



# JCM THE JOINT CREDITING MECHANISM 2021

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

Published in October 2021



# About the Joint Crediting Mechanism (JCM)

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 17 countries and continues to communicate with other developing countries.

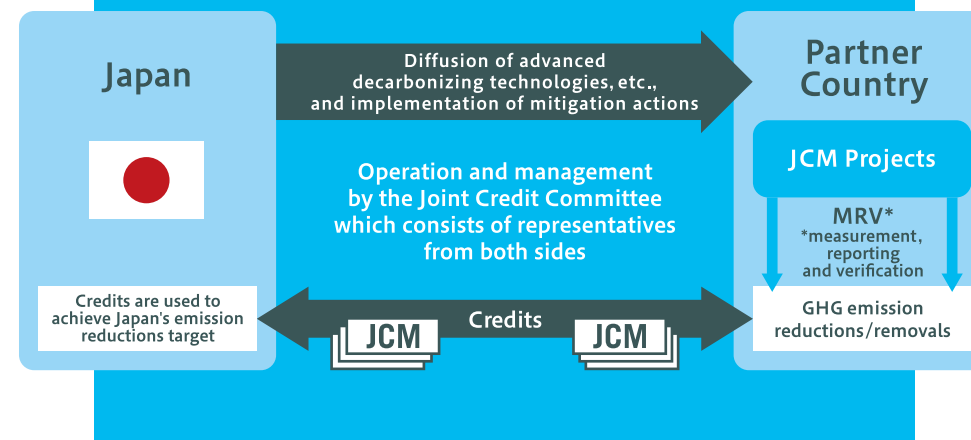
## Basic Concept of the JCM

- 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-CO<sub>2</sub> 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 × Decarbonizing Project

