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Policy Brief

Bangladesh's Energy Transition: A Political Economy Perspective

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Background and Rationale

Bangladesh is at a crucial stage in its energy transition as it strives to achieve SDG 7- affordable and clean energy by 2030- with a target of significantly increasing the share of renewable energy (RE) in the total energy mix. At present, RE accounts for only 5% of the total electricity generation capacity. To raise the RE share, the government of Bangladesh (GoB) has adopted the Renewable Energy Policy 2025, which aims to generate 20% of electricity from renewable sources by 2030 and 30% by 2040. Harnessing renewable energy, particularly solar and wind power, offers significant opportunities to drive economic growth, enhance energy security, and promote environmental sustainability. Nonetheless, institutional inefficiencies and political economy barriers hinder the country's progress toward a renewable energy future.

In Bangladesh, institutional challenges in the power and energy sector include fragmented and incoherent policies, weak institutional capacity, bureaucratic delays, financial and technical constraints, and persistent land acquisition difficulties. Limited skilled manpower, inadequate training programs, and weak innovation capacity further undermine the sector's preparedness. On the political economy side, entrenched fossil fuel interests, state capture, vote-bank politics, misaligned actor influence, patronage- based settlements, and rent-seeking behavior reinforce dependence on conventional energy.

Against this backdrop, assessing the institutional quality and political economy dynamics of Bangladesh's power and energy sector is essential for a smooth transition to renewable energy. This policy brief evaluates existing institutional frameworks, governance structures, and regulatory mechanisms, along with the political economy factors shaping this transition, and provides key recommendations to support it.

Review of Institutional Quality in the Power and Energy Sector

We assess the institutional quality of the power and energy sector using key indicators, including regulatory quality, institutional capacity, market structures, policy coherence, transparency and accountability, and corruption. Previous regulatory provisions, such as the Quick Enhancement of Electricity and Energy Supply Act (2010, amended 2021) and the BERC Act amendment (2022), bypassed competitive bidding and public hearings, undermining transparency and investor confidence. Similarly, the Integrated Energy and Power Master Plan (2023) prioritized fossil fuels and unproven technologies while neglecting clear renewable energy targets, raising concerns over the sustainability of the energy transition. It should be noted that the interim government of Bangladesh repealed the Quick Enhancement of Electricity and Energy Supply (Special Provision) Act 2010 on 28 November 2024. Additionally, on 17 August 2024, the government revoked amendments to

the Bangladesh Energy Regulatory Commission (BERC) Act that had centralized tariff-setting powers with the Prime Minister's Office. BERC now independently regulates energy prices through public hearings, restoring transparency and aligning with IMF bailout conditions.

During the last regime (2008-2024), institutional bodies, including SREDA and BERC, lacked sufficient authority and independence to drive renewable energy development, with much of the decision-making power concentrated in the Prime Minister's Office and in the BPDB. This resulted in weak implementation capacity and limited progress on renewable projects. However, the reforms by the Interim Government allow BERC to work independently.

The energy market remains highly centralised, with state-owned enterprises like BPDB dominating generation, transmission, and distribution. Although private Independent Power Producers (IPPs) contribute to generation, reliance on guaranteed pricing, subsidies, and the single-buyer model limits competition and strains public finances. The gas sector remains under Petrobangla's monopoly, while renewable energy markets are still nascent and underdeveloped. However, on 1 December 2024, the Interim Government of Bangladesh introduced the Merchant Power Policy (MPP), allowing private sector players to sell electricity directly to distributors or end-users, rather than exclusively to the Bangladesh Power Development Board (PDB). It remains uncertain whether, and to what extent, this policy will enhance competition in the sector.

Policy incoherence remains a major barrier to Bangladesh's renewable energy transition. Overlapping policies and inconsistent renewable energy (RE) targets across government documents create confusion and weaken implementation. For example, the Mujib Climate Prosperity Plan (MCPP) envisions 30% RE by 2030, 40% by 2041, and 100% by 2050, while the Delta Plan targets only 10% by 2020 and 30% by 2041.

