

July 7, 2022

Electric Power Development Co., Ltd.

Gas cogeneration power plant in Thailand: participation in replacement project

J-POWER's first power plant replacement project in Thailand

Electric Power Development Co., Ltd. (headquartered in Chuo-ku, Tokyo; President: Toshifumi Watanabe, "J-POWER") participated in a replacement project for the EGCO Cogeneration Company Limited ("EGCO Cogen") that is invested jointly with Electricity Generating Public Company Limited ("EGCO"). This is J-POWER's first contribution to replacing a power plant in Thailand.

J-POWER has participated in the EGCO Cogen since 2001 (released on March 15, 2001). The power plant wholesales electricity to Electricity Generating Authority of Thailand ("EGAT") based on Thailand's national SPP Program (Thailand's system for guaranteeing power purchases from small power producers). EGCO Cogen also sells electricity and steam to neighboring industrial users (IUs). EGCO Cogen signed a new Power Purchase Agreement (PPA) of 25 years in January 2022, and signed Loan Agreement in June.

EGCO Cogen is proceeding the construction, and commercial operation is scheduled to start from January 2024 when the existing PPA expires. EGCO Cogen will continue to sell electricity and steam to EGAT and IUs after the replacement of the power plant. By introducing the latest technology, energy utilization efficiency will improve. As well, greenhouse gas emissions will be reduced, helping to achieve low carbonization goals.

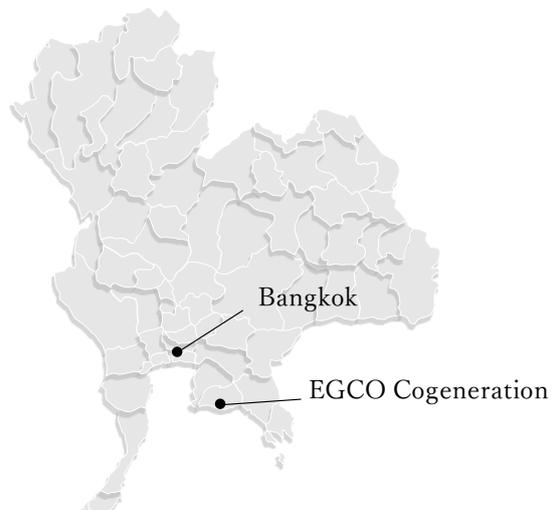
J-POWER, guided by our medium-term management plan announced in April 2021, will aim for a steady supply of electricity, reduce the environmental burden in Thailand, and further expand our business foundation by acquiring new projects.

(1) Overview

- ① Company name : EGCO Cogeneration
- ② Location : Rayong Industrial Park, Rayong Province, Thailand (about 200 km southeast of Bangkok)
- ③ Output : Electricity 74 MW; steam 35 t/h
(cf: existing power plant: electricity 112 MW; steam 30 t/h)
- ④ Generation type : Gas combined cycle power generation

- ⑤ Shareholders : EGCO 80%; J-POWER 20%
- ⑥ Customers : Electricity Generating Authority of Thailand (EGAT) and industrial users (IUs) near the power plant
- ⑦ Schedule : Construction start; January 2022
Commercial operation (planned); January 2024

(2) Location



(3) Current overview of power plant



(4) Attachments

1. List of J-POWER's overseas IPP projects

List of J-POWER's Overseas IPP Projects
(Currently operational projects)

Country/ Region	Project Name	Power Generation Method	Capacity (MW)	J-POWER Investment Ratio (%)	Owned Capacity (MW)
United States (11 Projects)			6,402		3,099
	Frontier	Gas (Combined Cycle)	830	31.0	257
	Elwood Energy	Gas (Simple Cycle)	1,350	50.0	675
	Green Country	Gas (Combined Cycle)	795	50.0	398
3 Eastern Gas Thermal Plants	Pinelawn	Gas (Combined Cycle)	80	50.0	40
	Equus	Gas (Simple Cycle)	48	50.0	24
	Fluvanna	Gas (Combined Cycle)	885	15.0	133
2 Long Island Thermal Plants	Edgewood	Gas (Simple Cycle)	88	50.0	44
	Shoreham	Jet Fuel (Simple Cycle)	90	50.0	45
	Orange Grove	Gas (Simple Cycle)	96	50.0	48
	Westmoreland	Gas (Combined Cycle)	940	25.0	235
	Jackson	Gas (Combined Cycle)	1,200	100.0	1,200
Thailand (14 Projects)			5,600		3,130
	Roi-Et	Biomass (Chaff)	9	24.7	2
	EGCO Cogen	Gas (Combined Cycle)	112	20.0	22
	GYG	Biomass (Rubber Wood Waste)	20	49.0	10
	GPG	Gas (Combined Cycle)	1,468	49.0	719
	7 SPP	Gas (Combined Cycle)	790	57.7	456
	Nong Saeng	Gas (Combined Cycle)	1,600	60.0	960
	U-Thai	Gas (Combined Cycle)	1,600	60.0	960
	Rooftop Solar(1 project)	Solar	0.8	60.0	0.5
China (4 Projects)			11,758		1,122
	Hanjiang (Xihe / Shuhe)	Hydropower	450	27.0	122
	Gemeng	Coal, Wind, Solar, Hydro(Pumped-storage)	9,218	7.0	645
	Hezhou	Coal	2,090	17.0	355
Phillipines (3 projects*)			728		364
	Caliraya	Hydro	23	50.0	11
	Botocan	Hydro	21	50.0	10
	Kalayaan	Hydro(Pumped-storage)	685	50.0	342
Australia (2 projects)			100		8
	Kidston Stage 1	Solar	50	7.7	4
	Jemalong Solar	Solar	50	7.7	4
United Kingdom (1 projects)			857		214
	Triton Knoll	Wind(Offshore)	857	25.0	214
Total (6 countries)			25,445		7,937

(Projects under construction / development)

Country/ Region	Project Name	Power Generation Method	Capacity (MW)	JPOWER Investment Ratio (%)	Owned Capacity (MW)
United States					
	Refugio	Solar	400	25.0	100
	Birchwood	Solar	50	50.0	25
	Birchwood	Storage	190	50.0	95
Australia					
	Kidston Stage-3 Wind	Wind(Onshore)	150	53.9**2	81
	K2-Hydro	Hydro(Pumped-storage)	250	7.7	19
	Bouldercombe	Storage	50	7.7	4
Thailand					
	Rooftop Solar(3 projects)	Solar	3.2	60.0	1.9
	EGCO Cogen (Replacement)	Gas (Combined Cycle)	74	20.0	15
Indonesia					
	Central Java	Coal	2,000	34.0	680

※1 Because of the rounding, the total MW of the country does not match the sum of each project's MW.

※2 J-POWER owns 50% stake of the project, and with its 7.7% stake in Genex Power Limited, J-POWER's overall stake is 53.9%.