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

#### JCM × Article6 (Market mechanisms)

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

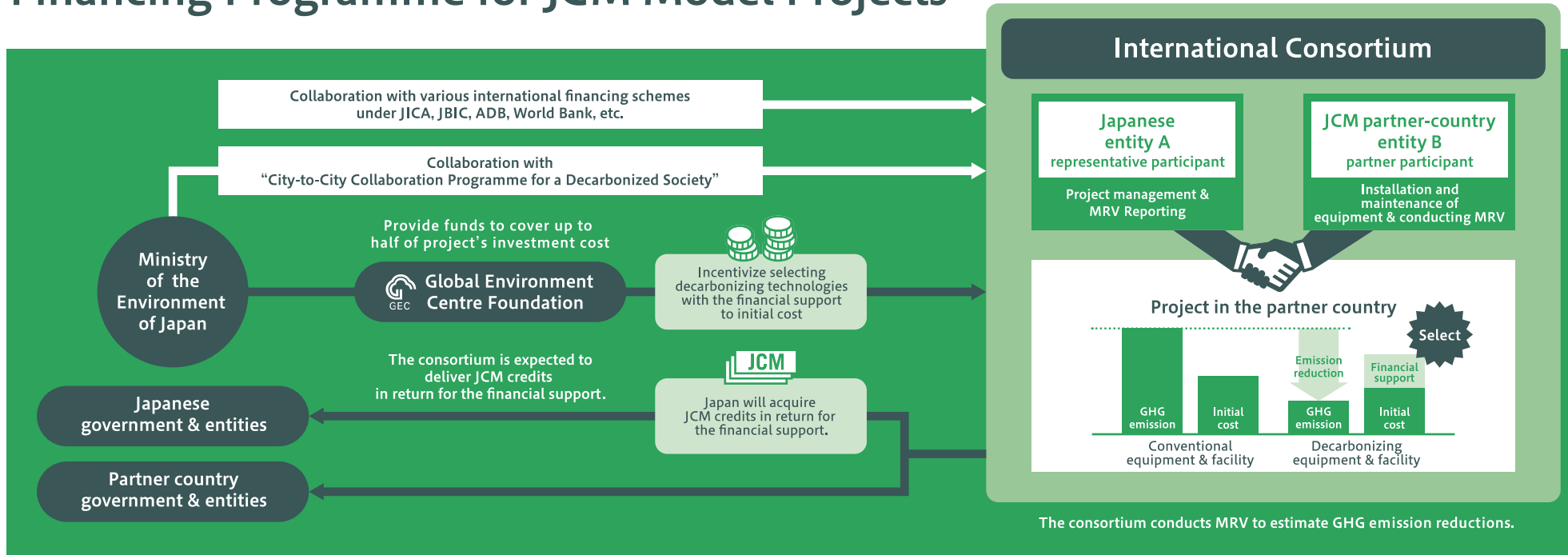
#### JCM × SDGs

Sharing relevant information of JCM's contribution to SDGs

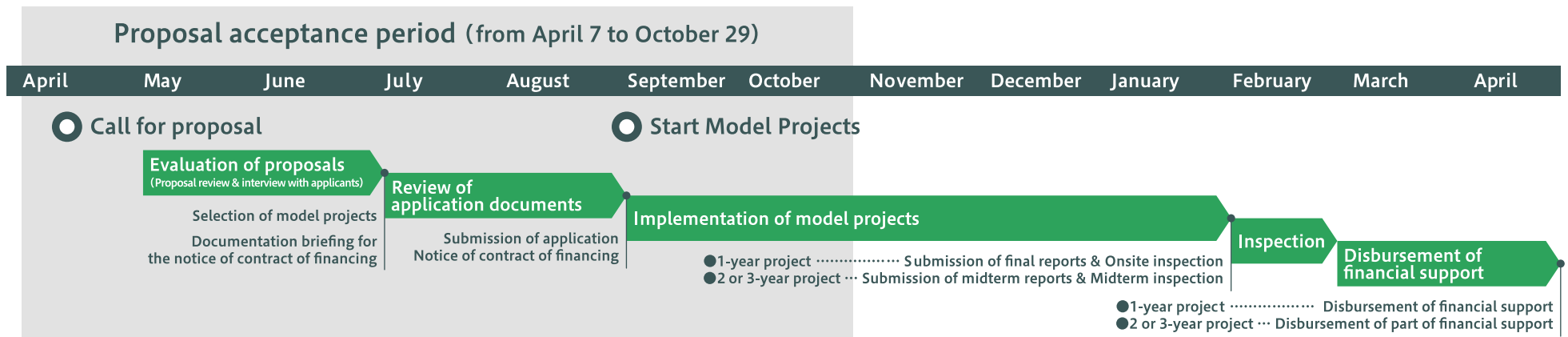
<https://www.carbon-markets.go.jp/eng/jcmgp/>



# Financing Programme for JCM Model Projects



## JCM Model Projects Schedule in FY2021



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

※ This figure shows the schedule of the first selection. Additional selection(s) will be conducted several times until the deadline on October 29, in which case the schedule after selection will be shifted behind accordingly.



# JCM Model Projects (FY2013-2021)

Total 194 projects

As of September, 2021

● Energy Efficiency ● Renewable Energy ● Effective Use of Energy ● Waste Handling and Disposal ● Transportation

## Mongolia : 6 Projects

- Heat Only Boiler (HOB)
- Fuel Conversion by Introduction of LPG
- 2.1MW Solar PV in Farm
- 8.3MW Solar PV in Farm
- 10MW Solar PV
- 15MW Solar PV

## Bangladesh : 4 Projects

- Centrifugal Chiller
- Centrifugal Chiller
- Loom at Weaving Factory
- 315kW PV-diesel Hybrid System

## Maldives : 1 Projects

- 186kW Solar Power on School Rooftop

## Saudi Arabia : 2 Projects

- Electrolyzer in Chlorine Production Plant
- 400MW Solar PV

## Ethiopia : 1 Projects

- 120MW Solar PV

## Kenya : 2 Projects

- 1MW Solar PV at Salt Factory
- 38MW Solar PV

## Myanmar : 9 Projects

- Refrigeration System in Logistics Center
- Brewing Systems to Brewery Factory
- Once-through Boiler in Instant Noodle Factory
- Energy Saving Equipment to Complex Buildings
- 7.3MW Solar PV
- 1.8MW Rice Husk Power Generation
- 8.8MW Waste Heat Recovery in Cement Plant
- 700kW Waste to Energy Plant
- Brewing Systems and Biogas Boiler to Brewery Factory

## Laos : 5 Projects

- Amorphous Transformers
- 14MW Solar PV
- 14MW Floating Solar PV
- 19.5MW Solar PV
- 11MW Solar PV

## Cambodia : 6 Projects

- LED Street Lighting
- Inverters for Distribution Pumps
- 200kW Solar PV at International School
- 1.1MW Solar PV at International School
- Biomass & Solar PV
- Solar PV & Centrifugal Chiller

## Viet Nam : 35 Projects

- Amorphous Transformers 1
- Amorphous Transformers 2
- Amorphous Transformers 3
- Amorphous Transformers 4
- High Efficiency Chiller 1
- High Efficiency Chiller 2
- Air Conditioning System & Chiller
- High Efficiency Water Pumps
- Electricity Kiln
- Air-conditioning Control System
- Energy saving Equipment in Lens Factory
- Energy Saving Equipment in Wire Production Factory
- Energy Saving Equipment in Brewery Factory
- Container Formation Facility
- Air-conditioning in Lens Factory
- High Efficiency Boiler
- Inverters for Raw Water Intake Pumps
- Air-conditioning in Hotel
- LED Lighting to Office Building
- Chiller and LED Lighting
- 320kW Solar PV in Shopping Mall
- 2MW Solar PV
- 2.5MW Solar PV
- 5.8MW Solar PV
- 9.8MW Solar PV
- 12MW Solar PV
- 49MW Solar PV
- 57MW Solar PV
- 9MW Solar PV to Factories
- Biomass Boiler to Chemical Factory
- Biomass Boiler
- Biomass Co-generation System
- Digital Tachographs
- Modal Shift with Reefer Container
- Waste to Energy Plant

## Thailand : 44 Projects

- Upgrading Air-saving Loom
- Centrifugal Chiller & Compressor
- Centrifugal Chiller in Tire Factory
- Ion Exchange Membrane Electrolyzer
- Once-through Boilers
- Refrigeration System
- Air Conditioning System & Chiller
- Chilled Water Supply System
- Energy Saving at Convenience Store
- LED Lighting to Sales Stores
- Boiler System in Rubber Belt Plant
- Air-conditioning Control System
- Refrigerator and Evaporator
- Heat Recovery Heat Pump
- Heat Exchanger in Fiber Factory
- High Efficiency Chiller
- 1MW Solar PV on Factory Rooftop
- 2MW Solar PV to University
- 126kW Solar PV
- 1.8MW Solar PV
- 2MW Solar PV 1
- 2MW Solar PV 2
- 2.5MW Solar PV
- 2.6MW Solar PV
- 3.4MW Solar PV 1
- 3.4MW Solar PV 2
- 5MW Solar PV
- 8.1MW Solar PV
- 23MW Solar PV
- 35.59MW Solar PV and Storage Battery
- 5MW Floating Solar PV
- 30MW Floating Solar PV
- Biomass Co-generation System
- Biomass Boiler
- 15MW Biomass Power Generation
- 30MW Solar PV
- 25MW Solar PV in Industrial Park
- 12MW Waste Heat Recovery in Cement Plant
- 0.8MW Solar PV and Centrifugal Chiller
- 37MW Solar PV and Melting Furnace
- High Efficiency Boiler, Chiller, and Solar PV
- Co-generation in Motorcycle Factory
- Co-generation in Fiber Factory
- Co-generation System

