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Communities are united against fossil fuel expansion

Developing and climate-vulnerable nations face a dual crisis. They face acute vulnerability to climate breakdown and macroeconomic destabilization driven by dependence on centralized fossil fuels. Bangladesh exemplifies this structural trap, spending approximately USD 13 billion annually on fuel imports while 67% of national generation remains tethered to imported energy. Fossil gas, including both domestic supplies and imported LNG, remains the dominant energy source, accounting for 41% of power generation. In the gas segment alone, the state entity Petrobangla has accumulated losses of USD 25.65 billion over the last 8 years (since 2018-19), reflecting unwise energy planning in Bangladesh [4]. Annual LNG import costs are projected to reach USD 4.79 billion during the 2025–26 fiscal year, escalating economic risks. Over this period, USD 4.77 billion went to LNG subsidies and USD 1.14 billion to Excelerate and Summit in terminal capacity charges, escalating economic risks and exposure to global fossil fuel price volatility while constraining resources for a just energy transition [4].

In recent years, around 30 GW of proposed gas and LNG power plant projects have stalled or been outright canceled due to community and civil society pressure, environmental degradation, prohibitive fuel prices, and fiscal crises. Civil society has mobilized the People's Power model, converting threatened fossil sacrifice zones into self-governed, distributed solar and storage hubs.

Prioritizing domestic renewables and industrial efficiency over imported LNG delivers substantial macroeconomic relief. The macroeconomic rationale for canceling planned LNG and coal units is confirmed by the Levelized Cost of Electricity (LCOE). Centralized imported fossil power demands ruinous recurring fuel subsidies and foreign currency, while local rooftop and microgrid solar delivers lower life-cycle costs and zero fuel exposure.

As coal and LNG deepen economic, social, and environmental vulnerabilities, people’s power offers a way to challenge fossil-fuel expansion at its roots. In response, Bangladesh is championing People’s Power, an inclusive model that turns vulnerable energy corridors into centers of distributed, community-led energy. By expanding community ownership of renewable assets, the nation shows how a just, sustainable, participatory energy transition can strengthen domestic energy sovereignty while advancing climate commitments. Sustained civil society advocacy has already helped raise the national rooftop solar target from 3,000 MW to 5,500 MW by 2030 in the July 2026 Renewable Energy Strategy Paper. This policy shift shows the power of public pressure, but it still falls short of the pace of LNG expansion.

Community-Owned Prosumers Energy (COPE) System

Coastal Livelihood and Environmental Action Network (CLEAN), a Bangladesh-based organization, centers communities in this transition through its Community-Owned Prosumers Energy (COPE) Systems, where people are not merely consumers but active producers, owners, and decision-makers shaping their energy future. People’s Power seeks to reduce and ultimately eliminate demand for coal and LNG, transforming

resistance to fossil fuel expansion into a practical pathway towards a just, people-centered energy transition driven by community ownership and energy sovereignty.

Community Ownership and Financial Sustainability

The Community-Owned Prosumers Energy (COPE) System empowers communities to become renewable energy producers, collective owners, and decision-makers through locally governed cooperatives. Each cooperative comprises 20–25 local members and is led by an elected leadership and executive committee. Monthly meetings facilitate collective decisions on energy management, finances, and social issues, including climate change, gender equality, and human rights. Each cooperative typically operates a 15–20 kW solar system, with average household demand of 100–120 units/month; it generates and distributes electricity locally at rates significantly below the national grid tariff.

Capital Retention & Internal Equity

Under the COPE framework, community-driven utility cooperatives, or *Somitis*, anchor decentralized renewable expansion. Local member equity provides the foundational investment, reinforced by catalytic philanthropic seed financing and technical support from partner entities. Granting cooperatives full authority over system governance and revenue streams lets this model turn clean energy generation into a self-sustaining local economy, protecting against external capital drain. Rather than siphoning revenue out of rural communities, operational margins remain in a reserve fund to finance repairs and local growth.

The Solar Sister

Each cooperative centers on the Solar Sister, a local representative selected and equipped with technical expertise to anchor decentralized green-technology management. Her responsibilities span the total operational cycle of COPE installations, from mounting and servicing photovoltaic infrastructure alongside Battery Energy Storage Systems (BESS) to systematically recording energy outputs. Concurrently, she administers the cooperative's financial ledger, including equity shares, tariff collections, and maintenance reserves. By integrating technical operations with fiscal accountability, Solar Sister reduces reliance on external service providers, builds strong community trust, and ensures energy dividends remain permanently rooted in the local economy.

Solar Power Generation

A 10 kWp rooftop solar system with 30% battery energy storage can generate an average of 16,213 units of electricity annually (1,351 units monthly), for an estimated 324,252 units over its 20-year lifetime. 10 kWp system can save approximately BDT 285,654 annually and BDT 5,713,076 over 20 years in generation costs while reducing dependence on imported heavy fuel oil (HFO) and easing pressure on national foreign currency reserves [3]. At the national level, solar power has saved BDT 2,642 crore (USD 226 million) in generation costs compared with HFO-based generation over the past eight years. In FY

2024–25 alone, solar power saved BDT 2 crore (USD 0.163 million) per MWp in generation costs [2]. Installing rooftop solar systems in one million households could create one million jobs. [5]

Fossil Fuel Cost Avoided

The cumulative benefit of solar power in terms of avoided fuel imports has been substantial, totaling BDT 5,313 crore (USD 468 million) over the last eight years. The massive increase in avoided costs in 2024-25, which reached BDT 2,248 crore (USD 183 million), underscores the growing strategic importance of solar power. If the country scales its solar capacity to 10,000 MWp by 2030, annual savings on fuel import bills could reach BDT 29,835 crore (USD 2.43 billion). [2]

