Overview of the Financing Programme for JCM Model Projects

August 25, 2020

Global Environment Centre Foundation (GEC)

1. Overview of the Financing Programme for JCM Model Projects

2. Introduction of Business Matching Platform "JCM Global Match"

Basic concept of JCM Model Projects Global Environment Centre Foundation

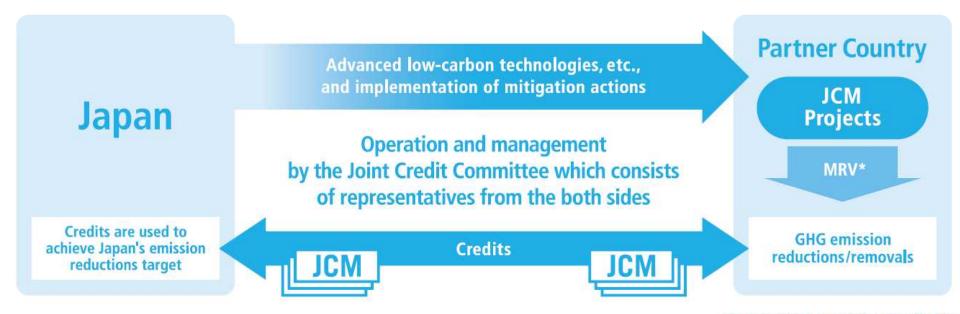


Basic concepts of JCM

Facilitating diffusion of advanced low-carbon or decarbonizing technologies, products, system, services and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing country.

Appropriately evaluating contributions from Japan to GHG emission reductions or removals in a quantitative manner and use them to achieve Japan's emission reduction target.

Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals.



*measurement, reporting and verification

MOEJ

Incentivizes selecting low-carbon technologies by the financial support to initial cost





Collaboration with "City-to-City Collaboration Programme for Low-Carbon Society"

Collaboration with various international financing schemes under JICA, JBIC, ADB, World Bank, etc.

International Consortium

Japanese entity A

representative participant

Project management & report **MRV** result

JCM partnercountry entity B

partner participant

Installation and maintenance of equipment & conduct MRV

Project in the partner country Select **Emissions** reduction **Financial** support Initial Initia GHG emissions emissions cost Conventional Low-carbon equipment & facility equipment & facility

Japanese government & entities

Japan will acquire a part of JCM credits (in return to the financial support)



Expected to deliver at least half of JCM credits issued

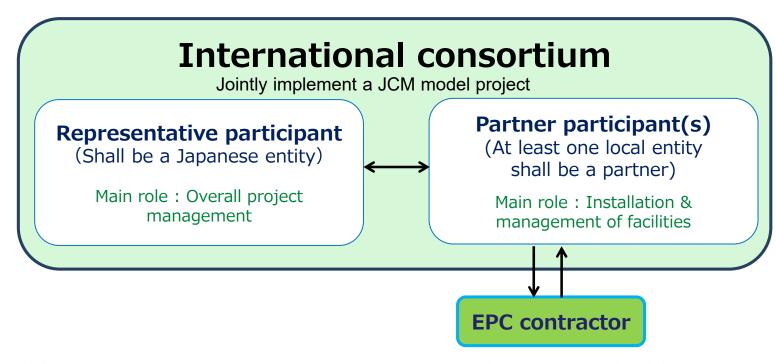
The consortium conducts MRV to estimate GHG emission reductions

Partner country government & entities

What kind of projects are supported by this financing programme?



- Reduce energy-related CO2 emissions with leading low carbon technologies in partner countries
- Contribute to the sustainable development in partner countries.
- Reduction of GHG emissions achieved by the projects can be quantitatively calculated and verified.
- Facilities installed by the projects do not receive any other subsidy by the Government of Japan.



Consortium must include both an owner and user of facility installed by the model project.

- (a) A representative participant of the model project shall be a Japanese entity of an international consortium.
- (b) A participant shall have capability for the implementation, such as technical capacity to appropriately implement the eligible project.
- (c) A participant shall have a financial basis to bear the costs necessary to appropriately implement the eligible project.
- (d) A participant shall have adequate management structures and handling capacity for accounting and other administrative work related to the eligible project;
- (e) A participant shall explain the contents, effect on GHG emission reductions, details of the cost, investment plan, etc. of the eligible project.

Guideline

for Submitting
JCM model project proposal in FY2020

What kind of cost is covered or not covered in this program?

✓ COVERED

- Facilities and Equipment
- Monitoring Equipment
- Main construction work
- Surveying and Testing
- Administrative Work
- Other necessary costs approved by GEC

✓ NOT COVERED

- Removal work for existing facilities and equipment
- Civil engineering work
- Consumable supplies and materials
- Spare parts
- Emergency facilities and equipment
- Cost related to restoration of function
- Cost related to land acquisition
- Forward exchange contract and remittance charge



Amount of the financial support

- Budget in FY 2020: 9 billion yen (Approx. USD 84million)
- Max. financial support per project: Approx. 2 billion yen
- All the eligible costs for financing will be supported by the certain percentage of the support.

