Day2 FY2022 NICE
"Together for Carbon Neutrality"

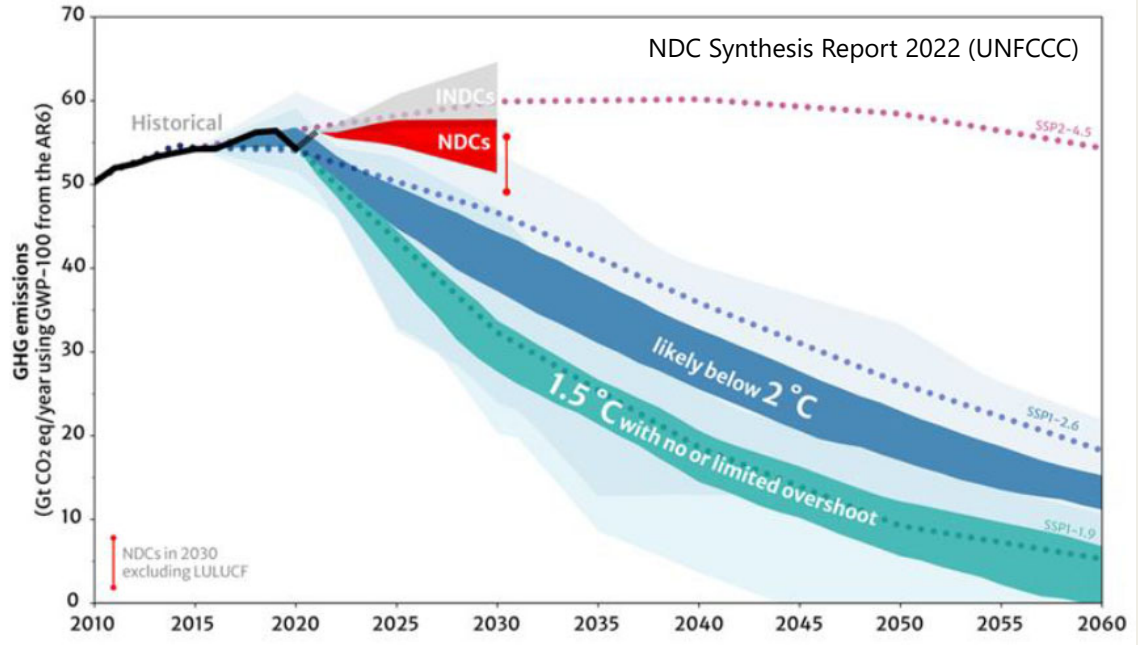
Japan's initiative on international cooperations under Article 6 of the Paris Agreement for achieving carbon neutral

December 16, 2022

Jun Watanabe, researcher, Overseas Environmental Cooperation Center, Japan (OECC)

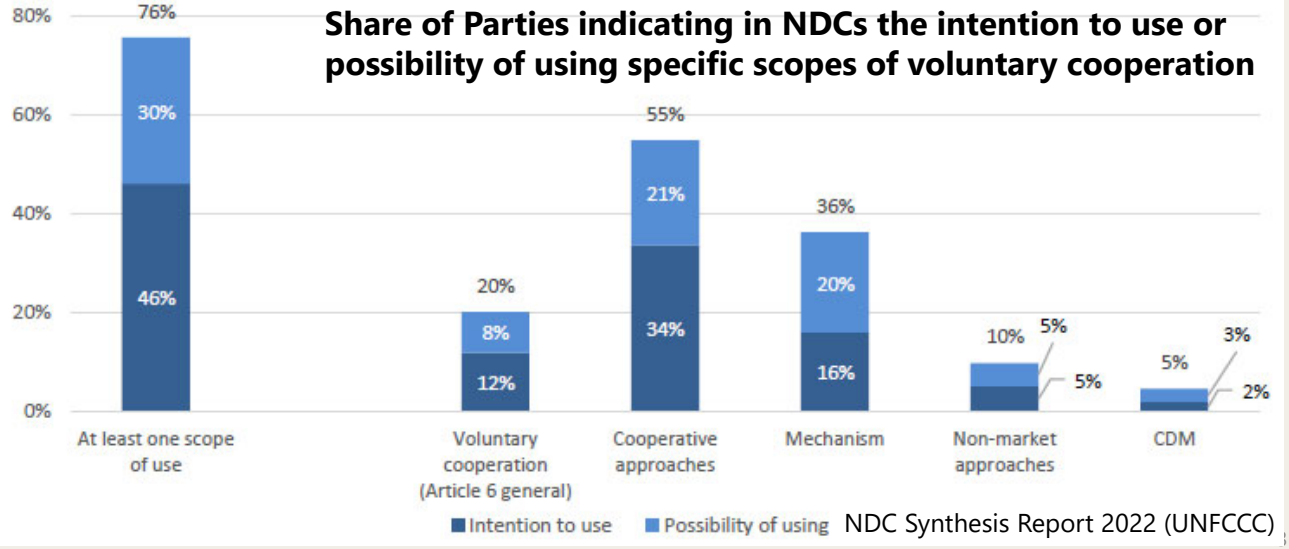
Urgent need for raising climate ambition