The Integrated Energy and Power Master Plan 2023 sets even lower goals—5.7% by 2030 and 8.9% by 2041. In contrast, the Renewable Energy Policy 2025 aims to generate 20% of electricity from renewable sources by 2030 and 30% by 2040. These inconsistencies, along with the confusion between "clean energy" and "renewable energy," have resulted in fragmented governance and weak coordination. Although ambitious targets exist on paper, implementation has been sluggish, and fossil fuel projects continue to dominate new investments.

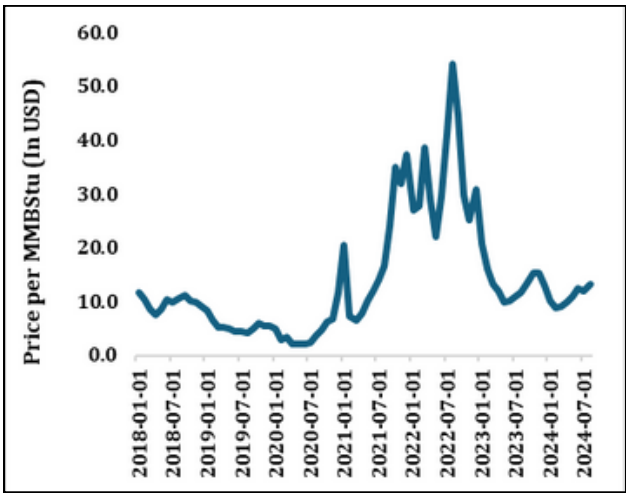
Transparency and accountability remain major concerns in the energy sector. The repeated awarding of contracts—often without fair competition—to a small group of companies, including Summit Group, Excelerate Energy, Gunvor, Vitol Asia, JERA, and TotalEnergies, has created market concentration and limited oversight. Key contractual decisions have been made at the highest levels of government, with insufficient public scrutiny, undermining competition, efficiency, and energy security.

Corruption is widespread, facilitated by the Indemnity Act of 2010, which allows projects to bypass competitive tenders. This has led to inflated costs, unqualified contractors, delays, and systemic mismanagement. The White Paper Committee (2024) highlights that at least USD 3 billion in illicit transactions occur in the sector, with politically connected businesses capturing lucrative deals at the expense of capable entrepreneurs.

Review of Pricing and Subsidy Policies and Rent-seeking Activities in the Power and Energy Sector

The energy pricing and subsidy framework is heavily shaped by political capture. Tariff adjustments often reflect fiscal pressures and vested interests rather than efficiency or market logic. Despite fluctuations in global fuel prices (see Figure 1 & Figure 2), domestic electricity tariffs have continued to rise (see Figure 3), burdening consumers while allowing inefficiencies within state-run entities to persist.

Figure 1: Global Price of LNG, Asia



Source: IMF

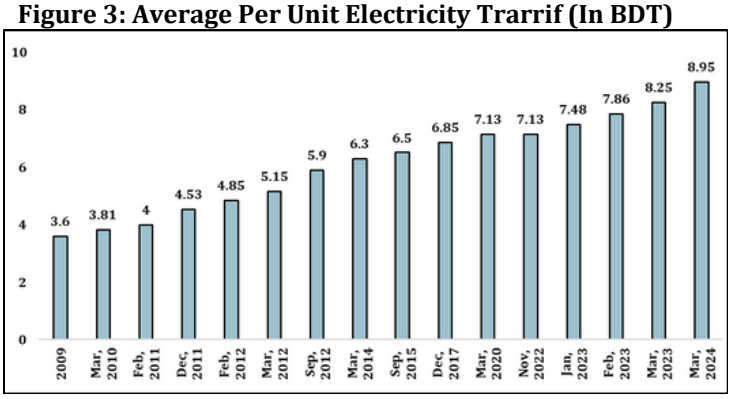
Figure 2: Global Price of Brent Crude Oil Price

Source: IMF

Subsidies further entrench distortions. In FY2024–25, approximately 80% of all energy subsidies were allocated to capacity payments, disproportionately benefiting Independent and Rental Power Producers, such as Summit, Aggreko, and United Group. These companies receive guaranteed payments regardless of actual power generation, leading to over-capacity, financial strain, and underutilization of installed plants.

