

## Material Use:

### Natural Gas (MMSFC), Diesel Oil (Litres), Energy Consumption

RATCH controlled the operations of 7 power plants in Thailand in 2024 (with combined capacity of 5,118 MW). They are Ratchaburi Power Plant, Berkprai Cogeneration Power Plant, Nava Nakorn Electricity Generating Power Plant, RATCH Cogeneration Power Plant, Ratch Energy Rayong Power Plant, Ratch Pathana Energy Power Plant, and Hin Kong Power Plant. Their natural gas and electricity consumption generated 100,976 million megajoules of electric power and steam, which can be classified below:

- Generated electric power totaling 48,919 million megajoules (13,588,671 megawatt-hours)
- Distributed electric power and steam totaling 47,622 million megajoules (13,228,268 megawatt-hours) and 1,301 million megajoules (466,328 tons), respectively.

At Ratchaburi Power Plant of which installed capacity is 3,645 MW, only 3 combined cycle generators, each with 725 MW capacity, were operational in 2024, using natural gas as fuel. Two generating units with 735 MW capacity each were on reserve shutdown.

List	Unit	2024	2023	2022
Natural gas	Million Cubic Feet	98,991	87,674	149,202
	Million Megajoule	100,970	89,428	152,186
Bunker oil	Liter	0	92,755,799	290,691,483
	Million Megajoule	0	3,689	11,561
Diesel oil	Liter	153,445	6,168,914	21,881,178
	Million Megajoule	6	225	797
Energy use from transmission system	MWh	52,172	40,813	46,905
	Million Megajoule	188	147	169
Renewable energy use	MWh	17,085	16,600	13,860
	Million Megajoule	62	60	50
Total produced electricity	MWh	13,588,671	11,141,093	18,958,341
	Million Megajoule	48,919	40,108	68,250
Total distributed electricity	MWh	13,228,268	10,842,852	18,488,776
	Million Megajoule	47,622	39,034	66,560
Total distributed steam	Tons	466,328	459,544	475,252
	Million Megajoule	1,301	1,292	1,338

## Heat rate 2024

(unit: BTU/ kWh)

Power plants in Thailand	Natural gas		Bunker oil		Diesel	
	Target	Result	Target	Result	Target	Result
Ratchaburi Thermal Unit 1	No dispatch order		a secondary fuel to be used by EGAT's order when needed		Not relevant	
Ratchaburi Thermal Unit 2						
Ratchaburi Combined Cycle Block 1	7,191.35	7,182.93	Not relevant		a secondary fuel to be used by EGAT's order when needed	
Ratchaburi Combined Cycle Block 2	7,331.66	7,323.93				
Ratchaburi Combined Cycle Block 3	12,911.90	13,705.29				
Hin Kong Unit 1	6,132.60	6,128.77				
Berkprai Cogeneration	7,285.86	7,347.23			Not relevant	
Nava Nakorn	7,810.24	7,841.53				
RATCH Cogeneration	7,864.54	7,911.04				
RATCH Energy Rayong	7,200.00	7,142.86				
RATCH Pathana Energy	8,258.96	8,946.17				