



Recent development of the JCM (Joint Crediting Mechanism)

Webinar on the Joint Crediting Mechanism (JCM) Implementation in Chile - Innovation for Carbon Neutrality through the JCM -

February 2, 2022 Ministry of the Environment, Japan







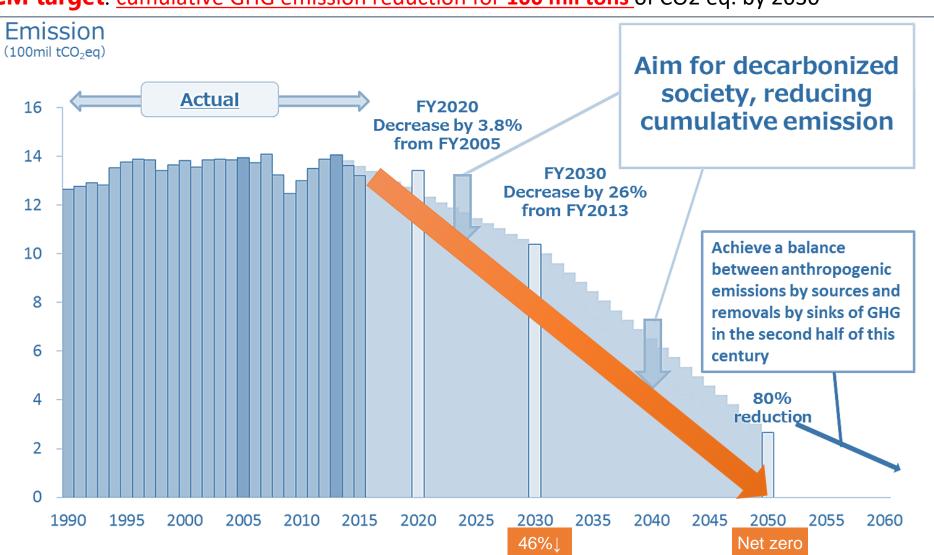




GHG emissions and target in Japan

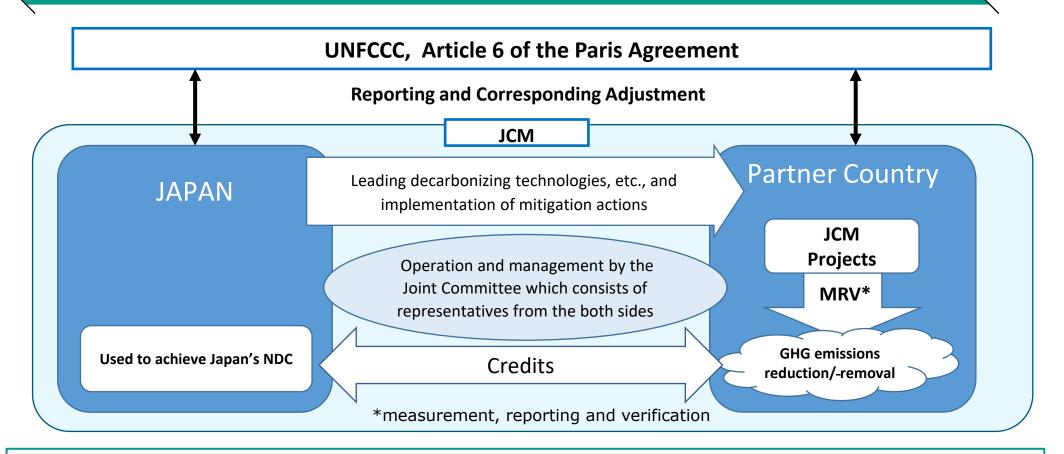


- ☐ Long-term goal: Net zero emissions by 2050 compared to 2013
- ☐ Mid-term target: 46% emission reduction by 2030 compared to 2013
- \Box GHG emissions in 2020: 1,149 mil ton of CO_2 eq. (5.0% reduction to 2019, 18.4% reduction to 2013)
- ☐ **JCM target**: <u>cumulative GHG emission reduction for **100 mil tons** of CO2 eq. by 2030</u>





Basic concept of the JCM and contribution to carbon neutrality



Cooperation towards achieving carbon neutrality

With the successful conclusion of the Rulebook for <u>Article 6 of the Paris Agreement</u> at COP26, carbon markets will further expand. The JCM, as a pioneering mechanism under the Article 6, will benefit not only for GHG emission reductions, but also for the sustainable development of the partner countries.



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)



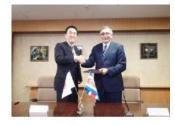
Viet Nam
Jul. 2, 2013
Oct.14, 2021 (Hanoi)



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 Programme by MOEJ



	JCM Model Projects (including ECO Lease scheme)	ADB Trust Fund: Japan Fund for JCM (JFJCM)	JCM F-gas Recovery and Destruction Model Project
Overview	Support projects which reduce GHG emissions by utilizing leading decarbonizing technologies in developing countries.	Provide the financial incentives for the adoption of advanced low-carbon technologies which are superior in GHG emission reduction but expensive in ADB-financed projects	Support projects that recover and destroy of F-gas (GHG except for energy-related CO2, etc.) from used equipment instead of releasing to air, and reduce emissions
FY2022 Draft budget	approx. 171 million in total by FY2024	approx. 10 million	approx. 0.60 million
Type of support	Subsidy	Grant (Sovereign) / Interest Buy-down (Non-sovereign)	Subsidy
More info	 https://gec.jp/jcm/kobo/ https://www.carbon- markets.go.jp/eng/jcmgp/inde x.html 	https://www.adb.org/what-we- do/funds/japan-fund-for-joint- crediting-mechanism	Please contact us.