A comparison of five energy technologies- solar, coal, gas, LNG, and nuclear- reveals that rent-seeking opportunities are relatively higher in fossil-fuel energy technologies. Unlike fossil fuel-based and nuclear technologies, which involve complex supply chains, large-scale procurement, and long-term contracts that create avenues for political favouritism and financial mismanagement, solar energy relies on more decentralised and transparent deployment.

Figure 3: Average Per Unit Electricity Trarrif (In BDT)



Source: BERC

Political Settlement, Deals Environment, and Actors Dynamics in Renewable Energy Transition

Bangladesh's political settlement in the power and energy sector has historically prioritised rapid capacity expansion for short-term political gains over long-term sustainability. The patronage-based system is dominated by state-owned enterprises, such as the BPDB and Petrobangla, where politically connected actors control major contracts, policy directions, and project approvals. As a result, the sector remains heavily centralised and fossil-fuel-dependent, with renewable energy investments confined to a fragmented and uncertain policy landscape.

The deals environment is bifurcated. Fossil fuel projects operate within a closed and ordered system, characterized by guaranteed payments, assured contracts, and political protection (Table 1).

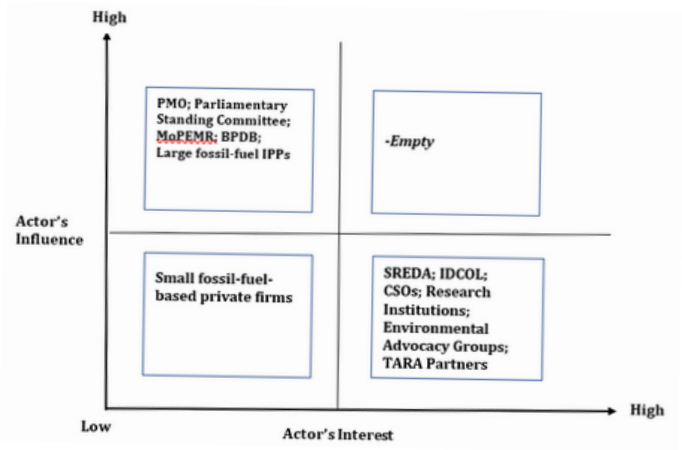
Table 1: Deals Environment in the Power and Energy Sector

	Ordered	Disordered
Open	-2000s IPPs Bids (Transparent bidding, PSMP)	Renewables (Now) (Regulatory uncertainty, delays)
Closed	Fossil-Fuels (Now) (Unsolicited contracts, capacity payments)	

In contrast, the renewable energy projects exist in an open but disordered setting, constrained by regulatory uncertainty, bureaucratic delays, and weak institutional.

Bangladesh's renewable energy transition is hindered by a clear influence-interest imbalance. Key decision-makers, such as the PMO, MPEMR, BPDB, and major fossil fuel based IPPs, hold high influence but show limited commitment to renewables. Meanwhile, actors genuinely advocating for renewable energy, including SREDA, IDCOL, civil society, and research institutions, lack the influence needed to shape policy. This absence of powerful (high influence) and committed (high interest) actors highlights a major governance gap that must be addressed to advance the country's energy transition.