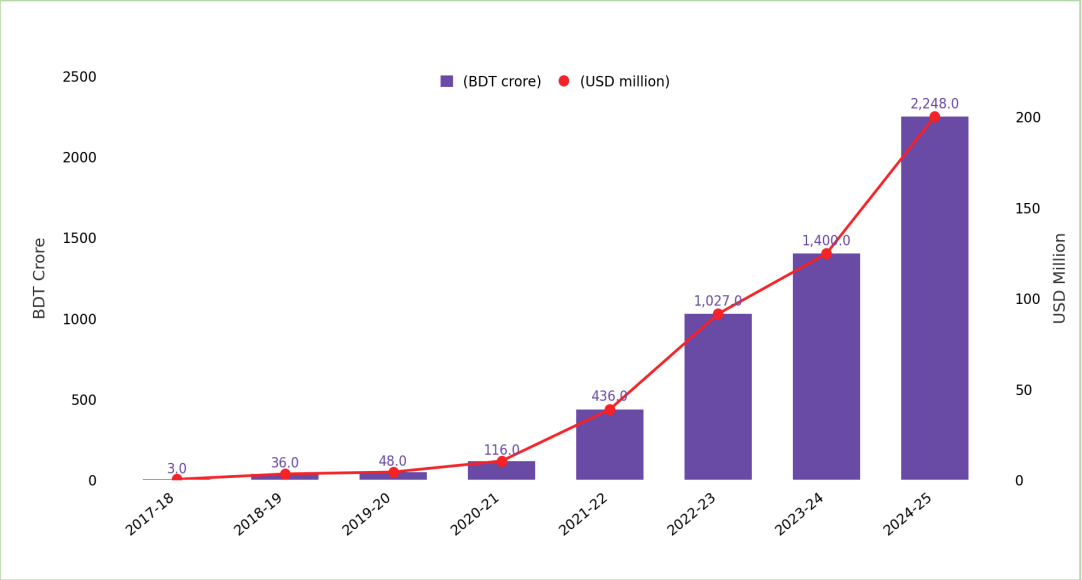


Figure 1: Import cost avoided by solar power

Imported Fossil Fuel Cost Avoided per kWp

The direct financial benefit of solar power, in foreign-currency savings, offers a critical policy choice for policymakers. In 2024-25, each MWp of solar power installed in Bangladesh saved BDT 3.11 crore (USD 0.25 million) in annual fuel import costs. Each kilowatt of installed capacity could save Tk 29,600–Tk 31,300 annually in furnace oil imports and reduce carbon emissions (CO2) by around 1.4 tonnes [3][5].

Savings per MWp are increasing primarily because of rising fuel costs that solar displaces. This data provides a compelling economic case for allocating public land and offering fiscal incentives for solar projects, as the return on investment in terms of foreign-currency preservation is extremely high. [2]

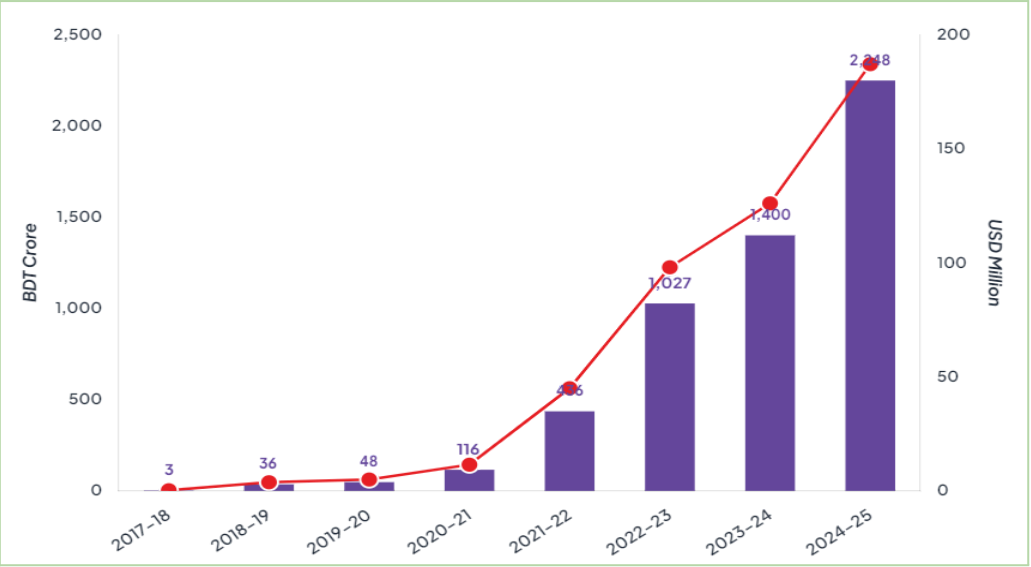


Figure 2: Imported Fuel Cost Avoided per MWp

Scaling People's Power Across Bangladesh

The COPE initiative is currently being implemented across five geographical zones in Bangladesh: Northern, North-western, Central, North-eastern, and South-western Bangladesh. Future expansion is envisioned particularly in coal-concentrated areas of the northeast and the southeast, where community-owned renewable energy could offer an alternative development pathway. The model demonstrates that the energy transition is not simply about replacing one technology with another. It is about shifting ownership, economic benefits, and decision-making power towards communities, strengthening energy security, and enabling people to build their own energy future.

COPE demonstrates that a just energy transition means more than replacing fossil fuels with renewables. It is a structural shift in who owns energy infrastructure, who governs energy decisions, and who benefits from energy production. Through community ownership, renewable energy becomes more than a source of electricity. It becomes a tool for economic empowerment, democratic participation, and people-centered development.

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