

JCM

2024-2025

**Introduction of the Joint
Crediting Mechanism (JCM) &
Financing Programme for
JCM Model Projects**



Expanding JCM Partner Countries

Japan, aiming to facilitate global GHG emission reduction and removal, implements the Joint Crediting Mechanism (JCM) as a scheme for decarbonizing technology diffusion and implementation measures to respond to challenges in partner countries in a flexible and swift manner.

The use of carbon market mechanisms, including the JCM, is articulated under Article 6 of the Paris Agreement. The market mechanism under Article 6, including the JCM, is not only for GHG emission reduction, but also for the sustainable development of the partner countries.

Japan has established partnerships with 29 countries (as of August 31st, 2024) and continues to communicate with other developing countries.



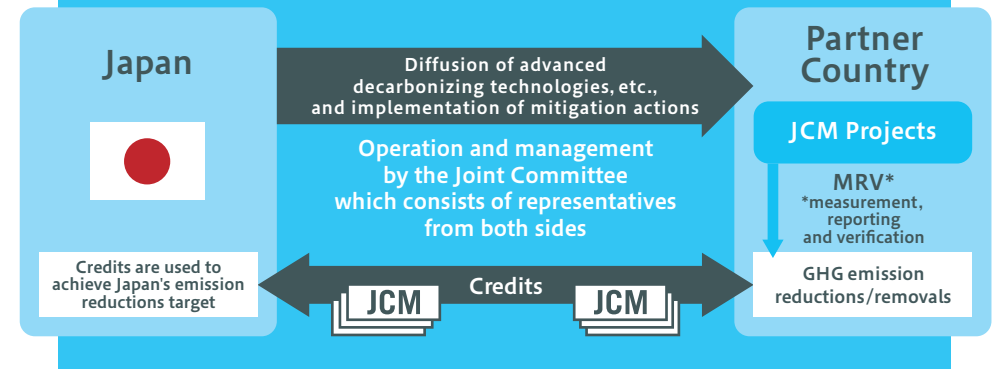
Basic Concept of the JCM

- Facilitating diffusion of advanced decarbonizing technologies, products, systems, services and infrastructure as well as implementing mitigation actions, and contributing to the sustainable development of developing countries
- Appropriately evaluating contributions from Japan to GHG emission reductions and removals in a quantitative manner and using them to achieve Japan and partner country's NDC emission reduction targets
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions and removals

Position of the JCM in the Plan for Global Warming Countermeasures

(Cabinet Decision, October 2021)

Japan will establish and implement the Joint Crediting Mechanism (JCM) in order to quantitatively evaluate contributions of Japan to greenhouse gas emission reductions and removals which are achieved through the diffusion of, among others, leading decarbonizing technologies, products, systems, services, and infrastructures as well as through the implementation of measures in developing countries and others, 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.



JCM Global Partnership

JCM Global Partnership aims to strengthen international partnerships towards decarbonization by facilitating mutual communication among various entities such as JCM partner countries, international organizations, local governments, private companies and financial institutions for decarbonizing project development through the JCM, the Article 6 of the Paris Agreement (market mechanisms), and achievement of SDGs.



Three Pillars of Activities

JCM × Carbon Neutral Project

Promoting utilization of financing schemes and business matchings to formulate JCM projects through collaboration among various stakeholders

JCM × Article 6 (Market mechanisms)

Sharing how the JCM is being implemented as a program under Article 6 of the Paris Agreement with actual cases

JCM × SDGs

Sharing relevant information of JCM's contribution to SDGs

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



Overview of Japan's Support for the JCM Partner Countries

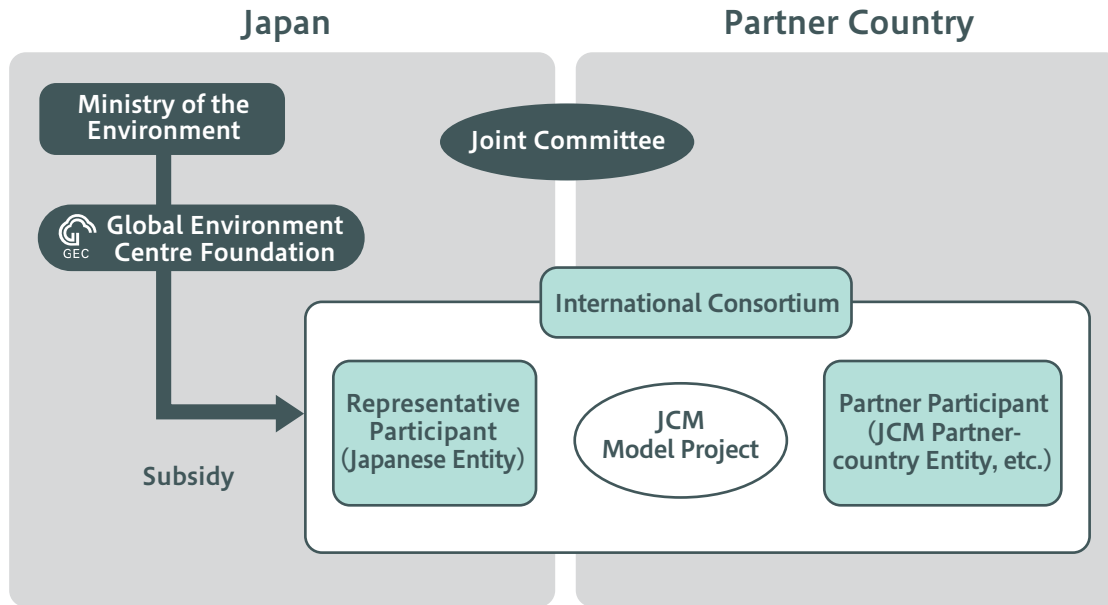
Ministry	Programme	Type of support
Ministry of the Environment	Financing Programme for JCM Model Projects*1 (See page 3, 5-9, 11-13)	Subsidy
	Finance Programme for F-gas Recovery and Destruction Model Projects*1 (See page 14)	Subsidy
	Japan Fund for the JCM (JFJCM) - Managed by ADB*2 (See page 15)	Grant
	JCM Support Programme by UNIDO*1*3 (See page 16)	Grant for projects, technical cooperation
	Demonstration Programme for Application of New Decarbonizing Technology (See page 17)	Subsidy
	Project Development/ Capacity Building/MRV Support	Technical cooperation
Ministry of Economy, Trade and Industry	JCM Feasibility Study (See page 18)	Technical cooperation
	JCM Demonstration Programme (See page 18)	Government-commissioned project
	JCM Project Cycle Support / MRV Application Study	Technical cooperation
Ministry of Agriculture, Forestry and Fisheries	Development of MRV for JCM projects in Agriculture - Implemented by ADB (See page 19)	Technical cooperation
	Field Studies for JCM REDD+	Government-commissioned project

*1 These programmes can support projects implemented by government-owned companies but not those implemented by the government itself.

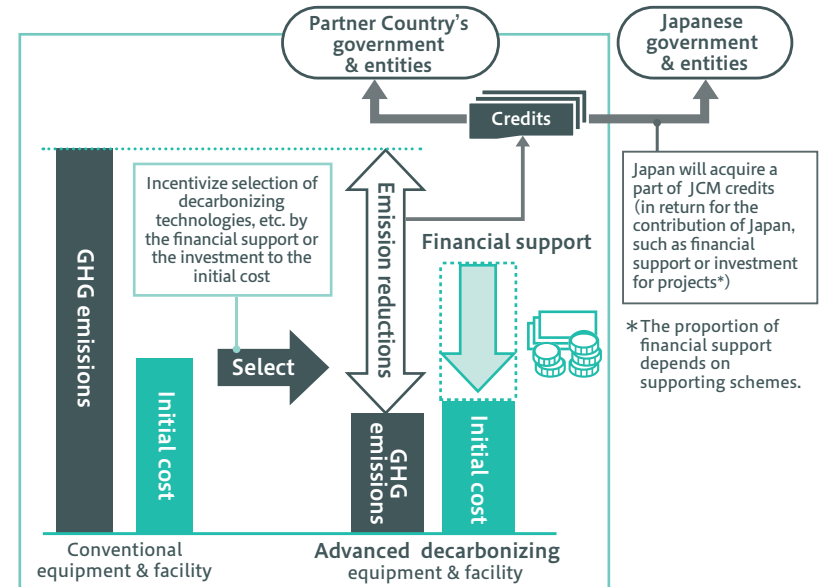
*2 JFJCM : ADB (Asian Development Bank) Trust Fund / Japan Fund for Joint Crediting Mechanism