Percentage of the financing support

 According to the number of already selected project(s) using a similar technology in each partner country within the JCM programme.

the number of similar technology in each partner country.	Zero (the first project)	One or more and less than 4	4 or more
Maximum percentage of the financial support	50 %	40 %	30 %

What is the criteria of cost-effectiveness?

JPY4,000 / tCO2-e

Amount of financial support[JPY]

Emission reductions of GHG [tCO2equivalent/y] × legal durable years[y]

Legal durable years of the facilities is stipulated by the Japanese law, and are dependent on the industry classification.

JPY3,000 / tCO2-e

In case the number of similar technological projects in a partner country is 5 or more ("Solar Power" projects in Mongolia, Palau and Philippine and "Hydropower" projects in Indonesia)

JPY2,500 / tCO2-e

In case the number of similar technological projects in a partner country is 10 or more ("Solar Power" projects in Thailand)

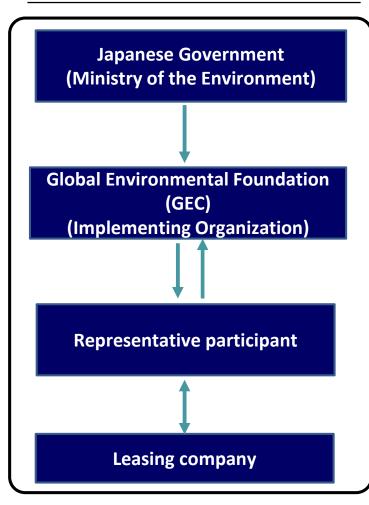


JCM ECO Lease Scheme



- "JCM Eco Lease" scheme is financial support for leasing businesses.
- Financial support is uniformly 10% of total leasing charge including leasing interest.
- Leasing period is at least 5 years.

Chart of JCM ECO Lease Scheme



<Merit>

- Shorter MRV period
 - Equivalent to leasing period (At least 5years)
- Simplified process
 - Less documents for application
 - No need to develop new methodology(Only applicable to approved methodology)

< Examples of eligible facilities/equipment >

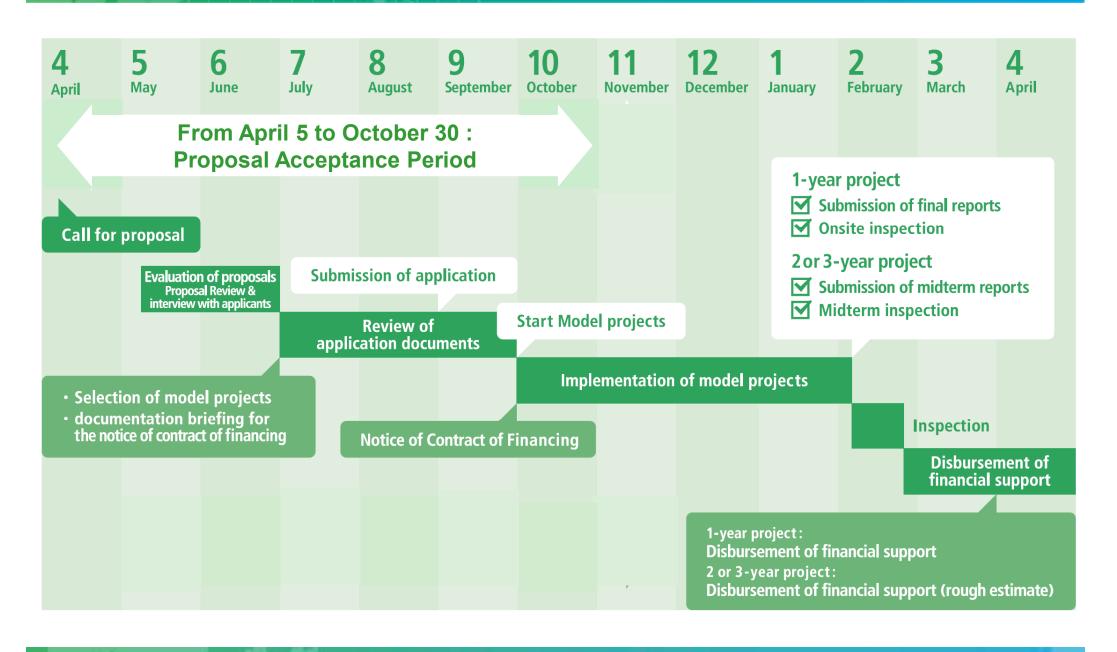


PV



High Efficiency equipment

JCM Model Projects Schedule in FY2020 Global Environment Centre Foundation



List of JCM Model Projects Selected in Thailand (1) lobal Environment Centre Foundation