Figure 4: Influence and Interest of Key Actors in RE Transition

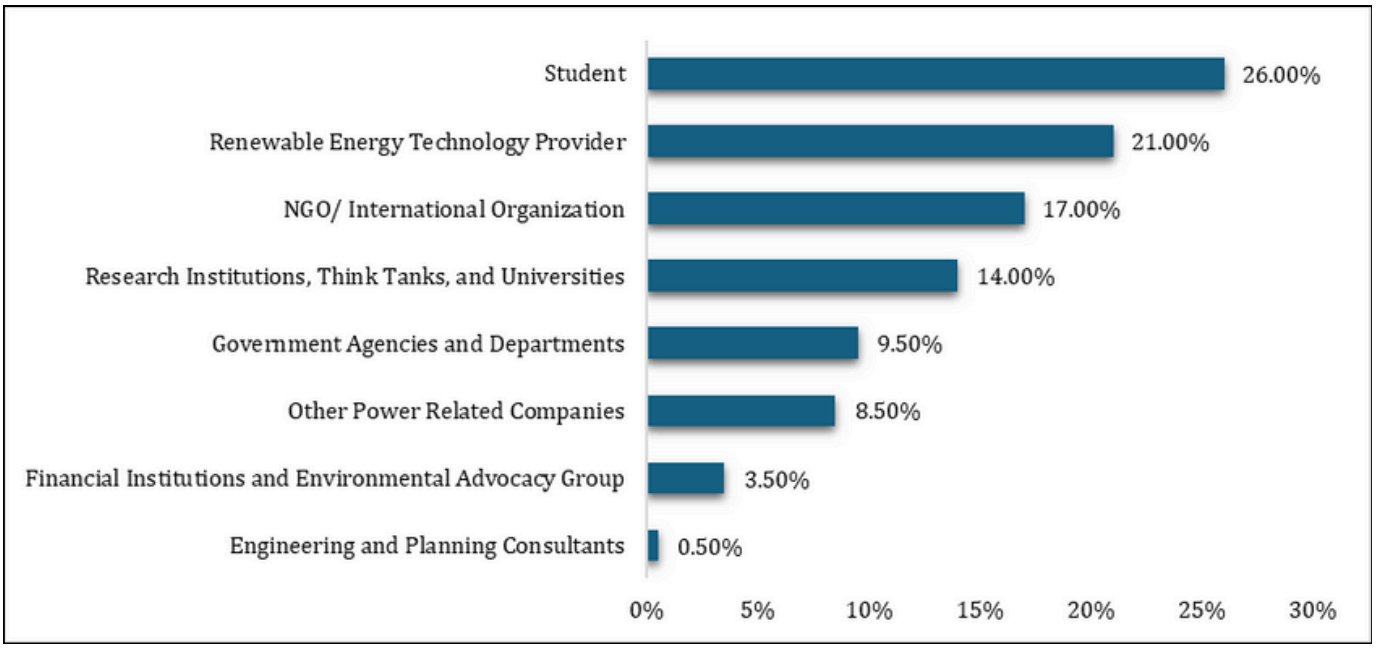


Source: Authors' Analysis

Findings from the Stakeholder Perception Survey

To capture the views and experiences of key stakeholders who directly influence or are affected by Bangladesh's renewable energy transition, the study conducted a stakeholder perception survey. In total, 200 individuals participated in the survey, including politicians, bureaucrats, business leaders, academics, students, and civil society representatives (see distribution in Figure 5).

Figure 5: Demographic of the Survey Population



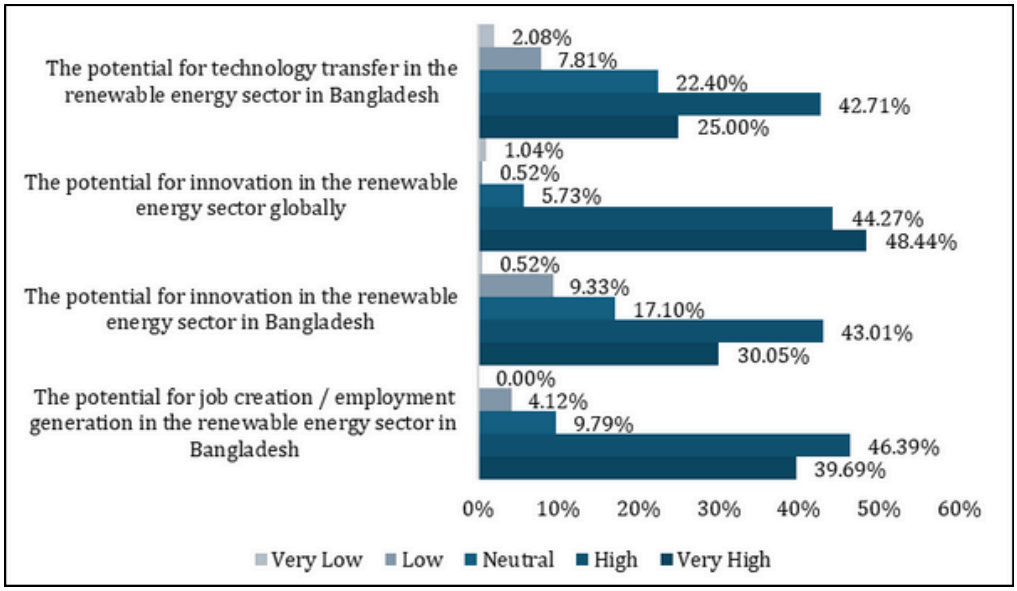
Source: SANEM Stakeholder Perception Survey 2024

