

# Recent development of the JCM (Joint Crediting Mechanism)

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17th February, 2022 Ministry of the Environment, Japan







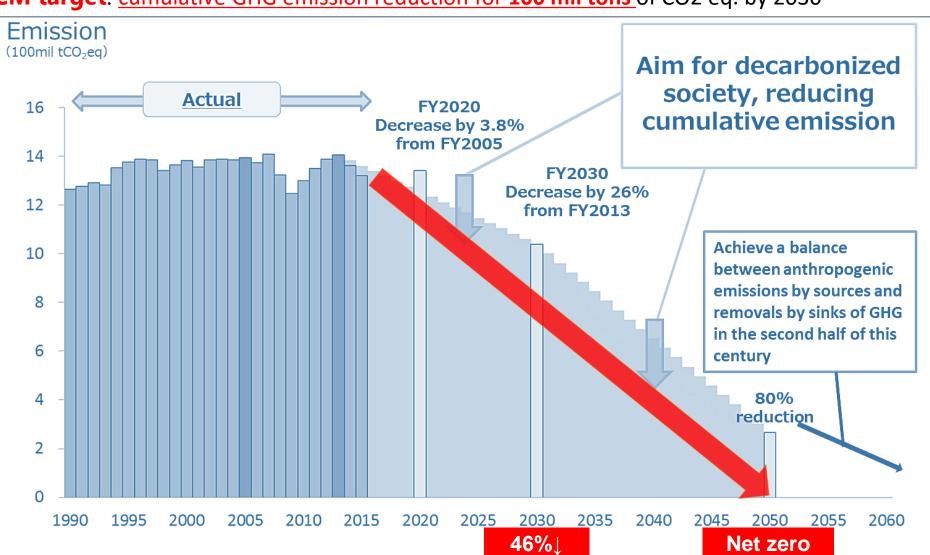




# GHG emissions and target in Japan

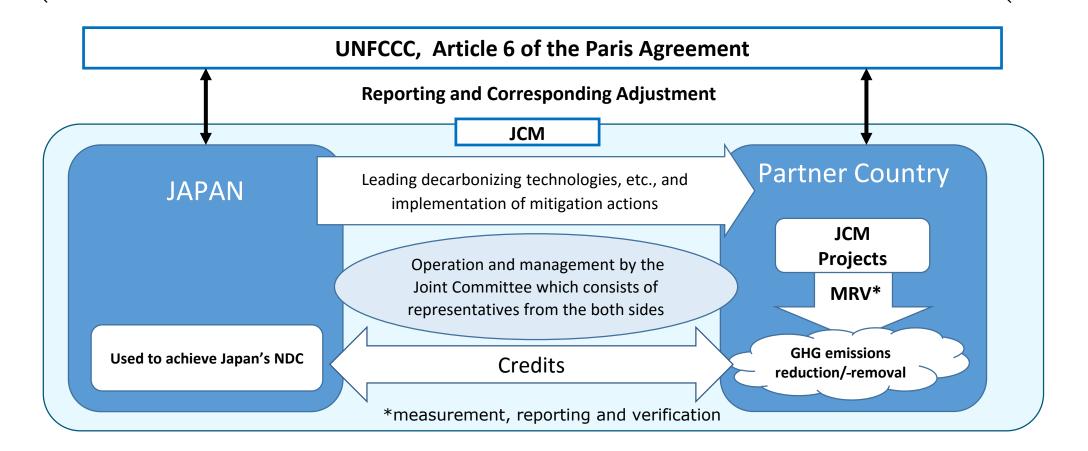


- ☐ Long-term goal: Net zero emissions by 2050 compared to 2013
- ☐ Mid-term target: 46% emission reduction by 2030 compared to 2013
- GHG emissions in 2020: 1,149 mil ton of  $CO_2$  eq. (5.0% reduction to 2019, 18.4% reduction to 2013)
- ☐ **JCM target**: <u>cumulative GHG emission reduction for **100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





### Basic concept of the JCM and contribution to carbon neutrality



### Cooperation towards achieving carbon neutrality and sustainable development

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 Article 6, will benefit not only for GHG emission reductions, but also for the sustainable development of the partner countries.



