



METI

Ministry of Economy, Trade and Industry

METI's Support Program for the JCM

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METI's support for the JCM partner countries

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- METI supports the introduction of **advanced decarbonizing technologies through Demonstration Projects** which contribute to the decarbonization of the JCM partner countries.
- The project cost burdened by Japanese side is **100% supported by Japanese government (METI/NEDO).**

Examples of past projects



Optimization in petroleum refining plant, Yokogawa Electric Corp. Indonesia



Energy-saving of mobile communications base transceiver stations, KDDI Corp. Indonesia

Total: 11 projects in 6 countries (As of July 2023)

JCM Feasibility Study by METI



Scope:

- Consider basic elements of the demonstration (technology, project site, stakeholders, etc.)
- Establish the basis of JCM methodology for quantification of the GHG emission reduction
- Study the possibility of dissemination of the introduced technology
- Project cost: 15 million JPY (approx. 116 thousand USD) per study

Project period: Up to 1 year

Assumed technical areas: Energy efficiency with IoT, EMS, Renewable energy, CCS/CCUS, Hydrogen/Ammonia, etc.

JCM Demonstration Program by NEDO (*)

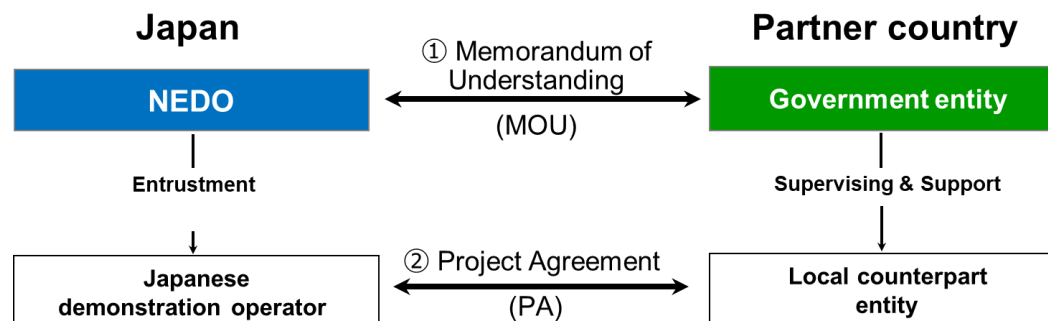


Scope:

Demonstrate and verify the effectiveness of advanced decarbonizing technology:

- Introduction of relevant facilities and systems, and conduct demonstration
- Quantification of GHG emission reduction effectiveness
- JCM procedure toward issuance of JCM credits
- Budget for FY 2024: 700 million JPY (approx. 5 million USD)

Project period: Pre-demonstration stage: up to 1 year
Demonstration stage: up to 3 year
Follow-Up Project stage: up to 2 year

