

***Financing Programme for JCM Model Projects
and JCM Global Match***

February 16, 2024

Global Environment Centre Foundation (GEC)



1

• JCM Financing Programme Overview

2

• Project Trend

3

• JCM Global Match

4

• Conclusion

JCM Partner Countries (28 countries as of January 2024)



Mongolia
Jan. 8, 2011 (Ulaanbaatar)



Bangladesh
Mar. 19, 2013 (Dhaka)



Ethiopia
May. 27, 2013 (Addis Ababa)



Kenya
Jun. 12, 2013 (Nairobi)



Maldives
Jun. 29, 2013 (Okinawa)



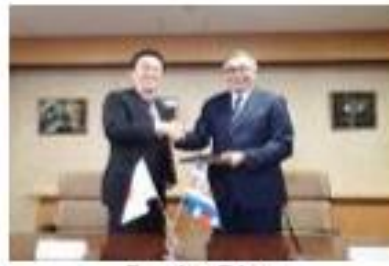
Viet Nam
Jul. 2, 2013 (Hanoi)



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)



Philippines
Jan. 12, 2017 (Manila)



Senegal
Aug. 25, 2022 (Dakar)



Tunisia
Aug. 26, 2022 (Tunis)



Azerbaijan
Sept. 5, 2022 (Baku)



Moldova
Sept. 6, 2022 (Chisinau)



Georgia
Sept. 13, 2022 (Tbilisi)



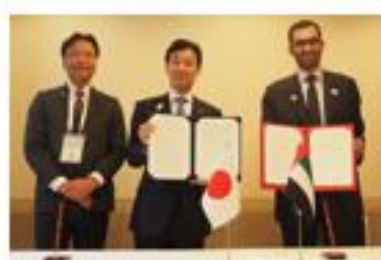
Sri Lanka
Oct. 10, 2022 (Colombo)



Uzbekistan
Oct. 25, 2022 (Tashkent)



Papua New Guinea
Nov. 18, 2022 (Sharm-el-Sheikh)



United Arab Emirates
Apr. 16, 2023 (Sapporo)

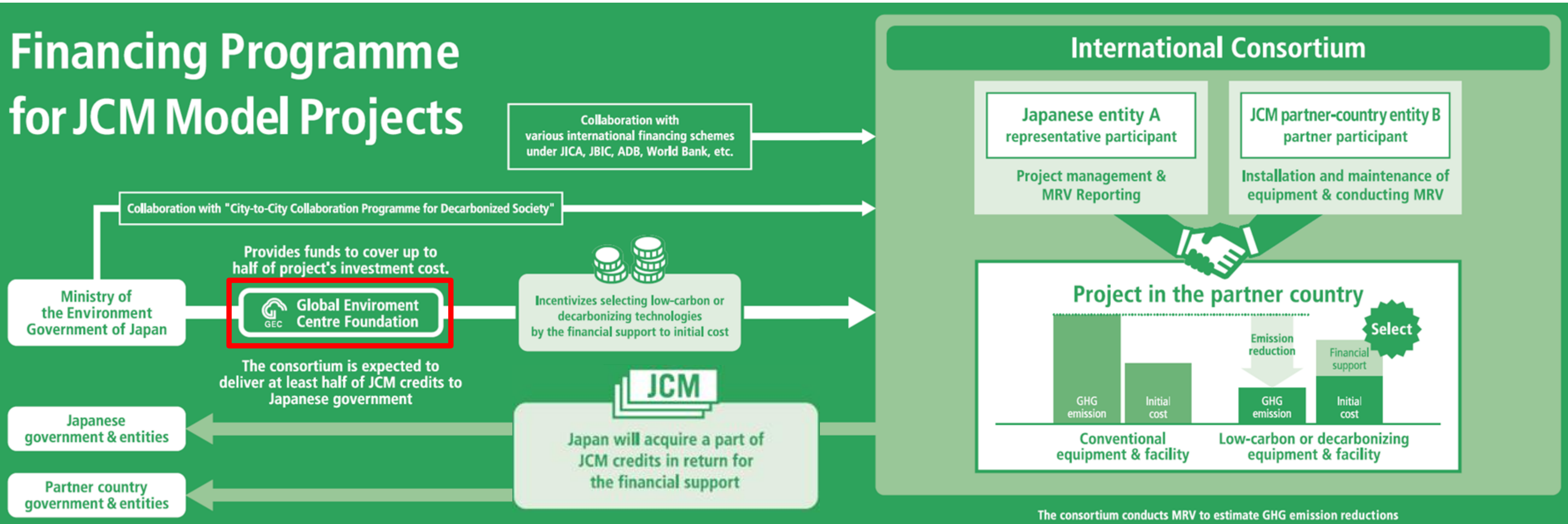


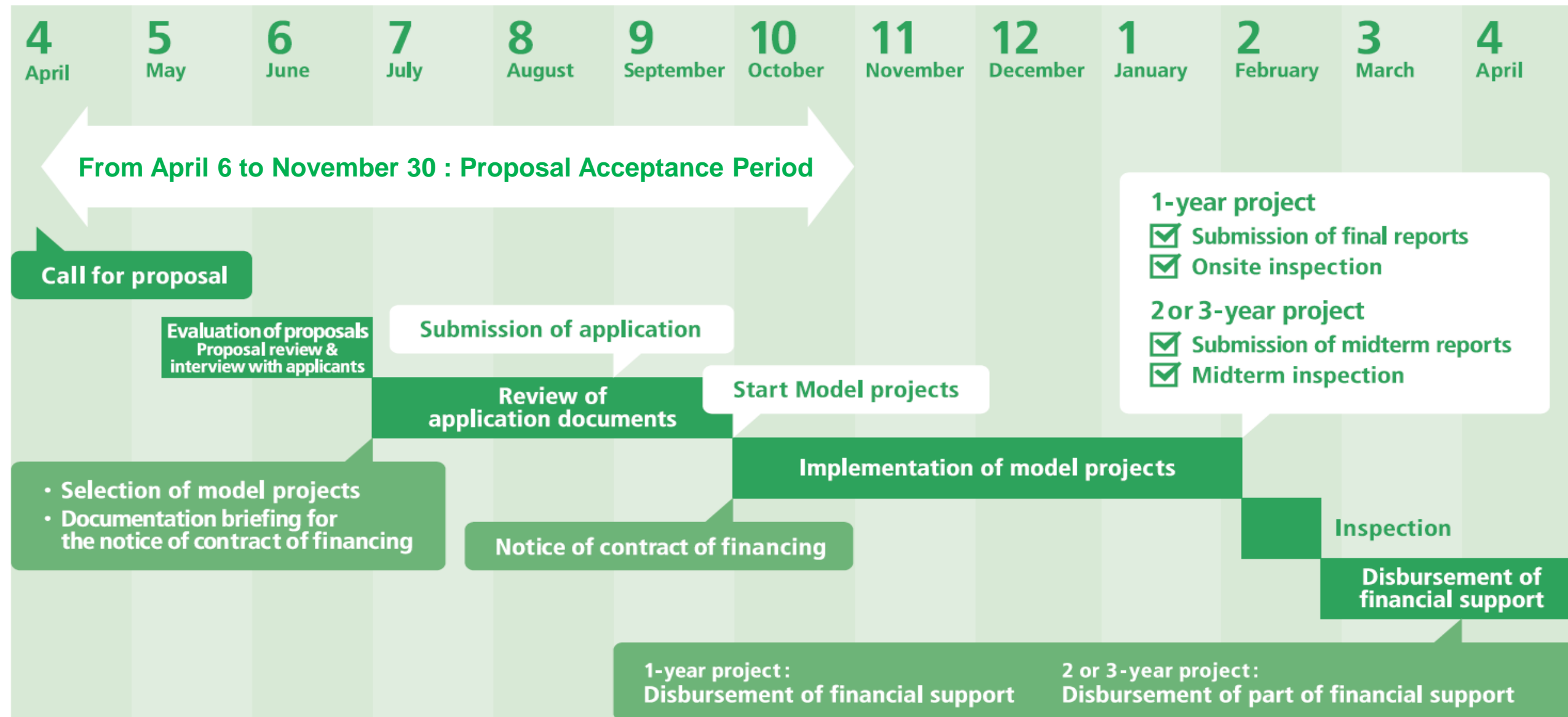
Kyrgyz Republic
July. 6, 2023 (Bishkek)



Republic of Kazakhstan*
October 30, 2023 (Astana)

Financing Programme for JCM Model Projects





- Prioritize 28 partner countries that have already established the JCM (as of February, 2024).
- Project proposals in other countries are also received. (Application for FY2023 was already closed)
 - ◆ Adoption is considered in parallel with bilateral negotiations for new partner countries.

Development Step

Matching with a Japanese Partner



Development of proposal and submission to GEC



Share PIN with Partner country and approve the project

※PIN: Project Idea Note



Announcement of preliminary selection result



Development of application documents for contract of finance and submission to GEC



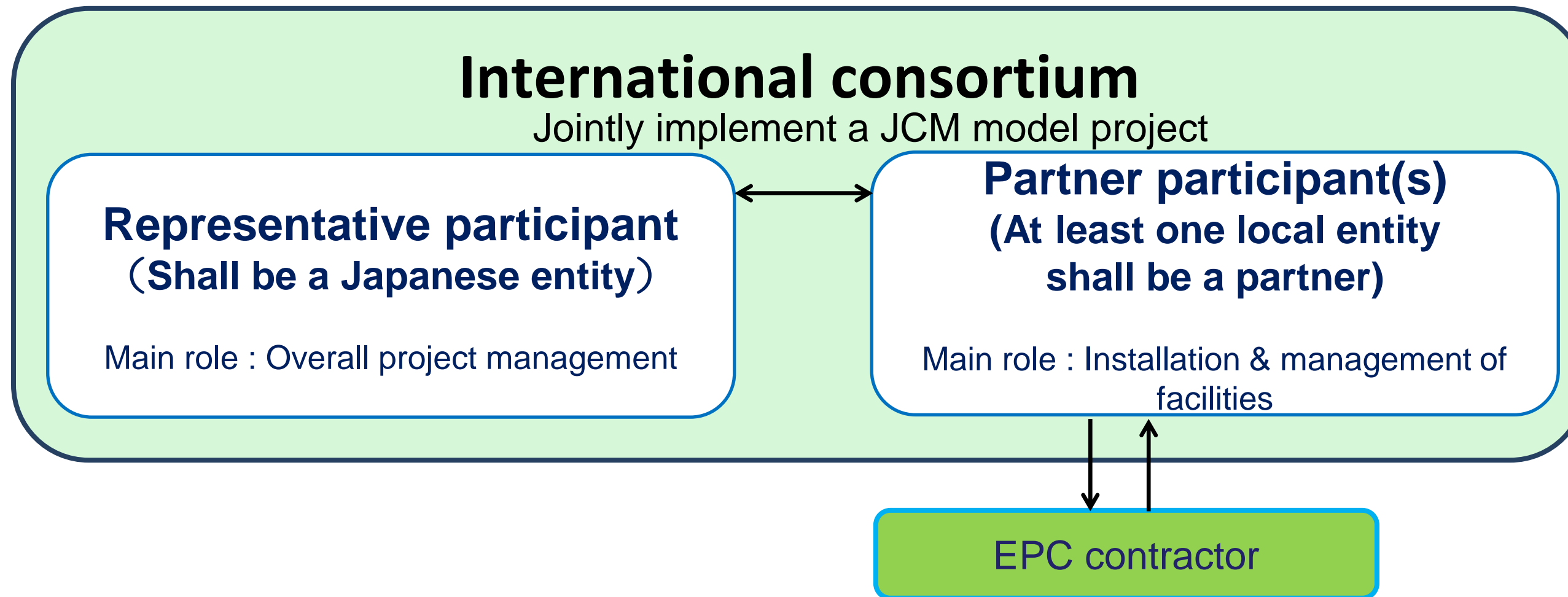
Conclusion of the contract of finance



Starting the JCM Model Project

Budget	<p>Approx. USD109million for FY2023 *Applied Exchange Rate JPY137/USD</p>
Executing Entity	<p>International Consortium that consists of a Japanese entity and a JCM partner-country entity (ies)</p>
Scope of Financing	<p>Facilities, equipment, vehicles, etc. which reduce CO2 from fossil fuel combustion as well as construction cost for installing those facilities, etc.</p>
Eligible Projects	<p>Start installation after the Contract of Finance is concluded and finish installation within 3 years.</p>
Maximum percentage of Financial Support	<p>Maximum of 50% and reduce the percentage according to the number of already selected project(s) using a similar technology in each partner country. ※ Number of already selected project(s) using a similar technology in each partner country : none (0) = up to 50%, up to 3 (1-3) = up to 40%, more than 3 (>3) = up to 30%. The percentage of financial support will be determined by GEC.</p>
Cost-effectiveness	<p>Cost-effectiveness of GHG emission reductions is expected to be JPY 4,000/tCO2eq or lower. Details are referred in later slide</p>

