

A photograph of a large solar farm with rows of solar panels in a green field under a cloudy sky.

Advancing Bangladesh's Green Energy Transition

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Introduction

The energy sector is critical to Bangladesh's economic growth and environmental sustainability. Recent developments, including changes in government and policy directions, underscore the need for a comprehensive strategy to address energy challenges. Under the leadership of Professor Muhammad Yunus, the Interim Government aims to achieve "three zeros": zero net carbon emissions, zero wealth concentration to end poverty, and zero unemployment. Professor Yunus, a Nobel Laureate and founder of Grameen Shakti, is committed to advancing renewable energy in Bangladesh. Grameen Shakti focuses on providing sustainable energy solutions to rural areas, empowering women, creating green jobs, and reducing greenhouse gas emissions. The Chief Advisor is expected to enhance efforts in renewable energy and extend decarbonization to agriculture, transport, industry, and households.

The interim government has decided to cancel 31 solar power projects that were initiated during the ousted Awami League government's term. These projects, taken up without any scrutiny under a controversial special law, led to the government's decision. Most of these projects were owned by businessmen allied with the Awami League, with a combined production capacity of 2,645 megawatts. Also, generated a National Committee to review contracts signed under the Quick Supply of Power and Energy (Special Provisions) Act, 2010 (Amendment 2021).

Energy Transition and Climate Action in Bangladesh

Issues	Measures	Timespan
Legal and Policy Reform		
Quick Enhancement of Electricity and Energy Supply (Special Provision) Act, 2010	<ul style="list-style-type: none">Immediate repeal of the Act to restore transparency and accountability in the power sector.	Immediate (6-12 months)
Withdrawal of Fossil Fuel Subsidies for RE Expansion	<ul style="list-style-type: none">Gradually reduce fossil fuel subsidies by 25% in 2025, increasing to 100% by 2041, redirecting savings of \$4.358 billion to renewable energy expansion.Replacement of fossil fuels with renewable energy could reduce capacity charges by 10% by 2025 and 20% by 2041, generating total savings of \$1.872 billion.	Long Term (2025-2041)
Renewable Energy Finance	<ul style="list-style-type: none">Establish a dedicated Renewable Energy Fund (REF) with a clear, long-term, and transparent strategy. Primarily can start with USD1 billion taking 50% of funds from RSF-IMF and EIB as proposed around €400 million.Include mechanisms such as Feed-in-tariff and auctions for tariff determination.	Immediate (6-12 months)

Integrated Energy Power and Master Plan 2023 (IEPMP)	<ul style="list-style-type: none"> IEPMP 2023 outlines a roadmap to 2041, targeting 60,000 MW capacity with 10% from renewables by 2030 and 20% by 2041. However, it projects renewable energy's share in primary supply to be only 2.6% by 2041, conflicting with the NDCs. To better align with these goals, the plan requires revision or reconsideration. 	Immediate (6-12 months)
Bangladesh Energy Regulatory Commission (BERC)		
Bangladesh Energy Regulatory Commission (BERC) Act, 2003	<ul style="list-style-type: none"> Abolish 2020 and 2023 amendments to restore BERC's autonomy. Reinstate BERC's full responsibilities. Create a dedicated wing for renewable or green energy promotion. 	Immediate (6-12 months)
Tariff Determination Transparency	<ul style="list-style-type: none"> Empower BERC to apply the 'Electricity transmission tariff regulations 2016'. Introduce transparent, project-specific details on tariffs and associated costs. 	Immediate (6-12 months)
Sustainable and Renewable Energy Development Authority (SREDA)		
Reform and Reorganization of SREDA	<ul style="list-style-type: none"> Convert SREDA into Renewable Energy Division (RED). Grant full licensing authority and adequate resources for exercising their autonomy. Ensure skilled technical personnel (prioritize National Experts) for proper technical support, auditing and oversight of RE sectors. 	Immediate (6 months)
Establishment of Renewable Energy Institutions	<ul style="list-style-type: none"> Establish Renewable Energy Laboratory, Office of Energy Efficiency, and Council for Environmental Quality. 	Medium Term (1-3 years)
Solar Power Potential	<ul style="list-style-type: none"> Prioritize only green energy and ensure optimal adoption of solar or wind-based power generation. Evaluate current RE projects and reallocate resources to solar-radiation enriched regions with higher potential. 	Immediate (6-12 months)
Renewable Energy Finance and Investment		
Optimizing RE Finance	<ul style="list-style-type: none"> Establish a Renewable Energy Finance Taskforce to oversee RSF, EIB, and national/international funds. Implement transparent and competitive RE project procurement. Ensure transparent land acquisition processes to avoid inflated Levelized Cost of Energy (LCoE). 	Immediate (6-12 months)
Allocation and Prioritization	<ul style="list-style-type: none"> Increase renewable energy related allocation of public funds, as the current allocation is only 3.2% of the requirements to achieve the renewable 	Medium Term (1-3 years)