- Large difference between GHG emission level based on the latest NDCs and 1.5 / 2 °C scenarios in the IPCC AR6.
- Many Countries have been increasing ambitions however further enhancement of NDCs or overachievement of NDCs is necessary.



International cooperation to boost climate ambition

- Article 6 of the Paris Agreement offers opportunities for countries to voluntarily cooperate to promote NDC implementation and sustainable development.
- 76% countries plan to or will possibly use voluntary cooperation in implementing their NDCs.



NDC Synthesis Report 2022 (UNFCCC)

Market mechanisms of the Paris Agreement

Article 6.2: Cooperative Approach

Countries cooperate bilaterally/multilaterally to promote mitigation and achieve NDC through internationally trading carbon credits.

Internationally Transferred Mitigation Outcomes (**ITMO**)

Bilateral cooperations on going (Japan, Switzerland, etc.)

Article 6.4 Mechanism

Centrally governed carbon crediting mechanism which can be used for achieving NDC (Successor of the CDM of Kyoto Protocol)

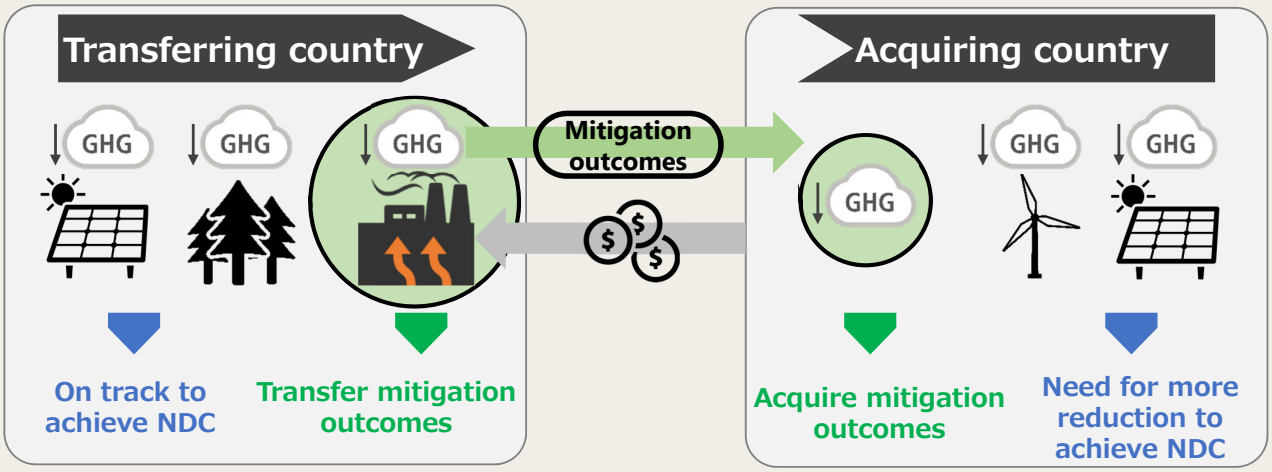
Article 6.4 Emission Reduction **(A6.4ER)**

Expected to start from 2024 or later

<Process of International Negotiation>

	Paris Agreement COP21 [2015]	Rulebook of Art.6 COP26 [2021]	Details of rule COP27 [2022]	Continue
6.2	■ **PA 6.2** Avoiding double counting, promoting sustainable development	■ **6.2 Guidance** Participation criteria, method of corresponding adjustment, reporting, and review	■ **6.2 details** Guidance of recording, tracking, and review	
6.4	■ **PA 6.4** overall mitigation in global emissions, establishing Supervisory Body (SB)	■ **6.4 Rules, modalities, procedures** Activity cycle of the mechanism. Structure of SB, CDM transition	■ **6.4 details** Guidance of authorization and reporting of A6.4ER, guidance of CDM transition	

