Renewable Energy in the National Budget 2026-27

Overshadowed by Fossil Fuels?

Study Team

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Presentation Outline

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2. Overview of Current Scenario of Renewable Energy
3. Renewable Energy in the National Budget: A Review
4. Review of Recent RE Initiatives 2025-26
5. Challenges and Opportunities to the RE Sector
6. Recommendations and Way Forward

1. Introduction

Introduction

- Renewable energy in Bangladesh continues to remain constrained under the **overwhelming dominance of fossil fuel-based allocation within the national budget framework.**
  - Despite the growing importance of energy transition, a **major share** of public expenditure, subsidies, and development allocation in the power sector continues to be **directed toward conventional fuel-based generation** and related infrastructure.
  - The **imbalance in budgetary allocation** has contributed to **slower renewable energy expansion**, limited project execution efficiency, and weak progress in achieving targeted RE capacity growth.
- In this context, **CPD Power and Energy Study** focuses its renewable energy budget assessment which includes:
  - Review of previous national budgets and renewable energy allocation trends
  - **Budgetary prioritization** of renewable energy within the power sector
  - **Effectiveness of budget allocation** and utilization in RE projects
  - Assessment of renewable energy targets and progress gaps.
  - Finally, **expectation to the newly elected government** to the RE sector.

2. Overview of Current Scenario of Renewable Energy

2.1 Current Status of RE in Bangladesh

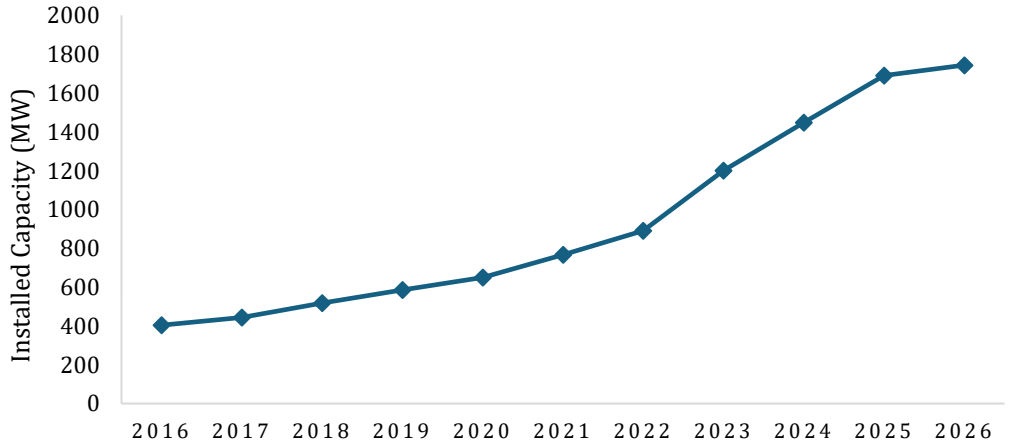
- Bangladesh's **total RE** installed capacity stands at approximately **1745.25 MW** as of 11 May 2026 (Table 1).
- **On-grid** renewable power at **1,366.73 MW** and **off-grid** at **378.52 MW.**
- The dominating technology of RE is **Solar PV**, accounting for **83.2%** of the total installed capacity, equivalent to **1452.16 MW.**
- The share of renewable is **5.39%** of Total Installed Capacity.
- Compound Annual Growth Rate **(CAGR)** of RE from 2016 to May 2026 is **15.78%** (Figure 1).
- Despite the wind energy potential in the coastal region, **wind** power installation remains very low, accounting for only about **62 MW.**

Table 1. Current RE Installed Capacity

Technology	Off-grid (MW)	On-grid (MW)	Total (MW)
Solar	377.43	1074.73	1452.16
Wind	0	62	62
Hydro	0	230	230
Biogas to Electricity	0.69	0	0.69
Biomass to Electricity	0.4	0	0.4
Total	**378.52**	**1366.73**	**1745.25**

Source: SREDA

Figure 1. RE Progress Trend (2016- May 2026)

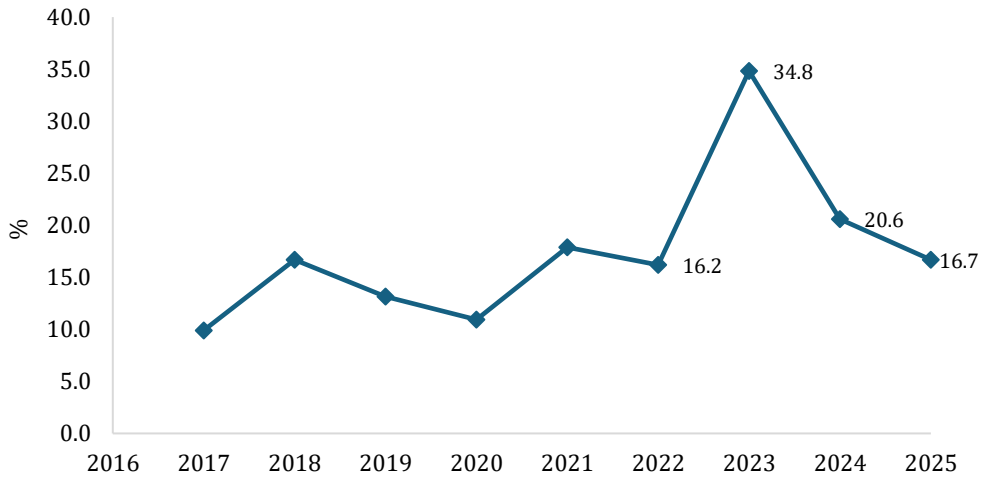


Source: SREDA

2.1 Current Status of RE in Bangladesh

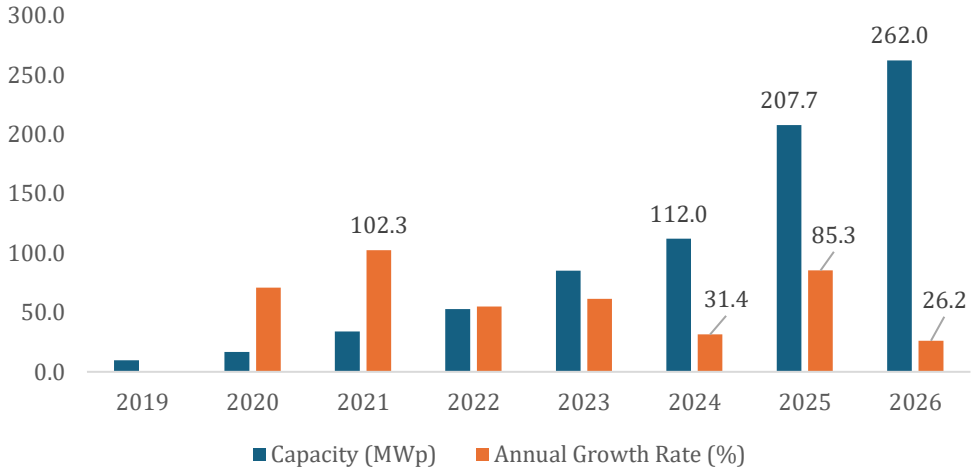
- **Annual growth** remained mostly in the range of about **10%–18%** between 2017 and 2022, indicating steady but moderate capacity expansion during the early and middle period (Figure 2).
  - A **sharp spike** occurred in **2023 (34.82%),** driven by significant capacity addition compared to previous years.
  - After the peak, **growth declined** to **20.58% in 2024** and **16.68% in 2025**, showing a normalization after the rapid expansion.
- **Net metering rooftop** solar capacity shows **very high** and fluctuating **annual growth**.
  - The highest expansion recorded in **2021 (102.29%),** followed by another strong surge in **2025 (85.32%),** indicating rapid but uneven adoption (Figure 3).
  - Current **installed capacity** is **262MWp** with the **CAGR(2019-26)** of **59.77%.**