# The JCM related Articles in the Paris Agreement

# **Article 6 of the Paris Agreement**

- 2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.
- 3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.
- Use of market mechanisms, including the JCM, is articulated under Article 6 which prescribes for the use of emissions reductions realized overseas towards national emissions reduction targets.
- The amount of emissions reduction and removal acquired by Japan under the JCM will be appropriately counted as Japan's reduction in accordance with the Paris Agreement.
- The detailed rules of Article 6 of the Paris Agreement was agreed in November 2021.



### **JCM Partner Countries**

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)



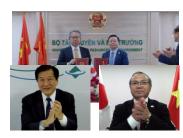
Ethiopia May 27, 2013 (Addis Ababa)



Kenya Jun. 12, 2013 (Nairobi)



Maldives
Jun. 29, 2013
(Okinawa)



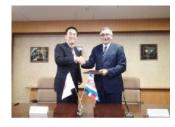
Viet Nam
Jul. 2, 2013
Oct.14, 2021 (Hanoi)



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)



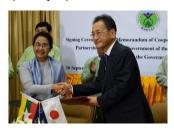
Mexico Jul. 25, 2014 (Mexico City)



Saudi Arabia May 13, 2015



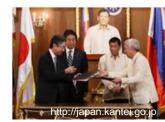
Chile May 26, 2015 (Santiago)



Myanmar Sep. 16, 2015 (Nay Pyi Taw)



Thailand Nov. 19, 2015 (Tokyo)



Philippines
Jan. 12, 2017
(Manila)



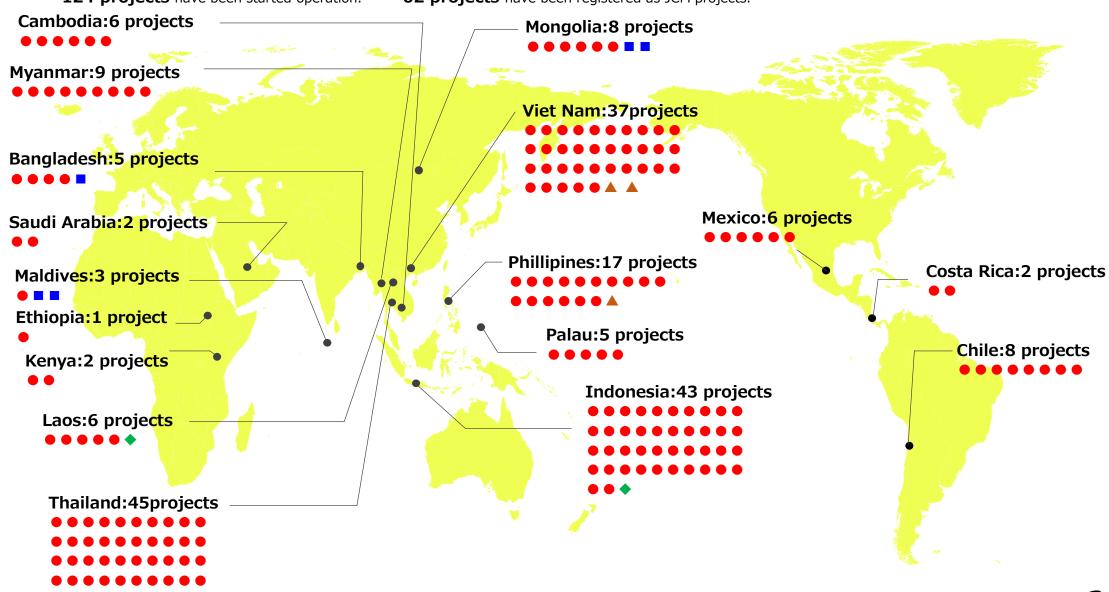
## JCM Financing Programmes by MOEJ (FY2013~2021) (February, 2022)

#### **Total 205 projects in 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

124 projects have been started operation.

62 projects have been registered as JCM projects.