The survey results show that stakeholder collaboration is widely regarded as essential for driving renewable energy adoption in Bangladesh. A large majority of respondents emphasised the importance of cooperation among key players, including government agencies, the private sector, international organisations, and civil society, for successfully navigating the energy transition. This reflects a broad consensus that no single entity can achieve the country's renewable energy goals alone, and that collaborative efforts are critical to overcoming technical, financial, and institutional challenges.

The survey also highlights the high level of awareness regarding renewable energy policies, with respondents demonstrating a general understanding of the importance of government intervention. However, perceptions of policy effectiveness varied, with only 59% of respondents rating current policies as effective, and 29% expressing concern that policies may not be sufficient to drive the energy transition. This underscores the need for policy reform and enhanced communication to ensure that stakeholders are fully informed and policies are properly aligned with the goals of the renewable energy sector.

Respondents clearly identified the job creation potential of the renewable energy sector as one of the most promising outcomes of a successful transition. There is a strong belief that renewable energy development can contribute significantly to economic growth, particularly in rural areas, through the implementation of solar-powered irrigation systems. Additionally, the use of solar energy was widely recognised as a key area of opportunity, with many respondents seeing it as the most feasible and impactful renewable resource for Bangladesh, given the country's geographic advantages.

Figure 6: Perceived Potential for Technology Transfer, Innovation, and Job Creation in the Renewable Energy Sector



Source: SANEM Stakeholder Perception Survey 2024

Table 2: Prospects for Bangladesh's Renewable Energy Transition by 2041

	Very High	High	Neutral	Low	Very Low
Portability and accessibility of solar energy.	24.47%	51.60%	18.62%	4.79%	0.53%
Abundant solar energy utilization potential at daytime.	23.08%	46.70%	24.18%	5.49%	0.55%
Huge Wind energy potential in the coastal region.	14.84%	37.91%	30.77%	14.29%	2.20%
Irrigation with solar-powered pump and year-round crop cultivation potential.	24.04%	54.10%	17.49%	4.37%	0.00%
Cost-effective power supply to the end users with RE.	23.24%	50.27%	18.38%	6.49%	1.62%
Inclusive power and energy ecosystem with net metering and feed-in tariff schemes.	24.86%	46.96%	20.99%	6.63%	0.55%
Environmental sustainability and positive contribution to climate conservation.	27.47%	52.75%	15.38%	3.85%	0.55%
Less dependence on imported fuel, domestic self-reliance, and economic stability.	23.76%	43.09%	23.76%	6.63%	2.76%
A more reliable dynamic optimum energy mix with successful RE transition.	24.31%	50.83%	18.23%	5.52%	1.10%
Reduction of sector-specific inflationary pressure resulting from mammoth fiscal burden in fossil-fuel-based power sector if successful RE transition is ensured.	18.23%	45.30%	29.28%	6.08%	1.10%

Source: SANEM Stakeholder Perception Survey 2024

Institutional capacity and stakeholder influence were also key points of focus. Government agencies and fossil fuel companies were identified as the most influential players in shaping energy policies. However, renewable energy companies and international organisations are increasingly being recognised for their role in driving the clean energy transition. Nevertheless, the lack of political will continues to be seen as a major barrier to progress, emphasising the need for stronger institutional leadership and clearer policy direction.