Figure 2. Simple Annual Growth Rate of RE (2017-25)



Source: SREDA

Figure 3. NEM RTS Installation Trend and AGR (2019-26)



Source: SREDA

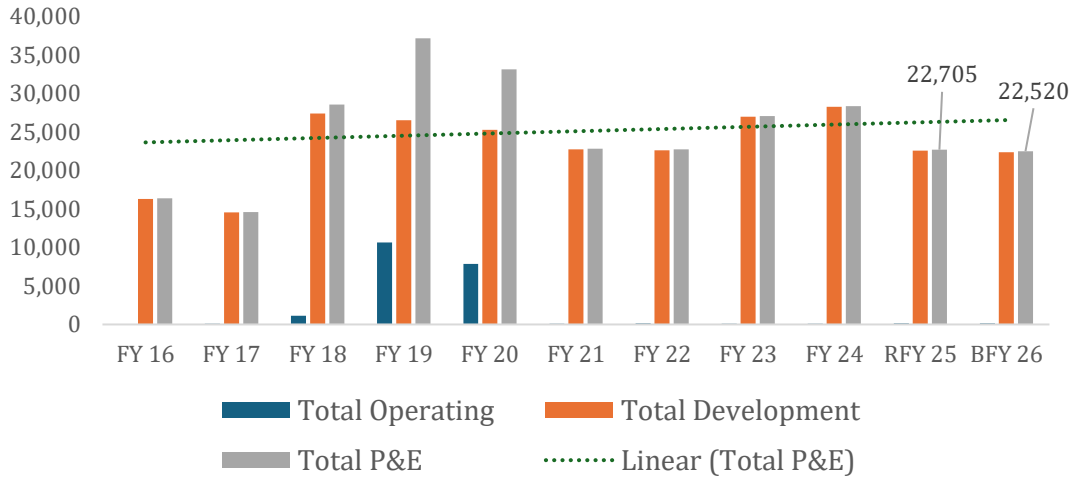
3. Renewable Energy in the National Budget: A Review

3.1 Review of Previous National Budget 2025-26 (PE)

Power and Energy in the National Budget 2025-26

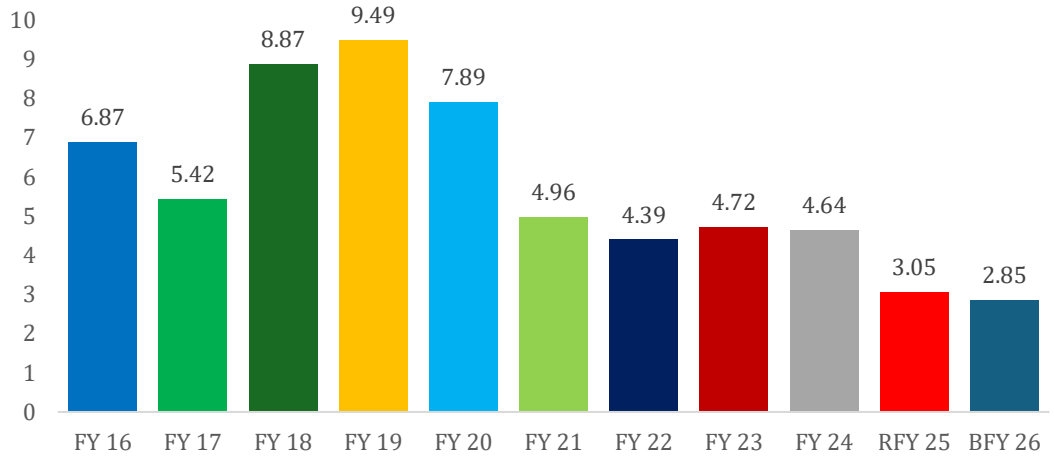
- MoPEMR has received a significant allocation in the national budget FY2025-26 in amount **BDT 22520 crore** (Figure 4).
- However, the allocation for P&E has been **decreased (0.8%)** compared to RFY2025 **despite of a linear upward trend** in this sector.
- This allocation accounts for **2.9% of the BFY2026** total budget, which is lower than that of FY25 revised budget (Figure 5).
- The **operating budget** for BFY26 have **increased** compared to the revised budget for FY25 by **15.38 %** and the **development budget decreased by 0.91%.**
- **However, the allocation for RE inside this budget scheme raises serious doubt to achieve such a high ambitious goal in RE.**

Figure 4. Power and Energy Sector Budget Over the Years



Source: Budget Docs, MoF

Figure 5. Share of P&E in the National Budget (% of the total budget)



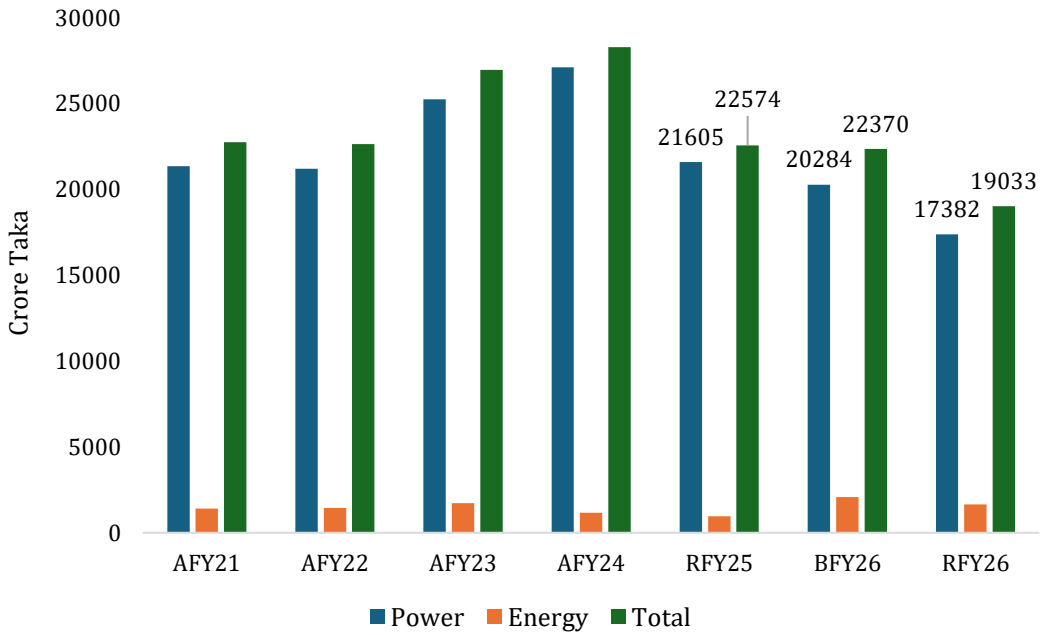
Source: Budget Docs, MoF

3.1 Review of Previous National Budget 2025-26 (PE)

ADP Allocation in Power and Energy Sector

- In **BFY2026**, the Power Division received ADP allocation of **BDT 20,284 crore** (**decreased of 7.2% from RFY25**) (Figure 6).
- The **total ADP allocation** for **Power and Energy in BFY26** was **BDT 22,370 crore** whereas the total allocation in **RFY2025** was **BDT 22574 crore**. (decreased of 0.1% from RFY25).
- The **significant changes** came between **BFY26 and RFY26**.
- The **Revised** ADP allocation in 2026 for **power division** is **BDT 17,382 crore** (**decreased 14.3% from BFY26**).
- **Total allocation** for **power and energy** in RFY26 is BDT **19,033 crore** (**decreased 14.9% from BFY26**).

