

# Bangladesh's Fossil Fuel Imports Rise by 14.8% in Four Years

EP REPORT

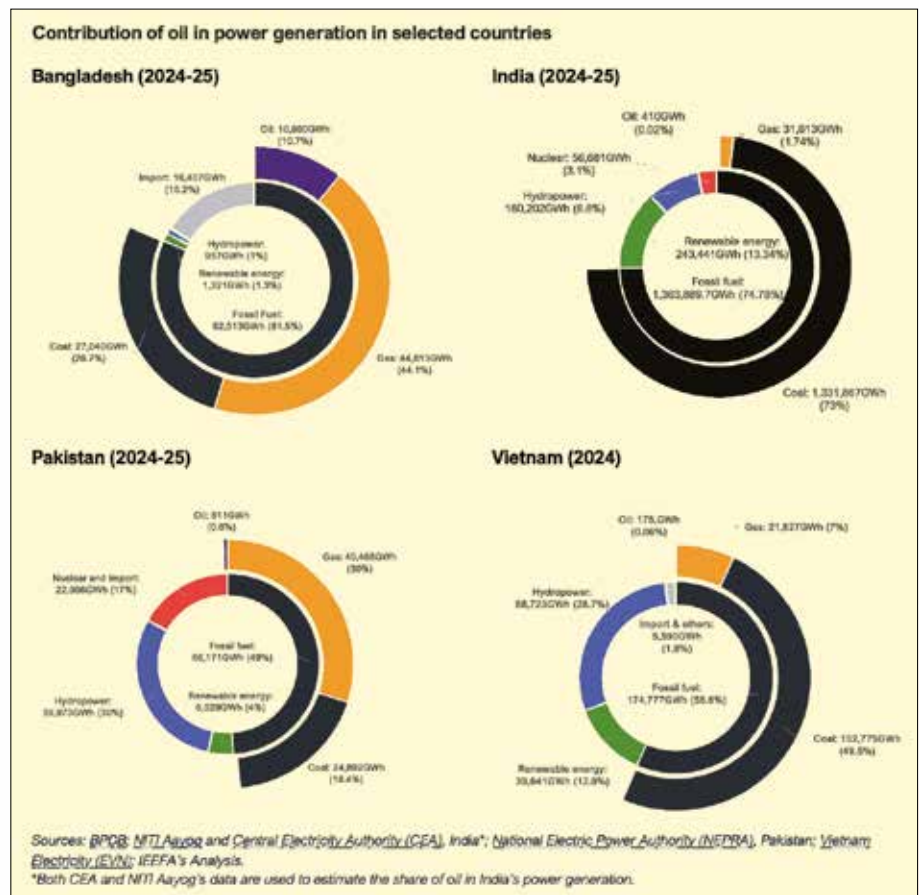
Bangladesh's primary energy imports rose from 47.7% to 62.5% in four years, exposing its vulnerability to the volatile international fossil fuel market and raising the power generation cost by 83%.

Apart from expensive fossil fuels and depreciation of the Bangladeshi Taka (BDT) against the United States Dollar (USD), large capacity payments from low demand growth significantly influenced the rising power costs, according to 'Fostering Bangladesh's energy transition', a new report by the Institute for Energy Economics and Financial Analysis (IEEFA).

Analyzing data from FY2020-21 to FY2024-25, the report finds that a surge in the average coal price by 290% between FY2020-21 and FY2022-23, along with an expensive oil price for a brief period and a sharp currency depreciation, drastically increased Bangladesh's power generation cost. However, despite 59.7% fall in coal prices as compared to FY2022-23, and oil prices remaining low during the time, the generation cost did not reduce in FY2024-25.

"The average capacity payments of approximately BDT9.5/Kilowatt hour (kWh) (USD0.077/kWh) and BDT5.9/kWh (USD0.048/kWh) paid to private oil- and coal-fired plants, respectively, in FY2024-25 raised overall generation costs," said Shafiqul Alam, the report's author and lead energy analyst at IEEFA.

"Further, gas supply shortage increased



cost—plants with load factor under 25% generated power at BDT16.85/kWh (USD0.137/kWh) while plants operating at around 75% load factor did so at a cost of BDT6/kWh (USD0.049/kWh)."

In addition, declining domestic gas production means that Bangladesh needs to import expensive liquefied natural

gas (LNG). The report estimates that the country could pay a subsidy of USD1.07 billion (BDT131.34 billion) on account of LNG imports from April to June 2026.

