

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

All 6 RATCH-controlled power plants have 4,089 MW in combined installed capacity or 83.81% of total revenue in 2022. All use natural gas as the primary fuel source, except Ratchaburi Power Plant (with installed capacity of 3,645 MW or 72.25% of 2022 revenue) which was designed to work primarily on natural gas and also on diesel and bunker oil as the secondary fuel source. For national energy security, the power plant uses diesel or bunker oil when natural gas supply from Myanmar is stopped following maintenance and other necessities. The fuel switch follows EGAT National Control Center's order. In 2022, the center ordered Ratchaburi Thermal Power Plant Unit 1 and 2 with 735 MW capacity each to use bunker oil.

Indicator	Unit	2022	2021	2020
Volume of natural gas	million cubic feet	149,202	121,482	129,310
Volume of bunker oil	liter	290,691,483	161,121,423	0
Volume of diesel	liter	21,881,178	9,244,423	2,020,571
Net generation output	megawatt-hour	18,488,776	14,625,418	14,933,403
Consumption of renewable energy	megawatt-hour	13,860	2,858	0

*Note: - In 2022 are reported the consumption and performance of Ratchaburi Power Plant, Berkprai Cogeneration Power Plant, Nava Nakhon Generating Power Plant, Ratch Cogeneration Power Plant, Nexif Ratch Energy Rayong Power Plant and Sahacogeneration Power Plant (Chonburi)*

*- In 2020 - 2021 are excluded Sahacogeneration Power Plant (Chonburi) and Nexif Ratch Energy Rayong Power Plant.*

## Heat Rate and Energy Consumption of Power Plant in Thailand 2022



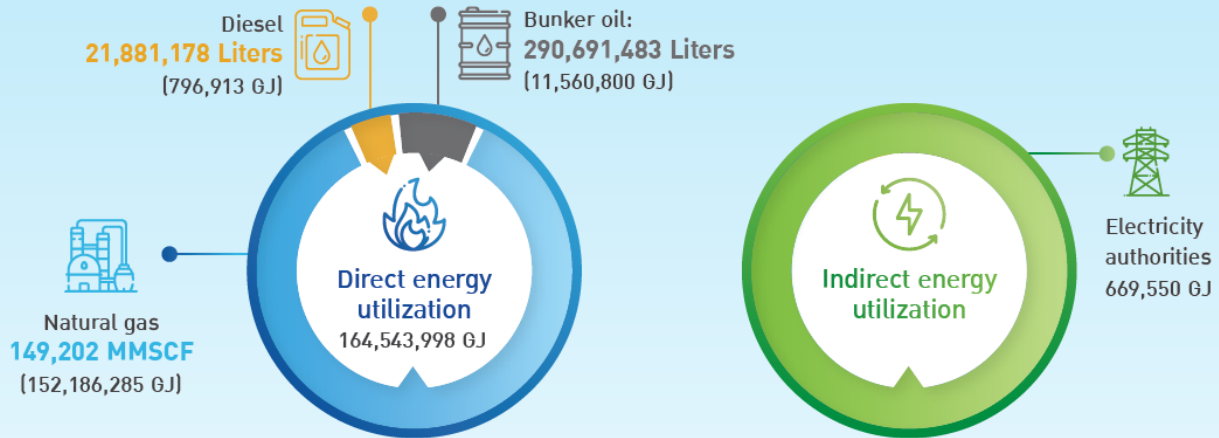
Average Heat Rate Consumption  
of Thermal Power Plant

**10,396**  
BTU/kWh



Average Heat Rate Consumption  
of Combined Cycle  
and cogeneration plants

**7,551** BTU/kWh



Total energy utilization (direct and indirect): **165,213,548 GJ**