Benefits of using market mechanisms for countries



- ✓ Introduction of decarbonizing technologies/solutions
- ✓ External finance/aid for decarbonization
- ✓ GHG reduction + Co-benefits for SDGs
- ✓ Know-how of GHG MRV
- ✓ Achievement of NCD
- ✓ Diffusion of decarbonizing technologies
- ✓ Promotion of international cooperation

✓ **Enabling cost effective climate mitigation globally**

According the study by IETA (2019), international cooperation through Article 6 could halve the cost of implementing NDCs (=saving $250 billion/year by 2030)

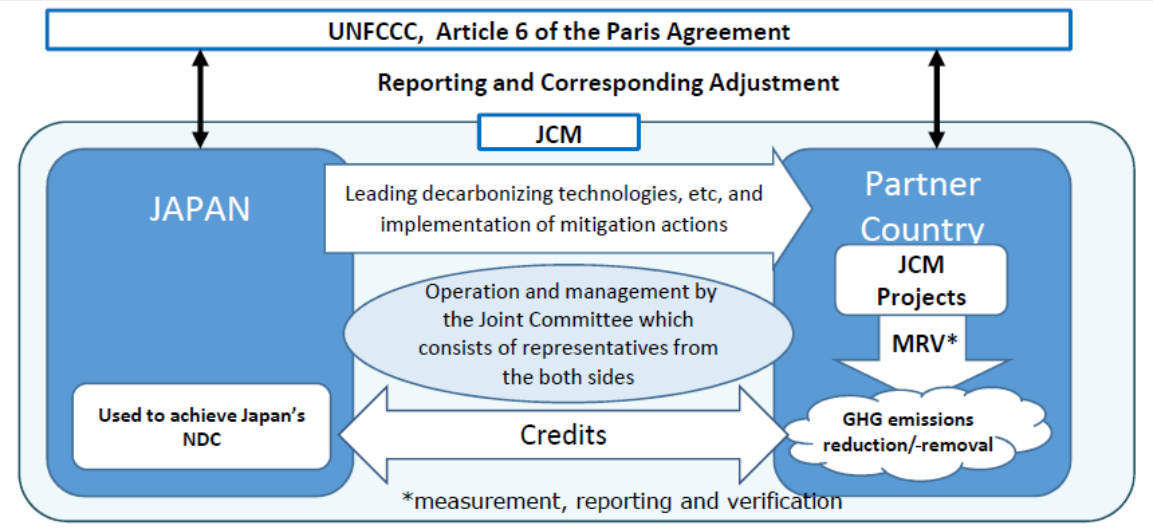
Cooperations under Article 6.2

- ☐Bilateral agreements on international carbon trading.
- ☐Sectors covered by these cooperations include:
  - ◆Renewable Energy & Energy Efficiency (Commercial/community level)
  - ◆Nature-based solutions (Forestry)

Buyer side	Seller side
Australia	Papua New Guinea, Fiji
Japan	Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia, Mexico, Saudi Arabia, Chile, Myanmar, Thailand, Philippines, Senegal, Tunisia, Azerbaijan, Moldova, Georgia, Sri Lanka, Uzbekistan, and Papua New Guinea
Korea	Mongolia, Vietnam, Gabon
Singapore	Papua New Guinea, Vietnam, Thailand, Colombia, Morocco, Peru, Ghana
Sweden	Ghana, Dominican Republic, Nepal
Switzerland	Georgia, Senegal, Thailand, Peru, Ghana, Dominica, Vanuatu

Joint Crediting Mechanism (JCM)