## Philippines : 16 Projects

- Air Conditioning System
- 0.16MW Micro Hydro Power Plant
- 1.5MW Hydro Power Plant
- 1.9MW Hydro Power Plant
- 1MW Rooftop Solar PV
- 1.2MW Rooftop Solar PV
- 1.53MW Rooftop Solar PV
- 2MW Solar PV
- 4MW Solar PV
- 18MW Solar PV
- 60MW Solar PV
- 2.5MW Rice Husk Power Generation
- 20MW Flash Geothermal Power Generation
- Biogas Power Generation and Fuel Conversion
- 33MW Wind Farm
- 29MW Geothermal Power Plant

## Palau : 5 Projects

- 370kW Solar PV for Commercial Facilities
- 445kW Solar PV for Commercial Facilities II
- 0.4MW Solar PV for Supermarket
- 155kW Solar PV for School
- 1MW Solar PV for Supermarket

## Chile : 8 Projects

- 1MW Rooftop Solar PV
- 3MW Solar PV 1
- 3MW Solar PV 2
- 3MW Solar PV 3
- 9MW Solar PV 1
- 9MW Solar PV 2
- 34MW Solar PV
- 3.4MW Rice Husk Power Generation

## Mexico : 6 Projects

- Once-through Boiler and Fuel Switching
- Energy Efficient Distillation System
- 30MW Solar PV 1
- 30MW Solar PV 2
- 20MW Solar PV
- 1.2MW Power Generation with Methane Gas Recovery System

## Costa Rica : 2 Projects

- Chiller and Heat Recovery System
- 5MW Solar PV

## Indonesia : 42 Projects

- Centrifugal Chiller at Textile Factory 1
- Centrifugal Chiller at Textile Factory 2
- Centrifugal Chiller at Textile Factory 3
- Energy Saving at Convenience Store
- Refrigerants to Cold Chain Industry
- Absorption Chiller
- High Efficiency Autoclave
- Injection Molding Machine
- Double Bundle-type Heat Pump
- Regenerative Burners
- Old Corrugated Cartons Process
- Upgrading to Air-saving Loom
- Centrifugal Chiller in Shopping Mall
- High Efficiency Thermal Oil Heater
- Smart LED Street Lighting System
- Once-through Boiler System in Film Factory
- Once-through Boiler in Golf Ball Factory
- Looms in Weaving Mill
- LED Lighting to Sales Stores
- Industrial Wastewater Treatment System
- High Efficiency Boiler
- High Efficiency Autoclave
- 0.5MW Solar PV
- 3.3 MW Solar PV
- 4.2MW Solar PV
- 2MW Hydro Power Plant
- 5MW Hydro Power Plant
- 6MW Hydro Power Plant 1
- 6MW Hydro Power Plant 2
- 8MW Hydro Power Plant
- 10MW Hydro Power Plant 1
- 10MW Hydro Power Plant 2
- 2X1.15MW Hydro Power Plant
- 2X3MW Hydro Power Plant
- 12MW Biomass Power Plant
- Rehabilitation of Hydro Power Plant
- 1.6MW Solar PV in Jakabaring Sport City
- 507kW Solar Power Hybrid System
- Gas Co-generation System
- 30MW Waste Heat Recovery in Cement Industry
- CNG-Diesel Hybrid Public Bus
- Gas Co-generation system

## Energy Efficiency



LPG Boilers (Mongolia)/  
Saisan Co.,Ltd.



Raw Water Intake Pumps (Viet Nam)/  
Yokohama Water Co., Ltd.



Amorphous Transformers (Viet Nam)/  
Yuko Keiso Co., Ltd.



Chiller and Heat Recovery System (Costa Rica)/  
NTT Data Institute Consulting Inc.

## Energy Efficiency



Energy Efficient Distillation System (Mexico)/  
Suntory Spirits Ltd.



Once-through Boiler (Myanmar)/  
Acecook Co., Ltd.

## Effective Use of Energy



Co-generation Plant (Thailand)/  
Nippon Steel Engineering Co., Ltd.

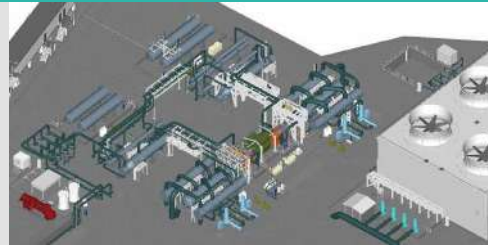


Gas Co-generation system (Indonesia)/  
Toyota Tsusho Corporation

## Renewable Energy



Wind Power Generation (Philippines)/  
Chodai Co., Ltd.



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



Solar Power (Viet Nam)/  
Kanematsu KGK Corp.