Need business partners? JCM Global Match: https://gec.jp/jcm/globalmatch/



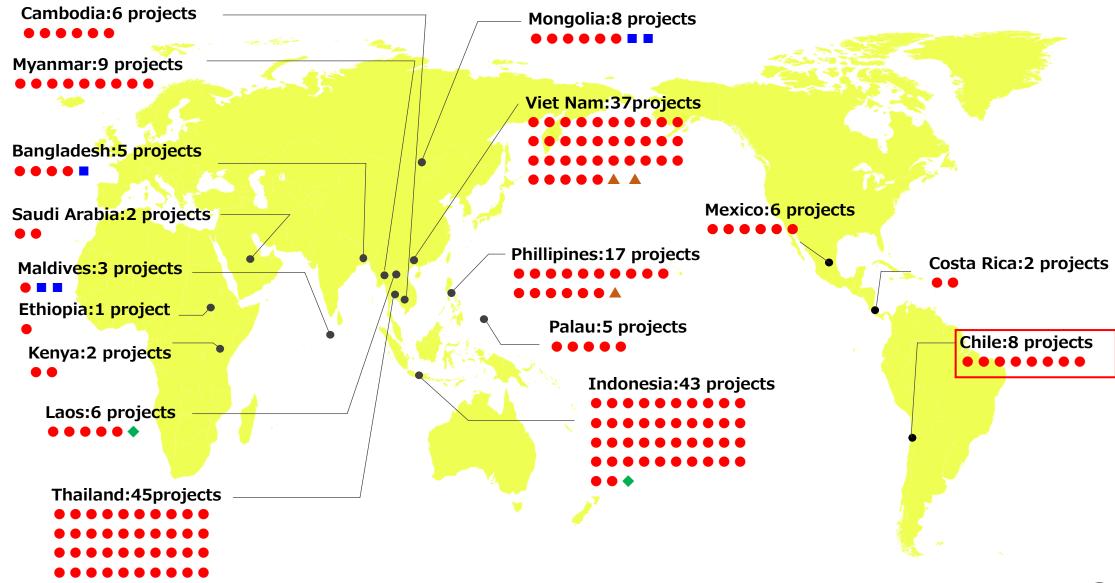
JCM Financing Programmes by MOEJ (FY2013~2021) (December, 2021)

Total 205projects (17 partner countries)

(●Model Project: 194 projects(including Eco Lease: 3project), ■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.





Examples of the JCM Model Projects

Renewable Energy











Energy efficiency [Consumer sector]



High-efficiency refrigerator, Mayekawa MFG, Indonesia



Energy saving at convenience stores, Panasonic, Indonesia



High-efficiency airconditioning system, Hitachi, Daikin, Vietnam

Energy efficiency [Industrial sector]



Regenerative Burners in industries, Toyotsu Machinery, Indonesia

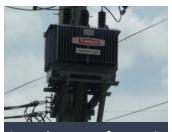


Upgrading air-saving loom at textile factory, TORAY etc., Indonesia, Thai, Bangladesh

Energy efficiency [Urban sector]



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

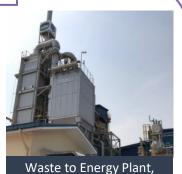


Amorphous transformers in power distribution, Hitachi Materials, Vietnam

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 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

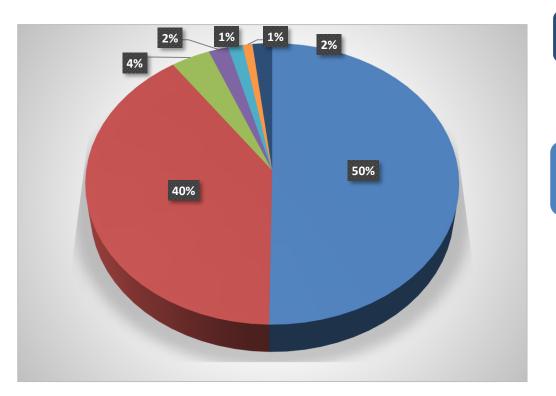
Feburuary,2022

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%

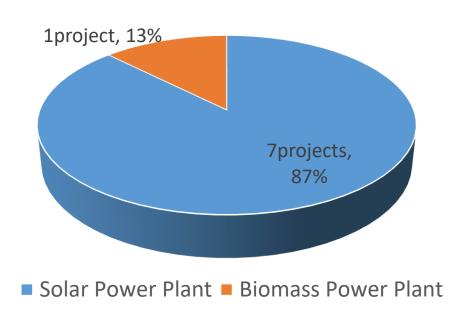
- Solar(&Storage battery)
- Micro hydro
- Wind
- Biomass
- Geothermal

Recent development of the JCM in Chile

- Ministry of the Environment
- 3 JCM Model Projects were newly selected in FY2021.
- Solar power projects account for the largest proportion. MOEJ also would like to support other renewable energy projects.

Project Title	Sector	
9MW Solar Power Project in Casablanca, Valparaiso Region	Renewable Energy	
9MW Solar Power Project in Yungay, Biobio Region	Renewable Energy	
3MW Solar Power Project Utilizing Farmland in Maule	Renewable Energy	
Region New projects from FY2021		

Percentage by technologies of JCM Financing Programmes in Chile





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. Expand 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 Africa
 - 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
- Regional Collaboration Centre Bangkok Promoting Action Against Climate Change
- 3. Contribute to the global operationalization of market mechanisms.
 - Supporting capacity building for related officials and project operators with <u>UNFCCC's</u> <u>Regional Collaboration Centre (RCC)</u>.

Thank you for your kind attention