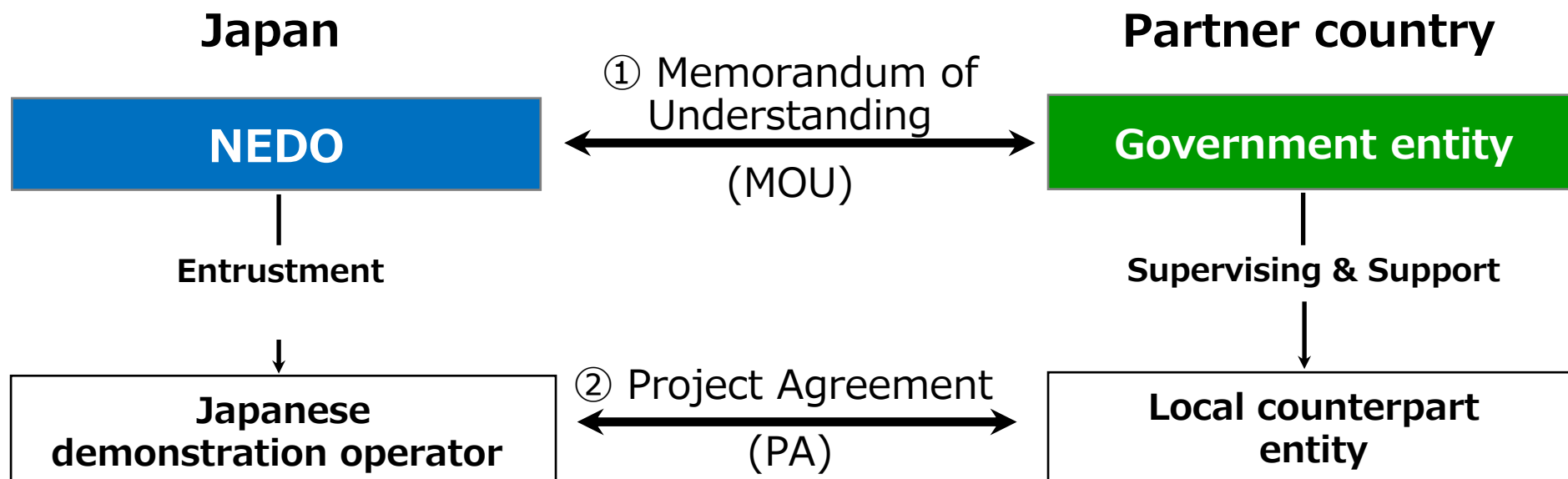


* NEDO = New Energy and Industrial Technology Development Organization

Cooperation framework for JCM Demonstration Project

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- ① NEDO and partner country government entity (a competent Ministry, local government, etc.) sign memorandum of understanding (MOU) that has clauses for implementation of demonstration and dissemination.
- ① Japanese demonstration operator and their local counterpart entity sign project agreement (PA) which stipulates details of demonstration activities, division of works, rights and duties.



Feasibility Studies and Detailed/Secondary Feasibility Study (as of October 2023)

Moldova:

- ★ Bio-gasification using ethanol distillation residues in the Republic of Moldova (SDG Impact Japan Inc.)

Uzbekistan:

- Introduction of solar power generation and storage batteries, and boiler fuel conversion in public hospitals in Uzbekistan (Hanwa Co., Ltd.)

United Arab Emirates:

- Project to reduce GHG emissions in the United Arab Emirates (Emirate of Abu Dhabi) by introducing electric, hydrogen, and other low-carbon emission vehicles for public transportation mobility and by introducing a system for monitoring and improving the efficiency of operations (SMOC) (Zenmov Inc)

Thailand:

- Utilization of highly efficient dyeing technology in textile dyeing process (Asahi Kasei Corp.)
- Feasibility study for JCM project implementation of biomass boiler utilization with private sector funding (Tepia Corporation Japan)
- ★ Feasibility Study for Demonstration of Fuel Cell (FC) Truck Technology for Low-Carbon Medium- and Long-Distance Overland Freight Transport (Toyota Tsusho Corporation)

Indonesia:

- Improvement of biodiesel yield from palm oil by utilizing AI (Kanematsu Corporation)
- The study of stock-based peatland water management technology for a stable supply of woody biomass (Sumitomo Forestry Co., Ltd.)
- ★ Low carbon technology project by introducing plasma heating equipment in Indonesia (NIPPON STEEL ENGINEERING CO., LTD.)

Mongolia:

- Switching fuel for heating boilers to biochar in Ulaanbaatar (PEAR Carbon Offset Initiative, Ltd.)

Lao PDR:

- Decarbonization of steam by systemization of hydrogen generators and hydrogen boilers in Lao PDR (Hitachi Zosen Corporation)

Vietnam:

- Integrated energy management and data platform in industrial parks (Sojitz Corporation)
- Feasibility Study on JCM Credit Creation Through Fuel Conversion in Vietnam (erex Co., Ltd.)
- ★ Demonstration Project on Wastewater Heat Recovery and Geothermal Heat Utilization Technology (Asano Taiseikiso Engineering Co., Ltd.)

Brazil:

- Conversion of production process of caustic soda and chlorine in Federative Republic of Brazil (AGC Inc.)

Chile:

- Chemical goods/synthetic fuel production using CO2 emitted from pulp mill as a raw material (Toyo Engineering Corporation)

Philippines:

- Study on GHG emission reduction and economic feasibility by the introduction of combined distributed renewable energy resources into poultry cooperatives in the Philippines (J-POWER)

Total as of 2023: **17 projects** (11 countries)

Projects with "●" are Feasibility Studies by METI

Projects with "●★" are Detailed/Secondary Feasibility Study by NEDO

Feasibility Studies (as of July 2024)

Uzbekistan :

- JCM Feasibility Study on large-scale onshore wind power project in Uzbekistan (Sojitz Corporation)

India:

- JCM Feasibility Study on the Introduction of Distributed Power Generation Systems Utilizing Methane Gas Derived from Cow Dung in India (Fine Eco Solution Co., Ltd.)