Solar Power (Lao PDR)/  
Sharp Energy Solutions Corporation

## Renewable Energy



Biomass Boiler (Thailand)/  
Fuji Foods Corporation

## Waste Handling and Disposal



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



Waste to Energy Plant (Myanmar)/  
JFE Engineering Corporation

## Transportation



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

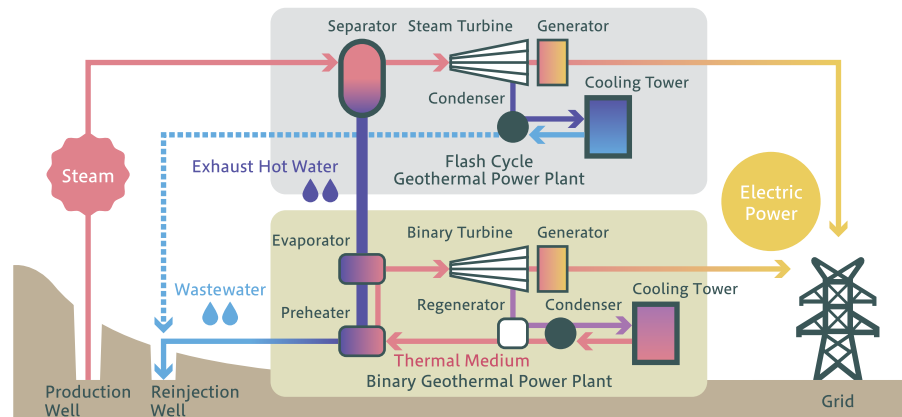




## 29MW Binary Power Generation Project at Palayan Geothermal Power Plant

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

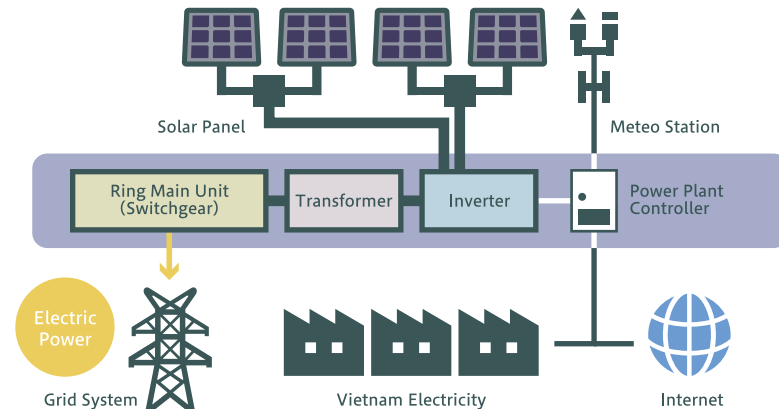
This project introduces a new 29MW binary geothermal power plant to the existing 120MW flash type geothermal power plant, located at Palayan area of southern part of the Luzon island, owned and operated by Bac-Man Geothermal Inc. Under this project electricity is sold to replace the grid power produced with fossil fuel, which in turn reduces greenhouse gas (GHG) emissions.



## 57MW Solar Power Project in An Giang Province

Country	Viet Nam
Representative	Kanematsu KGK Corp.
Partner	Sao Mai Group Corporation

Greenhouse gas (GHG) emissions are reduced by introducing a 57MW solar power plant on a 79.7ha (797,000m<sup>2</sup>) project site in An Giang Province. The generated electricity is supplied to the grid. This project contributes to meeting the renewable energy share of 23% in the total electricity supply in Viet Nam by 2030.



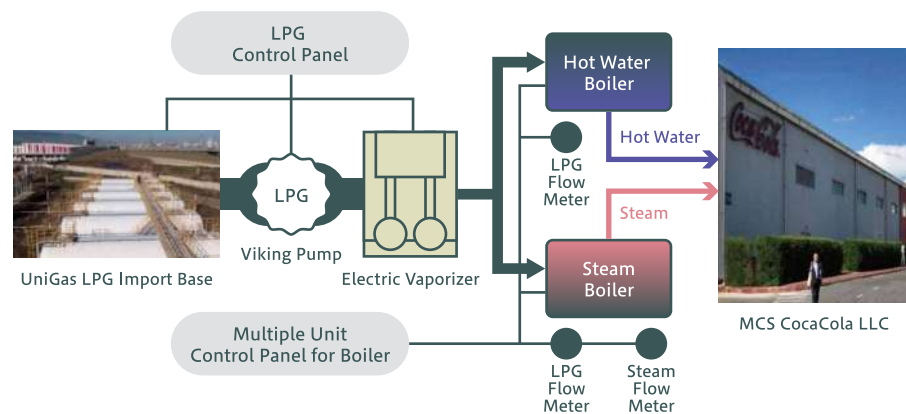
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### Fuel Conversion by Introduction of LPG Boilers to Beverage Factory

Country	Mongolia
Representative	Saisan Co., Ltd.
Partner	MCS International LLC, MCS Coca Cola LLC

LPG boilers are introduced to a beverage factory in Ulaanbaatar City for the purpose of mitigation of greenhouse gas (GHG) emissions as well as severe air pollution. By introducing the most efficient and newest model of LPG once-through boilers and vacuum type water heaters available, the efficiency of the system is improved with less fuel consumption.