*3 UNIDO : United Nations Industrial Development Organization

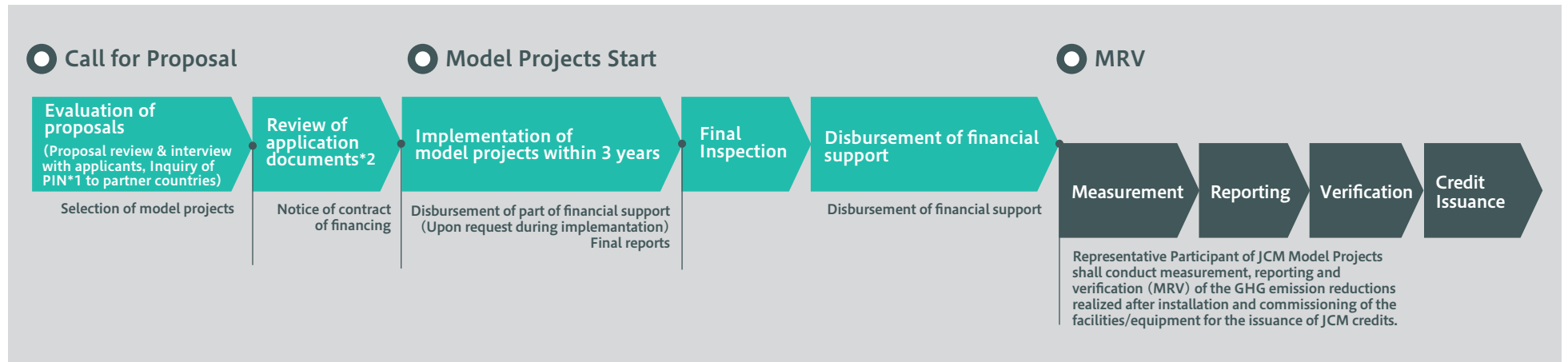
Financing Programme for JCM Model Projects



Contribution from Japan (example)



JCM Model Projects Flow



*1 PIN: The Project Idea Note is a proposal document shared with a partner country prior to the selection as a JCM Model Project to inquire if there is any objection.

*2 Submission of application should be done within 30 days after the selection of model projects so that the notice of contract of financing can be established within 60 days after the selection.

Project Cycle of the JCM



*1 PIN (Project Idea Note):

A document used to explain the outline of the project to the partner country and confirm whether there is an objection.

*2 For the latest information on JCM rules and guidelines, including the PIN procedures adopted with each Partner Country, please refer to each partner country page on the JCM website.

*3 PDD (Project Design Document):

A document that includes monitoring methods and estimated emission reductions. Required for project registration.

JCM Website

URL: <https://www.jcm.go.jp/>

< Contents >

- General information page
- Individual JCM partner countries-Japan page

< Function >

- Information sharing to the public, e.g.,
 - JC decision
 - JCM rules and guidelines
 - methodologies and projects
 - issuance of JCM credits
 - call for public inputs/comment
 - status of TPEs, etc.
- Internal information sharing for the JC members, e.g.,
 - file sharing for electronic decisions by the JC

Examples of JCM Model Projects by Technology

Energy Efficiency



Boiler & Chiller & Solar Power (Thailand)
The Kansai Electric Power Co., Inc.



Thermal Oil Heater System (Indonesia)
Fumakilla Limited



Chiller & LED Lighting (Vietnam)
Tokyu Corporation



Once-through Boiler (Indonesia)
DIC Corporation

Energy Efficiency



Chiller & Air Conditioner & Solar Power (Indonesia)
Yuko Keiso Co., Ltd.



LED Lighting (Vietnam)
Endo Lighting Corporation

Effective Use of Energy



Waste Heat Recovery (Myanmar)
Global Engineering Co., Ltd.

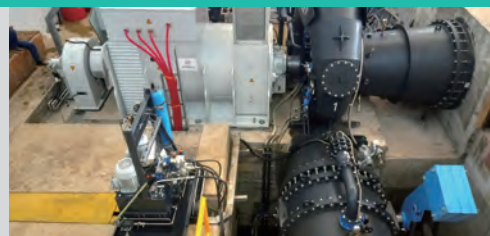


Gas Co-generation System & Chiller (Thailand)
The Kansai Electric Power Co., Inc.

Renewable Energy



Rice Husk Power Generation (Chile)
Asian Gateway Corporation



Mini Hydro Power Plant (Indonesia)
NIX JAPAN Co., Ltd.



Binary Geothermal Power Generation (Philippines)
Mitsubishi Heavy Industries, Ltd.



Solar Power (Thailand)
Shizen Energy Inc.

Renewable Energy



Mini Hydro Power Plant (Philippines)
Toyota Tsusho Corporation

Waste Handling and Disposal



Power Generation with Methane Gas Recovery System (Mexico)
NTT Data Institute of Management Consulting, Inc.



Waste to Energy Plant (Vietnam)
JFE Engineering Corporation

Transportation



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

Case Examples of JCM Model Project

1

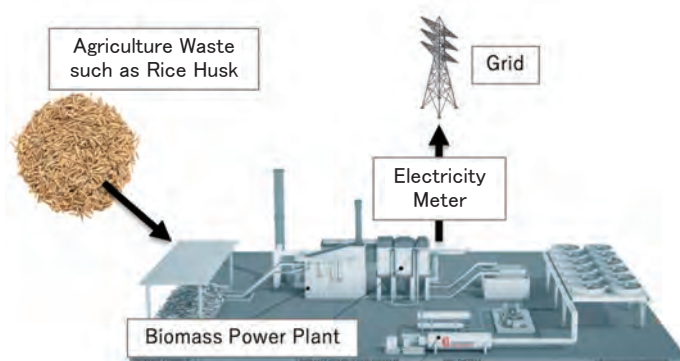
Renewable Energy



3.4MW Rice Husk Power Generation Project in Maule

Country	Chile
Representative	Asian Gateway Corporation
Partner	La Gloria S.A

3.4MW biomass power plant is installed in the region of Maule, which utilizes the agricultural residue such as rice husk. The generated power is supplied to an electric company and reduces greenhouse gas (GHG) emissions by replacing the grid power. In addition, this project prevents air pollution caused by open burning of agricultural residue. By adopting Organic Rankin Cycle technology, which requires less water consumption, it also contributes to the climate change adaptation regarding low rainfall expected in Chile.



Case Examples of JCM Model Project

2

Waste Handling and Disposal



Waste to Energy Project in Bac Ninh Province

Country	Vietnam
Representative	JFE Engineering Corporation
Partners	T&J Green Energy Company Limited

A waste-to-energy plant is introduced in Bac Ninh province. This plant incinerates and generates electricity from 230tons/day of municipal solid waste, which has been disposed of as landfill. The plant also incinerates and generates electricity from 120 tons/day of municipal solid waste and 150tons/day of industrial solid waste, which were previously incinerated. This scheme enables the proper waste treatment and the supply of electricity without the use of fossil fuels. It also reduces methane emissions from landfill sites and greenhouse gas (GHG) emissions by replacing grid electricity.



Waste to Energy Incinerator(Grate)
 Manufactured by Standard-Kessel Baumgarte (Germany)
 Processing Volume:
 500t/day
 (Municipal solid waste 350t/day and industrial solid waste 150t/day)

Case Examples of JCM Model Project

3

● Energy Efficiency



Introduction of High Efficiency Chiller and High Efficiency LED Lighting with Dimming Function to Shopping Center

Country	Vietnam
Representative	Tokyu Corporation.
Partner	BECAMEX TOKYU Co., Ltd.

This project introduces “High Efficiency Chiller”, “High Efficiency LED Lighting with Dimming Function” and, “High Efficiency LED Lighting” to SORA gardens SC, a shopping center located in Binh Duong New City, the capital of Binh Duong Province. The project leads to reducing energy consumption and greenhouse gas (GHG) emissions as the chillers are high-efficient and equipped with inverters, and LED lighting dim down 70% of light.