Costa Rica:

- JCM Feasibility Study on the Introduction of Battery Locomotives for Cargo Railway in Costa Rica (Nippon Koei Co., Ltd.)

Chile:

- JCM Feasibility Study on the Introduction of Solar Thermal Power Generation in the Mining Industry in Chile (AGC Inc)

Thailand:

- JCM Feasibility Study on Energy-Efficient High-Definition Flexographic Printing Technology in Thailand (Asahi Kasei Corporation)

Philippines:

- JCM Feasibility Study on Biomass Power Generation Utilizing Agricultural Residues in the Philippines (Kubota Corporation)
- JCM Feasibility Study on the Installation of Solar Panels and Batteries and Optimal Power Control Technology for Wireless Base Stations in the Philippines (NTT DOCOMO, INC)

Brazil:

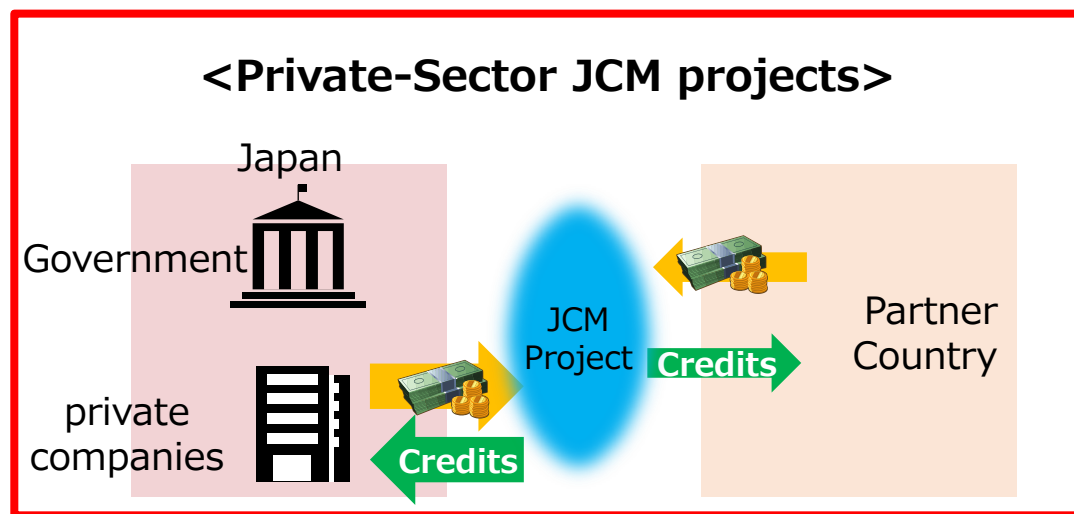
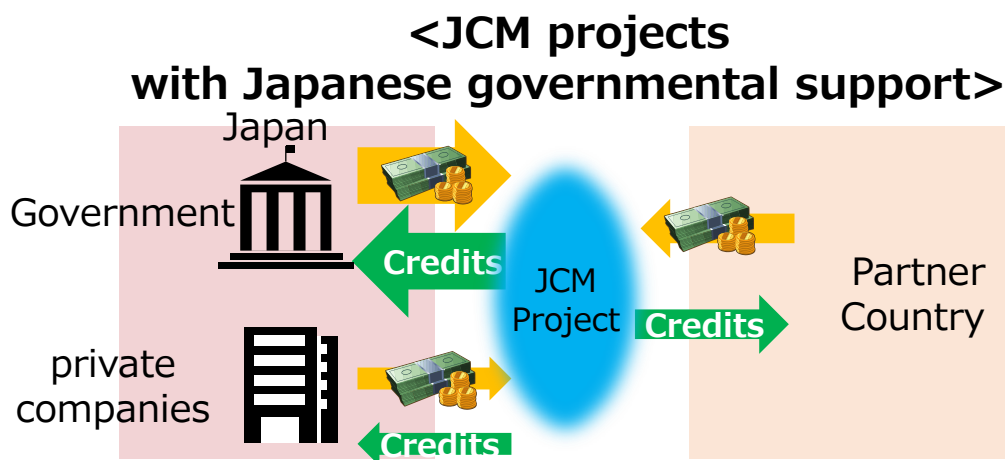
- JCM Feasibility Study on Energy Optimization Systems in Steelworks in Brazil (Yokogawa Electric Corporation)

Total as of July 2024 : 8 projects (7countries)

