and project operators with **UNFCCC's Regional Collaboration Centre (RCC)**.



Regional Collaboration Centre – Bangkok
Promoting Action Against Climate Change

Thank you for your kind attention



Ministry of the Environment