Year	Entity	Project Title	Sector	Expected GHG Emission Reductions (tCO2/y)
2015	FamilyMart Co., Ltd.	Energy Saving at Convenience Stores with High Efficiency Air-Conditioning and Refrigerated Showcase	Energy Efficiency	223
2015	Pacific Consultants Co., Ltd.	Introduction of Solar PV System on Factory Rooftop	Renewable Energy	491
2015	Toray Industries, Inc.	Reducing GHG Emission at Textile Factory by Upgrading to Airsaving Loom (Samutprakarn)	Energy Efficiency	390
2015	Sony Semiconductor Manufacturing Corporation	Energy Saving for Semiconductor Factory with High Efficiency Centrifugal Chiller and Compressor	Energy Efficiency	365
2015	NIPPON STEEL & SUMIKIN ENGINEERING CO., LTD.	Installation of Co-Generation Plant for On-Site Energy Supply in Motorcycle Factory	Energy Efficiency/ Effective Use of Energy	7,414
2015	Sony Semiconductor Manufacturing Corporation	Installation of High Efficiency Air Conditioning System and Chillers in Semiconductor Factory	Energy Efficiency	3,744
2015	Inabata & Co., Ltd.	Energy Saving for Air-Conditioning in Tire Manufacturing Factory with High Efficiency Centrifugal Chiller	Energy Efficiency	305
2016	AGC Inc.	Introduction of High Efficiency Ion Exchange Membrane Electrolyzer in Caustic Soda Production Plant	Energy Efficiency	2,591
2016	FAST RETAILING CO., LTD.	Introduction of LED Lighting to Sales Stores	Energy Efficiency	1,649
2016	TEPIA Corporation Japan Co., Ltd.	Introduction of High Efficiency Chilled Water Supply System in Milk Factory	Energy Efficiency	941

List of JCM Model Projects Selected in Thailand (2) lobal Environment Centre Foundation

NTT DATA INSTITUTE OF MANAGEMENT CONSULTING, Inc.	Introduction of 12MW Power Generation System by Waste Heat Recovery for Cement Plant	Effective Use of Energy	29,746
2016 DENSO CORPORATION	Introduction of Co-generation System to Motor Parts Factory	Energy Efficiency/ Effective Use of Energy	5,904
2016 Sharp Corporation	Introduction of 3.4MW Rooftop Solar Power System to Air-conditioning Parts Factories	Renewable Energy	1,179
2016 Finetech Co., Ltd.	Introduction of 2MW Rooftop Solar Power System for Power Supply in Factory	Renewable Energy	844
2016 KANEMATSU CORPORATON	Introduction of Energy Efficient Refrigeration System in Industrial Cold Storage	Energy Efficiency	293
2016 CPF JAPAN CO., LTD.	Introduction of Heat Recovery Heat Pumps to Food Processing Factory	Energy Efficiency	985
2016 TSB Co., Ltd.	Introduction of 5MW Floating Solar Power System on Industrial Water Reservoir	Renewable Energy	2,552
2016 Sharp Corporation	Introduction of 30MW Rooftop Solar Power System to Large Supermarkets	Renewable Energy	13,293
2016 BANDO CHEMICAL INDUSTRIES, LTD.	Introduction of High-efficiency Boiler System to Rubber Belt Plant	Energy Efficiency	3,060
2016 YUASA Tradng CO., Ltd.	Energy Saving by Air-Conditioning Control System in Precision Parts Factories	Energy Efficiency	2,493
2017 Fuji-Foods Corporation	Introduction of Biomass Co-Generation System to Food Factory	Renewable Energy	7,111
2017 Yokohama Port Corporation	Introduction of Energy Efficient Equipment to Bangkok Port	Energy Efficiency/ Renewable Energy	5,491

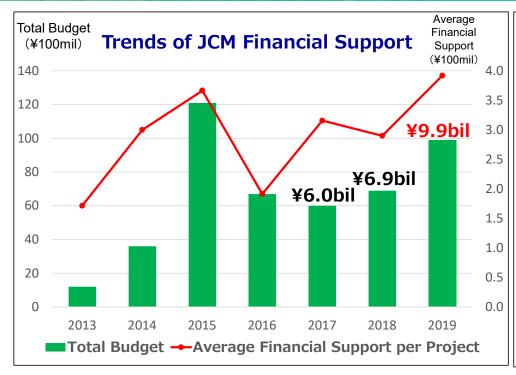
List of JCM Model Projects Selected in Thailand (3) lobal Environment Centre Foundation