Suggested size of one model project is within USD14.5 million

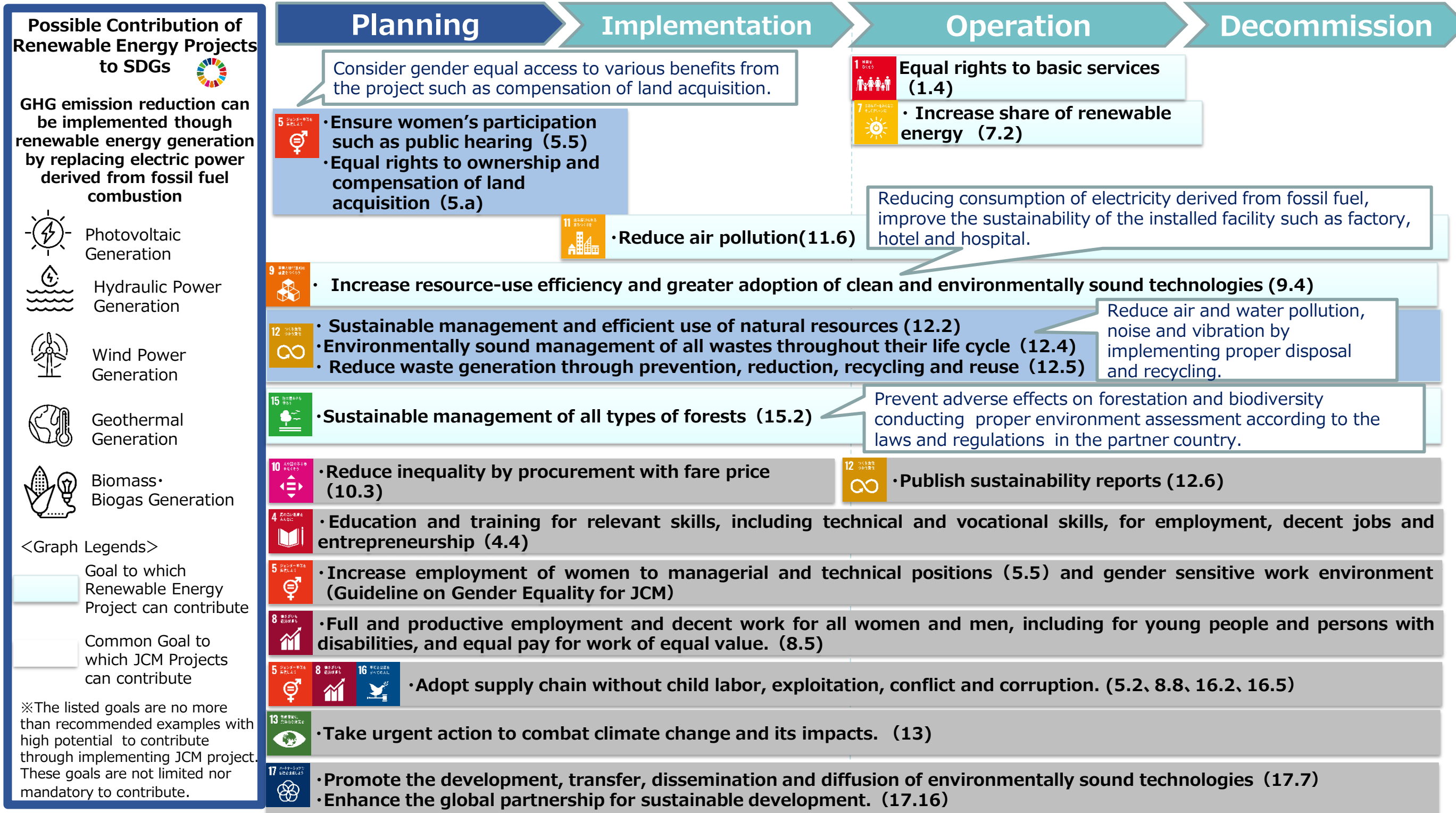


➤ Consortium must include both an owner and user of facility installed by the model project.

What kind of projects are supported by Financing Programme?

⇒ Excerpt from Guidelines for Submitting Proposals
[\(tentative\)2023 Guidelines for Submitting Proposals.pdf \(gec.jp\)](#)

- (a) Projects that reduce energy-related CO₂ emissions with leading decarbonizing technologies in developing countries.
- (b) Projects contribute to realization of SDGs (Sustainable Development Goals) and shall comply with the relevant laws and regulations of the partner country and international practices regarding the environmental and human rights protection.
- (c) Reduction of GHG emissions achieved by the projects can be quantitatively calculated and verified.



Maximum Percentage of Financial Support

Number of selected project(s) using a similar technology in each country	Percentage of financial support
0	Up to 50%
1 to 3	Up to 40%
More than 3	Up to 30%

- 10% flat for JCM Eco Lease Scheme

Sector	Technology	Mongo	Bangla	Ethiopi	Kenya	Maldiv	Viet	Lao	Indon	Costa	Palau	Camb	Mexico	Saudi	Chile	Myan	Thaila	Philipp		
		MN	BD	ET	KE	MV	VN	LA	ID	CR	PW	KH	MX	SA	CL	MM	TH	PH		
1. Energy Efficiency	Air Conditioning System						4		2								1		7	
	Chiller		2				5		5	1		1					5		19	
	Refrigerator								1							2	4		7	
	Absorption Chiller Using Waste Heat								2									2	4	
	Swirling Induction Type Air-Fridge and Freezer Showcase																	1		1
	Boiler	2					2		4				1			2	3			14
	Heat Medium Boiler								1											1
	Double Bundle-type Heat Pump						1		1									1		3
	Water Heater Using Waste Heat									1										1
	Waste Heat Recovery System															2	1			3
	Heat Exchanger																	1		1
	Transformer						4	2												6
	LED Lighting								2									1		3
	LED Lighting with Dimming System						2		1				1							4
	Pump						1													1
	Air Compressor						1											1		2
	Aeration System									1										1
	Regenerative Burners									1										1
	Gas Fired Furnace						1													1
	Gas Fired Melting Furnace																	1		1
	Air Conditioning Control System						1											1		2
	Frequency Inverter for Pump						1						1							2
	Loom		1							2								1		4
	Old Corrugated Cartons Process									1										1
	Battery Case Forming Device						1													1
	Electrolyzer in Chlorine Production													1				1		2
	Wire Stranding Machines						1													1
	Autoclave									2										2
Multi-effect Distillation System													1						1	
Injection Molding Machine									1										1	
2. Renewable Energy	Solar Power Plant	5	1	1	4	1	14	3	8	1	5	3	2	2	12	1	25	7	95	
	Solar Power Plant with Battery								1								1		2	
	Small Hydropower Plant						1		11									1	13	
	Wind Power Plant						1												0	
	Geothermal Power (Binary)																	3	3	
	Geothermal Power (Flush)																	1	1	
	Biomass Power Plant						1		1						1	1			4	
	Biogas Power Plant																	1	1	
	Biomass boiler						2											2	4	
	Biogas boiler																1	1	2	
	Biomass Co-generation																	1	1	
3. Effective Use of Energy	Power Generation by Waste Heat								1							1	2		4	
	Gas Co-generation								2								4		6	
4. Waste Handling and	Waste-to-Energy Plant						1									1			2	
	Power Generation by Methane												1						1	
5. Transportation	Digital Tachograph System						1												1	
	CNG-Diesel Hybrid Bus								1										1	
	Reefer Container						1												1	
Total	Number of technology : 49	7	4	1	4	1	47	5	53	3	5	6	5	3	13	11	61	14	243	

What is the criteria of cost-effectiveness?

JPY4,000/tCO₂equivalent

$$= \frac{\text{Amount of financial support[JPY]}}{\text{Emission reductions of GHG [tCO}_2\text{equivalent/y]} \times \text{legal durable years[y]}}$$

※ 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 similar technological Projects in each country is 5 to 9.

Solar power projects in Mongolia, Indonesia, Palau and Philippine
Chiller projects in Viet Nam Indonesia, and Thailand

JPY2,500/tCO₂equivalent

In case the number of similar technological Projects in each country is 10 or more.

Solar power projects in Viet Nam and Chile
Hydropower projects in Indonesia

JPY2,000/tCO₂equivalent

In case the number of similar technological Projects in each country is 20 or more.

NOTE: Cost effectiveness guide for a solar power project : 2,500JPY/tCo₂eq
Hydropower project : 500JPY/tCo₂eq

JCM ECO Lease Scheme

In the fiscal year 2020, “JCM Eco Lease Scheme” is newly introduced to JCM Model Project to cover leasing charges and interests. This scheme has an advantage in reducing the reporting burden of representative participants with shorter monitoring period and simple 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.

★JCM Eco Lease scheme: Monitoring period is equal to the leasing period (Minimum five years)

- Implement a project to reduce GHG emissions utilizing leading decarbonizing technologies
- Conduct **Measurement, Reporting and Verification** (MRV) of GHG emission reductions.
- Procedures for the issuance of JCM credits;

(a) Registration as JCM Project

Application for registration should be conducted within 1 year from the start of the operation of the facilities/equipment introduced by the project.

(b) Monitoring

Participants shall conduct monitoring to quantitate the effects of the facilities/equipment on GHG emission reductions based on a MRV methodology approved or expected to be approved by the Joint Committee.

(C) Issuance of JCM Credits

Participants shall request for issuance of JCM credits by using the monitoring results. The issuance includes development of a monitoring report, verification by a TPE, and submission of “JCM Credits Issuance Request” to a JCM Joint Committee.

The Participants shall deliver the issued JCM Credits with the percentage decided by the Ministry of the Environment, Japan to the account of Japanese government.



***1 PIN (Project Idea Note):**
A document used to explain the outline of the project to the partner country and confirm no objection.

***3 PDD (Project Design Document):**
A document that includes monitoring methods and estimated emission reductions. Required for project registration.