Private-Sector JCM projects

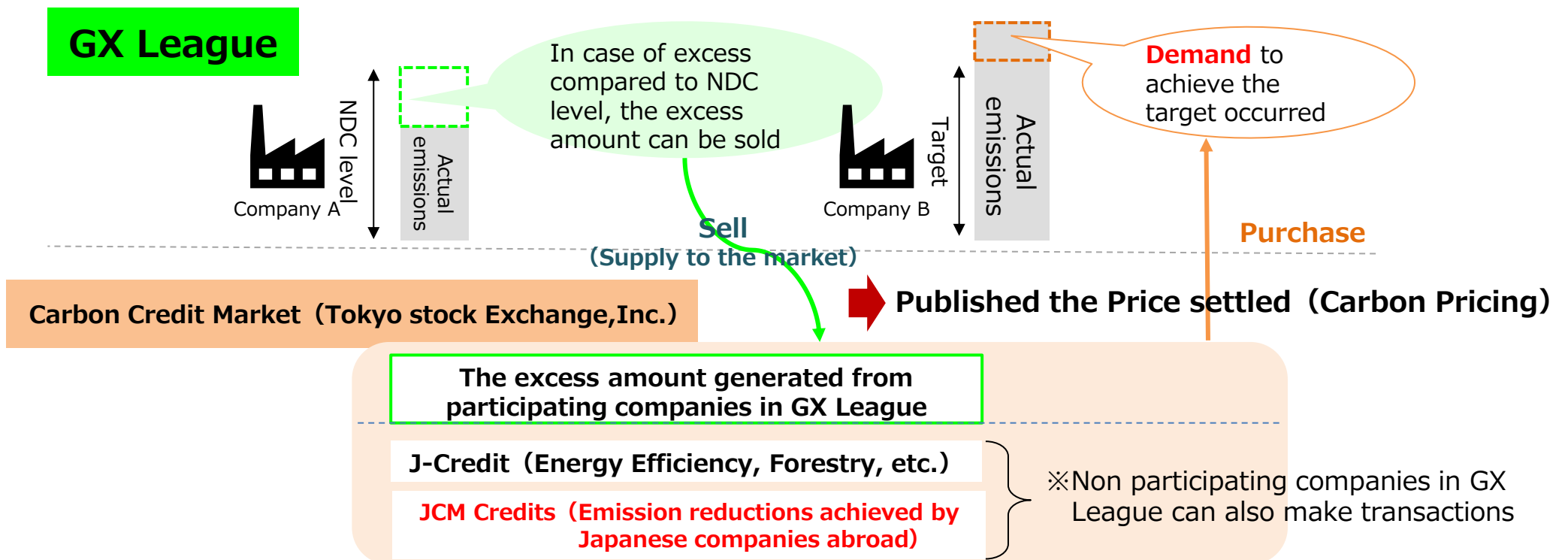
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- There is a need to promote the formation of JCM projects invested and implemented by private companies without any governmental financial supports for the purpose of obtaining JCM credits (private sector JCM), in light of the growing interest in the use of JCM credits for private-sector companies' own purposes.
- Formulated "Guidance on the development of Private-Sector JCM" in March 2023
- In the guidance, the following two processes were introduced:
 - Making an advance inquiry to the partner countries on the "Project Idea Note (PIN)" which includes the project contents and credit allocation plan
 - Confirming whether there are any objections on the PIN at the Joint Committee prior to the implementation of a JCM project.



Potential use of JCM credits

- JCM credits acquired by companies through private JCM can be utilized for the purpose of carbon offsetting.
 - 1) The domestic calculation, reporting, and publication system (**SHK system**)
 - 2) Use for the achievement of companies' **voluntary targets in the GX League**
 - 3) **Carbon offsetting**
- In the GX League, participating companies are supposed to be engaged in emission trading in the **Carbon Credit Market** under Tokyo Stock Exchange, Inc in order to achieve their targets. Through trading JCM credits in the Carbon Credit Market, pricing and monetization of the JCM credits will be expected.



- We will welcome your JCM project proposals, but please take note of the following points:
 - 1) Project participants
 - Need to involve both **Japanese companies and Moldovan companies**
 - 2) Japanese contribution
 - Preferably **Japanese technologies**, operations, finance/investment, etc.
 - 3) Contribute to the Moldovan government's policies and areas of focus
 - 4) No international transfer between Japan and Moldova
 - JCM credits will be issued in Japan's or Moldova's registry and cannot be transferred between them (allocation decided before issuance).
 - For acquisition, you should establish your account in either registry.

Please consult with us (METI JCM team) on your proposals: bzl-jcm@meti.go.jp