# POWERING A SUSTAINABLE FUTURE

With the formal inauguration of the Payra 1320 MW Thermal Power Plant, Bangladesh has achieved the milestone of 100% electricity across the country. Located at Patuakhali's Kalapara Upazila, it is the country's largest thermal power plant and the first of its kind. The plant uses state-of-the-art Ultra Supercritical Technology, ensuring the most sustainable power production in its category. Bangladesh has now become the third in Asia and the thirteenth in the world to use ultra-supercritical technology in producing power. The electricity generated at the plant is being supplied through submarine cables to 25,358 households in various chars of Rangabali Upazila, Patuakhali.

**Payra 1320 MW Thermal Power Plant**

**Matarbari Power Station (Under construction) 1200 MW**

**Barapukuria Power Station 525 MW**

EPC Contractor
**Consortium of NEPC & CECC, China**

Total Project Cost
**USD 2.48 billion**

Cooling Water System
**Closed Circulation of Water Using Cooling Tower**

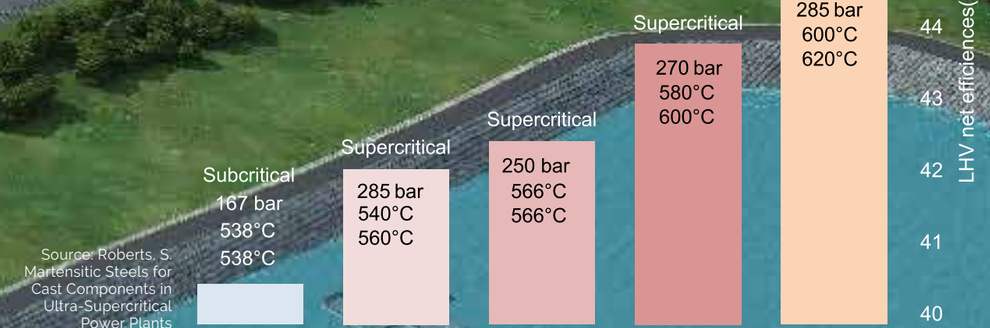
Turbine Heat Rate
**7522 KJ/KWh**

Plant capacity
**1320 MW (2 x 660 MW)**

Primary Fuel
**Sub-Bituminous /Bituminous Coal**

Coal Sourcing
**P.T. Bayan Resources Tbk, Indonesia**

Coal Transportation
**Oldendorff, Germany**




Source: Roberts, S. Martensitic Steels for Cast Components in Ultra-Supercritical Power Plants

The operation conditions of Ultra Supercritical Technology utilises higher pressure and temperatures yielding higher LHV (Low Heating Value) efficiency, a.k.a net calorific value.

Project Financier
China EXIM Bank

Source: Bangladesh-China Power Company (Pvt) Limited (BCPCL) Infographic Designed By : **Sk. Yeahhia**