High Efficiency Chiller
3 units

High Efficiency LED Lighting with Dimming Function:
592 units
High Efficiency LED Lighting
144 units



Case Examples of JCM Model Project

4

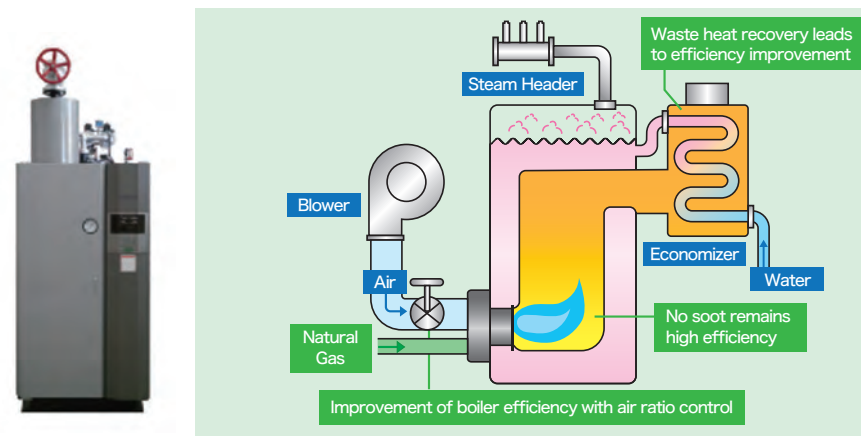
● Energy Efficiency



Introduction of High-efficiency Once-through Boiler System to Chemical Factory

Country	Indonesia
Representative	DIC Corporation.
Partner	PT. DIC GRAPHICS.

This project reduces energy consumption and greenhouse gas (GHG) emissions by installing natural gas-fired high-efficiency once-through boiler system in the factory where coal-fired boiler mainly has been used.



Case Examples of JCM Model Project

5

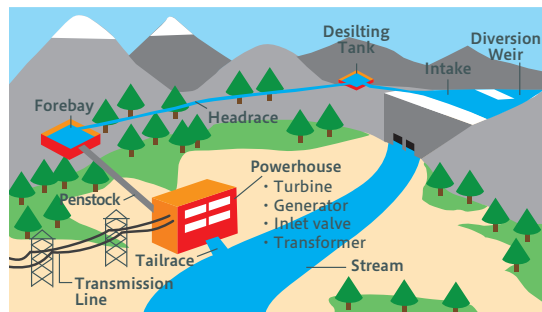
● Renewable Energy



Introduction of 14.5MW Mini Hydro Power Plant Project in Siguil River in Mindanao

Country	Philippines
Representative	Toyota Tsusho Corporation.
Partner	Alsons Consolidated Resources, Inc., Alsons Renewable Energy Corporation Siguil Hydro Power Corporation

This project aims to reduce CO2 emissions by constructing a run-of-river mini hydroelectric power plant 14.5MW (14.5 X 1 unit) utilizing water resources in the Municipality of Maasim, in the southern part of Mindanao Island. This project contributes to the reduction of greenhouse gas (GHG) emissions by replacing grid electricity with renewable energy and also contribute to the realization of a sustainable society by addressing the growing demand for electricity necessitated by economy growth.



Case Examples of JCM Model Project

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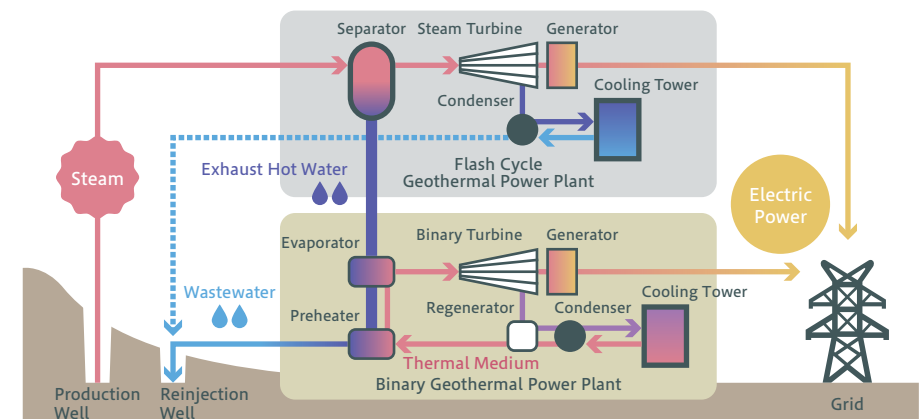
● Renewable Energy



29MW Binary Power Generation Project at Palayan Geothermal Power Plant

Country	Philippines
Representative	Mitsubishi Heavy Industries, Ltd.
Partner	Bac Man Geothermal Inc.

This project introduces a 29MW binary geothermal power plant with the Organic Rankine Cycle (ORC) system to the existing 120MW flash type geothermal power plant in southern part of the Luzon island. This plant utilizes exhaust hot water of low enthalpy from the existing power plant without producing hazardous gasses.



Case Examples of JCM Model Project

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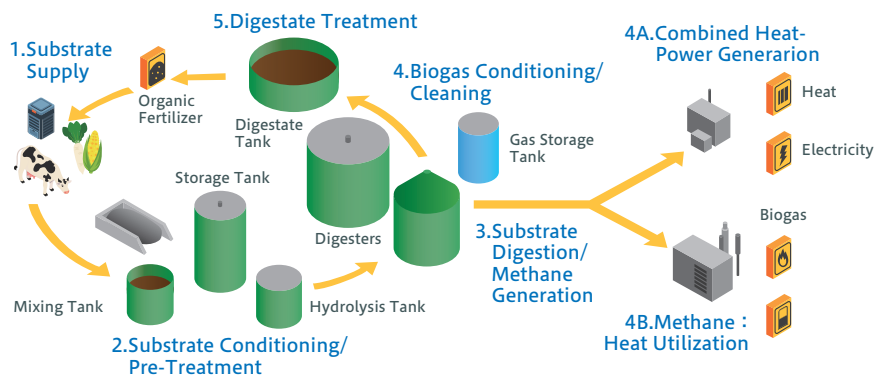
Renewable Energy



Biogas Power Generation and Fuel Conversion Project in Pineapple Canneries

Country	Philippines
Representative	Itochu Corporation
Partners	Met Power Venture Partners Holdings Inc., Surallah Biogas Ventures Corporation

In this project, biogas derived from pineapple residue is utilized as fuel for gas engines and boilers to generate power and steam at the two pineapple canning factories (Surallah and Polomolok) of Dole Philippines, Inc. This project aims to produce renewable energy by utilizing the pineapple waste and contributes to reducing greenhouse gases emissions as well as lowering electricity cost of the factories.



Case Examples of JCM Model Project

8

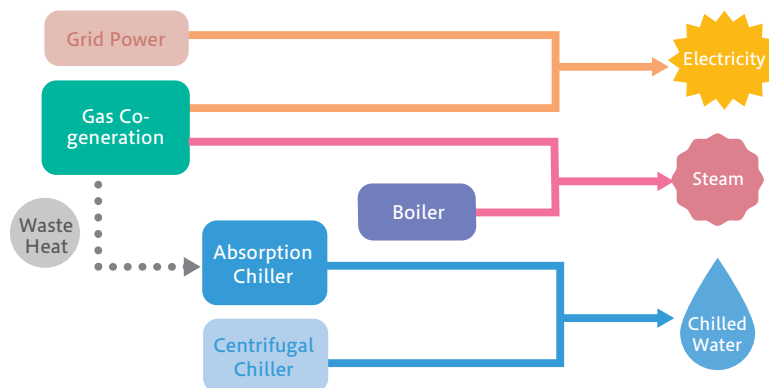
Effective Use of Energy Energy Efficiency



Introduction of Gas Co-generation System and Absorption Chiller to Fiber Factory

Country	Thailand
Representative	The Kansai Electric Power Co., Inc.
Partner	Kansai Energy Solutions (Thailand) Co., Ltd.

This project aims to reduce CO2 emissions by introducing gas co-generation system (5MW class x 2sets) and absorption chiller (800USRT class) to fiber factory in Bangpa-in District, Ayutthaya. These gas co-generation system and absorption chiller contribute to energy saving and cost reduction, and can improve reliability for power supply.



JCM Financing Programme by MOEJ (FY2013 ~ 2024) as of August 31, 2024

Total 246 projects (29 partner countries) 179 underlined projects have been started operation. 72 projects with* have been registered as JCM projects.