# **JCM Financing Programmes 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. 0.6 million
Type of support	Subsidy	Grant (Sovereign) / Interest Buy-down (Non-sovereign)	Subsidy
More info	<ul> <li>https://gec.jp/jcm/kobo/</li> <li>https://www.carbon- markets.go.jp/eng/jcmgp/inde x.html</li> </ul>	https://www.adb.org/what-we- do/funds/japan-fund-for-joint- crediting-mechanism	Please contact us.





# 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%

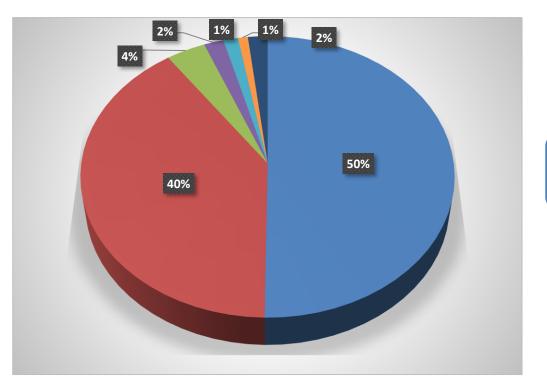
 Controlling slush and burn December, 2021

# 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



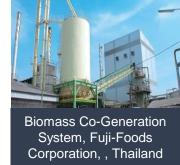
# **Examples of the JCM Model Projects**

### 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]



industries, Toyotsu Machinery, Indonesia

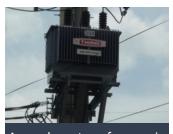


Upgrading air-saving loom at textile factory, TORAY etc., Indonesia, Thai, Bangladesh

#### Energy efficiency [Urban sector]



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

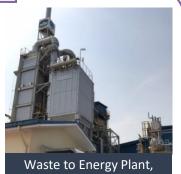


Amorphous transformers in power distribution, Hitachi Materials, Vietnam

#### Waste



Power Generation with Methane Gas Recovery System, NTTDATA, Mexico



JFE engineering, Myanmar

#### **Transport**



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



# Capacity building support (examples)

Further details to be presented from IGES at Part 2 of this conference on 7th March

# Workshops for understanding the JCM implementation under Article 6.2

- Organized by the Ministry of Environment and Tourism of Mongolia, MoEJ,
   Climate change research and cooperation centre (CCRCC), Institute for Global Environmental Strategies (IGES)
- Shared information on current status of international negotiations and update of voluntary carbon market trends and had discussion on the JCM implementation in line with Article 6.2 including necessary arrangements.

### Mutual Learning Program for Enhanced Transparency (Article 6 reporting)

- Mutual Learning Program for Enhanced Transparency (MLP) is for pairs of countries (Indonesia-Mongolia) and organizations to learn and practice reporting of climate actions, based on each other's reporting exercises.
- The MLP consists of meetings and exercises. During the program implementation, MLP support participants to actively engage with continuous discussions and knowledge sharing.
- IGES have so far implemented the MLP on Article 6.2 reporting by using the example of the JCM with support by MOEJ.



# MOEJ - Implementation of Article 6 following COP26 (26th Nov, 2021)

- At COP26, the Rulebook for Article 6 (market mechanisms) 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 negotiations for expansion of JCM partner countries including in the Indo-Pacific region and strengthen the implementation 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.
  - Support capacity building for related officials and project developers with <u>UNFCCC's</u>
     <u>Regional Collaboration Centre (RCC)</u>.



## Implementation of the Article 6 rules into domestic rules

- Establishment of the JCM Promotion and Utilization Council which consists of relevant 5 Ministries at January 2022 (MoEJ, 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 <u>authorization of JCM credits</u> as a Party to the Paris Agreement,
- the determination of a <u>method to apply a corresponding adjustment</u> to prevent double counting,
- 3. the revision of the Guidelines for the Implementation of the JCM.
- The draft procedures on the authorization and corresponding adjustment are currently under public consultation process by March 2022.
- ※ These are referred in the Guidelines for the Implementation of the JCM in Japan (effective since 17<sup>th</sup> January 2022) as the separately specified procedures.

# Thank you for your kind attention