JCM Home Page

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

<Contents>

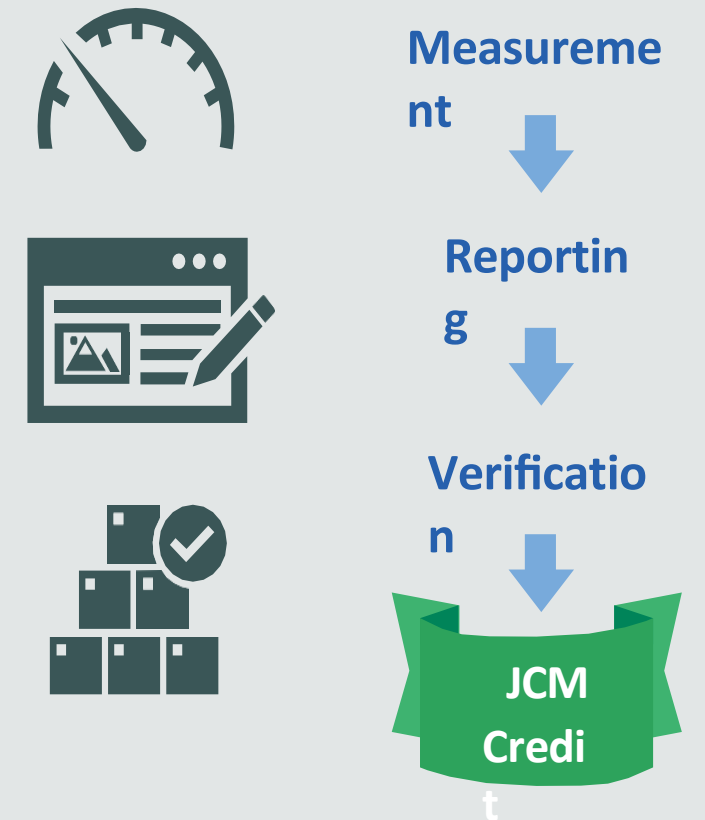
- General information page
- Individual JCM partner countries-Japan page

<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

MRV Process for the JCM

Measurement, Reporting and Verification of amount of GHG emission reductions for JCM Project



Representative Participant of JCM Projects shall conduct measurement, reporting and verification (MRV) of the GHG emission reductions realized after installation and commissioning of the facilities/equipment for the issuance of JCM credits.

Can be conducted by the same TPE.
Can be conducted simultaneously.

*2 For the latest information on JCM rules and guidelines, including the PIN procedures adopted by each Partner Country government, please confirm each partner country page on the JCM home page.

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- JCM Model Projects Overview

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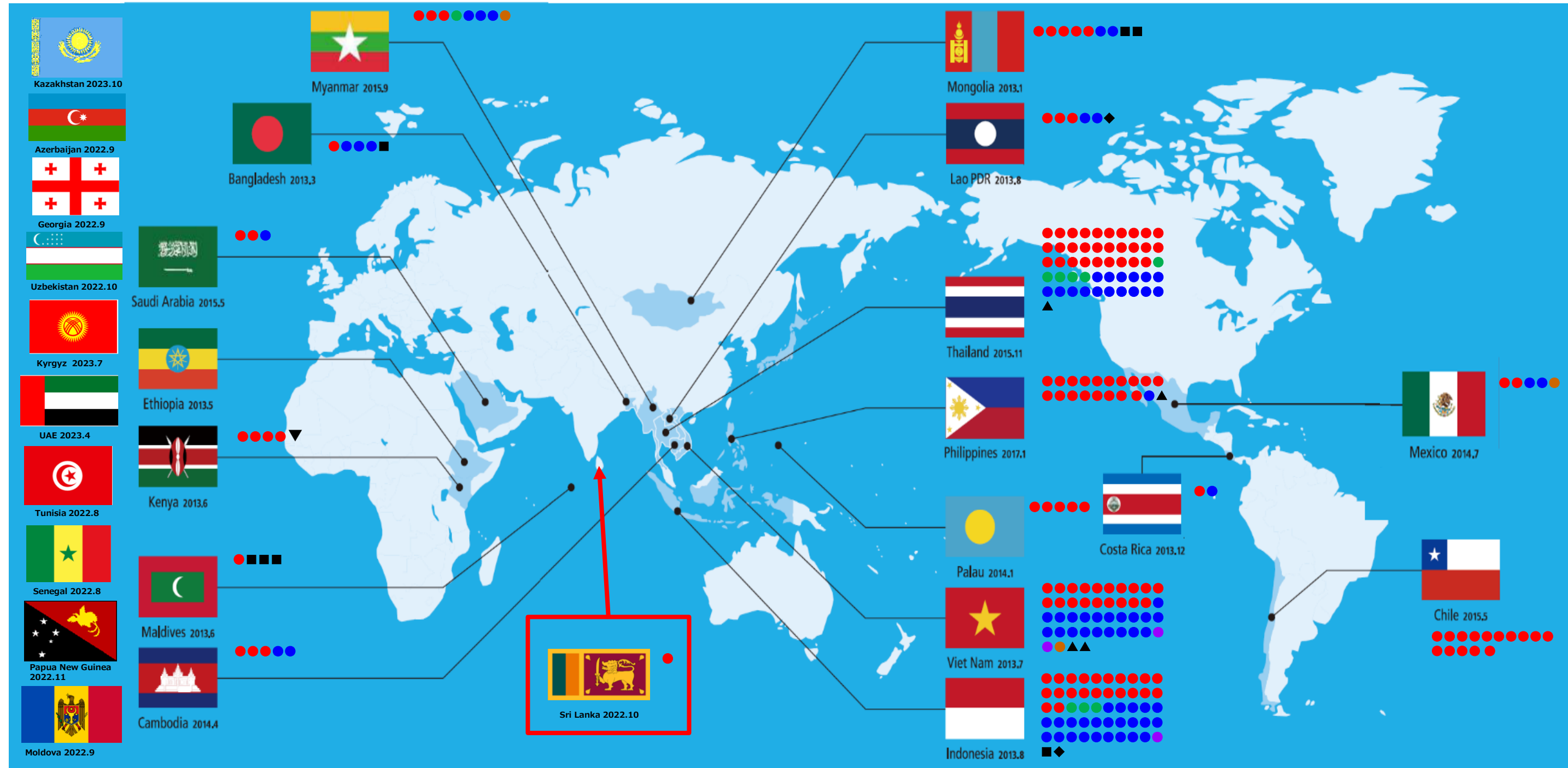
- Project Trend

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- Conclusion



Total 240 projects / 28 countries

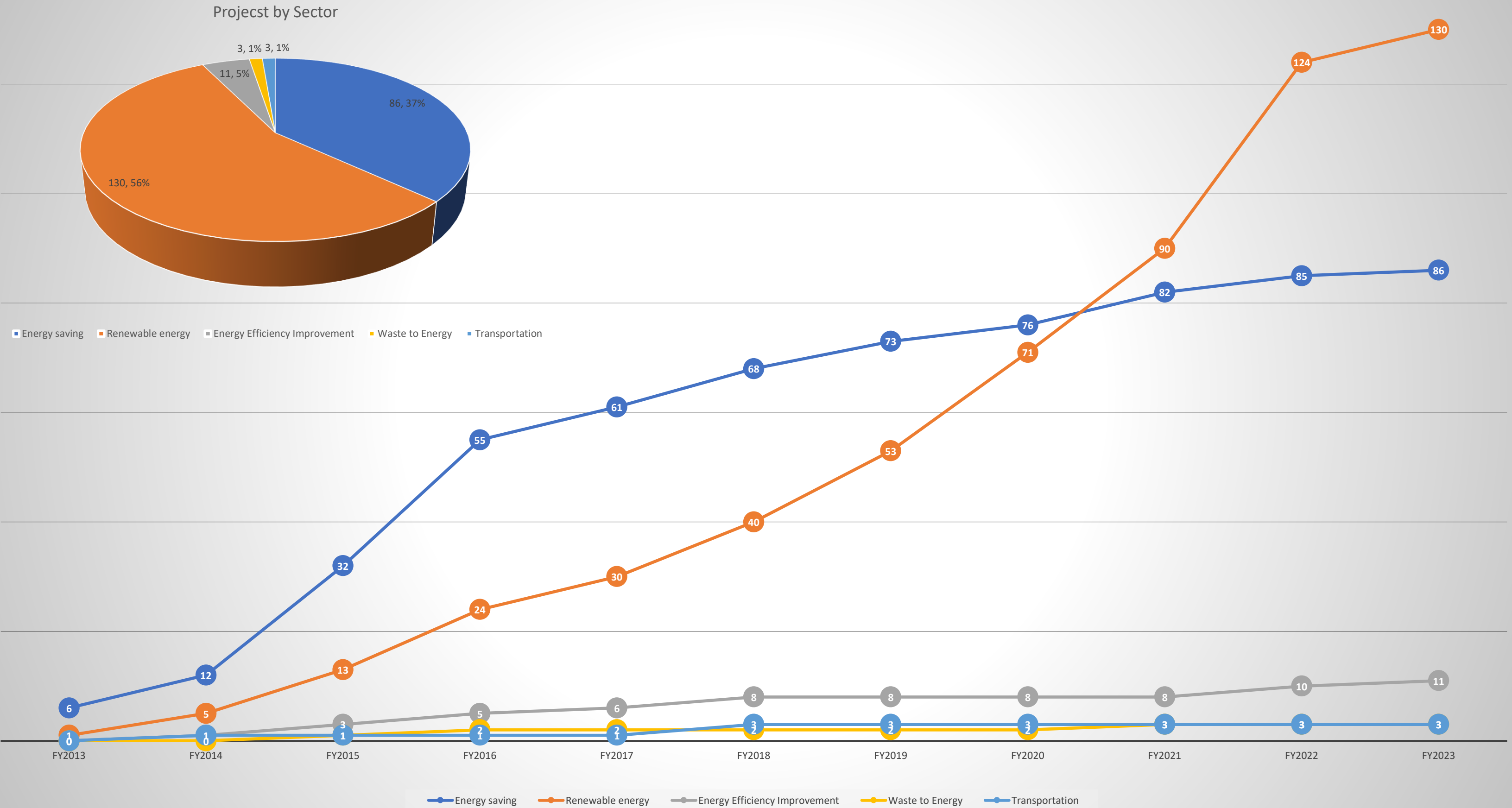
(● Model Project:226, ■ ADB:7, ◆ REDD+:2, ▲ F-gas:4, UNIDO▼:1)

- Renewable Energy
- Effective Use of Energy
- Energy Efficiency
- Transport
- Waste Handling and Disposal

Partner Country	Representative Participant	Project Name	Sector	Estimated GHG Reduction (tCO ₂ /year)
Mexico	BOT Lease Co., Ltd.	Introduction of 0.5MW Rooftop Solar Power System to Automotive Parts Factory (JCM Eco Lease Scheme)	Renewable Energy	392
Philippines	Global Engineering Co., Ltd.	Introduction of 6MW Power Generation System by Waste Heat Recovery for Cement Plant	Effective Use of Energy	21,244
Philippines	Kyuden International Corporation	27MW Solar Power Project in Dagohoy, Bohol Island	Renewable Energy	20,564
Philippines	Tokyo Century Corporation	Introduction of 1.2MW Rooftop Solar Power System to Electronic Equipment Assembly Factory (JCM Eco Lease Scheme)	Renewable Energy	697
Indonesia	AURA Green Energy Co.,Ltd	12MW Biomass Power Plant Project in Aceh Province, Sumatera	Renewable Energy	33,573
Indonesia	AGC Inc.	Improvement of Combustion Method and Furnace Shapes in Flat Glass Production Melting Furnace	Energy Efficiency Improvement	5,747
Indonesia	Alamport Inc.	Introduction of 3MW Rooftop Solar Power System to Paper Factory in Java Island	Renewable Energy	2,182
Chile	Farmland Co., Ltd.	26.3MW Solar Power and 48MWh Storage Battery Project Utilizing Farmland in the Metropolitan Area and O'Higgins Region	Renewable Energy	20,197
Chile	Sojitz Corporation	Introduction of 196MWh BESS in Huatacondo PV Plant in Tarapaca Region	Effective Use of Energy	17,975
Philippines	Kanematsu Corporation	11.3MW Mini Hydro Power Plant in Tumauni	Renewable Energy	29,342
Philippines	Kyuden International Corporation	10MW Solar Power Project in San Jose, Luzon Island	Renewable Energy	6,846
Philippines	Tokyo Century Corporation	7MW Solar Power Project in Collaboration with Power-supply Company	Renewable Energy	4,731
Sri Lanka	Shibata Corporation Co., Ltd.	13.5MW Solar Power Project in Kebithigollewa, North Central Province	Renewable Energy	6,511