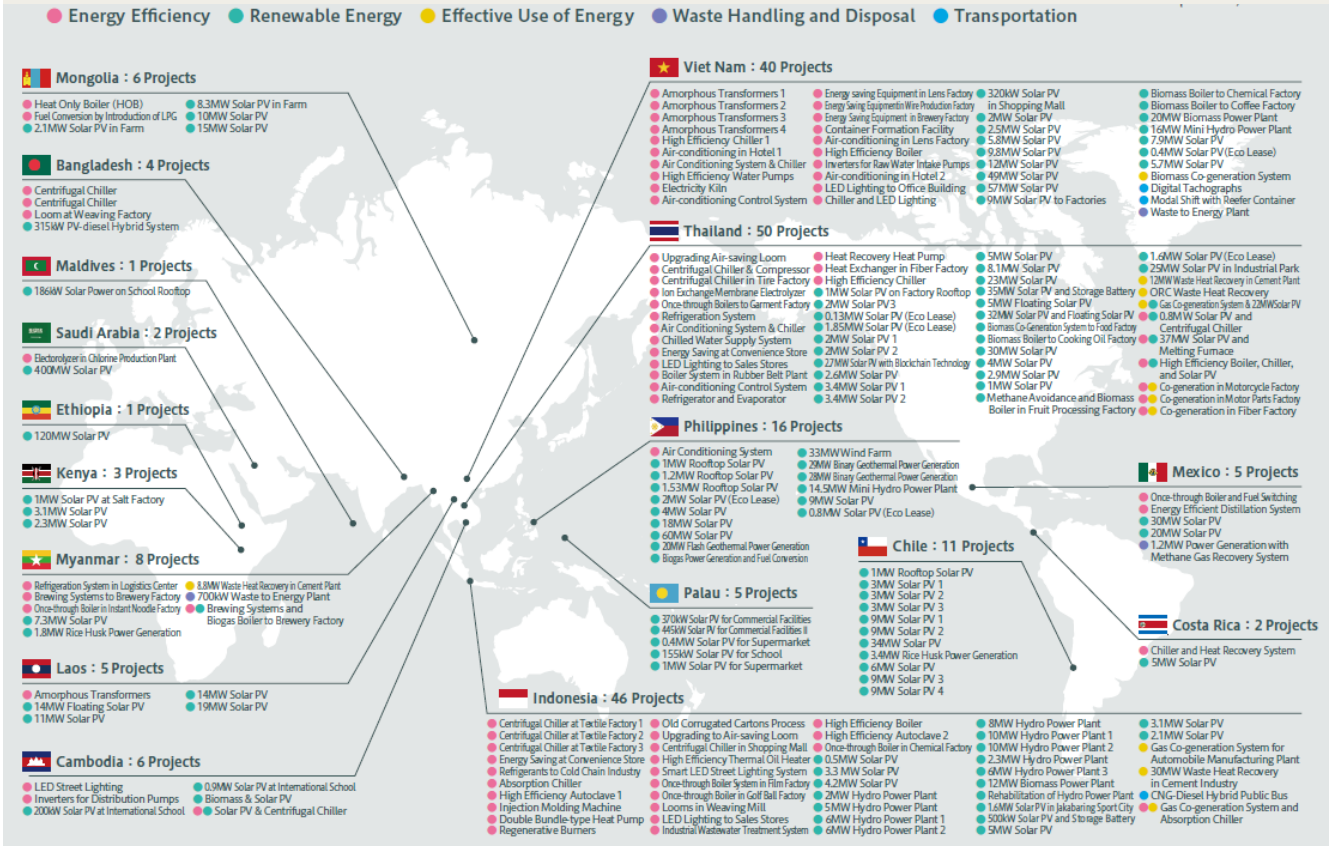
- Japan has been implementing the JCM in order to quantitatively evaluate contributions of Japan to GHG emission reductions and removals, which are achieved through the diffusion of leading decarbonizing solutions in the partner countries, and in order to use such contributions to achieve Japan's NDC.
- By doing so, through public-private collaborations, Japan aims to secure accumulated emission reductions and removals at the level of approximately 100 million t-CO2 by fiscal year 2030.