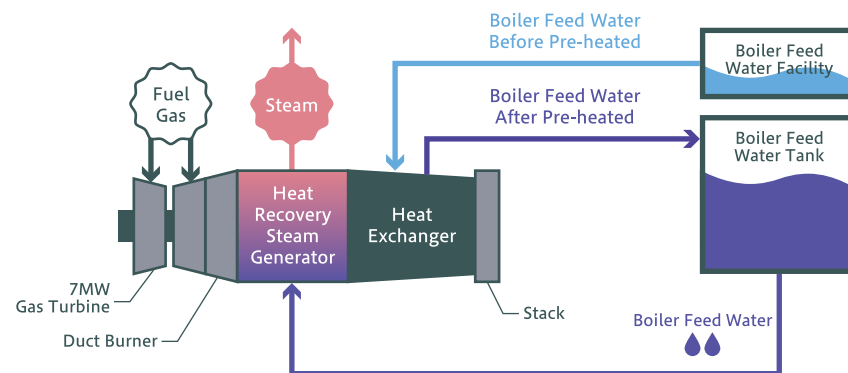
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### Efficiency Improvement of Co-generation System by Installation of Heat Exchanger in Fiber Factory

Country	Thailand
Representative	Nippon Steel Engineering Co., Ltd.
Partner	NS-OG Energy Solutions (Thailand) Ltd.

This project aims to efficiently utilize unused thermal energy of the co-generation system, which is composed of 7MW gas turbine and heat recovery steam generator equipped with duct burner, to heat water fed from a boiler in a fiber factory in Samutprakran province. Natural gas fuel used for duct burner is reduced by utilizing unused thermal energy for heating water.





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## Introduction of Biomass Boiler to Cooking Oil Factory

Country	Thailand
Representative	Tepia Corporation Japan Co., Ltd.
Partner	Thanakorn Vegetable Oil Products Co., Ltd.

A biomass boiler with the steam production capacity of 35 tons per hour is installed in a cooking oil factory in Samut Prakan Province. The steam is used in the oil production process. Palm Kernel Shell (PKS) is used as its biomass fuel, and PKS is produced from multiple suppliers so as to secure the stability of steam production.



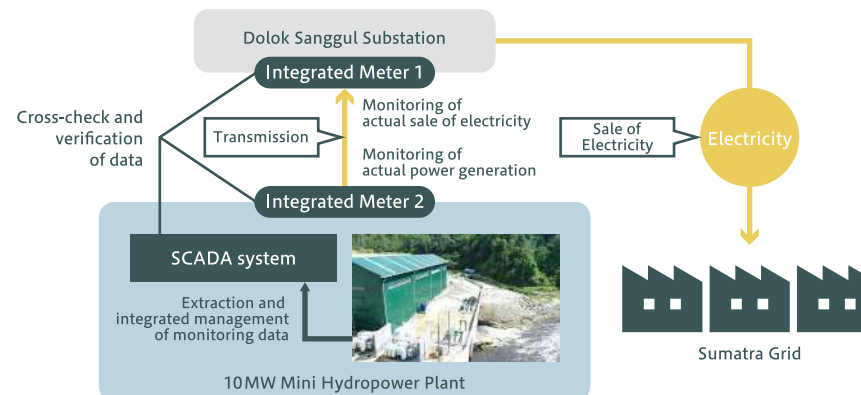
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## 10MW Mini Hydro Power Plant Project in North Sumatra

Country	Indonesia
Representative	Toyo Energy Farm Co., Ltd.
Partner	PT. Citra Multi Energi

A mini hydro power plant is constructed in Humbang Hasunduran District of North Sumatra with a capacity of 10MW (5MWx2). The electricity generated by the plant is to be supplied to a power company, resulting in GHG emission reductions by replacing grid electricity. As North Sumatra has been experiencing energy shortages, this project is also expected to contribute to improving energy supply in the region.



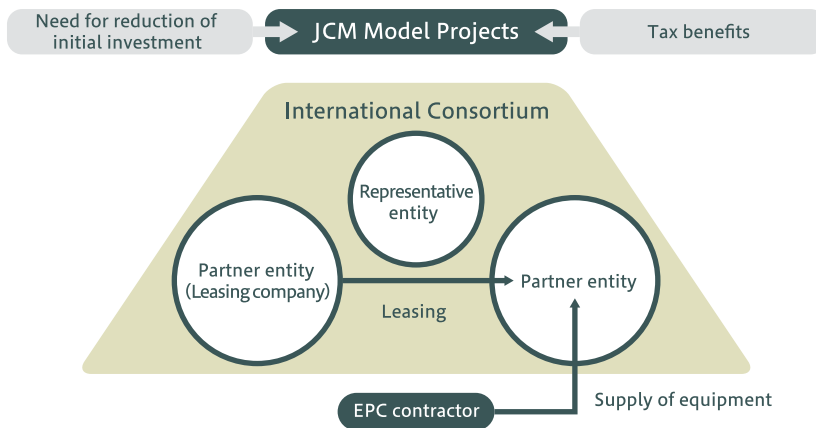




## Introduction of Low-carbon Facilities Utilizing Lease Scheme

Country	Indonesia
Representative	Tokyo Century Corporation
Partner	PT. Dynaplast, etc.

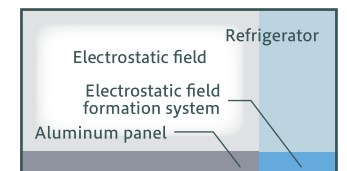
By introducing highly efficient injection molding machines and refrigerators with a leasing scheme, power consumption and CO2 emissions will be reduced. The leasing scheme offers an alternative long-term financing and is expected to expand advanced low-carbon or decarbonizing technologies.



## Modal Shift from Truck to Cargo Ship with Freshness Preservation Reefer Container

Country	Viet Nam
Representative	Nihon Crant Co., Ltd.
Partner	Hoan Chau-Asia Co., Ltd.

Introduction of freshness preservation reefer containers for shipment between Hai Phong and Ho Chi Minh enables longer storage life for foodstuff and lowers CO2 emission by modal shift from trucks to cargo ships. The freshness preservation reefer container forms static electric field with high voltage and low current in the chilled container and enables long storage of foodstuff.