Figure 6. ADP Allocation for Power and Energy Division over the years



Source: Budget Docs, MoF

3.2 Review of Previous National Budget 2025-26 (RE)

ADP Share in RE-GM-SM Projects

- **Renewable Energy (RE):** This sector consists of 3 projects with a total RADP-26 allocation of 795.5 Crore Taka (Table 2).
- **Grid Modernization (GM):** There are 6 initiatives planned for grid upgrades with a total RADP-26 allocation listed at 228.2 Crore Taka.
- **Smart Metering (SM):** This category includes 5 projects aimed at digital utility management with a total allocation of 574.3 Crore Taka.

Poor Share of RE Based Projects

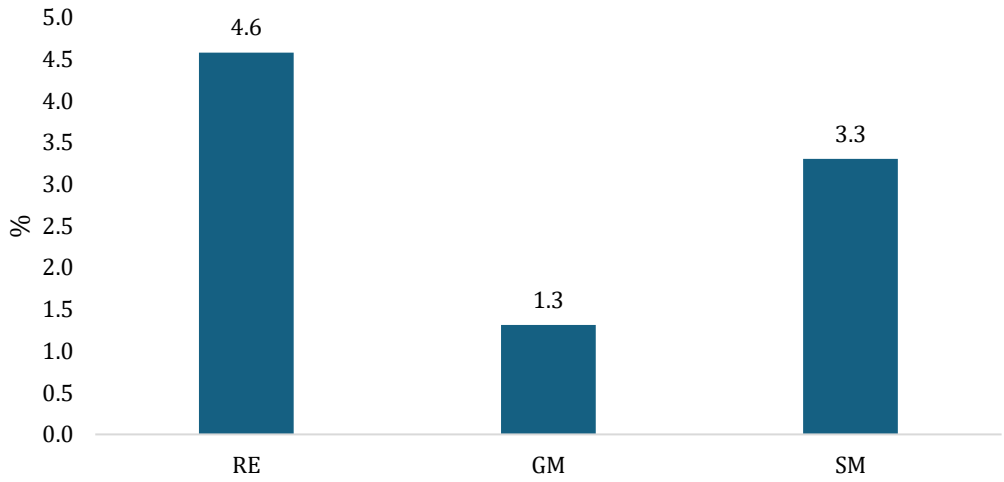
- Despite of **significant allocation** in the national budget for **Power and Energy:**
- Allocation for **RE project** is **significantly low (4.6% of PE RFY26)** (Figure 7).
- **GM** and **SM** projects holds the share around **1.3%** and **3.3%** respectively

Table 2. RFY26 Allocation for RE Category Projects

Type of Projects	No of Projects	Total Allocation (RFY26) Crore Taka
RE	3	795.5
GM	6	228.2
SM	5	574.3

Source: Budget Docs, MoF

Figure 7. ADP Share of RE-GM-SM Projects with Total Power Division Allocation, RFY26



Source: Budget Docs, MoF

3.2 Review of Previous National Budget 2025-26 (RE)

FF vs. RE in the National Budget RFY26

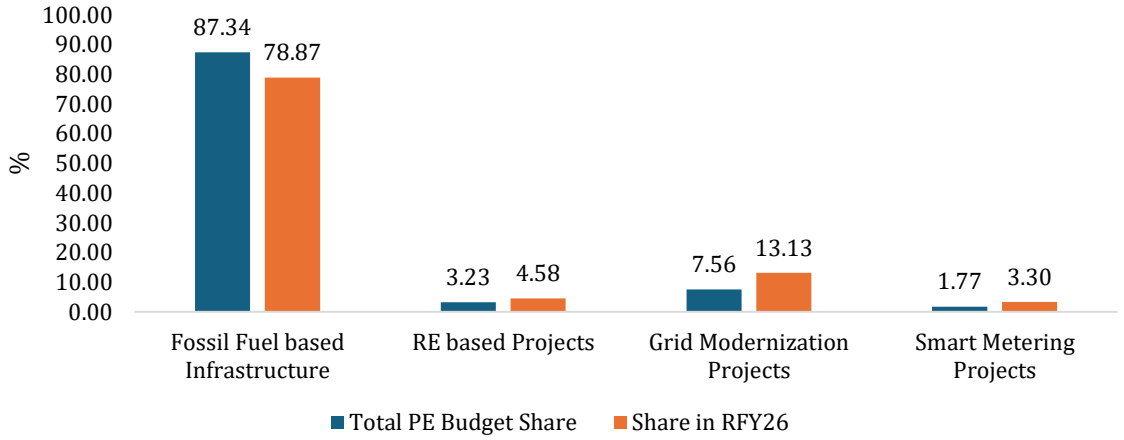
- The RFY26 allocation structure continues to demonstrate a **strong fiscal dominance** of **fossil fuel-based** infrastructure within the Power and Energy sector budget.
  - Fossil fuel-based projects account for **87% (169886 Crore BDT)** of the **total PE project budget** and **receive 79% of RFY26 allocation (13709 BDT Crore)** (Table 3 & Figure 8).
- In contrast, **renewable energy** projects remain **significantly underprioritized** in the national budget framework.
  - **RE-based** projects account for only **3% (6292 BDT Crore)** of the **total PE** project budget and receive **merely 5% (3652 BDT Crore) of RFY26 allocation.**

Table 3. RFY26 Comparison between FF vs RE

Type of Project	Total Project Budget Crore BDT	RFY26 Allocation Crore BDT
Generation	72212	3155
Transmission and Distribution Line	95773	10547
Substation	1901	6
Sub-Total	**169886**	**13709**
Renewable Energy	6292	795
Grid Modernization	14701	2282
Smart Metering	3438	574
Sub-Total	**24431**	**3652**
Electrification	204	21
Total	**194521**	**17382**

