Overview of the Financing Programme for JCM Model Projects

12 November 2019

PACIFIC CONSULTANTS CO., LTD.

Pacific Consultants

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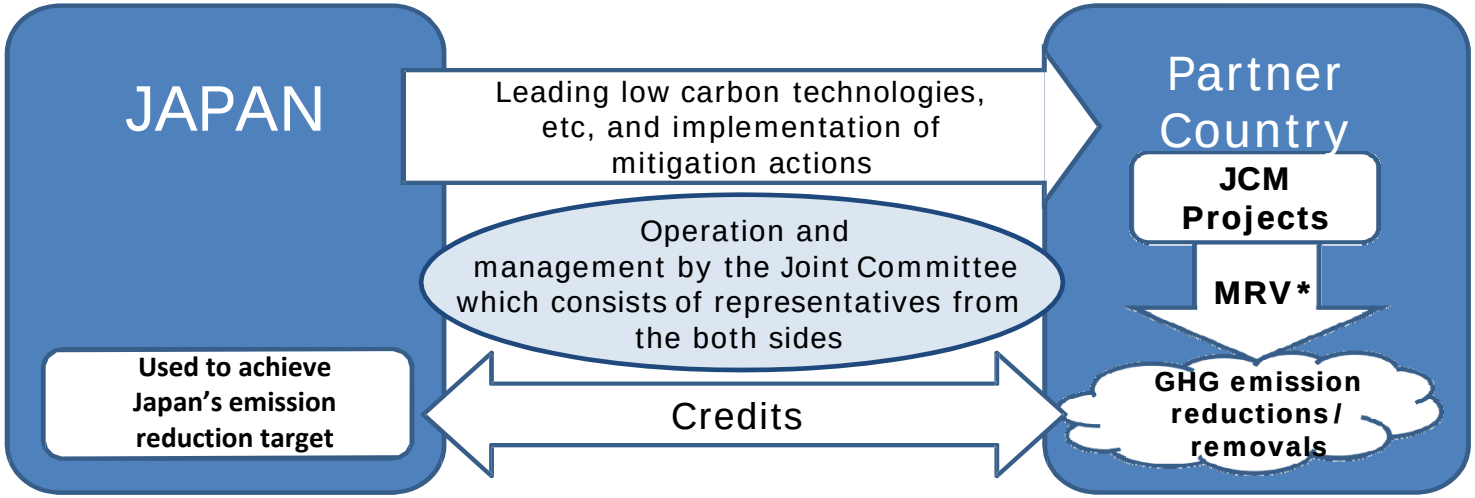
Basic Concept of the JCM

- Facilitating diffusion of leading low carbon technologies, products, systems, services , and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- 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

- Source: Recent Development of The Joint Crediting Mechanism (JCM), March 2019, MOEJ website

JCM Partner Countries

Mongolia
Jan. 8, 2013
（Ulaanbaatar）

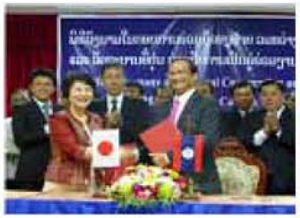
Bangladesh
Mar. 19, 2013
(Dhaka)

Ethiopia
May 27, 2013
(Addis Ababa)

Kenya
Jun. 12,2013
(Nairobi)

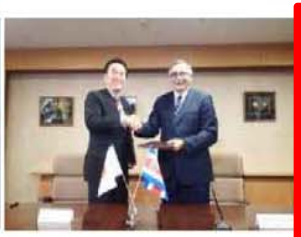
Maldives
Jun. 29, 2013
(Okinawa)

Viet Nam
Jul. 2, 2013
(Hanoi)



Lao PDR
Aug. 7, 2013
(Vientiane)

Indonesia
Aug. 26, 2013
(Jakarta)



Costa Rica
Dec. 9, 2013
(Tokyo)

Palau
Jan. 13, 2014
(Ngerulmud)

Cambodia
Apr. 11, 2014
(Phnom Penh)

Mexico
Jul. 25, 2014
(Mexico City)