How the container works

# Outline of Guidelines for Submitting JCM Model Project Proposal in FY2021 (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 GHG emission reduction target 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 7.6 billion (approx. USD 76 million) from FY 2021 for 3 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)	More than 3 (4 and more)
Percentage of financial support	Up to 50%	Up to 40%	Up to 30%

## 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

- 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

- 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 FY2021 (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.

### 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

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

## Cost-effectiveness of Emission Reductions of GHGs

The cost of reducing 1 ton of GHG emissions shall be JPY4,000/tCO<sub>2</sub>eq or lower in principle. However, if the number of similar technological projects in a partner country is 5 or more, its cost-effectiveness is expected to be JPY3,000/tCO<sub>2</sub>eq or lower. If it is 10 or more, JPY2,500/tCo<sub>2</sub>eq or lower.

$$\text{Cost-effectiveness of emission reductions of GHG (JPY/tCO}_2\text{eq)} \\ = \frac{\text{Amount of financial support (JPY)}}{\text{Total emission reductions of GHG (tCO}_2\text{eq)}^*}$$

\*Total emission reductions of GHG

= Emission reductions of GHG per year (tCO<sub>2</sub>eq/y) × legal durable years (y)

\*Amount of financial support (JPY)

= Costs eligible (JPY) × Percentage of financial support (%)

In principle, If the number of similar technology in a partner country is less than 5, **JPY4,000/tCO<sub>2</sub>eq or lower**

If the number of similar technology in a partner country is 5 or more, **JPY3,000/tCO<sub>2</sub>eq or lower**

If the number of similar technology in a partner country is 10 or more, **JPY2,500/tCo<sub>2</sub>eq or lower**

※ Regarding the number of similar technology 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 FY2021 (3)

## Newly Added Points to Evaluation Criteria for Selecting JCM Model Projects in FY2021

### ☑ Consistency with the policies of the partner country

The model project should be consistent with the relevant policies (including Nationally Determined Contribution - NDC) in the country where the project is implemented.

### ☑ Equipment using fossil fuels

In principle, the model project should not be a business related to thermal power generation using fossil fuels, except equipment that effectively utilizes the heat generated during power generation and equipment that contributes to decarbonizing technology such as carbon capture and storage (CCS).

### ☑ Projects after the completion of Co-Innovation projects

In Assessment Review of proposals for model projects, points will be added to the projects that demonstrate the certainty of business development after the completion of the Program to Demonstrate Decarbonizing Technology for Realizing Co-Innovation and its preceding program.

### ☑ Criteria for solar power plants

The conversion rate from optical to electric energy of photovoltaic modules must be 20% or higher.

### ☑ Criteria for solar power plants with batteries

- Photovoltaic module :  
The efficiency of photovoltaic modules must be 20% or higher.
- Battery :  
If the battery meets the requirements stipulated in Guidelines for Submitting Proposals, the battery will also be covered by this programme.

## JCM Eco Lease Scheme

From the fiscal year 2020, “JCM Eco Lease Scheme” is implemented to cover leasing charges and interests. This scheme has an advantage in reducing the reporting burden of representative participants with shorter monitoring period and simpler proposal document.

Representative Participant	Japanese leasing company
Amount of Financial Support	Up to JPY500 million for 3 years in principal
Percentage of Financial Support	Uniformly 10% of total leasing charges including leasing interests
Period of MRV	Equal to leasing period
Leasing Period	At least 5 years
Costs Eligible for Financing	Leasing charges of the costs of facilities/equipment and relevant lease interests
Eligible Type of Technologies	In principle, technologies with JCM methodology (ies) that have been either approved or proposed
Financial Statement for Application	Only financial statements of Representative Participant need to be submitted.



### Purposes

- To contribute to creating a decarbonized society through renovation and dissemination of high quality decarbonizing technologies
- To create innovation beneficial for both Japan and partner countries through collaboration (co-innovation)
- To contribute to achieve Japan's emission reduction target through JCM and to bring benefits to the technology developers in Japan as a result

### Eligible Participants and Eligible Costs

#### Eligible Participants

Japanese entities such as private companies (Participants must form an international consortium that consists of foreign entities, etc.)

#### Eligible Costs

This programme covers the following costs which are directly required for the projects of renovation and demonstration for decarbonizing technologies reducing the energy-related CO2 emissions in partner countries, by means of systemization and packaging of multiple technologies: Machinery and equipment, erection and installation, ancillary work, survey and test, facilities/instruments (including monitoring system), administrative work

### Implementation Period

Within 3 years (Application documents for the Contract of Finance must be submitted in the first fiscal year.)

### Budget and Ratio of Financial Support

**Budget** About JPY 700 million (approx. USD 7 million) from FY 2021 for 3 years

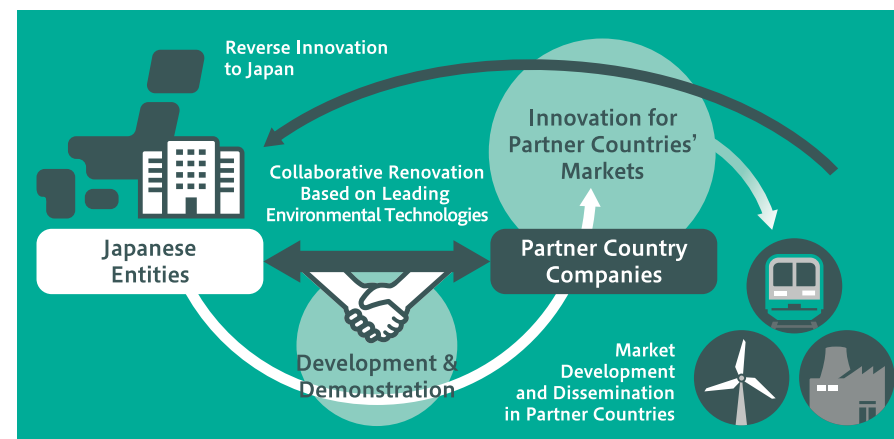
#### Ratio of Financial Support

2/3 for small and medium-sized enterprises, 1/2 or 1/3 for participants who do not fall into the above classification