Source: Budget Docs, MoF

Figure 8. Share of RE and FF in RFY26



Source: Budget Docs, MoF

3.3 Subsidising the Past, Starving the Future: Bangladesh's Energy Subsidy Paradox

FF Subsidy History

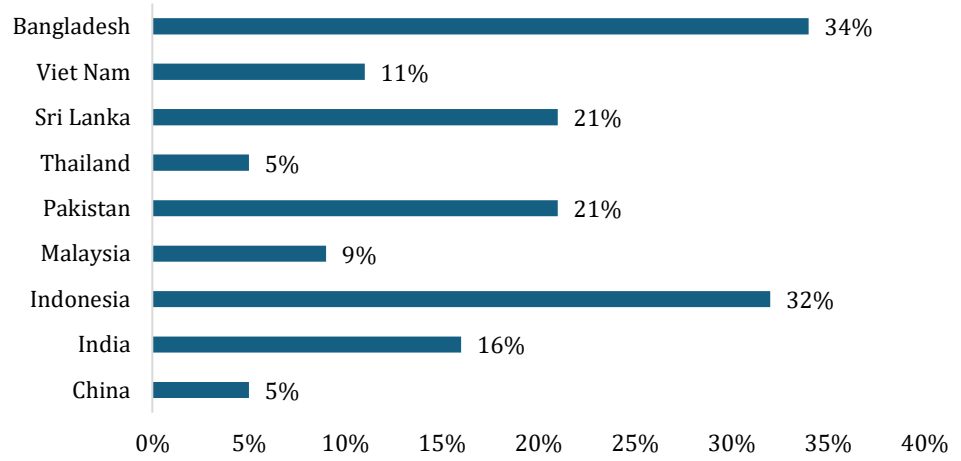
- FF power generation has been the overwhelming beneficiary of Bangladesh's energy subsidy architecture receiving substantial and growing budgetary support year after year to sustain an expensive, import-dependent generation mix.
- While the fiscal burden has consistently escalated despite successive electricity tariff hikes, reflecting a structurally unsustainable subsidy model that crowds out investment in cleaner and cheaper alternatives.
- Bangladesh has spent over BDT 1474.11 billion subsidising its power sector between FY2020-21 and FY2024-25, almost entirely to sustain expensive fossil fuel-based generation (Table 4).
- Bangladesh has been providing the **highest level of subsidy** among the selected Asian countries around **34%** (Figure 9). Though the amount of subsidy per capita in Bangladesh is still at a modest level (USD45).

Table 4. Subsidy to Power Sector (2020-21 to 2025-26)

Fiscal Year	Fossil Fuel Power Subsidy (BDT Billion)
FY2020-21	89.4
FY2021-22	119.6
FY2022-23	295.11
FY2023-24	350
FY2024-25	620 (Revised)
FY2025-26	350–370 (Expected)

Source: Banik Barta,2025

Figure 9: Subsidy for the PE sector in selected Asian Countries



Source: Preoty, H. et. al., (2024)

3.4 RE-GM-SM Project Status

Table 5. RE Category Project Status FY26

Type	Project Name	Implementing Organization	Max Completation rate by FY26 (%)	Type of Project
RE	জামালপুর জেলার মাদারগঞ্জে ১০০ মেগাওয়াট সৌর বিদ্যুৎ কেন্দ্র নির্মাণ (১ম সংশোধিত)	রুরাল পাওয়ার কোম্পানি	60.6	Concluding Project
RE	পাওয়ার ট্রান্সমিশন স্ট্রেংথেনিং এন্ড ইন্টিগ্রেইশন অব রিনিউয়েবল এনার্জি	পাওয়ার গ্রীড কোম্পানি অব বাংলাদেশ লি: (পিজিসিবি)	8.8	Continuing Project
RE	সৌর বিদ্যুৎ চালিত পাম্পের মাধ্যমে কৃষি সেচ (২য় সংশোধিত)	বাংলাদেশ পল্লী বিদ্যুতায়ন বোর্ড (বাপবিবো)	40.4	Concluding Project
GM	বাপবিবো'র বৈদ্যুতিক বিতরন ব্যবস্থার আধুনিকায়ন ও ক্ষমতাবর্ধন (খুলনা বিভাগ) (১ম সংশোধিত)	বাংলাদেশ পল্লী বিদ্যুতায়ন বোর্ড (বাপবিবো)	55.4	Continuing Project
GM	বাপবিবো'র বৈদ্যুতিক বিতরন ব্যবস্থার আধুনিকায়ন ও ক্ষমতাবর্ধণ (ঢাকা-ময়মনসিংহ বিভাগ) (১ম সংশোধিত)	বাংলাদেশ পল্লী বিদ্যুতায়ন বোর্ড (বাপবিবো)	34.0	Continuing Project
GM	বাপবিবো'র বিদ্যমান ৩৩/১১ কেভি পোল মাউন্টেড উপকেন্দ্রের নবায়ন ও আধুনিকায়ন (পর্যায়-১)	বাংলাদেশ পল্লী বিদ্যুতায়ন বোর্ড (বাপবিবো)	10.8	Concluding Project
GM	ডিপিডিসি'র আওতাধীন এলাকায় উপকেন্দ্র নির্মাণ ও পুনর্বাসন, বিদ্যুৎ ব্যবস্থায় ক্যাপাসিটর ব্যাংক স্থাপন এবং স্মার্ট গ্রীড ব্যবস্থার প্রবর্তন	ঢাকা পাওয়ার ডিস্ট্রিবিউশন কোম্পানি (ডিপিডিসি)	35.9	Continuing Project
GM	নেসকো এলাকায় Smart Distribution System বাস্তবায়ন প্রকল্প	নর্দান ইলেকট্রিসিটি সাপ্লাই কোম্পানী লিমিটেড	79.0	Concluding Project
GM	মডার্নাইজেশন অব পাওয়ার ডিস্ট্রিবিউশন-স্মার্ট গ্রীডস ফেজ ১	ওয়েস্ট জোন পাওয়ার ডিস্ট্রিবিউশন কোম্পানি লিমিটেড (ওজোপাডিকো)	10.3	Continuing Project
SM	ওয়েস্ট জোন পাওয়ার ডিস্ট্রিবিউশন কোম্পানি লিঃ (ওজোপাডিকো) এলাকার জন্য স্মার্ট প্রি-পেমেন্ট মিটারিং প্রকল্প (২য় পর্যায়)	ওয়েস্ট জোন পাওয়ার ডিস্ট্রিবিউশন কোম্পানি লিমিটেড (ওজোপাডিকো)	1.8	Continuing Project
SM	ডেসকো এলাকায় স্মার্ট প্রি-পেমেন্ট মিটার সরবরাহ ও স্থাপন প্রকল্প (১ম সংশোধিত)	ঢাকা ইলেকট্রিক সাপ্লাই কোম্পানি লি: (ডেসকো)	22.1	Concluding Project
SM	ডিপিডিসি'র আওতাধীন এলাকায় আট লক্ষ পঞ্চাশ হাজার স্মার্ট প্রি-পেমেন্ট মিটার স্থাপন প্রকল্প (১ম সংশোধিত)	ঢাকা পাওয়ার ডিস্ট্রিবিউশন কোম্পানি (ডিপিডিসি)	76.2	Continuing Project
SM	রাজশাহী এবং রংপুর বিভাগে নেসকো'র আওতাধীন এলাকায় স্মার্ট প্রি-পেমেন্ট মিটার স্থাপন (১ম সংশোধিত)	নর্দান ইলেকট্রিসিটি সাপ্লাই কোম্পানী লিমিটেড	90.1	Concluding Project
SM	স্মার্ট প্রি-পেমেন্ট মিটারিং প্রজেক্ট ইন ডিস্ট্রিবিউশন জোনস অফ বিপিডিবি (১ম সংশোধিত)	বাংলাদেশ বিদ্যুৎ উন্নয়ন বোর্ড (বাবিউবো)	92.5	Concluding Project

Source: Authors' Calculation.

4. Review of Recent RE Initiatives 2025-26

4.1 Private Sector Initiative

- **Solar Development Pipeline:**
  - While **168 MW** of solar projects were **completed** in **FY24-25**, there are currently **321 MW under construction** (Table 6).
  - A massive **5254.25 MW in the tendering or planning phase**. (**Mostly under planning phase**)
  - Where the question raises **concern** about the **progress in tendering** process.
- **Wind and Waste-to-Energy Progress:** Beyond solar, there is **55 MW** of wind power and **43 MW** of waste-to-energy capacity currently under construction.
- **Dominance of IPP Ownership:** Independent Power Producers (IPP) maintain a major stake in the sector.
  - Owning **69% of under-construction** solar, **99.7% of planned solar**, and 100% of all ongoing wind and waste-to-energy projects.