Saudi Arabia
May 13, 2015

Chile
May 26, 2015
(Santiago)

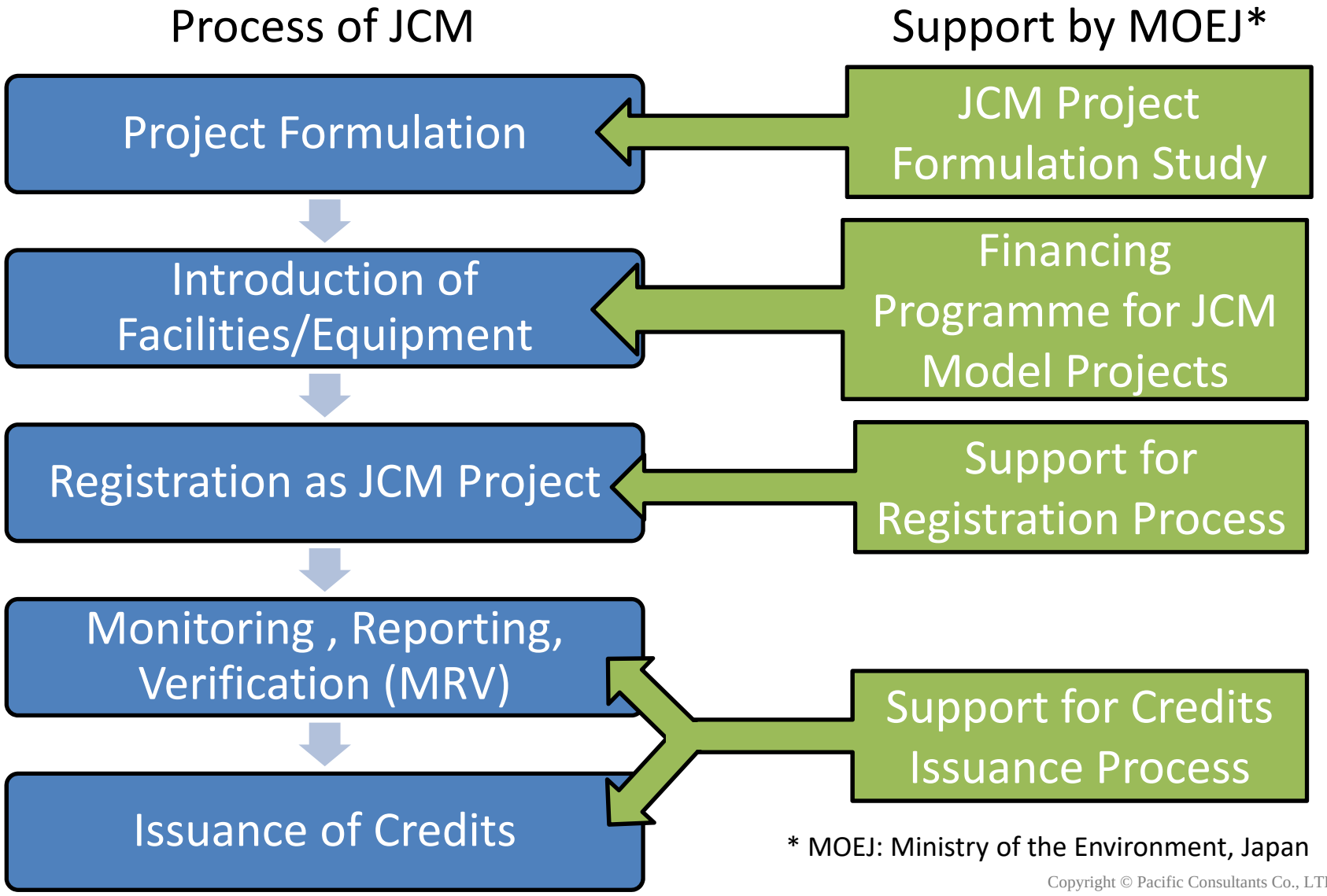
Myanmar
Sep. 16, 2015
(Nay Pyi Taw)

Thailand
Nov. 19, 2015
(Tokyo)

the Philippines
Jan. 12, 2017
(Manila)

■ Source: Recent Development of The Joint Crediting Mechanism (JCM), March 2019, MOEJ

Process of JCM and Support by MOEJ*



* MOEJ: Ministry of the Environment, Japan

Financing Programme for JCM Model Projects by MOEJ

Budget for projects starting from FY 2019 is 9.9 billion JPY (approx. USD 99 million) in total by FY2021

(1 USD = 100 JPY)

※Includes collaboration with projects supported by JICA and other governmental-affiliated financial institute.