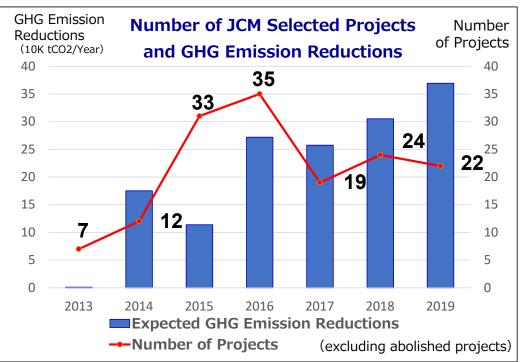
2018	The Kansai Electric Power Company, Incorporated	Introduction of Gas Co-generation System and Absorption Chiller to Fiber Factory	Energy Efficiency/ Effective Use of Energy	17,851
2018	Tokyo Century Corporation	25MW Rooftop and Floating Solar Power Project in Industrial Park	Renewable Energy	10,678
2018	Toyota Motor Corporation	Introduction of 3.4 MW Rooftop Solar Power System in Technical Center and Office Buildings	Renewable Energy	1,617
2018	TEPIA Corporation Japan Co.,Ltd.	Introduction of Biomass Boiler to Cooking Oil Factory	Renewable Energy	29,759
2018	Kanematsu KGK Corp.	Introduction of 0.8MW Solar Power System and High Efficiency Refrigerator to Food Factory	Energy Efficiency/ Renewable Energy	481
2019	Toyota Motor Corporation	Introduction of 37 MW Solar Power System and High Efficiency Melting Furnace in Vehicle & Engine Factory	Energy Efficiency/ Renewable Energy	19,512
2019	NIPPON STEEL ENGINEERING CO., LTD.	Efficiency Improvement of Co-generation System by Installation of Heat Exchanger in Fiber Factory	Energy Efficiency	359
2019	Global Engineering Co., Ltd.	Introduction of 15MW Biomass Power System to Sugar Plant	Renewable Energy	11,999
2020	The Kansai Electric Power Company, Incorporated	Introduction of 8.1MW Rooftop Solar Power System in Motorcycle Factory and Fiber Factory	Renewable Energy	3,797
2020	The Kansai Electric Power Company, Incorporated	Introduction of Energy Saving Centrifugal Chillers to Machinery Factory	Energy Efficiency	225

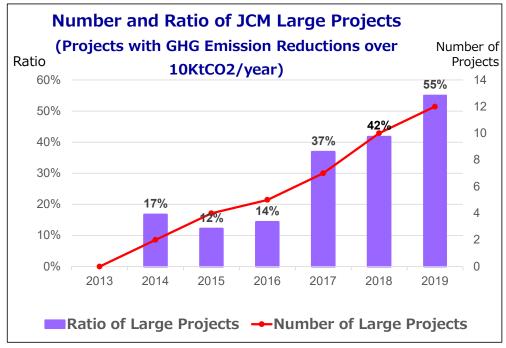
Total 33 Projects

- Energy Efficiency: 20 Projects
- Effective Use of Energy: 4 Projects
- Renewable Energy: 14 Projects









It is expected to propose a project that will achieve greater GHG emission reductions and cost effectiveness.



During the COVID-19 Period,

- >"New Normal" is required in business.
 - ✓ Digital Transformation
 - ✓ Remote Control, Smart Factory
 - ✓ Digital Supply Chain, etc.



- > "Green Recovery" is needed for decarbonization.
 - ✓ Recovery from the pandemic of COVID-19 is a good opportunity to accelerate decarbonization.

"Financing Programme for JCM Model Projects" is a good tool to tackle with these issues.

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)".



Suitable for Getting advice on your proposal at various phases.

■ Contact:

Takeyama, Tango
Global Environment Centre Foundation (GEC) Tokyo Office
E-mail: jcm-info@gec.jp

XCurrently, due to COVID-19, we are partially doing telework, and provide application consultation at web conference. Please send an e-mail to contact us.

■ Webinar

- **XAII** events will be held as webinars in FY2020.
- > Thailand: August 25 (15:00-17:00, GMT+7)
- Indonesia: September 30 (15:00-17:30, GMT+7)
- Vietnam : October
- Tokyo : November
- Costa Rica : Dec.
- Chile: Jan. 2021
- Mexico : Feb.



Bangkok (Sep. 2019)



Jakarta (Oct. 2019)

■ GEC's Website on JCM

http://gec.jp/jcm/

■ GEC's JCM Twitter

https://twitter.com/GEC_JCM_Info



ขอบคุณครับ!

Global Environment Centre Foundation(GEC) Tokyo Office

E-mail:jcm-info@gec.jp

URL : http://gec.jp/