



Ministry of the Environment



Recent Development of the Joint Crediting Mechanism(JCM)

September 15, 2022

Ministry of the Environment ,Japan



Effect of implementing Article 6 market mechanism

- Under the Paris Agreement, all countries must prepare, communicate and maintain nationally determined contribution(NDC).
- In Article 6 of the Paris Agreement, a market mechanism is defined to allow for higher ambition in mitigation and adaptation actions and to promote sustainable development and environmental integrity.
- In COP26, detailed rules and guidelines of Article 6 implementation was adopted.

- ◆ Experts estimate that up to 4 to 12 billion tons*¹ of additional annual global CO₂ reductions could be realized by 2030 through proper implementation of Article 6; approximately 10% to 40% of global CO₂ emissions (energy origin) in 2018.
- ◆ By stimulating the global decarbonization market and private investment, it is expected to contribute to global emission reductions as well as to each country's economic growth, with a market size of approximately 200 million USD *² as of 2030.

※1 J. Edmonds et al. (2021). How much could article 6 enhance nationally determined contribution ambition toward Paris Agreement goals through economic efficiency?. Climate Change Economics, (2021) 2150007 (P18)/UNEP and UNEP DTU (2021) Emissions Gap Report: Heat is On, Chapter 6 The role of market mechanisms in bridging the emission gap/TASKFORCE ON SCALING VOLUNTARY CARBON MARKETS Final Report (2021) January

※2 World Bank, State and Trends of Carbon Pricing 2017 (2017). P15, P64

MOEJ - Implementation of Article 6 following COP26

- 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.

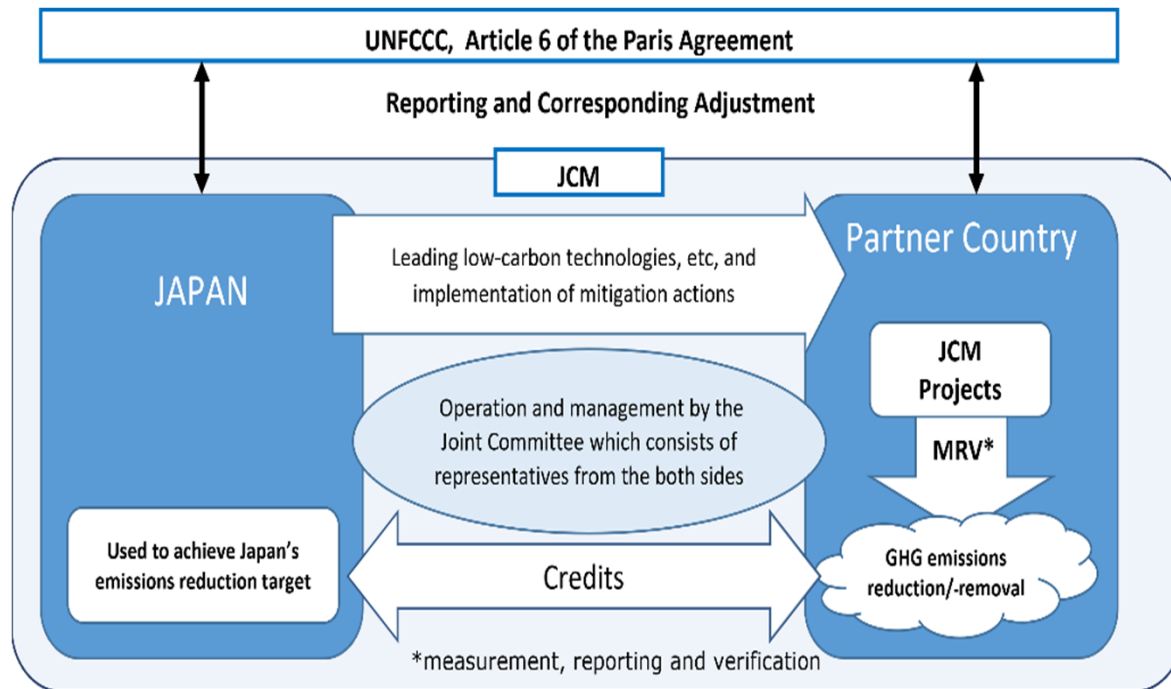
< 3 Actions >

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
 - **Establish Article 6 Implementation Partnership** to promote international coordination of Article6 Capacity Building and develop information platform for A6 implementation



The Joint Crediting Mechanism (JCM)

- Since 2013, Japan has established the JCM with **22 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)
- For achieving the target of the JCM, accelerating consultations to expand partner countries up to approximately **30 countries worldwide by around 2025**. (June 2022, Cabinet Decision)