This estimate is based on the import trend from April to June 2025 and the current import price of about USD20 per million British thermal units (MMBtu), excluding

regasification and terminal costs.

Additionally, the share of renewable energy remains just 2.3% of grid-based power generation, far below the global average of around 33.8%, limiting its ability to hedge against the volatile prices in international fossil fuel markets.

Currently, however, high import duties are levied on distributed renewable energy (DRE) systems. The report estimates that a combined rooftop solar capacity of 100 megawatts (MW) will save more than 30 times the one-off import duties by reducing furnace oil imports over the lifecycle.

Hence, it calls on the government to offer a duty waiver.

“The solutions to Bangladesh’s persistent problems lie closer to home, such as in expanding domestic renewable energy at scale while limiting fossil fuel-based plants to contain overcapacity. Given the requirement of spinning reserve and grid balancing, the government may consider retaining part of the operational oil-fired plants in its ownership to avoid the hefty capacity payments once their contracts expire,” said Alam.

The report also seeks to draw policymakers’

attention towards the need to keep the open access cost of renewable energy projects under Corporate Power Purchase Agreements (CPPAs) at a minimum.

This would enable the apparel sector and corporates to decarbonize their operations as part of their environmental, social, and governance (ESG) targets.

While power utilities fear loss of revenue due to such projects under the CPPA, the analysis by IEEFA shows that electricity consumption in industries increased by 4.8% in FY2024-25. [EP](#)

## Installed BESS Capacity in Spain Grows by 589% Since 2025 Blackout

One year after the blackout on April 28 in 2025, technical analyses and regulatory responses have reshaped the concept of security of supply in Spain’s electricity system, which has been undergoing rapid transformation since 2018 due to high levels of renewable penetration.

Far from being an isolated incident, expert reports – including those from the committee appointed by the Spanish government, Red Eléctrica, and ENTSO-E – conclude that the blackout resulted from a combination of operational and structural factors that exposed vulnerabilities in a system increasingly dominated by renewable technologies. The event began with the sudden loss of approximately 15 GW of generation within seconds, triggering a cascading failure that led to a nationwide blackout. The sequence involved voltage deviations, frequency instability, and automatic shutdowns, underscoring the critical importance of real-time system control.

Among the main causes identified was insufficient voltage control capacity, linked to the reduced presence of synchronous generation.

In a system with high shares of non-synchronous renewables such as solar PV and wind, the provision of ancillary services – including inertia, frequency regulation, and reactive

power – becomes more complex, limiting the system’s ability to absorb disturbances.

This was compounded by the limited deployment of energy storage – around 28 MW of batteries at the time – which constrained rapid-response capabilities, as well as low levels of interconnection with neighboring systems, thereby restricting external support.

The overall diagnosis points to a systemic failure rather than a single cause: a chain of conditions and events that exceeded the system’s resilience. This understanding has informed subsequent measures aimed at strengthening both operational management and long-term system planning.

Although installed battery storage capacity has grown by more than 500% since the blackout, Spain still ranks near the bottom in Europe, far behind countries such as Germany, Italy, and the United Kingdom.

According to Red Eléctrica, Spain had just 28 MW of installed battery capacity in April 2025. By April 2026, this had increased to 193 MW – representing year-on-year growth of 589%. At the same time, the pipeline of BESS projects expanded sharply, with project processing rising by 464% year-on-year.

Demand for storage in the self-consumption segment also surged. In 2025, capacity grew from 155 MWh to 339 MWh, a 119% increase, according to APPA Renovables. Residential installations rose by 155%, while commercial and industrial deployments increased by 95%, compared with virtually no capacity in this segment in 2023.

### Outstanding challenges

Despite progress in renewable deployment, more than 70% of Spain’s total energy consumption still depends on fossil fuels. According to the Renewable Energy Foundation, imports of gas and oil alone cost more than €51 billion last year. Reducing reliance on gas and accelerating electrification across transport, industry, and heating remains a critical priority.

Grid constraints also remain a major issue. While 2025 saw strong renewable generation, it also highlighted saturation problems that forced curtailment. On average, 3.11% of renewable electricity could not be integrated into the grid, with peaks exceeding 10% in July. In total, 5,414 GWh of renewable electricity was curtailed.

At the same time, Spain recorded a new high in negative electricity prices, with 397 hours of negative pricing in the first quarter. [EP](#)