● Model Projects : 230 projects (including Eco Lease : 7 projects), ● JFJCM : 8 projects, ● UNIDO : 1 project, ● REDD+ : 2 projects, ● F-gas : 4 projects, ● New Technology : 1 project

Cambodia : 5 projects

- LED Street Lighting*
- 1MW Solar PV & Centrifugal Chiller
- 0.9MW Solar PV
- 200kW Solar PV at International School*
- Inverters for Distribution Pumps*

Myanmar : 8 projects

- 700kW Waste to Energy Plant*
- Brewing Systems to Brewery Factory
- Once-through Boiler in Instant Noodle Factory
- 1.8MW Rice Husk Power Generation
- Refrigeration System in Logistics Center
- 4.3MW Solar PV
- 8.8MW Waste Heat Recovery in Cement Plant
- Brewing Systems and Biogas Boiler to Brewery Factory

Bangladesh : 5 projects

- Centrifugal Chiller
- 315kW PV-diesel Hybrid System*
- Centrifugal Chiller*
- Loom at Weaving Factory*
- High Efficiency Transmission Line

Saudi Arabia : 3 projects

- Electrolyzer in Chlorine Production Plant
- 400MW Solar PV
- 100MW Solar PV

Maldives : 4 projects

- 186kW Solar Power on School Rooftop*
- Smart Micro-Grid System*
- Greater Male Waste to Energy Project
- BESS and Ocean Energy

Tunisia : 2 project

- 50MW Solar PV1
- 50MW Solar PV2

Kenya : 5 projects

- 1MW Solar PV at Salt Factory*
- 3.1MW Solar PV
- 2.3MW Solar PV
- 230kW Solar PV and Storage Battery
- 1.7MW Solar PV

Sri Lanka : 1 project

- 13.5MW Solar Power Project

Laos : 6 projects

- REDD+ through controlling slush-and-burn
- Amorphous transformers*
- 14MW Floating Solar PV*
- 11MW Solar PV*
- 7MW Solar PV
- Amorphous transformers2

Thailand : 48 projects

- Energy Saving at Convenience Store
- Centrifugal Chiller & Compressor*
- Air Conditioning System & Chiller*
- Chilled Water Supply System
- 12MW Waste Heat Recovery in Cement Plant*
- Refrigerator and Evaporator
- 5MW Floating Solar PV*
- Biomass Co-generation System
- 17.8MW Solar PV in Industrial Park
- F-gas Recovery and Destruction Scheme
- Heat Exchanger in Fiber Factory
- 5MW Solar PV
- 2.6MW Solar PV
- 18.9MW Solar PV and Floating Solar PV
- Boiler, Chiller and PV
- 0.13MW Solar PV (Eco Lease)
- ORC Waste Heat Recovery
- 1.6MW Solar PV (Eco Lease)
- 1MW Solar PV on Factory Rooftop*
- Centrifugal Chiller in Tire Factory
- Refrigeration System*
- LED Lighting to Sales Stores
- Co-generation System PV
- Heat Recovery Heat Pump*
- Boiler System in Rubber Belt Plant
- Co-generation in Fiber Factory
- 3.4MW Solar PV
- 8.1MW Solar PV
- 2MW Solar PV2
- Once-through Boiler in Garment Factory
- 2MW Solar PV3
- Gas Co-generation System & 22MWSolar PV

Mongolia : 10 projects

- Heat Only Boiler (HOB)**
- 15MW Solar PV1*
- Improving Access to Health Services
- 2.1MW Solar PV in Farm*

Vietnam : 50 projects

- Digital Tachographs*
- Container Formation Facility*
- Air-conditioning Control System
- Energy Saving Equipment in Lens Factory*
- Amorphous transformers 4
- Modal Shift with Reefer Container
- Biomass Boiler to Chemical Factory
- 57MW solar PV
- Waste to Energy
- 9.8MW Solar PV
- F-gas Recovery and Mixed Combustion Scheme
- 7.9MW Solar PV
- 1.8MW Solar PV
- Biomass Co-generation System
- 1.25MW Solar PV
- Amorphous transformers1*
- 320kW Solar PV in Shopping Mall*
- Electricity Kiln
- Amorphous transformers 3*
- Energy Saving Equipment in Brewery Factory
- Inverters for Raw Water Intake Pumps
- Air Cooled Chillers
- Once-through Boiler to Food Factory
- LED Lighting to Office Building
- 5.8MW Solar PV
- 0.4MW Solar PV (Eco Lease)
- 0.8MW Solar PV
- 15MW Solar PV
- Air-conditioning in Hotel1*
- Biomass Boiler
- 9MW Solar PV
- 2.5MW Solar PV
- 20MW Biomass Power Plant

Philippines : 20 projects

- 1.53MW Rooftop Solar PV*
- 4MW Solar PV*
- 29MW Binary Geothermal Power Generation
- F-gas Recovery and Destruction Scheme
- 14.5MW Mini Hydro Power Plant
- 0.8MW Solar PV (Eco Lease)
- 6MW Waste Heat Recovery in Cement Plant
- 1.2MW Solar PV (Eco Lease)
- 7MW Solar PV
- 1MW Rooftop Solar PV
- 9.6MW Solar PV
- 27MW Solar PV
- 11.3MW Mini Hydro Power Plant
- 1.2MW Rooftop Solar PV*

Mexico : 5 projects

- 1.2MW Power Generation with Methane Gas Recovery System
- Once-through Boiler and Fuel Switching
- 30MW Solar PV1
- 0.5MW Solar PV (Eco Lease)
- Energy Efficient Distillation System

Palau : 6 projects

- 370kW Solar PV for Commercial Facilities*
- 155kW Solar PV for School*
- 445kW Solar PV for Commercial Facilities **
- 0.4MW Solar PV for Supermarket*
- 1MW Solar PV for Supermarket
- Clean Energy Financing Project

Indonesia : 51 projects

- Centrifugal Chiller at Textile Factory1*
- Refrigerants to Cold Chain Industry**
- Centrifugal Chiller at Textile Factory 2*
- 500kW Solar PV and Storage Battery*
- Centrifugal Chiller at Textile Factory*
- Upgrading to Air-saving Loom*
- Smart LED Street Lighting System
- Gas Co-generation System*
- 1.6MW Solar PV in Jakabaring Sport City*
- 10MW Hydro Power Plant1
- Industrial Wastewater Treatment System
- Absorption Chiller*
- Rehabilitation of Hydro Power Plant
- Boiler to Carton Box Factory
- 6MW Hydro Power Plant2
- Thermal Oil Heater System
- 2.3MW Hydro Power Plant
- 5MW Solar PV
- 12MW Biomass Power Plant
- Energy Saving at Convenience Store*
- Double Bundle-type Heat Pump*
- 30MW Waste Heat Recovery in Cement Industry*
- Regenerative Burners*
- Old Corrugated Cartons Process*
- Centrifugal Chiller in Shopping Mall*
- Once-through Boiler System in Film Factory*
- Once-through Boiler in Golf Ball Factory*
- REDD+ through controlling slush-and-burn
- Looms in Weaving Mill*
- High Efficiency Autoclave1
- Injection Molding Machine
- 10MW Hydro Power Plant2
- 5MW Hydro Power Plant
- 2.1MW Rooftop Solar PV
- 3.5MW Hydro Power Plant
- High Efficiency Autoclave2
- 3.1MW Solar PV
- Energy Saving and Solar PV
- 3MW Solar PV
- LED Lighting to Sales Stores
- Gas Co-generation system
- CNG-Diesel Hybrid Public Bus
- 2MW Mini Hydro Power Plant
- 6MW Hydro Power Plant1
- 4.2MW Solar PV
- 6MW Hydro Power Plant3
- Once-through Boiler in Chemical Factory
- 2.1MW Solar PV
- 55MW Geothermal Power Generation
- Improvement of Flat Glass Production Melting Furnace

Costa Rica : 2 projects

- 5MW Solar PV*
- Chiller and Heat Recovery System

Chile : 15 projects

- 1MW Rooftop Solar PV*
- 3.4MW Rice Husk Power Generation
- 3MW Solar PV1*
- 9MW Solar PV1
- 6MW Solar PV
- 48MW Solar PV
- 9MW Solar PV2
- 26.3MW Solar PV and 48MWh Storage Battery
- 196MWh Storage Battery in PV Plant
- 3MW Solar PV2
- 9MW Solar PV3
- 2.0MW Solar PV
- 25.8MW Solar PV
- 3MW Solar PV3
- 9MW Solar PV4

Outline of Guidelines for Submitting JCM Model Project Proposal in FY2024 (1)

Purpose

To financially support the implementation of projects which reduce greenhouse gas (GHG) emissions by utilizing leading decarbonizing technologies in developing countries, and in return, to acquire JCM credits to achieve Japan's GHG emission reduction target.

Eligible Projects

Projects that reduce energy-related CO2 emissions with leading decarbonizing technologies in developing countries, with which Japan has signed or has been consulting to sign a bilateral document on JCM, and that are expected to contribute to achieving Japan's NDC through the JCM

Requirements for Representative Participant

A representative participant of the JCM model project shall be a Japanese entity and shall appropriately manage and implement the project as a representative entity of an international consortium which includes JCM partner-country entities. A representative participant also shall conduct measurement, reporting and verification (MRV) of GHG emission reductions.