Technologies Transferred through JCM (FY2013-2022)

- Total of 218 JCM Projects being developed in 22 partner countries (September, 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%

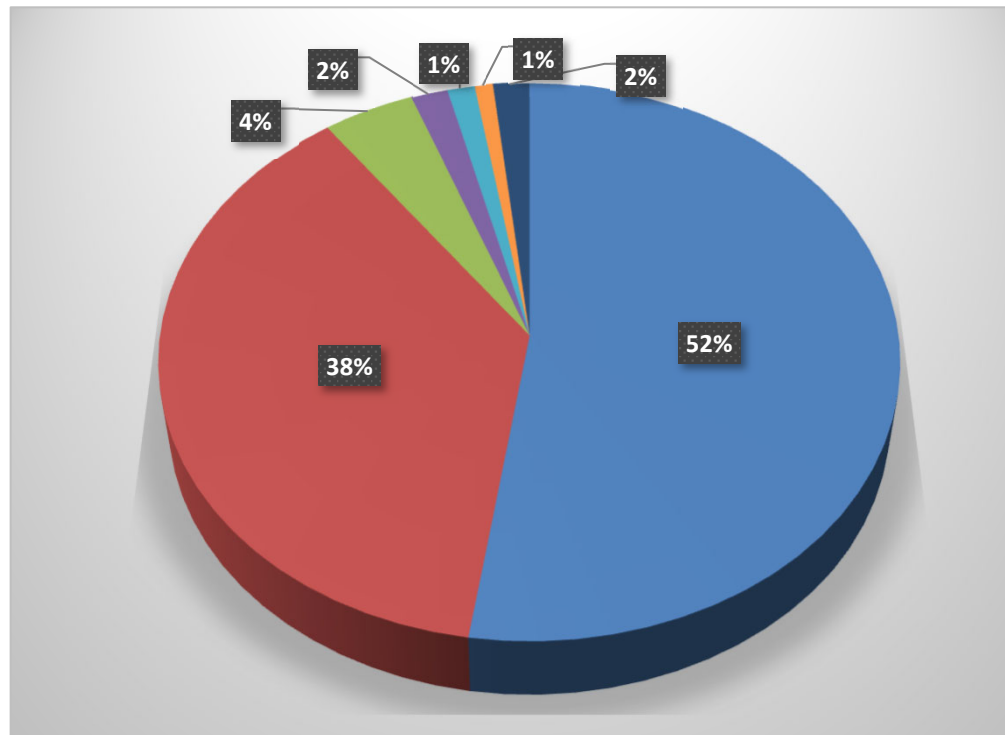
- Controlling slush and burn

Effective Use of Energy (10) 4%

- Waste Heat Recovery
- Gas Co-generation

Energy efficiency (86) 38%

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



F-gas (4) 2%

- Recovery & Destruction

Renewable energy (120) 52%

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

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

Project development & outreach activities by MOEJ

JCM Project Development

- To **identify barriers and needs** for JCM project development in partner countries in terms of technology, financing and partnership, and **provide solutions for overcoming barriers** through consultations.
- To **enhance overall capacity for JCM implementation** through facilitating understanding on the JCM rules & guidelines, and MRV methodologies by organizing workshops, seminars, training courses and site visits.
- **JCM Business Matching Site “JCM Global Match”** provides matching opportunities for sellers and buyers of low and zero carbon technology for the JCM project.

<https://gec.force.com/JCMGlobalMatch/s/>

business



Outreach

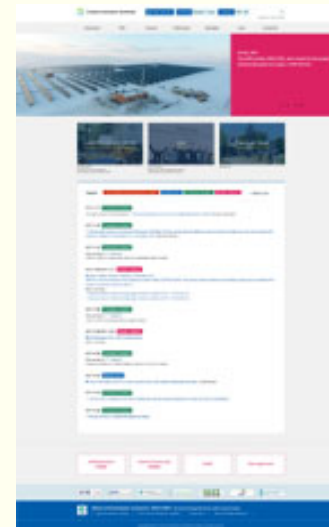
- **Carbon Markets Express website** provides information on the latest updates on the JCM and relevant programmes such as JCM promotion schemes by the Government of Japan.

<http://carbon-markets.env.go.jp/eng/index.html>

E-mail Newsletter and up-to-date information are distributed regularly. To register, access:

(for JP) <http://carbon-markets.env.go.jp/newsletter/index.html>

(for EN) http://carbon-markets.env.go.jp/eng/en_newsletter/index.html



CARBON MARKETS EXPRESS

Thank you for your kind attention



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