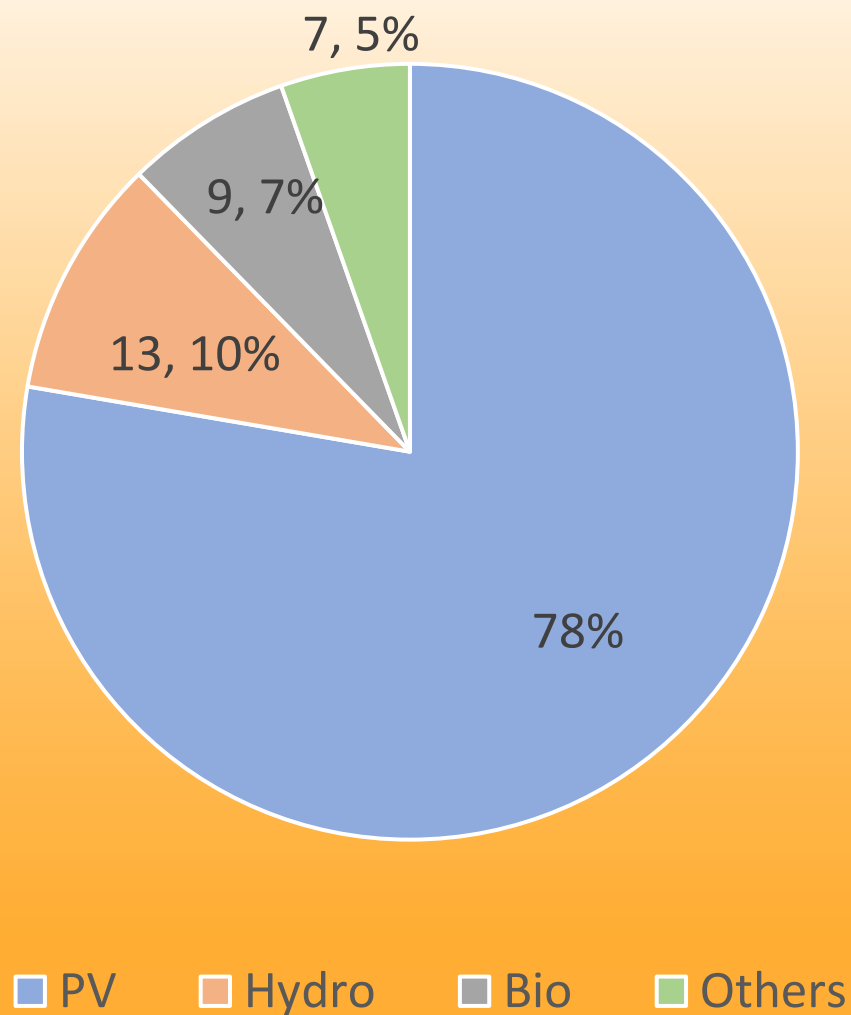
Please wait for the next selection result!

Project by Sector

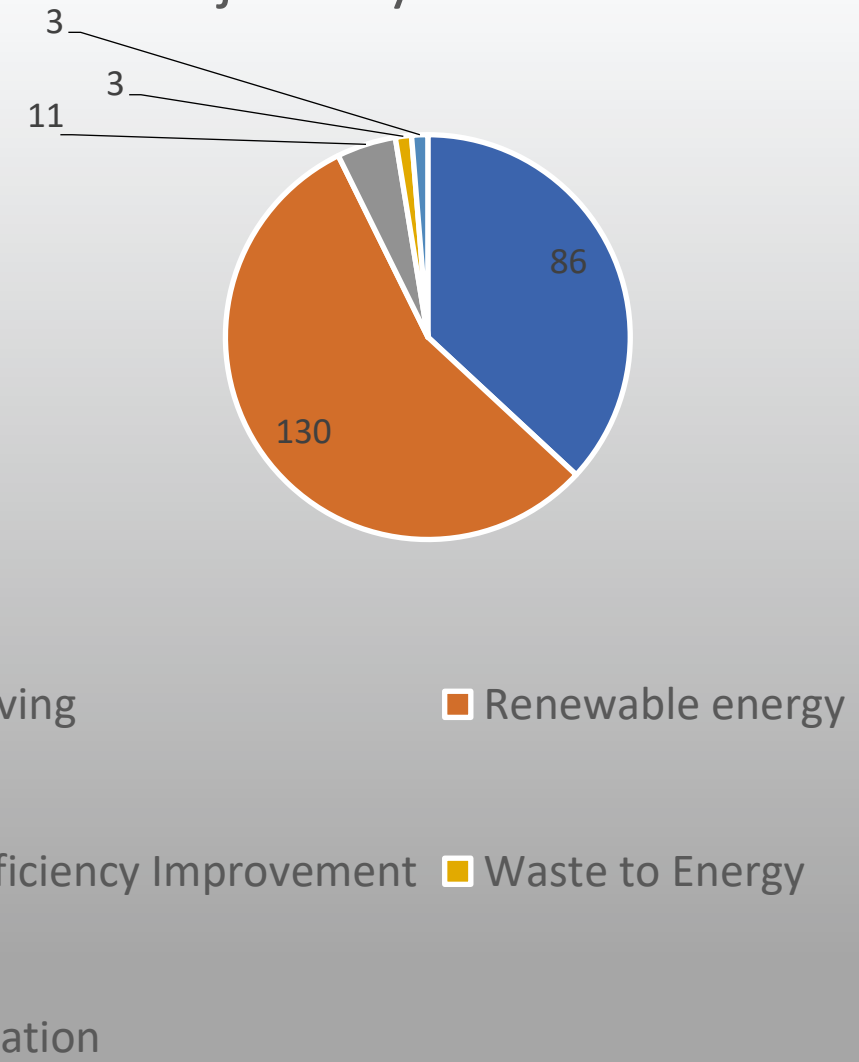


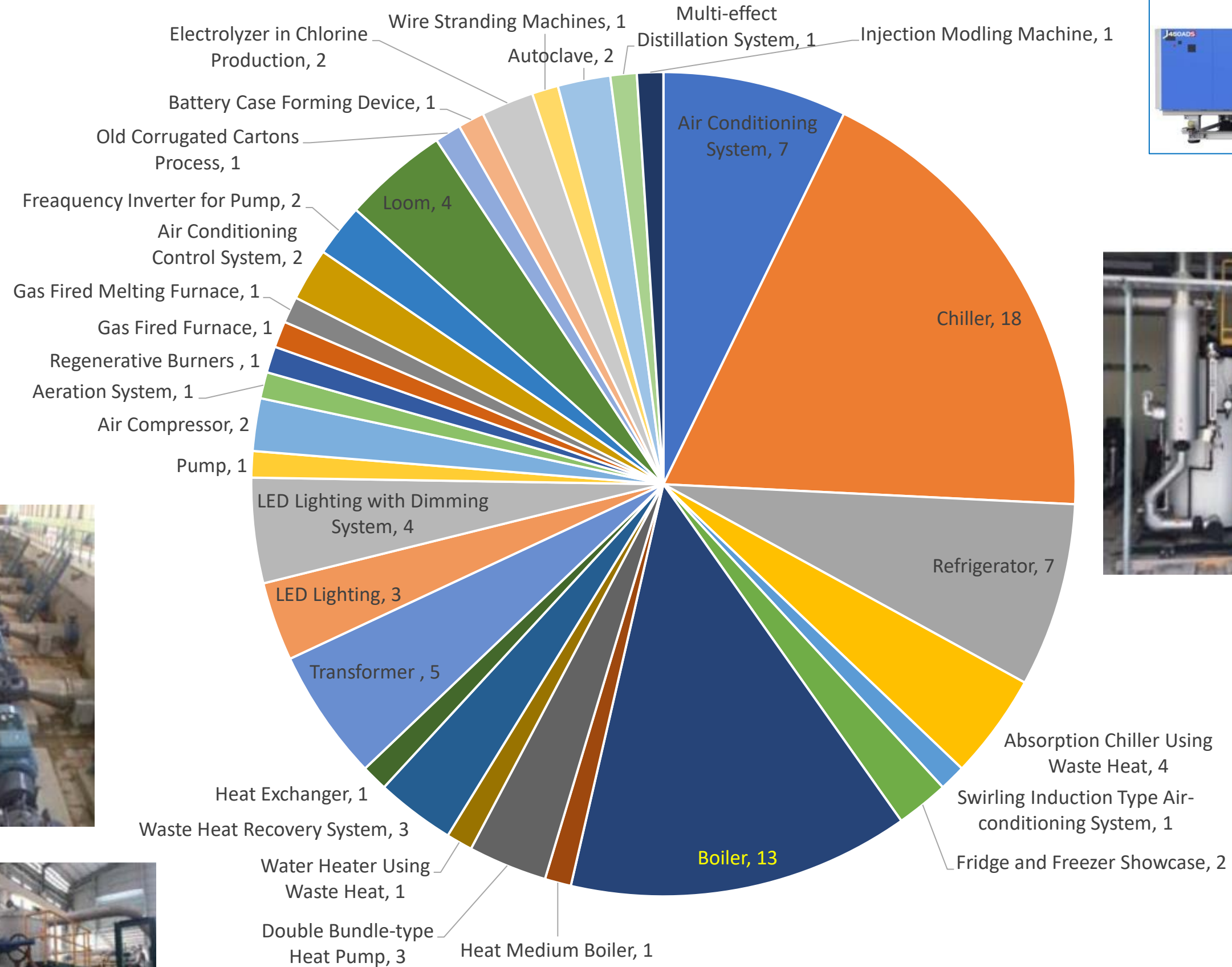
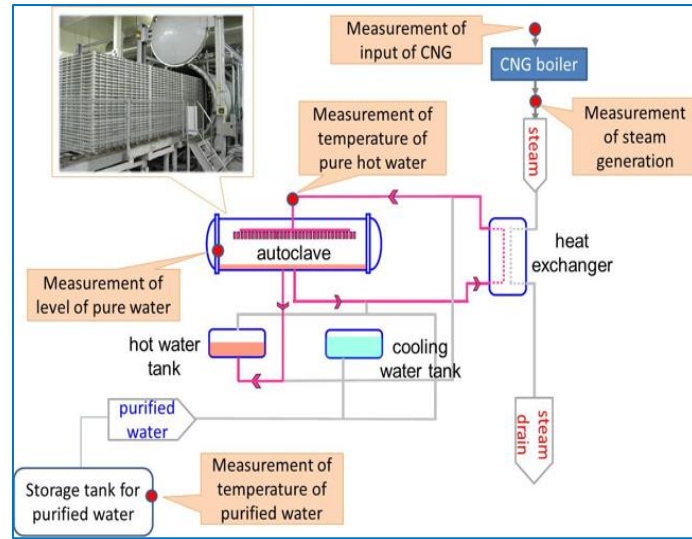


Renewable Energy Sector



Projects by Sector





13.5MW Solar Power Project in Kebithigollewa, North Central Province

Representative Participant (Japan): Shibata Corporation Co., Ltd.

Partner Participant (Sri Lanka): Kebithigollewa Solar Power (Pvt) Ltd., Windforce PLC

Outline of GHG Mitigation Activity

A 13.5MW solar power system is installed in Kebithigollewa, North Central Province.