Implementation Period of Model Projects

Participants of the model project shall start installation after the contract of finance is concluded and shall finish installation and payments of the eligible facilities and equipment within 3 years.

Budget

About JPY 12.8 billion (approx. USD 85.3 million at JPY 150 to USD 1) from FY 2024 for 3 fiscal years

Financial Support per Project

Equal to or less than JPY 2 billion in principle

Maximum Percentage of Financial Support

Shall be determined according to the number of previously selected project(s) using a similar technology in each partner country.

Number of previously selected project(s) using a similar technology in each partner country	None (0)	Up to 3 (1-3)	Up to 7 (4-7)	Up to 9 (8-9)	10 or more
Percentage of financial support	Up to 50%	Up to 40%	Up to 30%	Up to 20%	Not Applicable

Costs Covered by Financial Support

This programme covers the following costs that directly contribute to energy-related CO2 emission reductions. The typical costs not covered by this programme are also listed below.

Covered*
<ul style="list-style-type: none"> ● Facilities/equipment (including monitoring equipment) ● Main construction work ● Ancillary work ● Machinery and appliances ● Surveying and testing ● Administrative work ● Other necessary costs approved by GEC
NOT covered
<ul style="list-style-type: none"> ● Removal of existing facilities/equipment (including miscellaneous expenses related to removal costs) ● Equipment and consumable supplies/ materials for maintenance of the facilities/equipment installed by the model project, emergency facilities/equipment, safety equipment (such as fire extinguisher, sprinkler, PPE, etc.) and security equipment. ● Civil engineering work and building (excluding structures that directly contribute to energy-related CO2 emission reductions) ● Cost related to a simple restoration of function, such as restoring the function to the state at the time of installation by updating existing facilities/equipment ● Spare parts (excluding those used for testing and commissioning) ● On-site inspections and writing reports that are submitted to GEC as part of the model project ● Forward exchange contract and remittance charge ● Cost related to land acquisition

* Costs eligible for financial support in the JCM Eco Lease Scheme are limited to a leasing fee of the costs of facilities/equipment and relevant lease interests.

Outline of Guidelines for Submitting JCM Model Project Proposal in FY2024 (2)

Period of Measurement, Reporting and Verification (MRV)

Participants of the model project shall conduct measurement, reporting and verification (MRV) of GHG emission reductions until the end of legal durable years of the facilities/equipment as stipulated by the Japanese law. Please note that the legal durable years of the same facility may vary depending on the purpose of business usage as shown in the examples below.*1

*1 For questions regarding how to determine the appropriate legal durable years for your project, please contact Japanese local tax office.

Ministerial Ordinance on the Durable Years, etc. of Depreciable Assets

(Ordinance NO.15 of Ministry of Finance, March 31, 1965)

Appendix table 2 Producing “other final products” by using installed facilities

Appendix table 1 Other cases than the above
ex. the building owner introduces facilities as shared equipment

〈Examples〉

Category of technology	Purpose of business usage	Legal durable years
Solar power generation facilities	Electric power sales	17 years
	Internal consumption at car manufacturing factories	9 years
	Internal consumption from rooftop equipment on warehouses	12 years
Boilers	Cooking oil production	10 years
	Rubber products production	9 years
	Hot water supply for hotels	17 years
Absorption chillers	Supply of chilled water in chemical factories	8 years
	Air conditioning in shopping malls	15 years

Cost-effectiveness of Emission Reductions of GHGs

Cost-effectiveness is the amount of financial support to reduce 1 ton of CO2 equivalent of GHG emissions.

Cost-effectiveness of emission reductions of GHG (JPY/tCO2eq)

$$= \text{Amount of financial support (JPY)} * 2 \\ \div \text{Total emission reductions of GHG (tCO2eq)} * 3$$

*2 Amount of financial support (JPY)

$$= \text{Eligible costs (JPY)} \times \text{Percentage of financial support (\%)}$$

*3 Total emission reductions of GHG

$$= \text{Emission reductions of GHG per year (tCO2eq/y)} \times \text{legal durable years (y)}$$

In principle, if the number of similar technological projects in a partner country is less than 5, **JPY4,000/tCO2eq or lower**

If the number of similar technological projects in a partner country is 5 to 9, **JPY3,000/tCO2eq or lower *4**

Solar power project
JPY2,500/tCO2eq or lower

Hydropower project
JPY500/tCO2eq or lower

If the number of similar technological projects in a partner country reaches 10, no more project using the similar technology will be selected.

*4 Regarding the number of similar technological projects in the partner countries, please refer to Annex 2 “Categorization by applied technology type, Number of JCM model project by each country” of Guidelines for Submitting Proposals.

Outline of Guidelines for Submitting JCM Model Project Proposal in FY2024 (3)

Main Evaluation Criteria for Selecting JCM Model Projects in FY2024, including New Points

☑ Countries of priority

The model project shall prioritize the partner countries that have already established the JCM. Based on the objective of increasing the number of partner countries to around 30 in accordance with the Grand Design and Action Plan for a New Form of Capitalism (Cabinet Decision in June 2022), proposals for projects in non-partner countries will also be accepted on the basis that their selection will be considered in parallel with the bilateral negotiations for new partnership.

☑ Measures to respect human rights

Representative participant should take the best possible measures to respect human rights under its own responsibility in accordance with the National Action Plan on Business and Human Rights (2020-2025) (the Inter-Ministerial Committee for Japan's National Action Plan on Business and Human Rights, October 2020) as well as the Guidelines on Respecting Human Rights in Responsible Supply Chains (the Inter-Ministerial Committee on Policy Promotion for the Implementation of Japan's National Action Plan on Business and Human Rights, September, 2022). Specific details of their actions shall be provided in the application document, which shall be reviewed in the selection process.

☑ Efforts toward the achievement of "carbon neutrality in 2050" and "2030 GHG emission reduction target" by participant companies

- Setting GHG emission reduction targets toward carbon neutrality in 2050
- Participation in Decokatsu Support Team
- Registration for Decokatsu (National Movement for New and Prosperous Lifestyles toward Decarbonization)

[Reference]
Decokatsu web page (Ministry of the Environment, Japan)
<https://ondankataisaku.env.go.jp/decokatsu/en/>

☑ JCM focus areas of the Infrastructure Initiative for Decarbonization (MOEJ, June 2021)

Additional points may be given to projects that introduce the following leading decarbonizing technologies that are among the focus areas for JCM according to the Infrastructure Initiative for Decarbonization (MOEJ, June 2021) (*Excluding projects in countries where these technologies have already been or are being introduced as JCM Model Projects.)

- Renewable energies (solar power, wind power, hydro power, geothermal energy, biomass energy, green hydrogen, and so forth)
- Green logistics including cold chain (non-fluorocarbon cooling system, modal shift, airports, ports and harbors, and so forth)
- Waste management infrastructure (waste to energy, and so forth)

☑ Criteria for solar power plants

The conversion rate from optical to electric energy of photovoltaic modules must be 21.2% or higher.

☑ Criteria for solar power plants with batteries

- Photovoltaic module:
The conversion rate from optical to electric energy of photovoltaic modules must be 21.2% or higher.
- Battery:
The battery charges only the power generated by photovoltaic modules to be introduced.
Please refer to "the Guidelines for Submitting Proposals" for detailed conditions.

☑ Installation of storage battery only

The storage battery shall charge only the electricity generated by the renewable energy generation facilities. In addition, there must be surplus of electricity supply from renewable energy sources which is not used effectively due to power generation restrictions, etc., at the site. Please refer to "the Guidelines for Submitting Proposals" for detailed conditions.

Process related to Selection with Joint Committee of Partner Country

After the proposal review, "PIN (Project Idea Note for the JCM Project)" of prospective projects will be sent to the JCM Secretariat. After the JCM Secretariat verifies that the PIN contains all the required information, the JCM Secretariat sends the PIN to the respective Joint Committees of the partner countries. Joint Committee confirms that there is 'no objection' to selecting the concerned projects before MOEJ decides to select the project. Once the proposed project is nominated as a prospective project for selection, the applicant of the project will be notified that the project is on the PIN process stated above.