Table 3: Key Barriers and Challenges in Bangladesh's Energy Transition

	Very High	High	Neutral	Low	Very Low
Land scarcity	34.57%	39.36%	17.02%	6.91%	2.13%
Lack of political will and determination	40.32%	36.02%	18.28%	3.76%	1.61%
Lack of infrastructure readiness such as inadequate testing facilities, sub-standard solar accessories, and the absence of Smart Grid	34.92%	42.33%	15.87%	5.82%	1.06%
Lack of private sector investment (FDIs) in RE	30.32%	42.55%	18.09%	7.45%	1.60%
Lack of 'big push' in terms of investment in infrastructure and market development from the government	35.29%	37.43%	19.79%	4.81%	2.67%
Limited scope of SREDA, the institution responsible for RE development in Bangladesh, in terms of operating and regulatory independence regarding budget, manpower, coordination, and alignment with other institutions	29.79%	39.36%	23.94%	5.32%	1.60%
Decreased interest of the key industry actors in RE and their conflict of interests in the power sector	24.32%	44.32%	23.24%	7.03%	1.08%
Lack of coordination among ministry divisions and agencies	33.33%	41.40%	19.89%	3.23%	2.15%
Lack of a coordinated policy document aligned with the national targets, administrative inclination, and business interest	35.83%	41.71%	17.65%	2.14%	2.67%
Lack of specific attention in the annual budget formulation resulting in limited budgetary incentives, policy stimulus, and subsidies in the Solar-based Power Sector	31.35%	44.32%	20.00%	2.70%	1.62%
Humongous fiscal burdens including capacity payments, subsidies, direct tax expenditures relating to the power sector	36.76%	32.43%	25.41%	2.70%	2.70%
High import duties on the RE equipment and technologies	38.38%	39.46%	17.84%	3.78%	0.54%
Absence of Feed-in-tariff schemes	22.53%	35.71%	35.16%	4.95%	1.65%
The presence of influential fossil-fuel advocacy groups in the policy pathways	30.77%	41.76%	21.98%	4.40%	1.10%
Lack of diversification in the use and utilization of RE	22.70%	48.65%	20.54%	7.03%	1.08%
Lack of transparency and accountability of the existing regulatory and implementing agencies	37.70%	35.52%	24.04%	1.64%	1.09%

Source: SANEM Stakeholder Perception Survey 2024

The feasibility of achieving Bangladesh's 2041 renewable energy targets was met with cautious optimism. While nearly half of the respondents (45.36%) believe that the transition is feasible, there remains significant scepticism regarding infrastructure readiness and investment, with 42.55% of respondents highlighting the lack of private sector investment as a substantial barrier. Land scarcity was another critical issue seen as limiting the expansion of large-scale renewable energy projects like solar farms.

Despite these challenges, the report concludes that there are substantial opportunities for Bangladesh's renewable energy future. These include job creation, technological innovation, and environmental sustainability, all of which can be achieved with the right mix of strategic investments, policy reforms, and collaborative efforts. By addressing the identified barriers, Bangladesh has the potential to leverage renewable energy not only for environmental gains but also for economic development, ensuring a sustainable energy future by 2041.

Policy Recommendations

Bangladesh's energy transition toward renewable sources requires comprehensive policy interventions that address the institutional and political economy challenges. The following recommendations aim to establish an inclusive, transparent, and sustainable energy sector that not only supports large-scale renewable energy adoption but also ensures equitable access, institutional accountability, and long-term economic and social benefits.

Coordinating Policies:

- Coordinating the functions and activities of the government agencies
- Adopting uniform financing and subsidy strategy
- Prioritizing phasing out rental and quick rental power plants conforming to predetermined timeframes
- Updating the current "capacity payment" model in the Independent Power Producer (IPP) contracts to a "no electricity, no pay" framework
- Revealing all information about IPP contracts to the public to improve transparency and accountability in the sector

Setting Prioritization:

- Maintaining databases to accommodate the transition of the energy sector into a renewable and sustainable form
- Providing access to the database to the policymakers, researchers, and the general public, fostering transparency.