Examples of JCM Model Projects by Technology

Over 200 JCM Model Projects

OECC



JCM Good Practice:
Transferring & replicating low-carbon technology

OECC

- Transmission loss reduction & Stable supply
- GHG reductions

GHG

- More expensive than conventional product

JCM: Reducing initial investment cost

- Environmental performance is not sufficiently considered in procurement process

Local Power Authority : Revising Procurement process

- Challenges for introducing new technology

Cooperation between Japan (amorphous supply) & Vietnam (Transformer production)

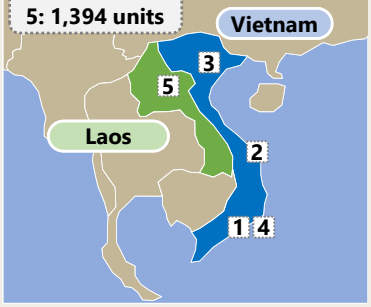
Power loss in Vietnam Electricity's systems has reduced from 7.24% in 2017 to **6.83% in 2018** and over achieved the target of 7.2%. *EVN news

Ensure the balanced capacity of power sources in each region: ensuring the reliability of electricity supply in each regional electricity system so as to **reduce losses of transmissions**, share the electricity yield and efficiently exploit hydropower plants in rainy and dry seasons.

*Revised National Power Development Master Plan for the 2011-2020 (2016)

Achievement (Since 2014)

1: 1,618 units
2: 4,843 units
3: 4,965 units
4: 2,145 units
5: 1,394 units

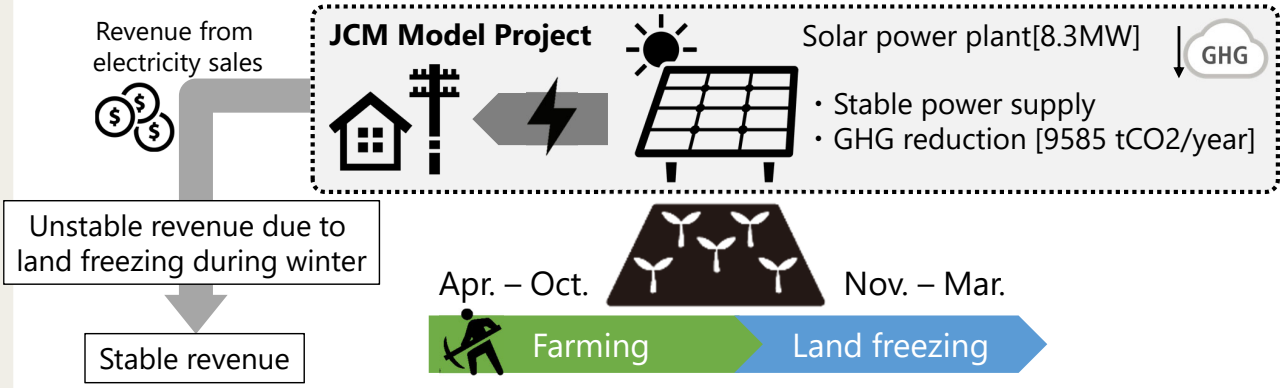


JCM

South region → Whole Vietnam → Laos PDR → Introduction by private finance

JCM Good Practice: Solar panels in farm to empower female workers

Introducing solar power plant in Monnaran Farm (Ulaanbaatar suburbs)



Job creation for women	Employing many female workers in electricity sales department
Training& Education for women	Dispatching many female workers to agricultural training in Japan utilizing the revenue from electricity sales
Transfer of agricultural tech.	Transferred advanced technology enabling longer farming period
Stable employment	Employment period of many female workers were extended because of longer farming period

Principles for achieving the sustainable social development: Ensure gender equality in social development, and create a pleasant environment for equal participation in social welfare. *Source: Mongolia Sustainable Development Vision 2030 (2016)

Paris Agreement Article 6 Implementation Partnership

- Japan launched the "Paris Agreement Article 6 Implementation Partnership" towards high integrity carbon markets, at COP27. [Nov.16, 2022]
- Promoting international collaboration for capacity building related to the Article 6, including by sharing good practices and supporting the implementation of Article 6.
- 40 countries and 23 institutions have pledged to participate the partnership.

Areas of work

- Facilitate understanding of Article 6 rules and linkages with NDCs
- Share good practices for institutional arrangements incl. authorization and recording
- Develop an information platform for Article 6 implementation
- Conduct mutual learning and trainings for Article 6 reporting and review
- Support baseline methodology (tool development, etc.)
- Designing of high integrity carbon markets

https://www.env.go.jp/en/press/press_00741.html

Thank you for your attention!

Overseas Environmental Cooperation Center, Japan (OECC)
TEL：03-5812-4104　FAX：03-5812-4105
Website: https://www.oecc.or.jp/
Email: watanabe@oecc.or.jp