Government of Japan

Finance part of an investment cost (**less than half**)

Conduct MRV and expected to deliver at least half of JCM credits issued

International consortiums (which include Japanese entities)



- Scope of the financing: facilities, equipment, vehicles, etc. which reduce CO_2 from fossil fuel combustion as well as construction cost for installing those facilities, etc.
- Eligible Projects : starting installation after the adoption of the financing and finishing installation within three years.

■ Source: Recent Development of The Joint Crediting Mechanism (JCM), March 2019, MOEJ

Eligible Project

- 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.

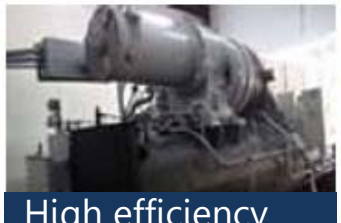
■ Source: http://gec.jp/jcm/jp/kobo/h31/mp/(tentative)2019_Guidelines_for_Submitting_Proposals.pdf

Example of Applicable Technologies for JCM Financing Programme


Cement exhaust heat recovery


Digital tachograph


Energy saving kiosk/supermarket


High efficiency industrial air conditioning


High efficiency boiler for heating


Energy saving loom


Solar power generation


Amorphous metal transformer


Co-generation system


High efficiency air conditioning

Solar power generation


Waste to energy plant

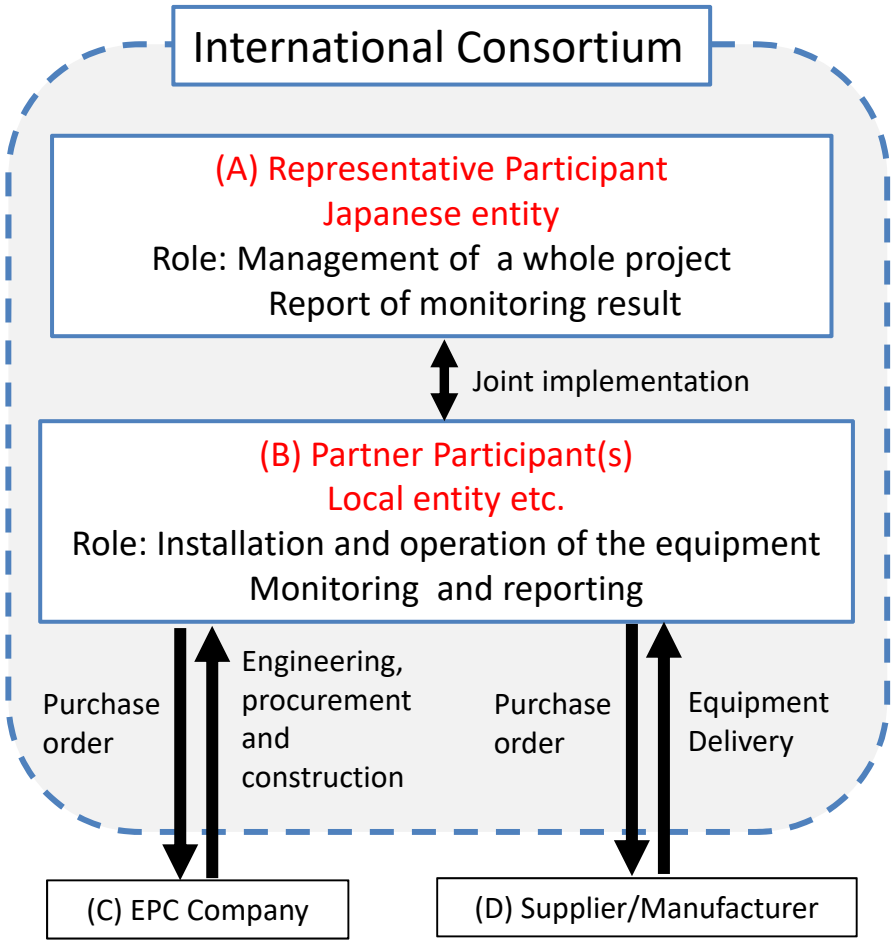

High efficiency refrigerator


High efficiency industrial furnace


Radio control of high efficiency LED

■ Source: http://gec.jp/jcm/jp/kobo/h31/mp/20190415_moej.pdf

Formulation and Development of Implementation Structure



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.

■ Source: http://gec.jp/jcm/seminar/2019thailand/2-2-1_GEC.pdf

Costs Eligible for Financing

What kind of cost is covered & not covered by this programme?

✓ COVERED

(a) Main construction work

(b) Ancillary work

(c) Machinery and appliances

(d) Surveying and testing

(e) Facilities/equipment (including monitoring equipment)

(f) Administrative work; and

(g) Other necessary costs approved by GEC *

* GEC: Global Environment Centre Foundation

■ Source: http://gec.jp/jcm/seminar/2019thailand/2-2-1_GEC.pdf

Maximum Percentage of Financial Support

Number of already selected project(s) using a similar technology in each partner country	Percentage of financial support (determined by GEC)
None (0)	Up to 50%
Up to 3 (1-3)	Up to 40%
More than 3 (>3)	Up to 30%

In Palau

- **Solar PV project → Up to 30%**
- **Others → Up to 50%**

■ Source: http://gec.jp/jcm/jp/kobo/h31/mp/(tentative)2019_Guidelines_for_Submitting_Proposals.pdf

Criteria of Cost-effectiveness

JPY4,000/tCO2equivalent

$$= \frac{\text{Amount of financial support[JPY]}}{\text{Emission reductions of GHG [tCO2equivalent/y]} \times \text{legal durable years[y]}}$$