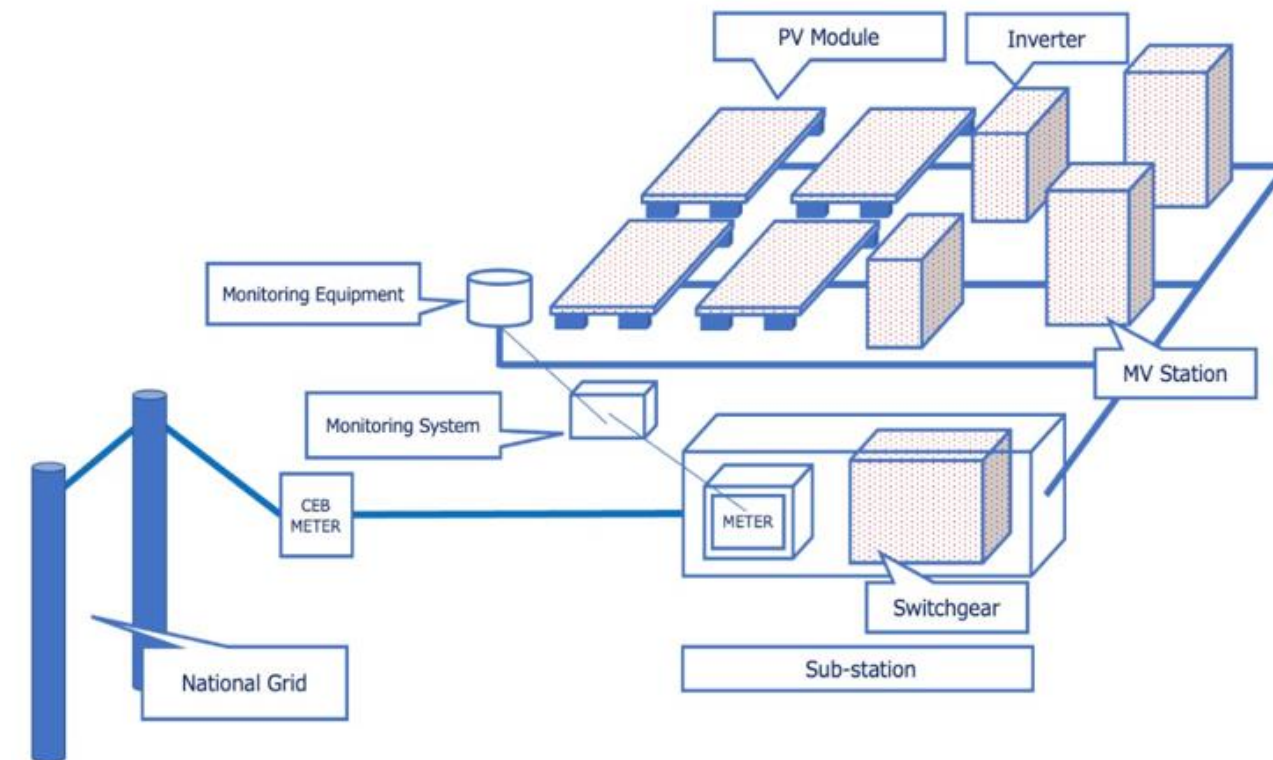
This project is to generate and sell electricity to Ceylon Electricity Board (CEB) and to replace a part of grid electricity derived from fossil fuels, thereby to reduce greenhouse gas (GHG) emissions.

The project will contribute to expand power generation capacity in Sri Lanka with using renewable energy and to reduce the greenhouse gases (GHG) emissions, which is in line with the Sri Lanka government's renewable energy policy.

The technology to be installed is an advanced solar power generation system which includes PV modules with 22.5% module efficiency, aiming to reduce GHG emissions in Sri Lanka. 20,413,487 kwh/year of electricity is expected to be generated.

Outline of the Solar Power Plant is shown in the figure right.

Outline of Solar Power Plant



Expected GHG Emission Reductions

6,511 tCO₂ /year

= (Reference CO₂ emissions) - (Project CO₂ emissions)

• Reference CO₂ emissions
= (Quantity of the electricity generated by the project) [MWh/year] × Emission factor [tCO₂/MWh]

• Project CO₂ emissions = 0 [tCO₂/year]

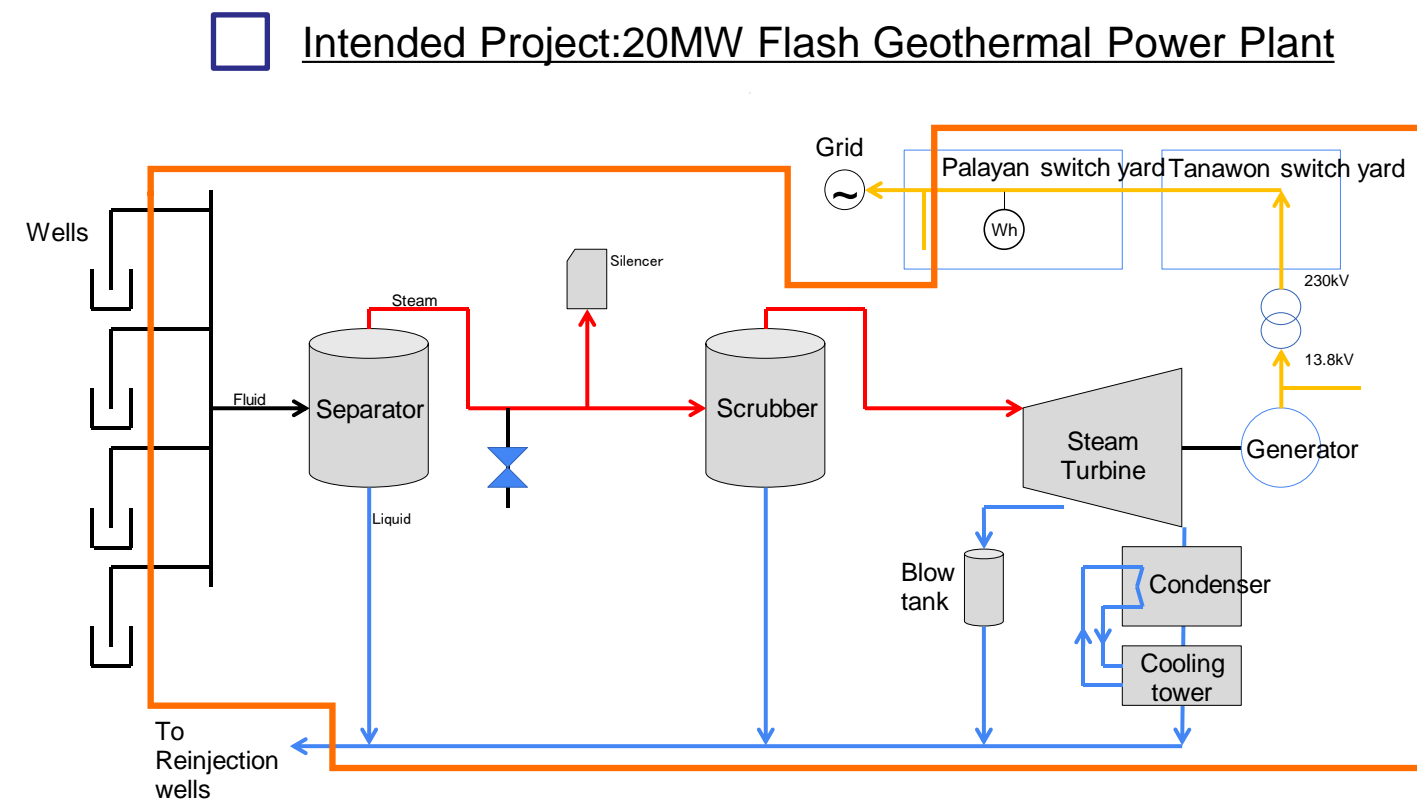
Tanawon 20MW Flash Geothermal Power Plant Project
 PP (Japan): Mizuho-Toshiba Leasing Company, Limited
 PP (Philippines): Bac-Man Geothermal Inc.

Outline of GHG Mitigation Activity

This project introduces a new 20 MW Flash Geothermal power plant system and new facilities for connection to the grid at Tanawon area of southern part of the Luzon island.

This Flash Geothermal power plant is small and easy to install, making it suitable for relatively small-scale geothermal power generation projects.

This project replaces the grid power produced by fossil fuel with renewable energy and reduces greenhouse gas (GHG) emissions.



Introduction of ORC Waste Heat Recovery Power Generation System to Flat Glass Factory

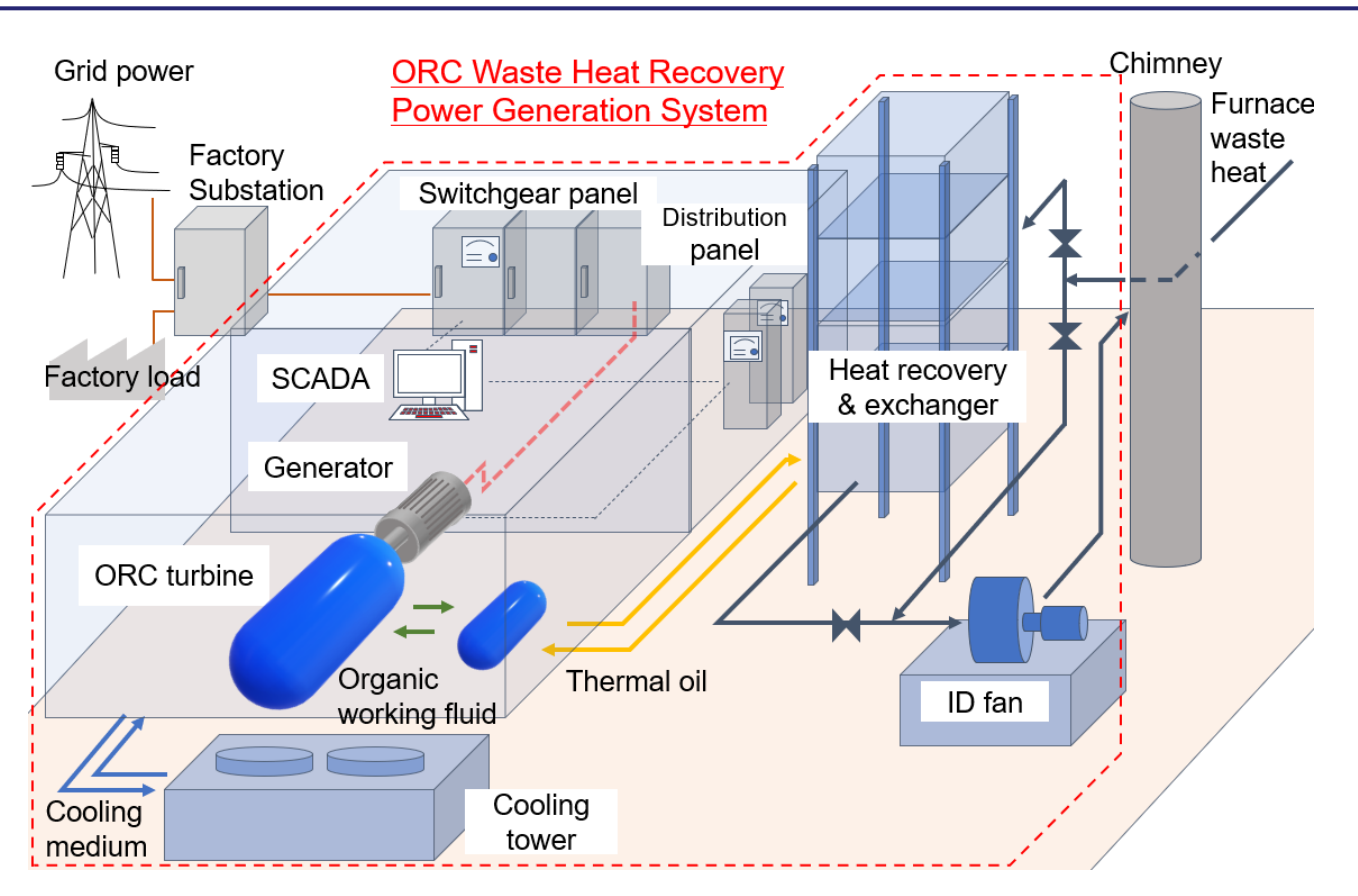
PP (Japan): AGC Inc.