Table 6. RE Initiatives by Private Sector FY25

Types	Capacity	Ownership in Capacity
Completed Solar Projects FY24-25	168 MW	-
Completed Wind Power Plant	2MW	-
Sub-Total (Completed)	**170 MW**	**-**
Under Construction Solar Projects	321 MW	IPP (69%)
Under Construction Wind Projects	55 MW	IPP (100%)
Under Construction Waste to Energy	43 MW	IPP (100%)
Sub Total	**419 MW**	**-**
Under Tendering/Planning (Solar)	**5254.25 MW**	IPP (99.7%)

Source: BDPB Annual Report-25

4.1 Private Sector Initiative

- A total of 10 renewable energy-based power plants with the capacity of **312 MW** are in the pipeline by 2026 (Table 7).
  - Adding the upcoming power into the grid, the renewable energy-based generation will be **2045.25 MW**
- **Three power plants** should be completed by 2025 while these are **still in implementation process**, intended to generate **107MW** from 2026.
- Combining all 13 power plants **(Solar 321 MW),** the total capacity will be **2164.25 MW.**
- **Providing fiscal support** as well as gradually reducing fiscal support for fossil-fuel-based energy and power is important to attract private investment
- **Foreign investment** and foreign aid will be needed to undertake more **G-G, G-P, and PP** projects for the development of the renewable energy sector development.

Table 7. Upcoming Renewable Energy based Projects

Project Name	Type	Capacity MW	Ownership	Possible COD
Madarganj, Jamalpur 100 MW Solar Park	Solar	100	RPCL	Jun_26
Dhormopasha, Sunamganj 32 MW (AC) Solar Power Plant	Solar	32	IPP	Dec_25
Patgram, Lalmonirhat 05 MW (AC) Solar Power Plant	Solar	5	IPP	Dec_26
Gowainghat, Sylhet 05 MW (AC) Solar Power	Solar	5	IPP	Jan_26
Bera, Pabna 3.77 MW (AC) Solar Power Plant	Solar	4	IPP	Dec_26
Tetulia, Panchagarh 30 MW (AC) Solar Park	Solar	30	IPP	Dec_26
65 MW Solar Park by Bangladesh-China Renewable Energy Company (Pvt.) Limited (BCRECL)	Solar	65	IPP	Jul_25
Muktagachha, Mymensingh 20 MW Solar Power	Solar	20	IPP	Dec_26
Moulvibazar, Sylhet 10 MW Solar Power Plant	Solar	10	IPP	Jun_25
Baraiyarhat, Chattogram 50 MW Solar Power Plant	Solar	50	IPP	Jan_26
Mongla, Bagerhat 55 MW Wind Power Plant	Wind	55	IPP	Sep_26
Aminbazar 42.50 MW Municipal Solid Waste based Power Plant Sponsor: WTE Power Plant North Dhaka Pvt. Ltd	Waste to Energy	43	IPP	July_26

Source: BDPB Annual Report-25

4.2 New Governments Initiative on RE Acceleration

- **Public Private Partnership (PPP) Model**
  - The government has introduced a new policy framework to accelerate renewable energy development by enabling the use of unused or underutilised state-owned land for clean energy projects under a public-private partnership (PPP) model.
  - Ministries have been instructed to submit details of dispute-free government land exceeding **3.5 acres** to support renewable energy project development under PPP arrangements.
  - A utility-scale solar project is planned on about **412 acres** of land owned by BEZA at the National Special Economic Zone, with an expected capacity of around **130–140 MW**.
- **Govt waives the import duties on Electric Bus for School:**
  - The government has allowed the **duty-free import of electric buses** for educational institutions to promote safe and environment-friendly transportation for students.
  - The facility applies to buses with a minimum seating capacity of 17, including the driver.
  - The bus batteries are required to have a minimum warranty period of seven years or 300,000 kilometres, with appropriate supporting documentation to ensure compliance.

4.2 New Governments Initiative on RE Acceleration

- **Govt set a target of generating 10GW Electricity from Solar by 2030**
  - The government has formed a committee to prepare necessary planning to achieve the target
  - The upcoming budget could play a significant role to achieve the 10GW goal
- **Government is considering to reduce import duties on RE equipment's**
  - The government is reportedly considering a five-year tax holiday alongside reduced import duties at nominal levels to stimulate private sector investment in the solar power sector.
  - An investment-friendly policy framework for the solar energy sector is expected to be finalized and announced by June 2026, aimed at improving private sector participation and project viability.
- **Review of 31 cancelled LOIs**
  - On 6 May, the Ministry of Power, Energy and Mineral Resources formed a committee through an office order to examine the legal feasibility of continuing activities under cancelled letters of intent (LoIs).
  - The full-scale implementation of the initiative is projected to require about **$4.5 billion in FDI**, with potential financing being explored from countries including China, France, Malaysia, Singapore, South Korea, Germany, Japan, the United States, the United Arab Emirates, and Saudi Arabia.

4.3 Interim Governments Initiative on RE

- The **Renewable Energy Policy 2025** which adopted in June 2025, replaced the 2008 framework after a 17-year gap, enabling broader participation of residential, commercial, and industrial users in renewable energy generation and allowing electricity sales under net metering arrangements.

- **12 solar power plants** were awarded through competitive bidding instead of the earlier non-competitive Special Act route, resulting in tariff reductions below Tk 10/kWh, estimated annual **savings of Tk 1,169 crore**, and a combined planned capacity of **918 MW**.

- The interim government has shifted procurement for power projects under the **Public Procurement Act 2006 and Rules 2008**, including international competitive tendering following the repeal of the **Special Provisions Act**, strengthening transparency in the energy procurement process.

- The **Merchant Power Policy 2025** introduces corporate PPAs by allowing **direct power purchase agreements** with public utilities, replacing capacity payments with energy-based payments and wheeling charges to improve market efficiency and investment flexibility.

- On **3 July 2025**, the government launched a **National Rooftop Solar Programme** targeting up to **3,000 MW** from government buildings, schools, and hospitals, aligned with the Renewable Energy Policy 2025 and long-term renewable targets of 20% by 2030 and 30% by 2040, though **progress remains negligible** due to **implementation gaps.**

5. Challenges and Opportunities to the RE Sector

5.1 Import Duties on RE Equipment's: Challenges

Import Duty & Tax Structure

- The tariff structure for renewable energy components in Bangladesh remains **highly uneven**, creating significant cost burdens across the solar and battery value chain.
- **Solar inverters**, a critical component for converting solar-generated DC electricity into usable AC power, also face a **28.73% TTI**. This increases the overall system cost for rooftop solar and utility-scale projects (Table 8)**.**
- Imported **lithium-ion** batteries face the highest Total Tax Incidence **(TTI)** at **61.80%** which substantially increases the cost of battery energy storage systems **(BESS),** electric mobility, and renewable energy backup solutions.