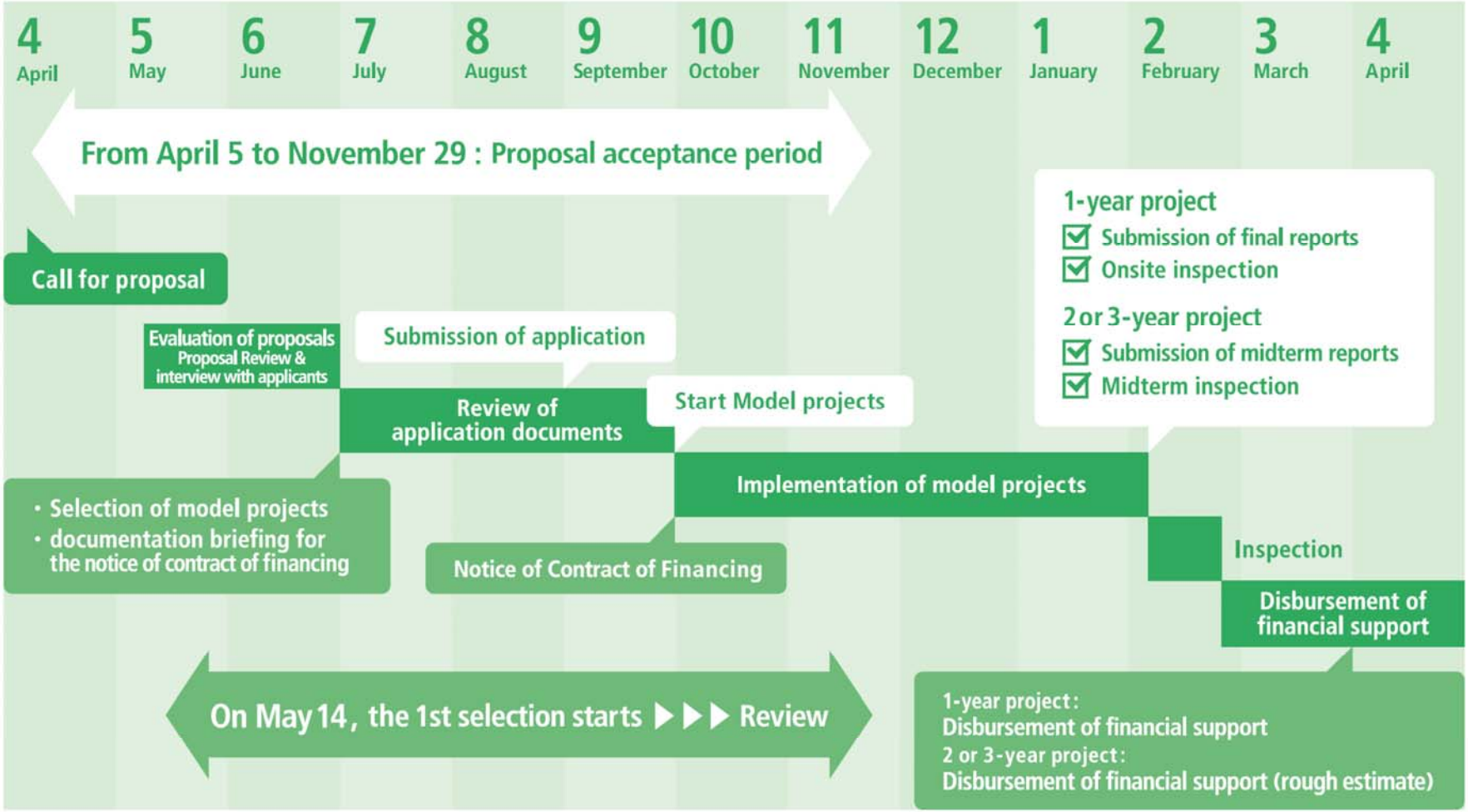
Legal durable years of the facilities is stipulated by the Japanese law, and are dependent on the industry classification.

JPY3,000/tCO2equivalent

In case the number of PV JCM Model Projects by each country is 5 or more. (Mongolia and Thailand)