	energy target (4114.2 MW) by 2030 as per the Bangladesh's NDC.	
Renewable Energy Financing Strategy	<ul style="list-style-type: none"> Formulate a robust finance strategy utilizing at least \$0.7 billion from the RSF-IMF for renewable projects. 	Medium Term (1-3 years)
Enhancing Access to International Finance	<ul style="list-style-type: none"> Secure international finance for RE capacity (e.g., EIB funding of €400 million for 750 MW RE). 	Medium Term (1-3 years)
Carbon Taxing and Re-channeling Revenue for RE Promotion	<ul style="list-style-type: none"> Explore carbon tax and clean environment fees to address \$23.4 billion climate finance gap. Generate up to \$3.4 billion annually for green projects. Implementing a 5-10% carbon tax on coal, oil, and LPG could generate net revenue of BDT 1,648-3,296 crore after a 20% refund to low-income groups. Imposing a 25% carbon tax on fossil fuel imports could generate \$2.23 billion, supporting the generation of at least 3000 MW of solar-based power. 	Medium Term (1-3 years)
Private Sector Role in RE Expansion	<ul style="list-style-type: none"> Encourage private sector participation through incentives while aligning with national RE goals and maintaining transparency in regulations and procurement. 	Immediate (6-12 months)
Meeting Gaps in RE Finance/Investment Through Carbon Taxing	<ul style="list-style-type: none"> It is possible to generate at least \$0.6 billion to a maximum of \$3.4 billion (about \$10 per person in the US) in green finance annually through the imposition of carbon tax and clean environment fees/pollution taxes, which is almost equal to the proposed climate-related allocation in the FY 2024-25 budget 	Medium Term (1-3 years)
Investment in Innovation	<ul style="list-style-type: none"> Establish dedicated research institutions for RE innovation and technology development. 	Medium Term (1-3 years)
Grid Modernization and Decentralization		
Grid Modernization	<ul style="list-style-type: none"> Upgrade the grid to a smart grid system to support large-scale renewable energy integration. 	Medium Term (1-3 years)
Prioritize small Renewable Energy projects	<ul style="list-style-type: none"> In establishing new RE power plants, prioritize those with a small capacity, up to a maximum of 50 MW. Promote mini-grids and micro-grids to foster decentralized RE-based power generation. 	Medium Term (1-3 years)
Transparency and Accountability		

Financial Transparency	<ul style="list-style-type: none"> • Regular public disclosure of BPDB, BPC, RPGCL, and Petro Bangla financial accounts. • Avoid IPPs and ensure that all new plants are acquired through competitive bidding and in compliance with the Public Procurement Act PPA should be publicly available to ensure transparency and accountability • Hold local authorities accountable for land acquisition processes to facilitate RE project development. 	Immediate (6-12 months)
EPZ and Industrial Clusters		
Renewable Energy for EPZs	<ul style="list-style-type: none"> • Utilize 20-30% of EPZ areas for solar Net Energy Metering (NEM) as it could add 222MW to 333 MW of renewable energy capacity to the nation grid. • Introduce capital subsidies for firms under EPZs and industrial clusters. • Implement National Energy Management System (NEMS) in EPZs. • Enhance BPEZA-SREDA coordination. 	Medium Term (1-3 years)
Gender Integration in RE		
Gender-Responsive RE Finance	<ul style="list-style-type: none"> • Allocate resources for women-led SMEs in renewable energy. • Set a target of 5% green finance access by women Greenpreneurs. 	Medium Term (1-3 years)