Submission of Proposals

How to submit proposals:

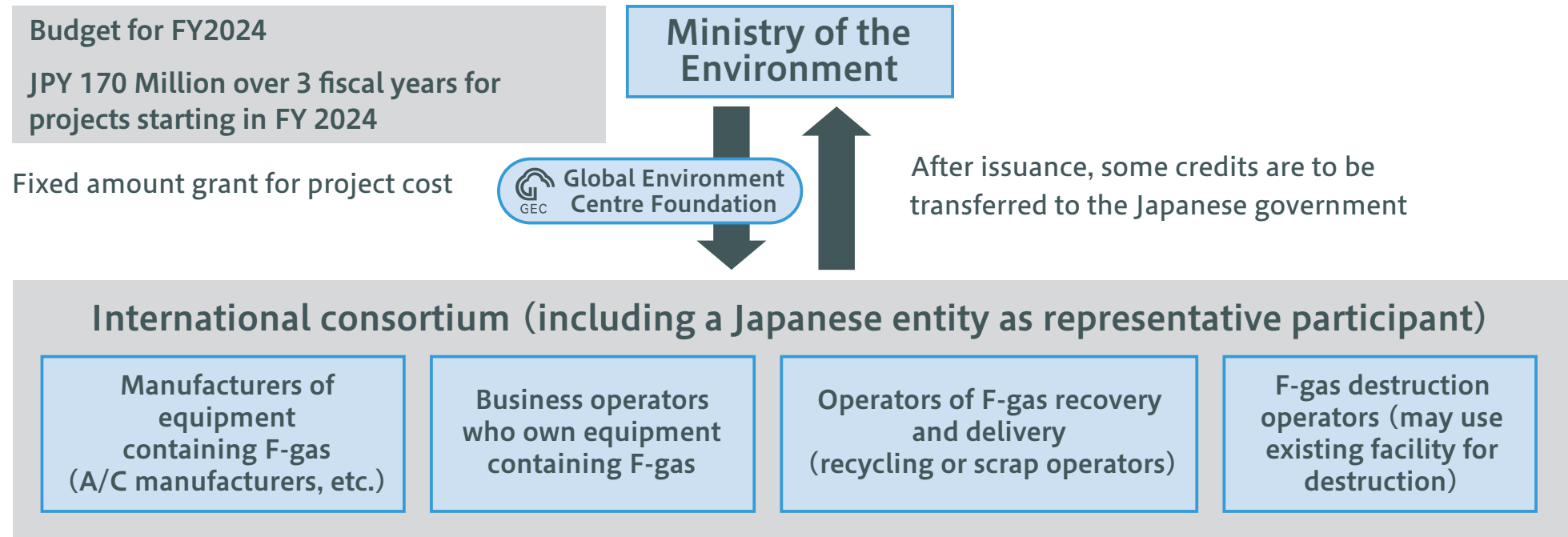
Proposals must be submitted electronically.

Period:

From Friday, 5 April 2024 to Friday, 29 November 2024 (12:00 JST)

- Pre-registration is recommended before submitting a proposal.
- The call may be closed before the deadline based on the availability of remaining budget.

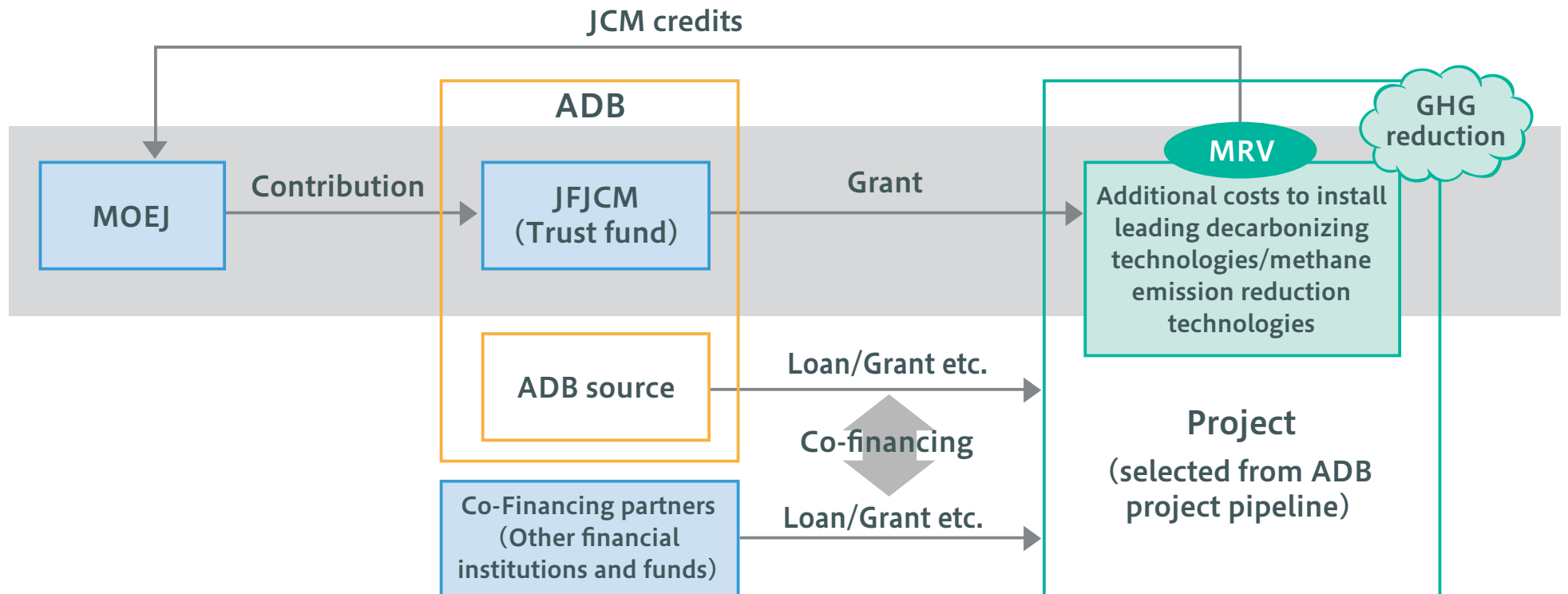
Finance Programme for JCM F-gas Recovery and Destruction Model Projects by MOEJ



<h3>Purpose</h3>	<h3>Project Period</h3>
<p>To contribute to achieve Japan's emission reduction target by reducing GHG emissions and utilizing JCM credit through recovery and destruction of F-gases without releasing them</p>	<p>Within a maximum period of three years</p>
<h3>Scope of Financing</h3>	<h3>Eligible Projects</h3>
<ul style="list-style-type: none"> ● Establishment of scheme for recovery and destruction ● Installation of facilities/equipment for recovery/destruction, and improvement of existing facilities/equipment ● Activities related to the implementation of MRV (Monitoring, Reporting, and Verification) and purchase of monitoring equipment ● Technology transfer and outreach promotion to local stakeholders for continuous project implementation 	<ul style="list-style-type: none"> ● To start the project after receiving the grant decision and implement recovery and destruction within three years ● To aim to register as JCM projects and achieve the issuance of credits

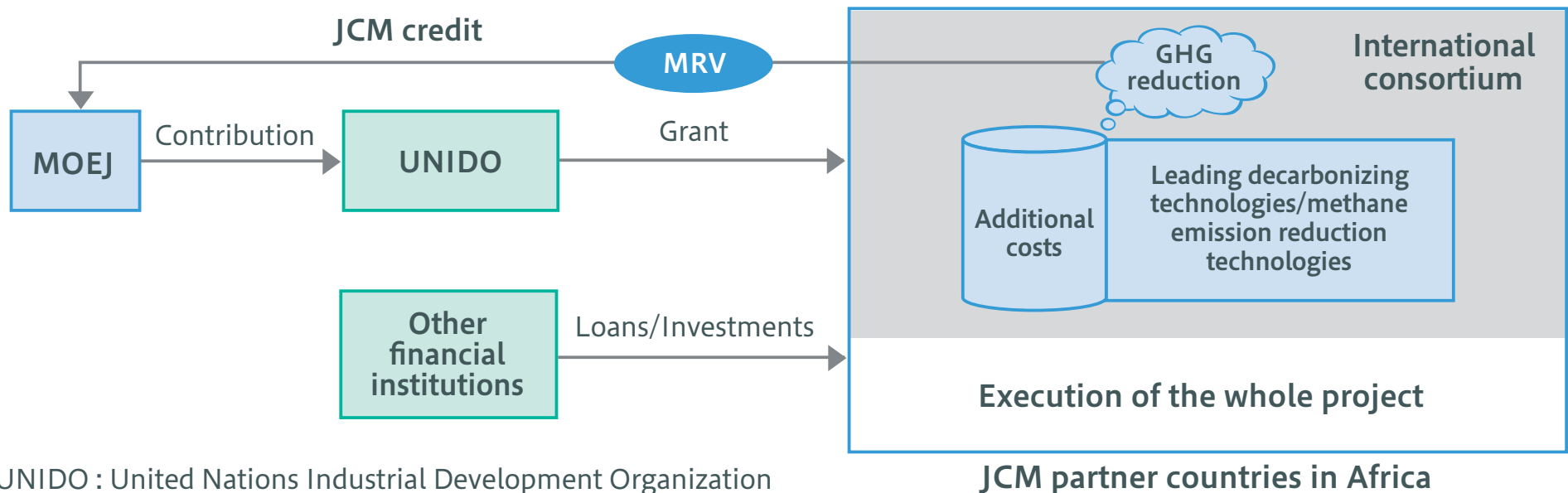
ADB Trust Fund: Japan Fund for the Joint Crediting Mechanism (JFJCM)