Table 8. Bangladesh National Tariff FY2025-26

HS Code	Description	CD	SD	VAT	AIT	RD	AT	TTI
85419000	Parts Of Devices Of 85.41	5	0	15	5	0	7.5	33.63%
85414200	Photovoltaic cells not assembled in modules or made up into panels	0	0	15	5	0	7.5	27.5%
85414300	Photovoltaic cells assembled in modules or made up into panels	1	0	15	5	0	7.5	28.73%
85076000	Lithium-Ion	25	0	15	5	3	7.5	61.80%
85044040	Solar Inverter	1	0	15	5	0	7.5	28.73%

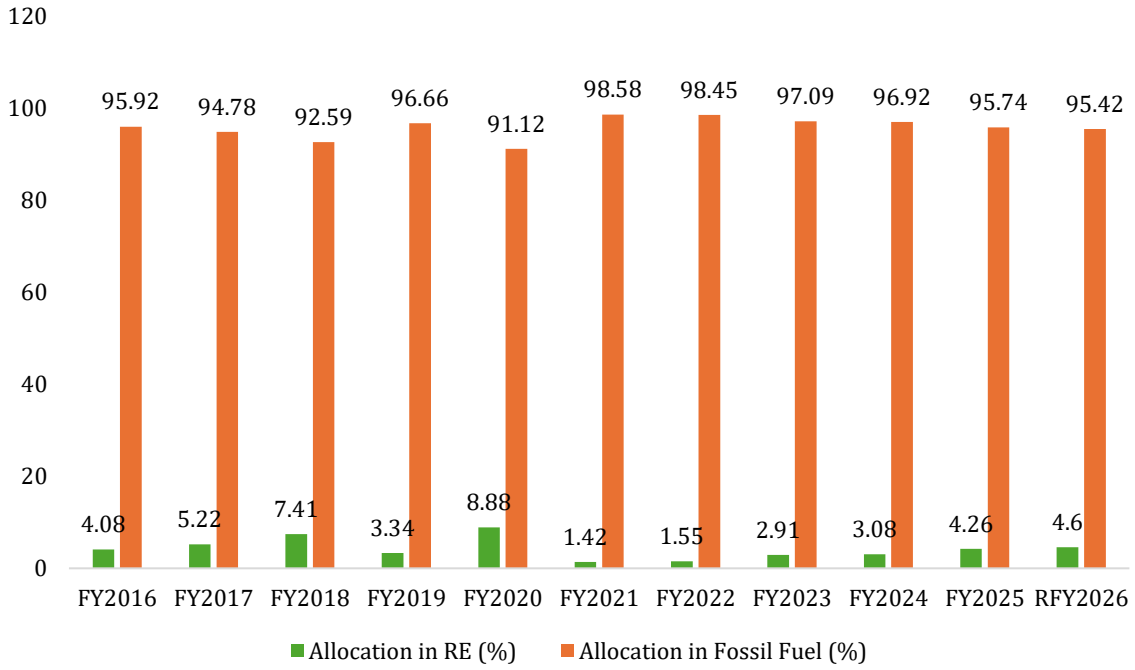
Source: NBR Tariff Document

5.2 Marginal Annual Development Program (ADP) Allocation: Challenges

Fossil Fuel Bias in the Budget :The Anti-RE Fiscal Tilt

- Despite ambitious clean energy pledges, the actual government budget allocation remains disproportionately low.
- The budget allocation trend from FY2016 to RFY2026 shows a **persistent dominance of fossil fuel-based** projects, which consistently **absorb more than 90%** of total Power and Energy development allocation across the entire period (Figure 10).
- **RFY2026** shows a **marginal improvement** in RE allocation at **4.6%,** and **fossil fuel-based projects** still dominate at over **95%, reflecting** limited structural rebalancing in the national energy investment framework.
- The **FY2025–26** budget provides **no new incentives** for solar or other RE technologies and **omits the Tk 100 crore** allocation for RE that was **included** in the **previous fiscal year.**

Figure 10. ADP Allocation in Renewable Energy and Fossil Fuel-Based Energy



Source: Authors' Calculation & CPD IRBD Policy Brief June 2025

5.3 Procurement & Tender Delays-A Broken Process: Challenges

Investor Confidence Shattered

- Bangladesh experienced stagnation in RE development, with **no utility-scale projects** added to the pipeline between **Aug 2024 and Dec 2025.**
- The country floated four tenders for RE projects with a combined capacity of **5,238MW** between Dec 2024 and Mar 2025, but they initially generated limited interest among investors (Table 9).
- Repeated deadline extensions for bid submission attracted bidders and reduced the average tariff by 16%, from US$0.0993/kWh to US$0.0827/kWh.
- BPDB has **reissued a 495 MW** solar tender **on 27 April 2026** after the previous round underperformed.
- Cancelled **3,287 MW (31 LOIs)** projects worth about **$6 billion** in foreign investment disrupted investors, **leading to 11 High Court petitions** from **15 companies** despite prior land acquisition and project preparation.

Table 9. The Four Tender Packages (2024–2025)

Package	Floated	Capacity	Status & Issues
Package 1	Dec 2024	353 MW (12 Plants)	6 deadline extensions; bids opened 2 Jun 2025; 20 local bids, zero foreign.
Package 2	Jan 2025	500 MW (10 Plants)	Poor response; deadlines extended; foreign firms absent.
Package 3	Jan 2025	1780 MW (19 Plants)	Out of 42 bid documents, Moulvibazar (100 MW) received 6 bids, several 100 MW plants got only 1 bid, while Pekua (70 MW) and Gopalganj (100 MW) received none.
Package 4	May 2025	2605 MW (14 Plants)	Only seven bid documents have been sold under the package, while nine plants with a combined capacity of 1,615 MW did not receive any bidder interest.

Source: TBS, 2025

5.3 Procurement & Tender Delays-A Broken Process: Challenges

- **Structural Deficiencies in Tender Design:** A CPD diagnostic assessment, benchmarking Bangladesh's BPDB tender documents against frameworks in Pakistan, the Philippines, and Saudi Arabia, found **three provisions universally absent:**
  - **Payment security instruments** (e.g., a revolving letter of credit covering 3–6 months of payments backed by sovereign or central bank support).
  - Implementation Agreement equivalents a **sovereign guarantee** backstop for investor commitments.
  - **Lender step-in rights** allowing lenders to take over project management upon developer default, protecting financier investment.
- **Impact on Specific Investors**
  - **Marubeni (Japan):** Marubeni had a joint venture with Doreen Power to build, own, and operate a 100 MW solar plant at Mongla. The LOI cancellation caused Marubeni to withdraw entirely from the joint venture
  - Nearly **30 affected companies** had foreign co-investors; all posed the same unanswered question through the Bangladesh Sustainable and Renewable Energy Association: *'How can an LOI issued by the government be cancelled?'*

5.4 RE Potential in Bangladesh: Opportunities

Rooftop Solar Potential

- Bangladesh has significant rooftop solar potential, with an estimated **25119m²** of **usable rooftop area** across all divisions for possible solar installation (Table 10).
- Rangpur and Rajshahi show the highest potential, driven by large building stock and extensive small-to-medium residential clusters.
- Dhaka and Chattogram also hold major potential, while Barishal and Sylhet contribute smaller but relevant distributed rooftop solar capacity.