### Differences from JCM Model Projects

	JCM Model Projects	Co-Innovation Projects
Eligible Projects	Projects that introduce facilities established as leading decarbonizing technologies to developing countries and that are expected to contribute to achieving Japan's GHG emission reduction target	Projects for renovation and demonstration of decarbonizing technologies for developing countries, that have been established in Japan, by means of systemization and packaging of multiple technologies
Partner Countries	JCM partner countries in principle	JCM partner countries and developing countries that have a potential of becoming JCM partner countries
Ratio of Financial Support	Up to 50%	As described above
Future Development after Completion of the Projects	Aiming for self-sustaining dissemination in partner countries, etc.	Aiming for contribution to achieving Japan's GHG emission reduction target by transforming the completed project into JCM model projects

### Image of development and dissemination of products and systems that match the markets of partner countries

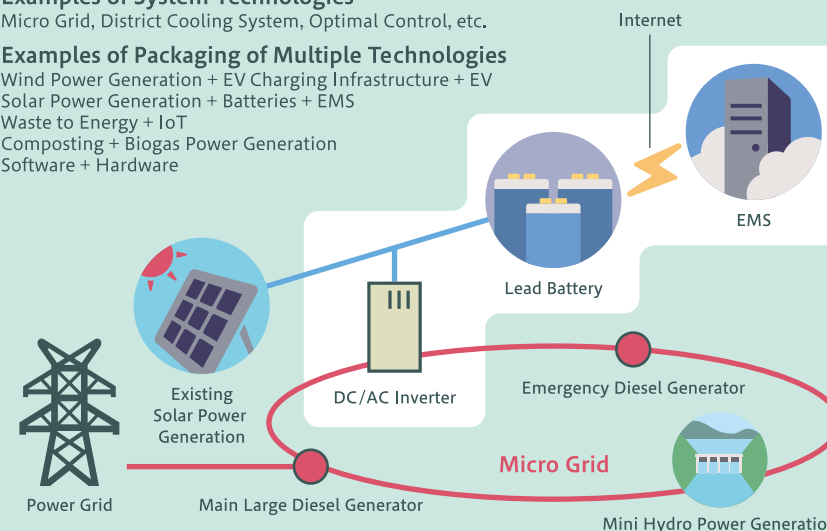


#### Examples of System Technologies

Micro Grid, District Cooling System, Optimal Control, etc.

#### Examples of Packaging of Multiple Technologies

Wind Power Generation + EV Charging Infrastructure + EV  
 Solar Power Generation + Batteries + EMS  
 Waste to Energy + IoT  
 Composting + Biogas Power Generation  
 Software + Hardware



Example of Packaging of Multiple Technologies : Solar Power Generation + Batteries + EMS

### Purposes

- Cultivation of renewable hydrogen market and hydrogen supply chain
- Contributions to achieve Japan's GHG emission reduction target through JCM
- Supporting the transition of developing countries to a decarbonized society

### Eligible Projects

Hydrogen projects that integrate the processes of production, storage and transportation as well as supply and use

### Period of Financial Support

**Implementation Period** Within 3 fiscal years

**Period of Financial Support** 1 fiscal year

※ Applicants selected for the financing support must submit application documents for the Contract of Finance each fiscal year.

※ When implementing a project that spans multiple fiscal years, the plan of the entire period should be described in the project implementation plan at the time of application.