Budget	Cumulative contribution from 2014: JPY 16.6 billion (approx. USD 110 million) ● Budget for 2024: JPY 0.2 billion (approx. USD 1.3 million) (1 USD = 150 JPY)
Overview	To provide financial incentives for the adoption of expensive but advanced low-carbon/methane emission reduction technologies in projects financed by Asian Development Bank (ADB)
Purpose	To develop ADB projects with sustainable and decarbonizing transition perspective by introducing advanced low-carbon technologies as well as to acquire JCM credits



JCM Support Programme by UNIDO*

Budget	<p>Cumulative contribution since 2021: JPY 800 million (approx. USD 5.33 million @JPY150/USD)</p> <ul style="list-style-type: none"> ● Budget for 2024: JPY 100 million (approx. USD 0.67 million)
Purpose	To accelerate formation of JCM projects in JCM partner countries in Africa (namely Ethiopia, Kenya, Tunisia, and Senegal), where the number of awarded JCM projects is smaller, by grants from UNIDO which has resources like local networks
Overview	This programme supports International Consortiums, including Japanese representative participants, to develop JCM projects by reducing additional costs to implement advanced decarbonizing technologies or the Fukuoka method of waste management through UNIDO's grants.
Requirements (in case of Decarbonizing Technologies)	<ul style="list-style-type: none"> ● Mainly aimed at acceleration of JCM Projects with decarbonizing technologies already selected in other JCM Projects ● Applicable only by Japanese entities as Representative Partners who leads International Consortium and receives Grants ● Maximum grant per project : US\$ 800,000, Maximum supporting ratio : 75% of eligible costs ● Cost efficiency : In principle, US\$30/t CO2 eq or better, MRV Period : Minimum 5 years ● Technical cooperation for MRV after completed implementation in the JCM Process is not provided for this particular programme.



*UNIDO : United Nations Industrial Development Organization

Demonstration Programme for Application of New Decarbonizing Technology

Purpose

Implementing new demonstration scale projects to promote the introduction of new decarbonizing technologies in JCM partner countries

Eligible Technology

- Advanced decarbonization technologies that have not been used in JCM projects in the country concerned
- Technologies that have been demonstrated and expected to be commercialized in JCM partner countries in the near future, but still require further demonstration of the business model outside Japan

Scope of Financial Support

- Equipment, construction and labor costs for the demonstration
- Research costs for fundraising or obtaining licenses and permits
- Research costs for developing a new methodology for calculating GHG emission reductions for future agreement with the JCM partner countries

Percentage of Financial Support

- (a) 1/2 (one-half) : When other than (b) or (c)
- (b) 2/3 (two-third) : When the representative participant is classified as a small and medium-sized enterprise under Japan law
- (c) 1/3 (one-third) : When the representative participant is not classified as a small and medium-sized enterprise under Japan law and the amount of support is 100 million yen or less per year.

Issuance of JCM Credits

- The programme aims to issue JCM credits for emission reduction realized by the selected demonstration projects.
- The programme also aims to receive application by the participants of demonstration projects for the Financing Programme for JCM Model Projects within a few years after completion of the demonstration period.

METI's Support for the JCM Partner Countries

- 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: JPY 15 million (approx. USD 100 thousand) per study (USD1=JPY150)

Project period Up to 1 year

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

JCM Demonstration Programme by NEDO *

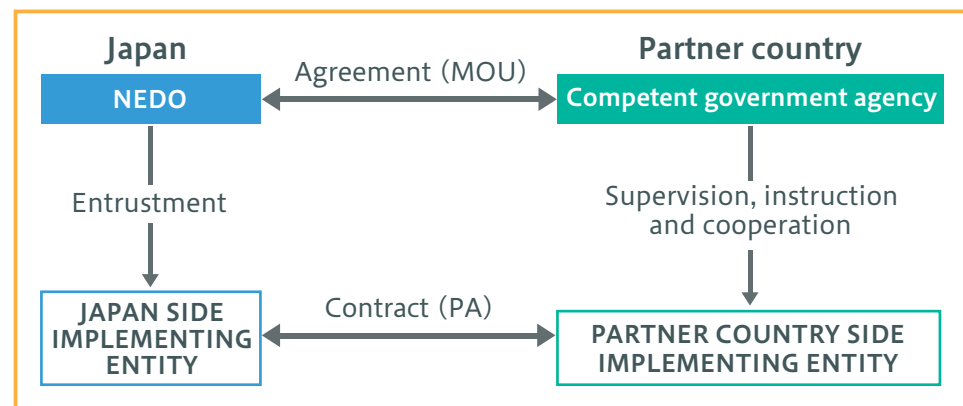


Scope

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: JPY 0.7 billion (approx. USD 4.7 million @ JPY150/USD)

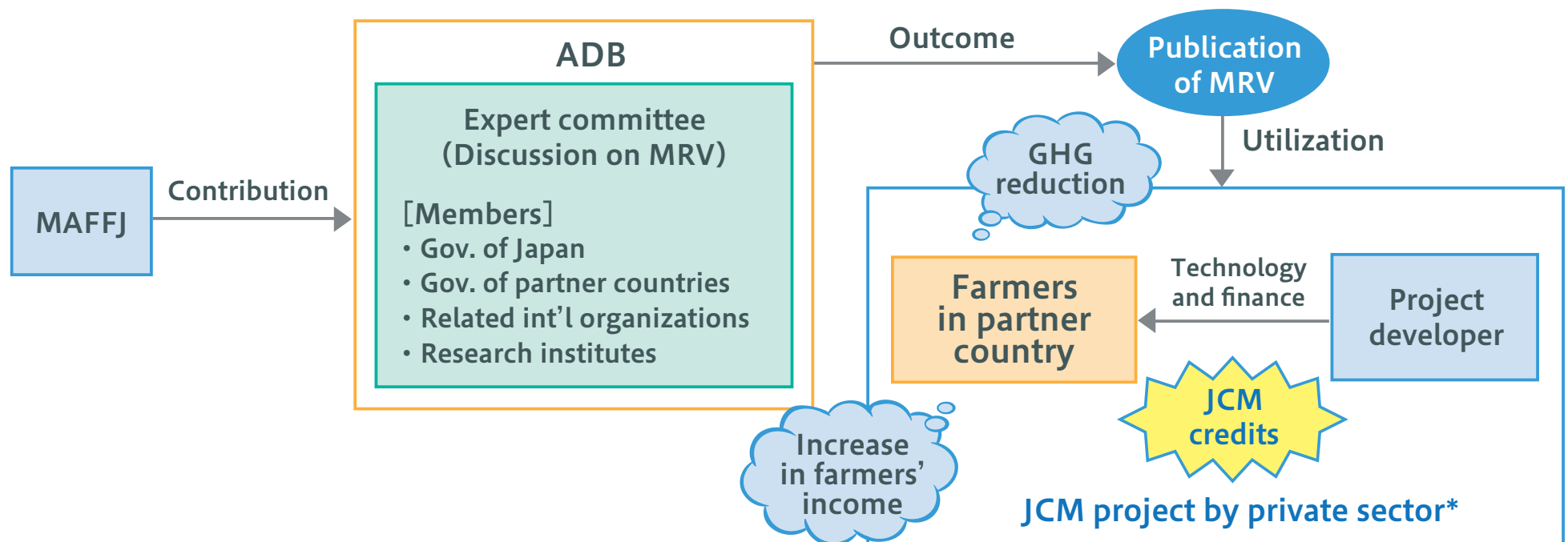
Project period Pre-demonstration stage: up to 1 year
 Demonstration stage: up to 3 years
 Follow-Up Project stage: up to 2 year



*NEDO = New Energy and Industrial Technology Development Organization

Development of MRV for JCM Projects in Agriculture – Implemented by ADB

Budget	Budget for FY 2024: JPY 30 million (approx. USD 0.2million)
Overview	<ul style="list-style-type: none"> ● Committee consisting of experts from governments of partner countries and Japan and relevant organizations with ADB serving as the secretariat has been launched. ● In 2024, the committee will commence the discussion on MRV and other necessary elements for Alternate Wetting and Drying (AWD) to reduce methane emissions from rice paddy fields, with the aim of supporting the formulation and implementation of an actual JCM project in agriculture to generate reliable and transparent carbon credits while ensuring business continuity for the private sector.
Purpose	Achievements of triple goals: GHG emission reduction, increase in farmers' income, and dissemination of Japanese climate-smart technologies



*JCM projects are envisioned to be led by private sector.