Table 10. Usable Rooftop Area in Each Division of Bangladesh, 2025

Division	Usable Area (m2)	Num of Buildings	Large Buildings	Medium Buildings	Small Buildings
Barishal	2152	1326375	37700	105636	1183039
Chattogram	3678	2905392	80815	233230	2591347
Dhaka	3355	2683223	39311	115979	2527933
Khulna	3596	3611568	45405	175673	3390490
Mymensingh	2697	2059616	25371	93673	1940572
Rajshahi	3415	3995415	127813	410334	3457268
Rangpur	4155	4454046	80164	286379	4087503
Sylhet	2071	1634185	82979	192083	1359123

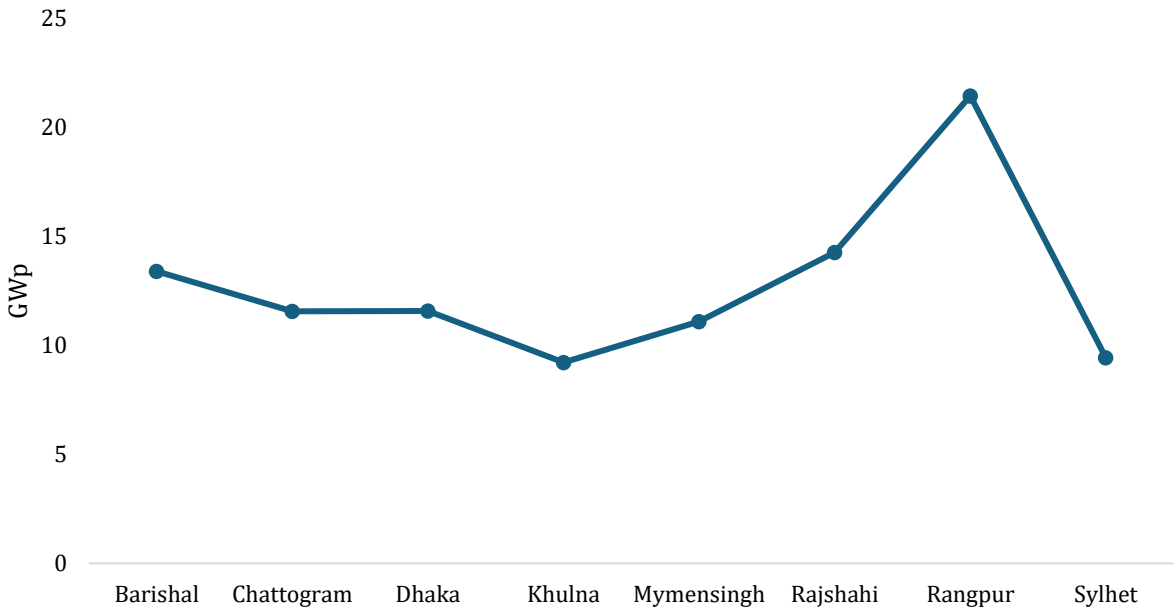
Source: DRE Atlas 2025

5.4 RE Potential in Bangladesh: Opportunities

Rooftop Solar Potential

- Bangladesh has an estimated **rooftop solar potential exceeding 100 GWp**, indicating a massive opportunity for decentralized renewable energy generation across all divisions.
- **Rangpur** holds the **highest** rooftop solar potential at **21.44 GWp**, followed by **Rajshahi** with **14.26 GWp** and **Barishal** with **13.40 GWp** (Figure 11).
- Major economic regions including **Dhaka** and **Chattogram** each possess more than **11.5 GWp** rooftop solar potential, highlighting strong prospects for industrial and commercial solar adoption.
- The widespread distribution of rooftop solar potential across all divisions demonstrates that **rooftop PV can play a critical role** in Bangladesh's smooth renewable energy transition by **reducing land pressure**, fossil fuel dependency, and grid stress.

Figure 11. Potential of Rooftop Solar Across Bangladesh, 2025



Source: DRE Atlas 2025

5.4 RE Potential in Bangladesh: Opportunities

Wind Potential in Bangladesh

- An area of more than 20,000 km^2 of Bangladesh's territory exhibits wind speeds of 5.75–7.75 m/s (Table 11), with a gross wind potential of **over 30 GW**.
  - **Intertidal** Zone: **5.38 GW**
  - **Near-shore** Zone: **9.68 GW**
  - **Off-shore** Zone: **15.06 GW**
- Wind monitoring stations were identified and installed at **22 wind potential locations** across coastal areas, offshore islands, and inland open areas
- The total energy output from the potential wind site could be **1336 GWh** (Figure 12).

Floating Solar Potential in Bangladesh

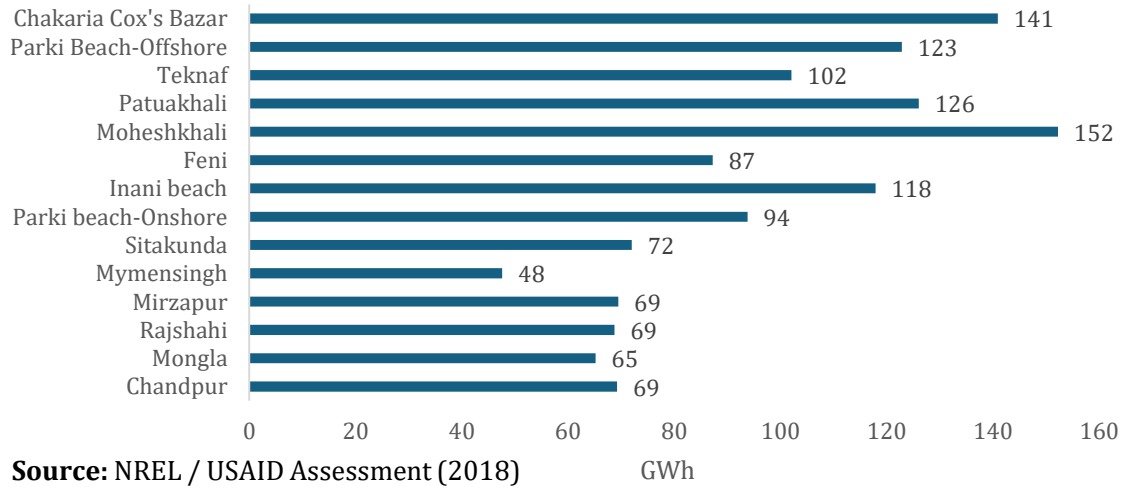
- Bangladesh has the potential of **11GWp FPV**, according a study by International Finance Corporation (IFC).
- By screening of **323 water bodies**, above **25 acres** of available water body available for FPV installation.

Table 11. Average Wind Speed in Potential Location of Bangladesh

Location	Capacity factor (%)	Mean Wind Speed (m/s)
Chandpur	16%	5.08
Mongla	15%	5.24
Rajshahi	16%	4.87
Mirzapur	16%	4.22
Mymensingh	11%	4.16
Sitakunda	16%	4.72
Parki beach-Onshore	21%	5.8
Inani beach	27%	6.1
Feni	20%	5.34
Moheshkhali	34%	6.18
Patuakhali	29%	6.63
Teknaf	23%	6.18
Parki Beach-Offshore	28%	6.58
Chakaria Cox's Bazar	32%	5.62

Source: NREL / USAID Assessment (2018)

Figure 12. Average Energy Output from Potential Site in Bangladesh



Source: NREL / USAID Assessment (2018)

6. Recommendation and Way Forward

6. Recommendation and Way Forward

6.1 Dedicated Budgetary Allocation for RE

- **Establish a Standalone Renewable Energy Development Fund (REDF):** The national budget must treat RE not as a sub-line within the Power Division, but as a **strategic national investment priority** deserving its own fiscal instrument.
- The government should **progressively scale up** direct **ADP allocation** for **RE** starting with a meaningful restoration in **FY2026-27** and escalating annually in proportion to the MW deployment target for that year
- A dedicated, legally **ring-fenced REDF** governed jointly by SREDA, MoF, and Bangladesh Bank **would prevent** the **recurring pattern** of RE allocations being absorbed into general energy spending or dropped entirely in RADP revisions.