PP (Thailand): AGC Flat Glass (Thailand) Plc.

Outline of GHG Mitigation Activity

A 1.8MW class ORC* waste heat recovery power generation system is introduced to the flat glass manufacturing factory located in Samut Prakan province for self-consumption purposes. The system reduces greenhouse gas (GHG) emissions by substituting part of grid power consumption. This project contributes to the achievement of Thailand policy for energy saving and reduction of CO₂ emissions.

* ORC: Organic Rankine Cycle



6MW Mini Hydro Power Plant Project in West Pasaman, West Sumatra
PP (Japan): NiX JAPAN Co., Ltd., Nix New Energy Co., Ltd.
PP (Indonesia): T&J Green Energy Company Limited

Outline of GHG Mitigation Activity

On the Batang Tonggar river in West Pasaman, West Sumatra, a run-of-river type mini hydro power plant (3MW x 2 units) is constructed, and the electricity is sold to PLN, a state-owned power company. The project reduces greenhouse gas (GHG) emissions by replacing the grid electricity. 38.73 GWh is expected to be sold annually.

The government's electric power development plan aims at a renewable energy ratio of 23% by 2025 and 31% by 2050. This project contributes to a promotion and expansion of renewable energy.

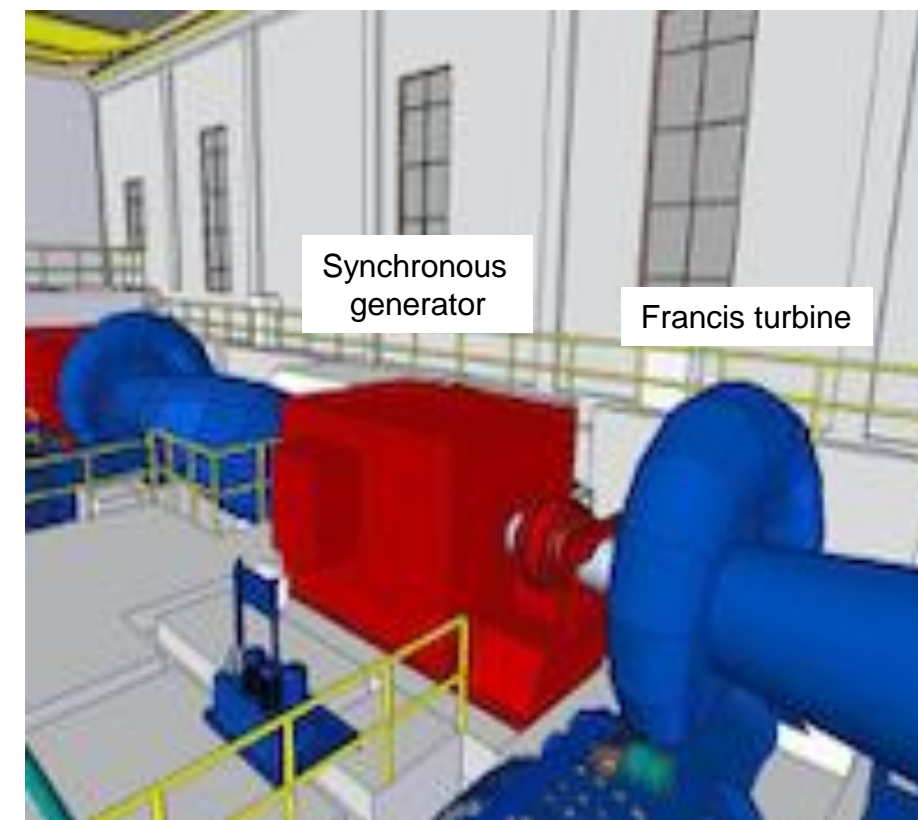


Image of inside view of the plant

Waste to Energy project in Bac Ninh Province
PP (Japan): JFE Engineering Corporation
PP (Vietnam): T&J Green Energy Company Limited

Outline of GHG Mitigation Activity

A waste-to-energy plant is introduced in Bac Ninh province. This plant incinerates and generates electricity from 230 tons/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 150 tons/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)

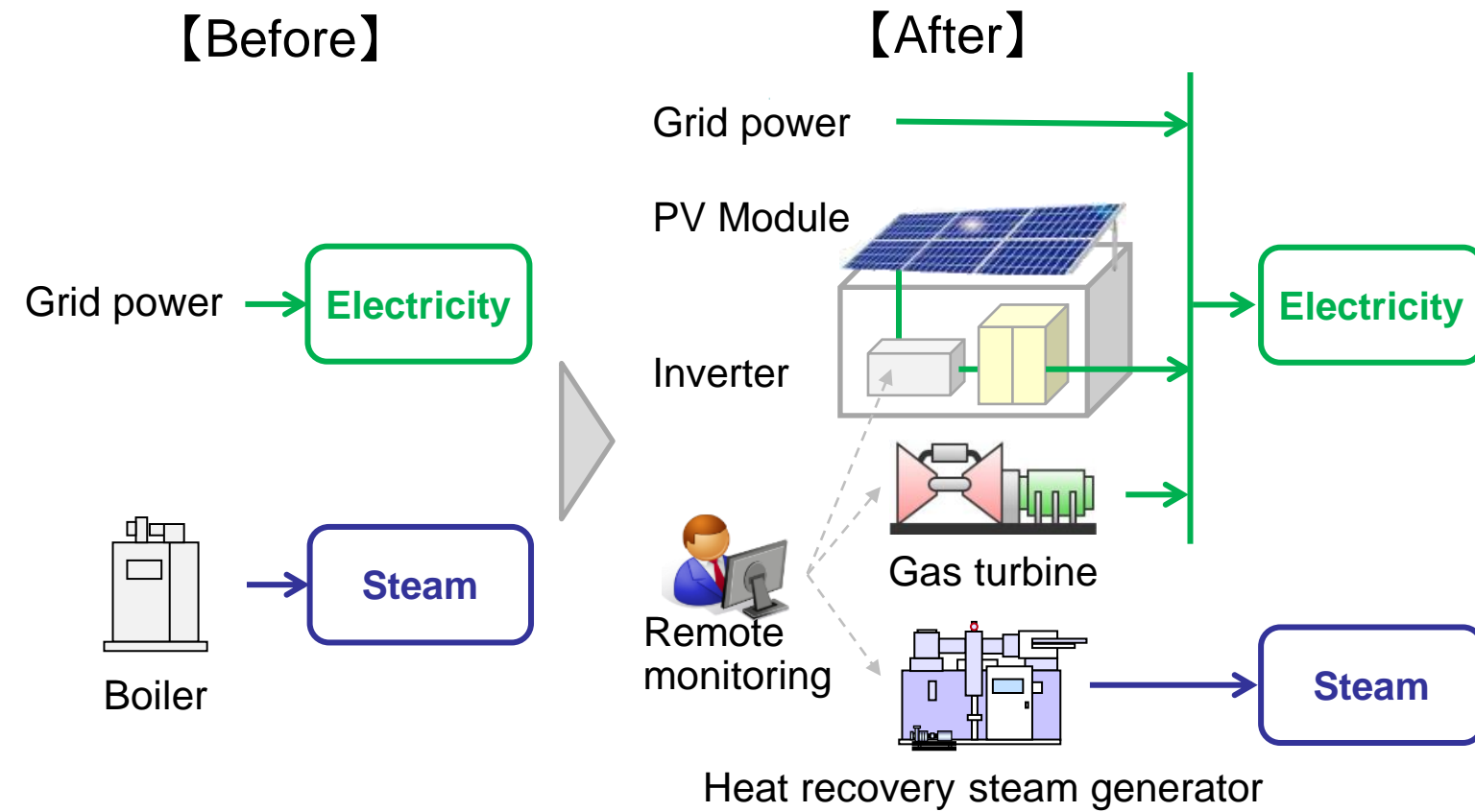
Processing Volume:
500t/day

(Municipal solid waste
350t/day and industrial
solid waste 150t/day)

Introduction of Gas Co-generation System and 22MW Rooftop Solar Power System to Tire Factory
PP (Japan): The Kansai Electric Power Company, Incorporated
PP (Thailand): Kansai Energy Solutions (Thailand) Co., Ltd.

Outline of GHG Mitigation Activity

A Gas Co-generation System (6.6MW class × 2 units) and a Rooftop Solar Power System (total of about 22 MW) are installed to the tire factory, and all the generated power and steam are supplied to replace those consumed in the factory. These high-efficient systems and renewable energy sources realize energy saving, stable energy supply, and reduction in green house gas (GHG) emissions.



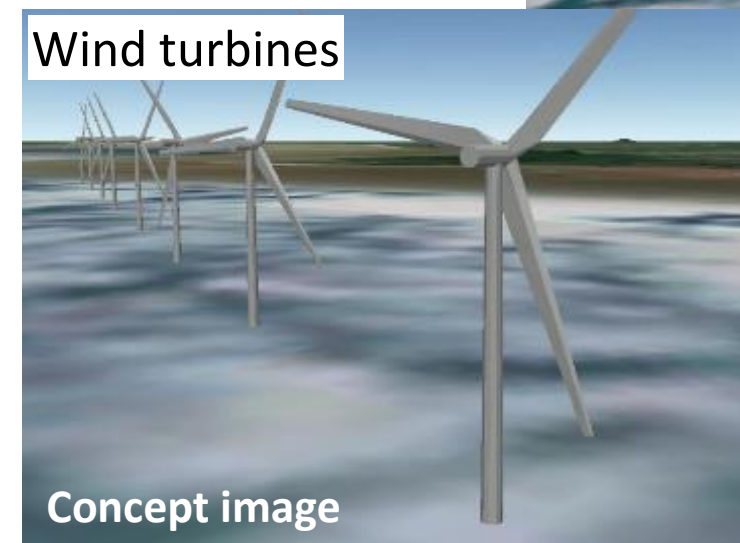
48MW Offshore Wind Power Generation Project in Duyen Hai District, Tra Vinh Province
PP (Japan): Shizen Energy Inc.
PP (Vietnam): Duyen Hai Wind Power Company Limited

Outline of GHG Mitigation Activity

This project installs offshore wind power generation facilities with a capacity of 48 MW 100m to 2km offshore in Duyen Hai District, Tra Vinh Province.

The electricity is sold to the Vietnam Electricity to replace fossil fuel originated power in the grid to reduce greenhouse gas (GHG) emissions.

This project contributes to Vietnam's nationally determined contribution (NDC) for reducing GHG emissions by 9% compared to BAU.



Wind Turbine to be installed offshore

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• Conclusion

JCM Global Match enhances the efficiency of your project development specializing in the JCM financing programme.



3 things you can do at “JCM Global Match”

After registration, you can...