### Budget, Ratio of Financial Support, Eligible Costs

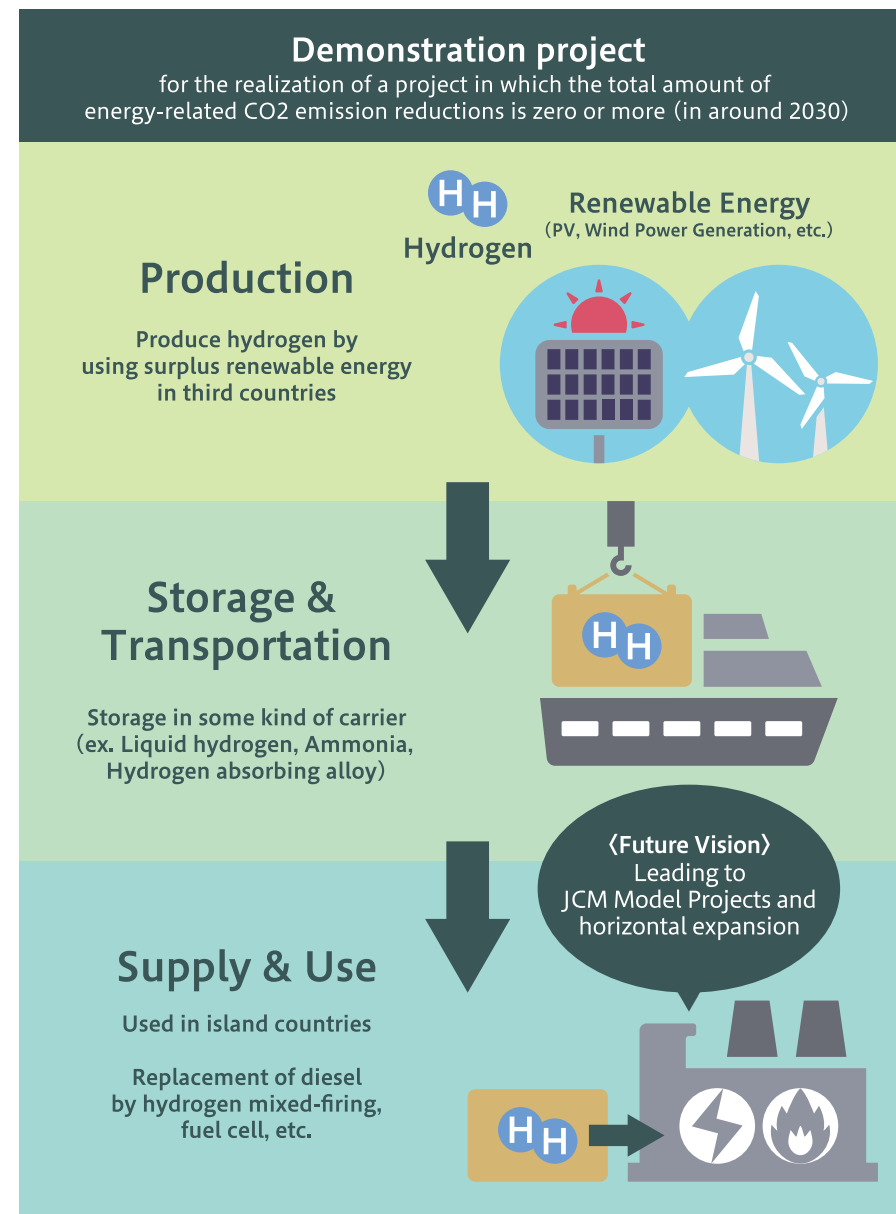
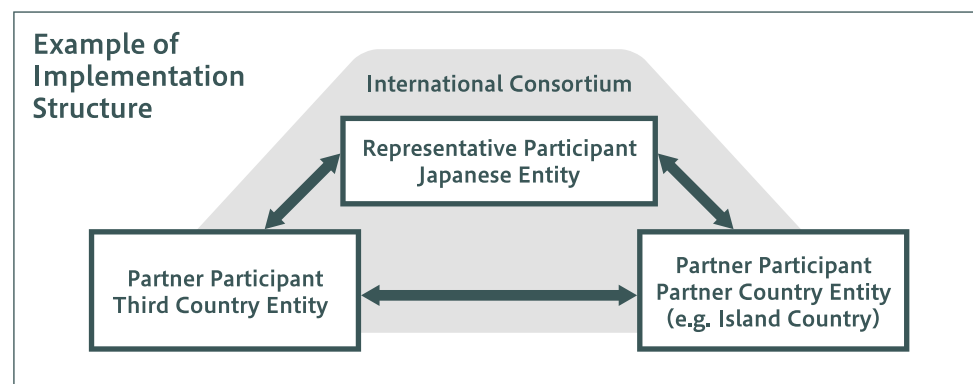
**Budget** JPY 500 million (approx. USD 5 million) from FY 2021

**Ratio of Financial Support** 50% of eligible costs

#### Eligible Costs

The following costs directly required to implement the projects :

Machinery and equipment, erection and installation, ancillary work, survey and test, facilities/instruments (including monitoring system), administrative work





# Application Support by GEC for JCM Model Project

## 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.

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



**Suitable for** Learning about the programme and past projects at early phase

## “JCM Global Match” JCM Business Matching Platform

This website enables you to connect with Japanese companies offering leading decarbonizing technologies, JCM partner country companies acquiring them, consultants and financiers who can support realizing your project. The users can promote their companies’ technologies and needs through this website. Some projects formed on this website have been selected for the JCM model projects. We recommend you register soon. (JCM Global Match Email address: [jcm-gm@gec.jp](mailto:jcm-gm@gec.jp))

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



**Suitable for** Finding a JCM project partner offering technologies or services of your interest

## 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](mailto:jcm-info@gec.jp). Subject of e-mail should be “Consultation on application for JCM Model Project (Your company name)”.

**Suitable for** Getting advice on your proposal at various phases



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Global Environment Centre Foundation (GEC) was established in 1992 as a United Nations Environment Programme (UNEP) support entity committed to conservation of the global environment, supporting IETC’s activities for urban environmental management and promoting partnership between Japan and developing countries. GEC has served as an implementation agency of the Financing Programme for JCM Model Projects since 2014.

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

 [http://twitter.com/GEC\\_JCM\\_Info](http://twitter.com/GEC_JCM_Info)

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Cover Pictures

Top from the left ; LPG Boilers(Mongolia)/Saisan Co.,Ltd., Heat Exchanger(Thailand)/Nippon Steel Engineering Co., Ltd., Raw Water Intake Pumps(Viet Nam)/Yokohama Water Co., Ltd., Amorphous Transformers(Viet Nam)/Yuko Keiso Co., Ltd.  
Bottom from the left ; Solar Power(Viet Nam)/Kanematsu KGK Corp. Mini Hydro Power Plant(Indonesia)/Toyo Energy Farm Co., Ltd., Biomass Boiler(Thailand)/Tepia Corporation Japan Co., Ltd., Freshness Preservation Reefer Container(Viet Nam)/Nihon Crant Co., Ltd.



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