6.2 Establish a Dedicated Ministry of Renewable Energy (MRE)

- Historically, when **fossil fuel** and **RE mandates coexist within a single ministry**, **fossil fuels win,** they generate immediate revenue, carry stronger industrial lobbies.
- A standalone Ministry of Renewable Energy **(MRE)** with its own **minister, secretary, budget head, and legislative mandate** would for the **first time give RE voice at the Cabinet table.**

6. Recommendation and Way Forward

6.3 Consolidate SREDA's Functions into the New Ministry with Expanded Mandate and Authority

- SREDA was established in 2012 as a technical agency it lacks regulatory authority, budget control, and inter-ministerial enforcement power; it can **recommend but cannot mandate**, **can plan but cannot fund**, and **can approve but cannot compel grid connection**.
- Under the new MRE, **SREDA should be restructured** into an **RE Regulatory and Implementation Authority (RERIA)** a **statutory body with genuine regulatory teeth**: power to issue RE licences, **set RE procurement standards**, **enforce PPA compliance timelines**, and impose penalties for grid connection delays.

6.4 Publication of Annual Renewable Energy Transition Report (RETR)

- The RETR **should not** be a **collection of project updates**, it should be a **structured analytical framework covering every dimension** of the **RE transition.**
- The reporting framework should cover, at minimum, the following dimensions:
  - Physical Progress
  - Financial Progress
  - Target Tracking
  - Institutional Progress

6. Recommendation and Way Forward

6.5 Complete the Tax Reform: Extend Relief from Inverters to the Entire Solar Value Chain

- Reducing duty only on inverters, while keeping taxes on panels, mounting structures, cables, and BESS, sends a mixed policy signal. Although the government claims to support renewable energy, most parts of the supply chain still face heavy taxation.
- The NBR should adopt a **technology-neutral, full-chain duty waiver** for all RE equipment.

6.6 Make Grid Modernization a Categorical Budget Priority, Not a Residual Allocation

- Variable RE (solar, wind) requires the modernization of grid including real-time balancing, smart metering, forecasting systems, and reactive power management, which have very low share in ADP.

6.7 Comprehensive Wind and FPV Resource Feasibility Study and Initiate Priority Wind & FPV Project Development

- Despite of having a large wind and FPV potential, there are some limitations on implementing them.
- A comprehensive feasibility study is required to understand the practical viability of the installation of large-scale wind-based power plants and FPV plants.

6. Recommendation and Way Forward

6.8 Tender Design Reform

- Introduce a **revolving letter of credit** covering 3–6 months of PPA payment obligations, backed by sovereign or central bank support as the payment security instrument.
- Reinstate the Implementation Agreement as a sovereign guarantee backstop protecting investor commitments and include lender step-in rights upon developer default.

6.9 National Rooftop Solar Programme

- A separate allocation from the development budget should be there for the fast deployment of the rooftop solar under this programme
- Tax or duty for any equipment, parts or item used for the rooftop solar exceeding 5% should be lower than 5%
- A special subsidy can be provided targeting the installation of rooftop solar on the educational and health institutions.
- A tailored, location-specific approach (considering solar radiation potential, geographic distribution of government offices, schools, hospitals) is essential to ensure technical and financial feasibility across diverse regions of Bangladesh

5. Recommendation and Way Forward

6.10 Introduce a Multi-Year RE Fiscal Commitment (Rolling 3-Year Budget)

- A single-year RE allocation creates uncertainty; developers and financiers need forward visibility to commit capital over 15–20-year project lifetimes.
- The government should adopt a rolling 3-year RE budget commitment, a medium-term expenditure framework specifically for RE reviewed annually but guaranteed for 36 months ahead

6.11 Publish an Annual National Budget and Energy Transition Booklet

- **A Single Consolidated Fiscal Picture on RE:** Bring together every budget decision relevant to the energy transition RE allocations, duty changes, subsidy figures, capacity payment obligations, and green finance updates presented not as raw line items but as interpreted fiscal signals showing whether the budget moved Bangladesh closer to or further from its RE targets
- **Accessible, Bilingual, and Publicly Distributed:** Produce the booklet in Bangla and English, designed for policymakers, investors, parliamentarians, and civil society distributed openly and updated annually so that year-on-year comparisons themselves become a living fiscal accountability record

5. Recommendation and Way Forward

6.12 Recommendation on Governments target 10000MW from Solar

- MoPEMR should produce a road/**action plan to execute the 10,000 MW target** by deploying both utility based RE and DRE.
- The land of the cancelled fossil fuel-based power plants and the upcoming **stranded assets due to the phase out of the power plants should be used for renewable energy-based power plants**
- Chinese **technologies, equipment** (panels, inverter, battery) and **investment** could significantly contribute to this additional power generation (example of Pakistan)
- It requires 1662MW installation per annum between January 2026 to December 2030 to achieve this target.

6.13 Agrivoltaics: A Rising Dimension of DRE Potential

- **Conduct a National Agrivoltaic Feasibility and Crop Compatibility Study:** Before scale-up, the government should commission a structured study identifying which crops, soil types, and agroclimatic zones are most compatible with agrivoltaic systems, providing the evidence base for a credible national deployment programme

5. Recommendation and Way Forward

6.14 Subsidy Rationalisation & RE Promotion

- **Phase Down Fossil Fuel Power Subsidies Through a Legislated Annual Reduction Schedule:** The government should enact a statutory subsidy phase-down pathway reducing FF based power generation subsidies by a defined percentage each fiscal year tied to verified RE capacity additions coming online as substitutes so that the subsidy reduction is not an arbitrary austerity measure but a managed fiscal transition.
- **Introduce a Direct RE Promotion Subsidy Modelled on Fossil Fuel Support Mechanisms:** Just as fossil fuel generation receives direct budgetary support through capacity payments, subsidy transfers, and VAT exemptions, the government should introduce an equivalent RE promotion subsidy architecture

6.15 Decentralised Budget Architecture for RE Adoption

- The country's most significant untapped DRE potential lies at the local level. The government should **allocate more** budget for **local government institutions** such as **City Corporations**, **Municipalities**, **Zilla Parishads**, **Upazilla Parishads**, and **Union Parishads** to implement **RE adoption** in a **decentralised manner**, ensuring that RE deployment decisions and implementation authority rest with the institutions closest to the point of energy need

5. Recommendation and Way Forward

6.16 RESCO Recognition & Financing Reform

- The government should grant **RESCOs legal recognition** as **power-producing entities** under **Bangladesh's energy regulatory framework,** entitling them to the **same tax holidays** and **import duty relief** currently available to IPPs so that **foreign and domestic RESCO capital** can **enter** Bangladesh's **RE market** on commercially viable terms without requiring any direct public expenditure.
- The government should **extend the existing duty reform** agenda **to cover RESCO-deployed equipment** ensuring that solar panels, storage systems, and **associated components** procured **under RESCO business models receive the same fiscal treatment** as utility-scale RE projects, **making zero-upfront-cost** industrial solar commercially viable and **removing** the most significant **fiscal barrier** to **foreign RESCO investment** in Bangladesh.

Thank you..!!!