1
FIND

Potential partner

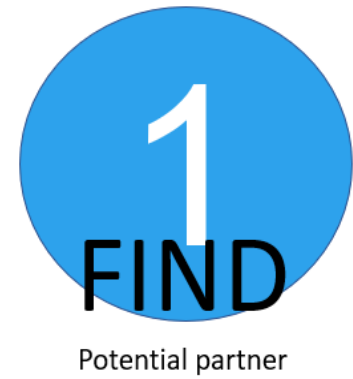
2
ADVERTISE

Your company to
other users

3
DISCUSS

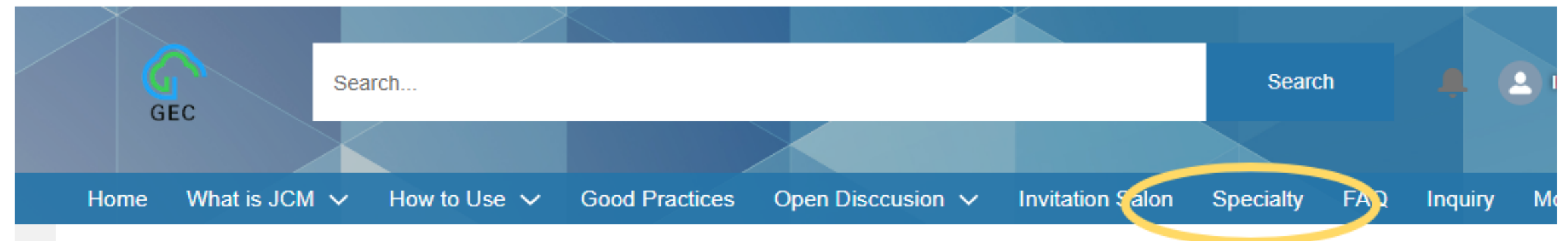
Your business plan

3 things you can do at “JCM Global Match”

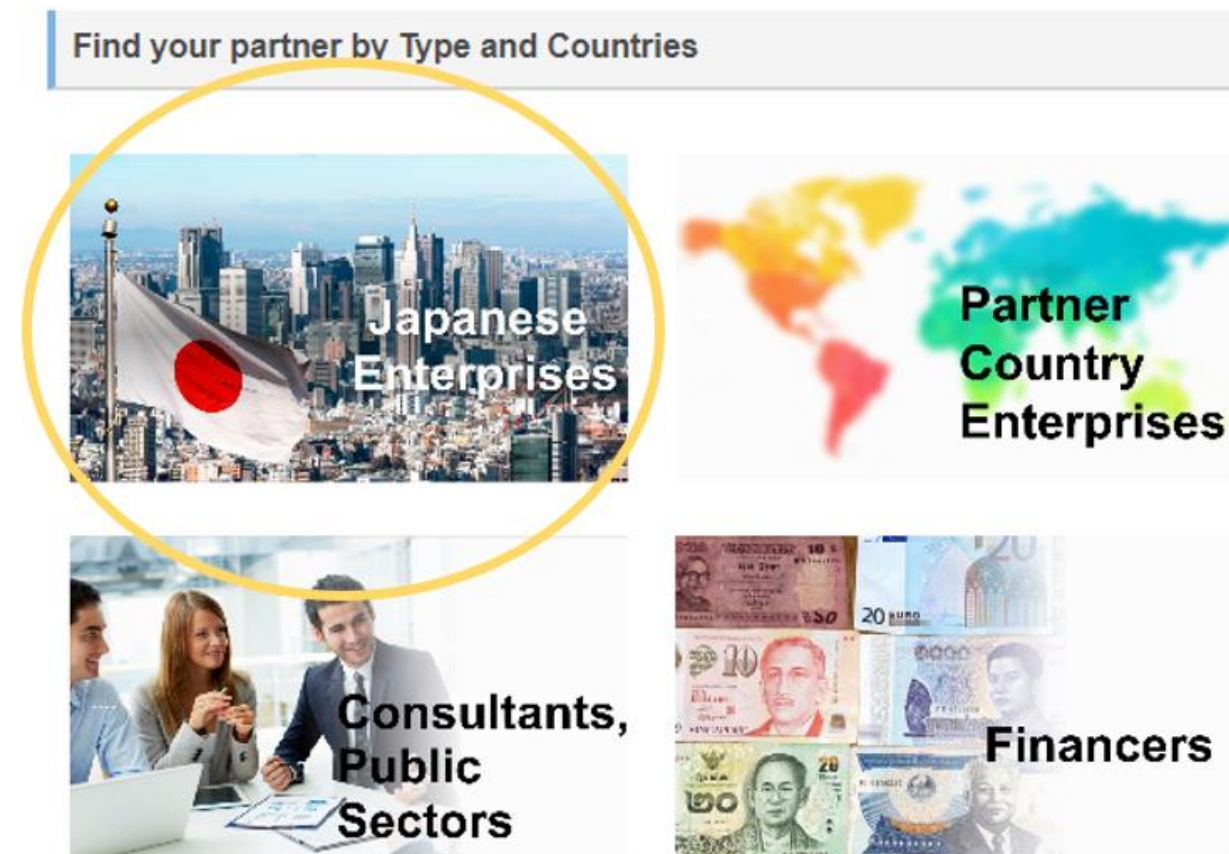


You can also obtain company lists by 2 ways.

*Menu bar



*Top page



3 things you can do at “JCM Global Match”

2
ADVERTISE
Your company to other users

To promote better,
you can create

“My specialties”
card after registration.

The screenshot displays the JCM Global Match website interface. At the top, a navigation bar includes 'Home', 'What is JCM', 'How to Use', and 'Good'. Below this, a section titled 'Find your partner by Type and Countries' features four categories: 'Japanese Enterprises' (with a Japanese flag and cityscape), 'Partner Country Enterprises' (with a world map), 'Consultants, Public Sectors' (with an office meeting), and 'Financial' (with various banknotes). A 'Your Company's Specialities' section at the bottom contains a 'Register My Specialities' button (circled in yellow) and an 'Edit My Specialities' button. On the right, a 'Create a Specialites' form is shown with fields for 'Specialities Name', 'Country of origin', and 'PR (Key words)'. A blue speech bubble labeled 'Select' points to the 'Specialities Name' dropdown menu, and another blue speech bubble labeled 'Write' points to the 'Country of origin' text input field. A yellow arrow points from the 'Register My Specialities' button to the form.

How to register/publish "My Company's Specialities" (video)

3 things you can do at “JCM Global Match”



“Open Discussion” is also the place you can advertise your products and services **freely**.

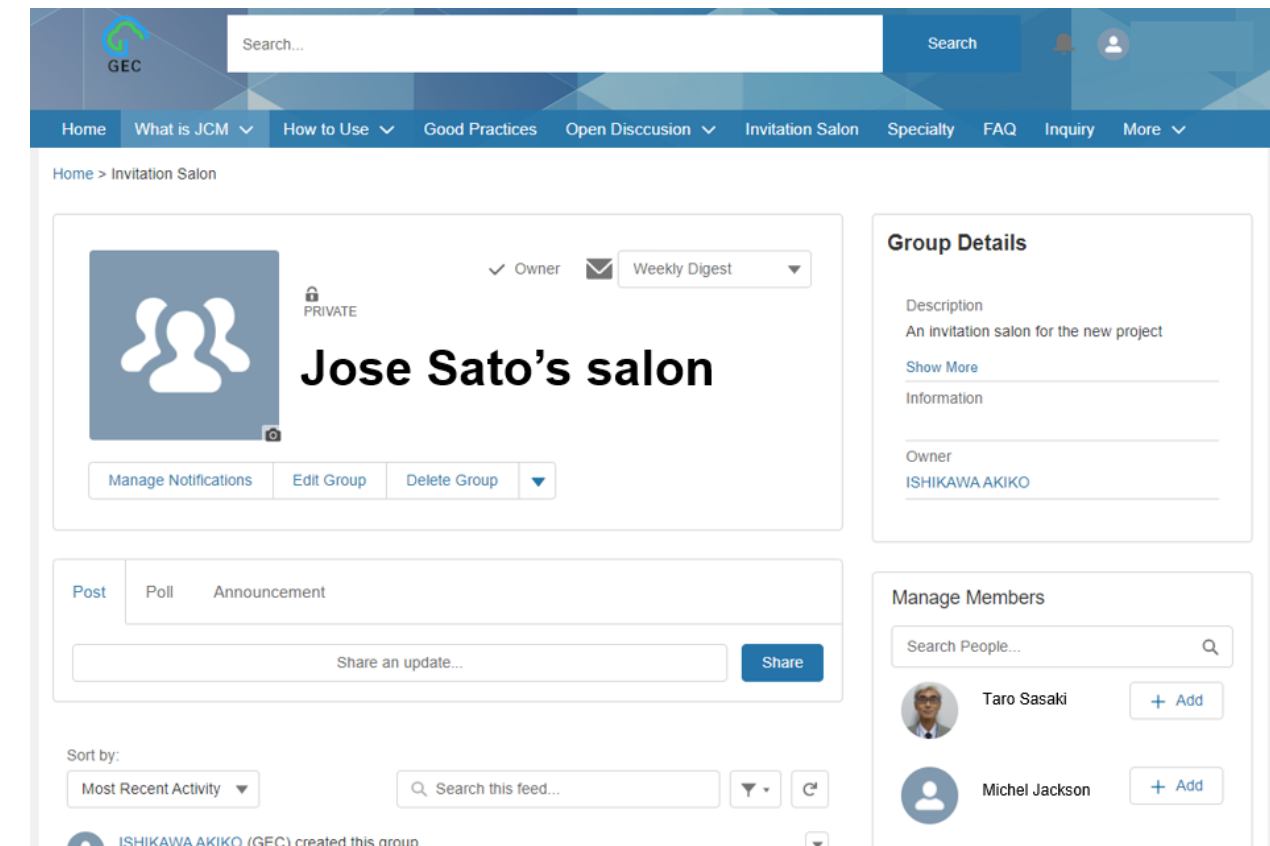
Open Discussion



Open Discussion by Country



Open Discussion by Technology



JCM Global Match

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



Please let any enterprize who may plan a JCM Model project in your country know about this information.

Consult GEC anytime during the year (except for evaluation period.)

Please fill out the Consultation Form which URL is shown here [GEC Consultation Form 2023 en.docx](#) as much as possible and send it to jcm-info@gec.jp for free of charge consultation online or offline. Your email title should be "Consultation on application for JCM Model Project (Your company name)."