Private-Sector JCM Projects

Background

- In order to achieve the JCM target of "cumulative international emission reduction/removal of approximately 100 million t-CO2 by 2030 through public-private partnership" based on the Global Warming Countermeasures Plan (approved by the Cabinet in October 2021), in addition to the conventional JCM project formation using financial support from the government, 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 on the part of private-sector companies in recent years.
- In FY2021, the "Study Group on Measures to Promote the Use of JCM by the Private Sector" released "Recommendations" including the following.
 - Significance of utilization of private-sector JCM and expectations from the private sector for the development of the system: Necessity of developing specific procedures for the JCM system, etc.
 - Promotion of partner countries' understanding of the concept of credit allocation, etc.: Importance of improving foreseeability through the advance inquiry process, etc.

Promotion through the formulation of "Guidance on the development of Private-Sector JCM projects invested and implemented by private companies without any governmental financial supports"

- Introduction of the following new procedure, which is under discussion with each JCM Partner country:
 - Making an advance inquiry to the partner countries on the "Project Idea Note (PIN)" which includes the project contents and credit allocation plan
 - Confirming that there are no objections at the Joint Committee prior to the implementation of a JCM project
- Explanation of matters to be considered when proposing a private-sector JCM project by PIN and requesting credit allocation (e.g., the concept of financial and non-financial contributions)
- Support measures for implementation of private-sector JCM projects, points to keep in mind when dealing with human rights, etc., and introduction of the support desk
- This guidance has been updated in March 2024 based on future revisions of JCM rules with JCM partner countries and the status of private-sector JCM projects.
- Please contact the JCM Secretariat at info@jcm.go.jp for any inquiry about private-sector JCM projects.

《JCM Project Cycle》

Submission of PIN	Project participant
Confirmation of no objection	Joint Committee
Project implementation	Project participant
Submission of methodology	Project participant/governments or Joint Committee
Approval of methodology	Joint Committee
PDD formulation	Project participant
Validation	Third Party Entities (TPEs)
Registration	Joint Committee
Monitoring	Project participant
Verification	Third Party Entities (TPEs)
Credit issuance	Joint Committee: Allocation Governments: Credit issuance

Submission of PIN Confirmation of no objection

Newly added process (under discussion with partner countries) to be implemented for all JCM projects

Japan Platform for Redesign: Sustainable Infrastructure (JPRSI)

What is JPRSI?

JPRSI is a public-private partnership platform established by the Ministry of the Environment, Japan in September 2020 to provide comprehensive support for partner countries' governments and corporations, etc. to improve environment by introduction of Japanese environmental infrastructure.

Environmental Infrastructure Supported by JPRSI

(1) Infrastructure for environmental conservation

Waste to Energy (WtE), Waste water treatment plant, Decentralized domestic wastewater treatment system ("Johkasou"), Renewable power generation, renewable hydrogen, etc.

(2) Infrastructure for decarbonization and reduction of environmental impacts

- Introduction of renewable energy and energy-saving equipment to infrastructure and cities,
- Highly efficient energy utilization and management in infrastructure,
- Introduction of equipment for emissions reduction from pollutants (wastewater, exhaust gas, dust, etc.),
- Introduction of disaster prevention systems that contribute to climate change adaptation, etc.

Major Activities and Achievements

(1) Dissemination of technical information provided by Japanese companies

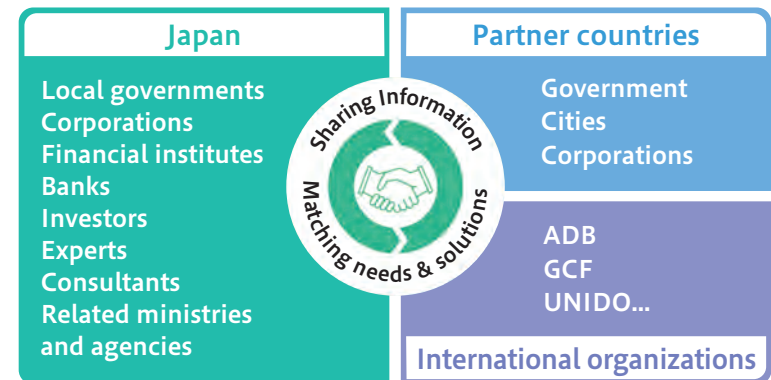
A list of environmental technologies of JPRSI members are compiled and disseminated. (220 technologies, available in English)

(2) Matching needs in partner countries with Japanese corporations' solutions

The JPRSI Secretariat receives inquiries from local governments and/or private sectors of commerce with interest in Japanese environmental technologies and the possibility to collaborate in projects, and introduces the inquiries to JPRSI members for matching purposes.

JPRSI Members (as of June 30, 2024)

583 Japanese corporations, etc. engaged in environmental infrastructure



**Free registration
Sign up here**



JPRSI HP: <https://www.jprsi.go.jp/en>

JPRSI Secretariat (FY2024):

Overseas Environmental Cooperation Center (OECC), Japan

E-mail: info-jprsi@oecc.or.jp

Application Support by GEC for JCM Financing Programme

GEC Website

GEC introduces project examples selected so far in the JCM Model Project on the GEC website. You can search by sector such as renewable energy for project study. For additional information, please refer to “Guidelines for Submitting Proposals” and Q&A on the website.

Suitable for Obtaining information on the programme including past projects and how to apply, etc.



<https://gec.jp/jcm/>

For more extensive information about the JCM, please see the following websites:

● Carbon Markets Express: <http://carbon-markets.env.go.jp/eng/> ● JCM Website: <https://www.jcm.go.jp/>

“JCM Global Match” JCM Business Matching Platform - Free of charge -

The JCM Global Match is a free-of-charge online business matching platform designed to help you find your business partners for an International Consortium of your JCM Model Project as well as JCM F-gas Project, ADB JFJCM and UNIDO-JCM Project. Among the registrants in the platform, you will be able to find Japanese and international companies with excellent decarbonization technologies, JCM partner country companies to use such technologies, consultants familiar with the JCM Programme and helpful in deal making, and Japanese and multinational financial institutions. About 40 % of the registrants are Japanese entities and the rest are from more than 50 countries.

You can appeal your company’s specialties and projects to all the registrants in various ways, like adding your information in the profile and specialty sections, posting a chat about your company or project in the "Open Discussion" room, etc. And you can find your potential business partner from the search window or the lists of the companies by categories. If you find a registrant of a company you are interested in, send a “Matching Request” to him/her. Once the receiver accepts your request, you can get his/her whereabouts to contact directly with him/her. In addition, you will get useful information about JCM and events on the platform. Register now. It’s easy. (Contact for JCM Global Match: jcm-gm@gec.jp)

Suitable for Finding JCM project partners including Japanese companies expanding business overseas and overseas companies wishing to introduce technologies using JCM funding.



https://jcm-gm.my.site.com/JCMGlobalMatch/s/?language=en_US

Consultation by GEC

GEC provides application consultation in order to assist project formation for entities interested in JCM Model Project. Please feel free to contact us. Please send an e-mail to jcm-info@gec.jp. Subject of e-mail should be “Consultation on application for JCM Model Project (Your company name)” .

Please contact the JCM Secretariat (info@jcm.go.jp) for prior consultation on Project Idea Note, etc. for private-sector JCM projects, invested and implemented by private companies without any governmental financial supports.

Suitable for Asking questions to or consulting with GEC staff face to face or online at various phases of proposal preparation from early planning to application.

Cover Pictures

Lower left : Floating Solar Power & Rooftop Solar Power (Thailand) Shizen Energy Inc. / Upper left : Chiller & LED Lighting (Vietnam) Tokyu Corporation / Center : Waste to Energy (Vietnam) JFE Engineering Corporation / Right : Mini Hydro Power (Philippines) Toyota Tsusho Corporation



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<https://gec.jp/jcm/>



https://twitter.com/GEC_JCM_Info



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