Restoring the Ability of the Bangladesh Energy Regulatory Commission (BERC):

- Distributing duties among offices to increase accountability and efficiency
- Revealing the pricing techniques regarding project procurement with supervision from the Bangladesh Energy Regulatory Commission (BERC)
- Restoring BERC's ability to oversee and modify the pricing mechanisms for fuel oil, electricity, and LPG

Coordinating Tax Restructuring:

- Removing high duties on renewable equipment to encourage private investment.
- Introducing performance-based subsidies for energy efficiency and renewable.
- Phasing out fossil fuel subsidies to fund green priorities and offering financial incentives for adopting energy-efficient technologies.
- Resolving billing issues and clarifying prepaid meter fees.
- Enforcing binding efficiency standards for infrastructure, vehicles, and machinery.

Ensuring Financing:

- Ensuring access to green financing and nurturing institutions to build expertise.
- Reforming the tax structure highlighting energy justice and affordable energy access for the mass.

Realigning Influence and Interest Among Key Actors:

- Forming multi-stakeholder platforms with PMO, MPEMR, BPDB, SREDA, and IDCOL.
- Integrating renewable goals into all strategic decisions.
- Ensuring accountability and link agency performance to renewable outcomes.
- Mandating renewable authority representation in policy and investment decisions.

Empowering Sustainable and Renewable Energy Development Authority (SREDA):

- Empowering the organizations working in the sector, and establishing their broader mandates and enforcement capabilities to promote cohesion and prioritization
- Creating new specialized institutions and departments for wind, solar, and cutting-edge renewable technologies to spur innovation and widespread adoption
- Strengthening SREDA with a broader mandate to spearhead the shift to renewable energy, fortify institutional structures, supervise renewable energy projects.

Expanding Technical Capacity:

- Investing in technologies and capacities, especially expanding energy storage technologies and smart grids in order to integrate variable renewable energy sources
- Creating an environment where academia works in coherence with the industry to advance renewable technologies and expand the capacities of the manpower.
- Implementing capacity-building initiatives to increase renewable energy technologies knowledge and management
- Collaborating with foreign organizations for training and technology transfer to guarantee the concurrent development of local talent.

Understanding Regional Nuances and Stimulating Demand:

- Devising policies based on the regional demands and necessities while incorporating the local resource endowment and socio-economic factors.
- Coordinating with the local and marginalized populace, and empowering them to reduce the grid dependency of regions.
- Fostering awareness about the long-term benefits of renewable energy adoption
- Promoting energy-efficient appliances and implementing star ratings on appliances.

Reforming Political Settlements to Incentivize:

- Restructuring the political economy to make renewables lucrative for influential actors through feed-in tariffs, PPAs, and tax breaks.
- Phasing out fossil fuel subsidies and redirecting funds to renewables.
- Linking political and economic incentives to renewable adoption.
- Encouraging influential actors to champion the green transition.

Creating Ordered Deals Environment for Renewables:

- Establishing clear, transparent renewable energy regulations.
- Standardizing permit procedures, grid access, and procurement processes.
- Creating a one-stop portal for renewable projects, tenders and enforcing strict approval timelines.
- Publicizing tenders and contracts to create an ordered environment that boosts investor confidence.
- Streamlining processes to attract private investment at scale.

Reverting from Cronyism:

- Preventing the wastage of official funds and policy mismatch by public disclosures and strict guidelines
- Auditing officials and agencies, and establishing oversight mechanisms, in cases of delays and cost overruns in energy projects

Arranging International Negotiations:

- Diversifying technology procurement to lessen its reliance on any one nation and guarantee competitive pricing and quality.
- Bargaining for advantageous conditions for technology transfer and investments in renewable energy as a developing country.

Establishing Energy Justice:

- Guarantying transparent, fair land acquisition and adequate compensation to protect vulnerable groups in renewable project development in the policy measures.

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