GEC will support you by answering to your questions and offer practical advices on points like below:

➤ Sample points of consultation

- ✓ Definition of Eligible Project and advanced technologies
- ✓ International Consortium
- ✓ MRV methodologies to calculate reduction in GHG emission
- ✓ Legal durable years, maximum percentage of financial support, and cost effectiveness
- ✓ Plan to obtain necessary financing, concession, licenses, etc.
- ✓ Reasons financial soppurts are needed, Profitability

Consultation Form (part)

Global Environment Centre Foundation (GEC)^①
 Consultation Form for JCM Project and Co-innovation Project [FY2022]^②
*Please fill out the white space as much as possible.^③
 *Reference material - Guidelines for Submitting Proposals (Tentative translation) for JCM Project^④
[https://gec.jp/jcm/jp/kobo/r04/mp/\(tentative\)2022_Guidelines_for_Submitting_Proposals.pdf](https://gec.jp/jcm/jp/kobo/r04/mp/(tentative)2022_Guidelines_for_Submitting_Proposals.pdf)^⑤

Information of Consultation ^⑥	
Select for which project would you like to apply. ^⑦	<input type="checkbox"/> JCM Model Project ^⑧ <input type="checkbox"/> Co-innovation Project ^⑨ <input type="checkbox"/> Undecided ^⑩
ID No. ^⑪	<small>*For internal use^⑫</small>
Entry Date ^⑬	Click here to select a date ^⑭
Submission to GEC ^⑮	E-mailed on Click here to select a date / Meeting (at) ^⑯
Meeting attendee(s) ^⑰	^⑱ <small>*Please list the name(s) and organization(s).^⑲</small>
Past Consultation Date for the same project ^⑳	<input type="checkbox"/> First time ^㉑ <input type="checkbox"/> () times + Previous Consultation Date : Click here to select a date ^㉒
GEC responder ^㉓	<small>*For internal use^㉔</small>
Project Information Provided by ^㉕	
Company name ^㉖	^㉗
Department/division ^㉘	^㉙
Your name ^㉚	^㉛
E-mail address ^㉜	^㉝
Phone No. ^㉞	<small>*Country code + local number^㉟</small>
Project Information ^㊱	
Application target ^㊲	<input type="checkbox"/> FY2022 <input type="checkbox"/> FY2023 <input type="checkbox"/> TBD ^㊳ If other than above, please specify: ^㊴
Partner country ^㊵	^㊶ <small>*The country where the project will be implemented.^㊷</small>
Name of representative participant ^㊸	Name of representative participant(s) ^㊹ : ^㊺ Website: ^㊻ <small>*1: A representative participant must be a Japanese entity registered in Japan.^㊼ If you haven't decided or been looking for one, please state as such.^㊽</small>
Name of partner participant ^㊾	Name of partner participant(s) ^㊿ : ^① Partner participant ^② is a subsidiary of a Japanese company: Click to select ^③ Website: ^④ <small>*1: Please include an entity that owns and uses the facility introduced by the project.^⑤</small>

1

- JCM Model Projects Overview

2

- Project Trend

3

- JCM Global Match

4

- Conclusion

Wholesale Distributors, Trading Companies	ITOCHU Corporation / Inabata Co., Ltd. / Kanematsu Corporation / Toyota Tsusho Corporation / Toyotsu Machinery Corporation / Japan Pulp and Paper Company Limited / Farmdo Co., Ltd. (FARMLAND Co., Ltd.) / Marubeni Corporation / MITSUI & CO., LTD. / YUASA TRADING CO., LTD
Retail	AEON MALL Co., Ltd. / AEON RETAIL Co., Ltd. / FAST RETAILING CO., LTD. / FamilyMart Co., Ltd. / Lawson, Inc.
Foods	Acecook Co., Ltd. / Kirin Holdings Company, Ltd. / Sapporo International Inc. / Suntory Spirits Ltd. / CPF JAPAN CO., LTD. / Fuji Foods Corporation /Dole Japan, Inc.
Chemicals, Rubber	Otsuka Pharmaceutical Factory, Inc. / KYOWA HAKKO BIO CO. LTD. / Showa Denko Materials Co., Ltd. / Sumitomo Rubber Industries, Ltd. / DIC Corporation / Bando Chemical Industries, Ltd. / FUMAKILLA LIMITED / Mitsubishi Chemical Corporation
Textiles, Glass, Ceramics	AGC Inc. / TOTO Ltd. / Toray Industries, Inc. / Nisshinbo Textile Inc.,
Nonferrous Metals	YKK Corporation
Electric Machinery, Precision Instruments	ENDO Lighting Corporation / Sharp Energy Solutions Corporation / Sony Semiconductor Manufacturing Corporation / DAIICHI JITSUGYO CO., LTD. / WWB Corporation / TSB Co., Ltd. / Hitachi-Johnson Controls Air Conditioning, Inc. / Voith Fuji Hydro K.K. / HOYA CORPORATION / MinebeaMitsumi Inc. / YAZAKI PARTS CO., LTD. / RICOH COMPANY, LTD.
Industrial Machinery	Ebara Refrigeration Equipment & Systems Co., Ltd. / Kanematsu KGK Corp. / Mayekawa Manufacturing Co., Ltd. / Mitsubishi Heavy Industries, Ltd.
Automobiles & Auto parts	DENSO CORPORATION / Toyota Motor Corporation
Transportation, Warehousing	Tokyu Corporation / Nippon Express Co., LTD. / RYOBI HOLDINGS Co., Ltd.
Engineering & Construction	JFE Engineering Corporation / Sumitomo Forestry Co., Ltd. / Toyo Energy Farm Co., Ltd. / JGC CORPORATION / NIPPON STEEL & SUMIKIN ENGINEERING CO., LTD. / Nihon Crant Co. Ltd. / Next Energy & Resources Co., Ltd. / Fujita Corporation / Yuko Keiso Co., Ltd.
Power, Gas, Water, Energy Supply	AURA-Green Energy Co., Ltd. / eREX Co.,Ltd. / Idemitsu Kosan Co., Ltd. / Osaka Gas Co., Ltd. / The Kansai Electric Power Company, Incorporated / Saisan Co.,Ltd. / SHIZUOKA GAS CO., LTD. / Shizen Energy Inc. / WWS-JAPAN Co. / Hokusan Co., Ltd. / METAWATER Co., Ltd. / Eurus Energy Holdings Corporation / Yokohama Water Co., Ltd. / Liberal Solution Co., Ltd., Kyuden International CO.
Finance	Tokyo Century Corporation / Mizuho-Toshiba Leasing Company Ltd. / Sumitomo Mitsui Trust Panasonic Finance Co., Ltd. / Sumitomo Mitsui Finance and Leasing Company, Limited, BOT Lease Co., Ltd.
Services and Others	Asian Gateway Corporation / Alairport Inc. / AAIC Japan Co., Ltd. / NTT DATA INSTITUTE OF MANAGEMENT CONSULTING, Inc. / NTT FACILITIES, INC. / Oriental Consultants Co., Ltd. / Kayama Kogyo Co., Ltd. / EMATEC:Environmental Management and Technology Center / Global Engineering Co., Ltd. / NiX Co., Ltd. / SUURI-KEIKAKU Co., Ltd. / Chodai Co., Ltd. / TEPIA Corporation Japan Co.,Ltd. / Pacific Consultants Co., Ltd. / Finetech Co., Ltd. / Waseda Environmental Institute Co., Ltd.

- 1 Thailand / EAST RETAILING CO., LTD. High Efficiency LED Lighting
- 2 Cambodia / AEON MALL Co., Ltd. Solar Power System and High Efficiency Centrifugal Oil Filter
- 3 Bangladesh / Kibao Refrigeration Equipment & Systems Co., Ltd. High Efficiency Centrifugal Chiller
- 4 Mexico / Sunteco Solares Limited Once-through Boiler and Fuel Switching

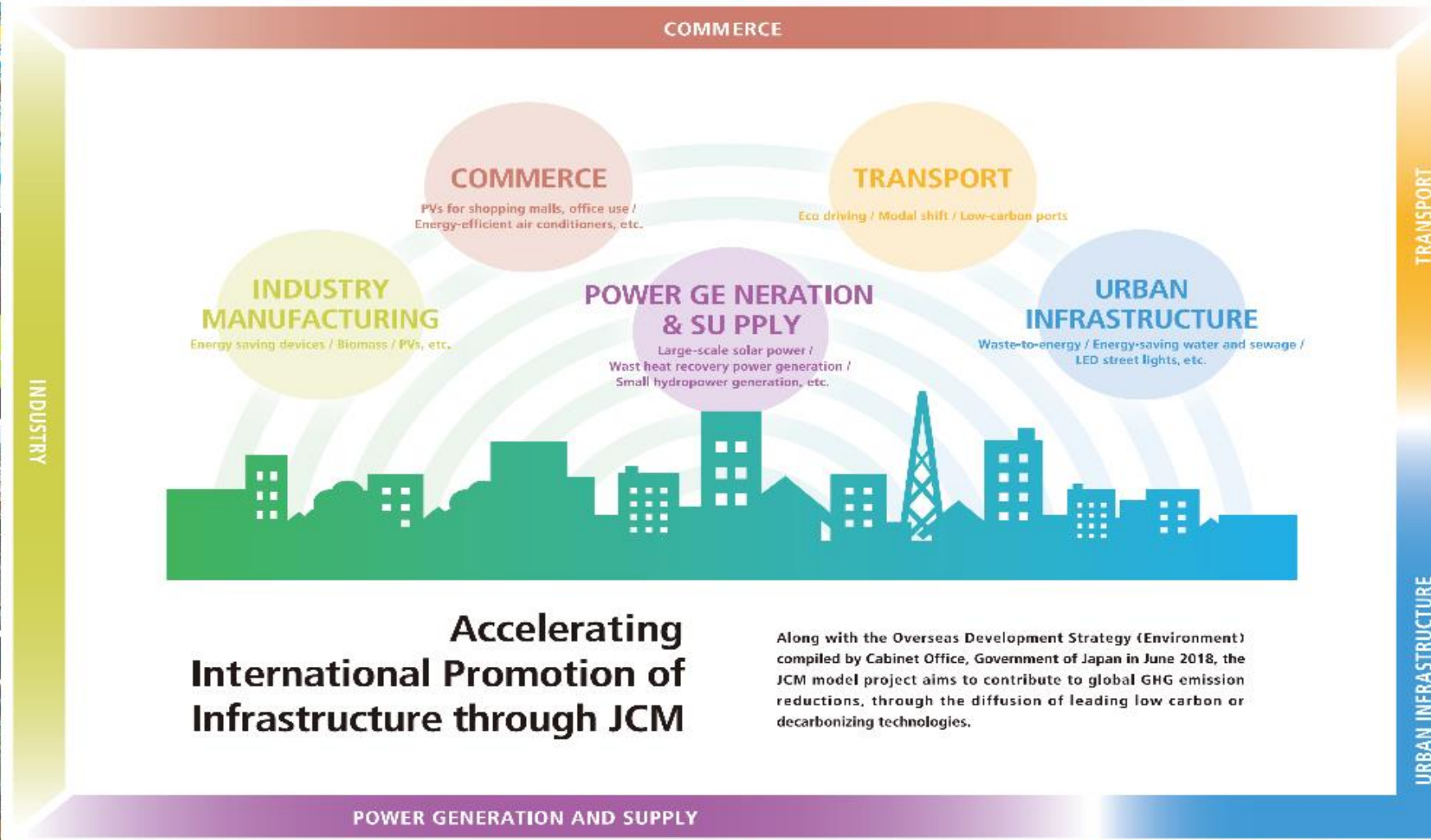


- 3 Palau / Pacific Consultants Co., Ltd. Solar Power Plants for Commercial Facilities
- 4 Indonesia / Toyota Tsusho Corporation Double-Ductile type Heat Pump
- 1 Indonesia / Hokutan Co., Ltd. CHG-Diesel Equipment to Public Bus
- 2 Thailand / Yokohama Port Corporation Energy Efficient Equipment to Bangkok Port



- 3 Indonesia / Environmental Management and Technology Center Energy Saving in Industrial Wastewater Treatment System
- 4 Myanmar / Kiri Holdings Company, Limited. Energy Saving Heating System
- 1 Thailand / TSD Co., Ltd. Floating Solar Power System
- 2 Mexico / TII (SIA) CONSULTING, INC. Power Generation with Methane Gas Recovery System

05



Accelerating International Promotion of Infrastructure through JCM

Along with the Overseas Development Strategy (Environment) compiled by Cabinet Office, Government of Japan in June 2018, the JCM model project aims to contribute to global GHG emission reductions, through the diffusion of leading low carbon or decarbonizing technologies.



- 1 Viet Nam / Yuka Kasei Co., Ltd. Amorphous High Efficiency Transformers in power grid
- 2 Viet Nam / Yokohama Water Co., Ltd. High Efficiency Water Pumps
- 3 Myanmar / JTE Engineering Corporation Waste-to-Energy Plant in Yangon City
- 4 Myanmar / Fujita Corporation Rice Husk Power Generation

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Thank you for your attention!
ご清聴ありがとうございました。

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