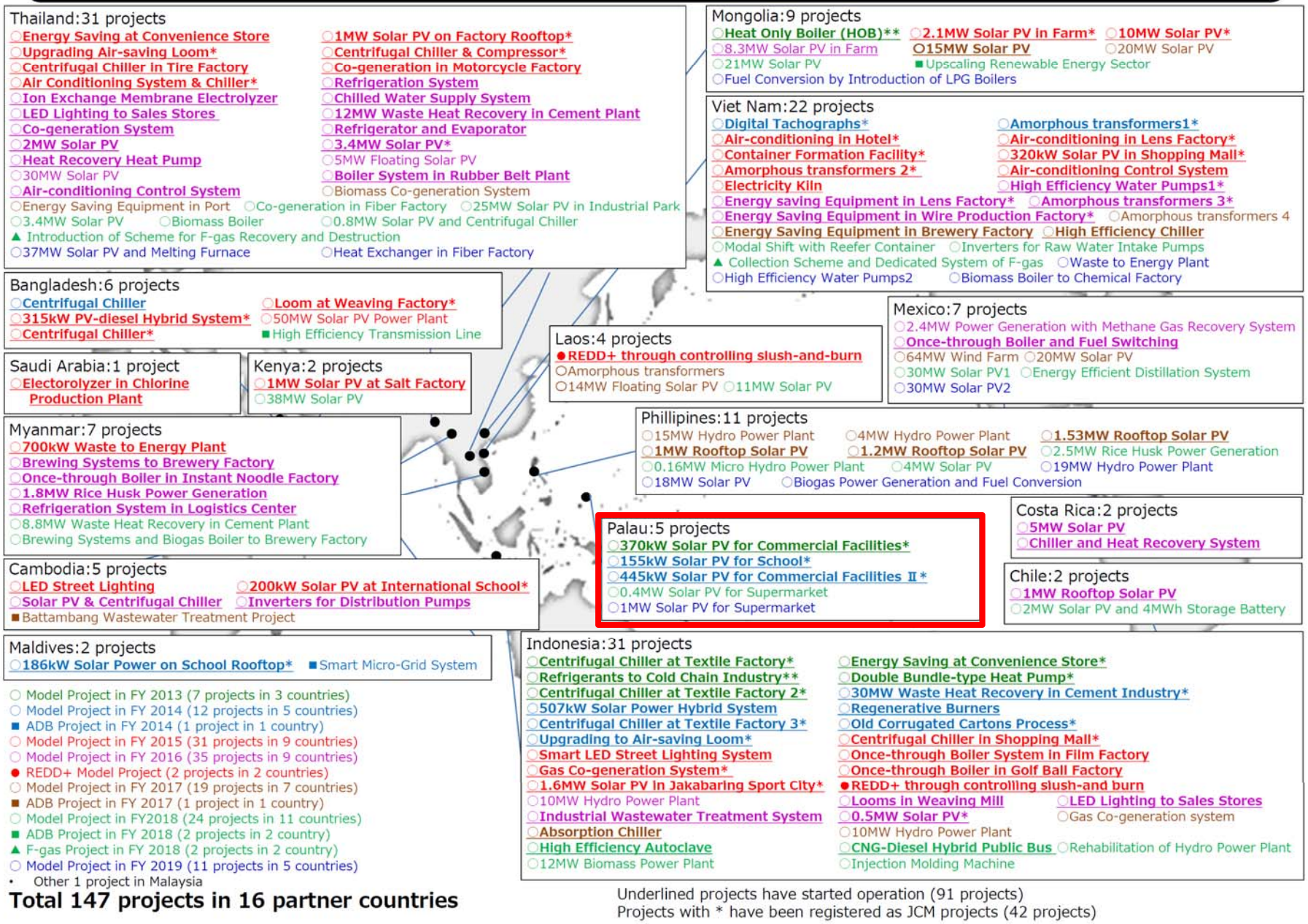
- Source: http://gec.jp/jcm/seminar/2019thailand/2-2-1_GEC.pdf

Schedule in FY2019



■ Source: http://gec.jp/jcm/seminar/2019thailand/2-2-1_GEC.pdf

JCM Financing Programme by MOEJ (FY2013～2019) as of Aug 2, 2019



■ Source: http://gec.jp/jcm/en/wp-content/uploads/2019/08/190802map_en.pdf

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JCM Model Projects in Palau

Year of adaption as JCM Model Project	Project name	Project participants	Technology	Expected GHG emission reductions	Current status
2013	Small Scale Solar Power Plants for Commercial Facilities in Island States	Pacific Consultants Co., Ltd., Western Caroline Trading Company, Surangel and Sons Company	Solar (220.5kW and 150kW)	259 tCO2/year	JCM Model Project: completed JCM Project Cycle: registered, credit issued
2014	Solar PV System for Schools Project	Pacific Consultants Co., Ltd., Palau Adventist Schools	Solar (51.675kW and 103.350kW)	111 tCO2/year	JCM Model Project: completed JCM Project Cycle: registered, credit issued
2014	Small-Scale Solar Power Plants for Commercial Facilities Project II	Pacific Consultants Co., Ltd., Western Caroline Trading Company, Palau Investment and Development Company	Solar (263.64 kW, 80.03 kW and 101.92 kW)	320 tCO2/year	JCM Model Project: completed JCM Project Cycle: registered, credit issued
2018	Introduction of 0.4MW Rooftop Solar Power System in Supermarket	Sharp Energy Solutions Corporation Western Caroline Trading Company	Solar (0.4MW)	296 tCO2/year	JCM Model Project: installing
2019	Introduction of 1MW Solar Power System on Supermarket Rooftop	Sharp Energy Solutions Corporation Surangel and Sons Company	Solar (1MW)	842 tCO2/year	JCM Model Project: installing

Thank you so much for
allowing us to make a presentation.

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