

CPD Power and Energy Study

Power and Energy Sector in the National Budget FY2025 Can the Proposed Measures Address the Challenges?

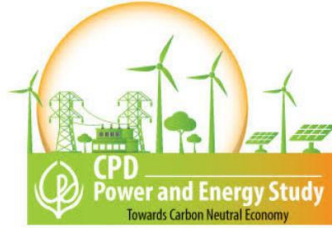
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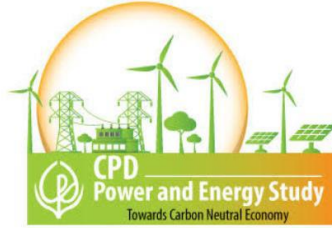


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1. Introduction

1. Introduction

- The National Budget for FY2025 has been **placed in the National Parliament on 6 June 2024**
 - Traditionally, the Power and Energy Sector is **one of the top priority sectors** in the National Budget
- At present, the sector has been confronting **a number of challenges and limitations**
 - These challenges have adversely affected all kinds of economic activities
- **Six issues** can be identified as major crisis faced by the power and energy sector in FY2024
 - I. Increasing over generation capacity
 - II. Continuous power-outage (load shedding) despite having generation capacity
 - III. Slow progress of transmission and distribution system
 - IV. Less attention given towards the renewable energy expansion
 - V. Taking riskier way to ensure supply of energy for power generation
 - VI. Continuous financial losses of public authorities related with power and energy sector
- National budget for power and energy sector needs to be reviewed from **two perspectives**
 - **Sustainability** of power and energy
 - **Energy transition** readiness
- CPD Power and Energy Study **analyses the proposed national budget** for FY2024-25
 - From the above-mentioned perspectives
 - From the perspectives of addressing the attending challenges

1. Introduction

- This budget has a critical importance from the point of view that this is the **first budget** from the newly elected government
 - Important to look into the proposed national budget to identify whether the **commitments made** during the election campaigning and election manifestos **are reflected** into the national budget
 - However, **not all the commitments are aligned** with energy sustainability and energy transition (Table 1)

Table 1: Summary of AL election manifesto on Power and Energy and their Alignment with Energy Landscape

Issues	Pledges	Level of Alignment
Electricity Production, Supply, and Distribution	Uninterrupted and quality power and energy supply will be ensured	Energy sustainability
	Increasing the power generation capacity to 40 GW by 2030 and 60 GW by 2041	Energy anti-sustainability
	The number of transmission lines will be increased to 24000 circuit kilometres	Energy sustainability
	Construction and operation of transmission lines under Public Private Partnership (PPP) will be undertaken	Energy sustainability
Fuel Production, Import, and Supply	Gas and LPG supply will be ensured in the northern and western regions of the country. For this purpose, the state institutions will be made more efficient	Energy sustainability
	The fuel oil refinery capacity of the Eastern Refinery will be increased from 1.5 lakh MT to 4.5 lakh MT	Energy anti-transition

1. Introduction

- It is important to review how the election related commitments are reflected in the National Budget for FY2025

Table 1: Summary of AL election manifesto on Power and Energy and their Alignment with Energy Landscape

Issues	Pledges	
Renewable Energy Production, Supply, and Distribution	10 GW of electricity will be generated from clean energy sources	Energy transition
	The grid will be made suitable for transmission of electricity generated by RE and nuclear power plants	Energy transition
	Import of hydropower from Nepal and Bhutan will be accelerated	Energy transition
Policies and Planning	Retirement of rental and inefficient power plants will be done in phases	Energy transition
	Based on the coal policy, special importance will be given to exploration and extraction of coal and mineral resources	Energy anti-transition

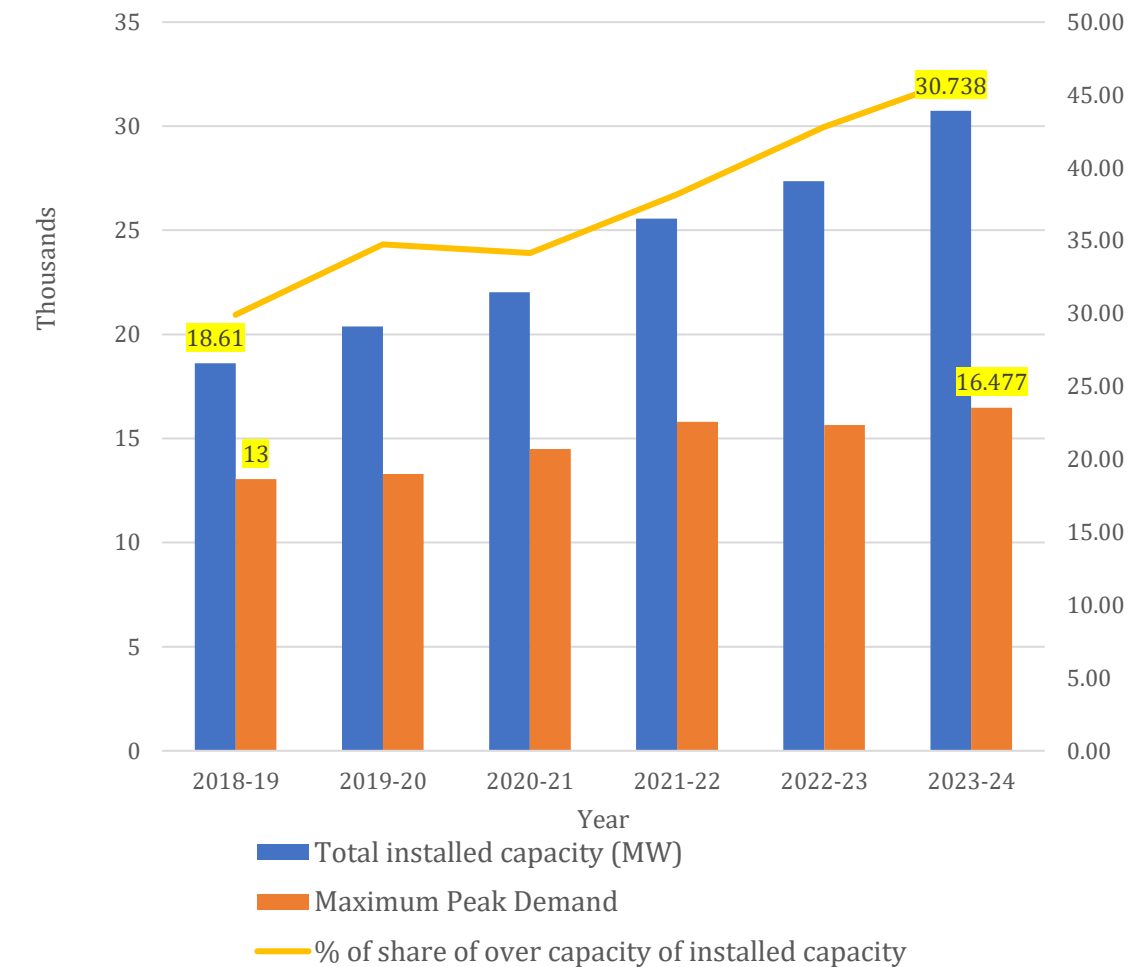
2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.1 Increasing reserve margin caused financial burden

- As of 31 May 2024, Bangladesh's installed electricity generation capacity is **30,738 MW**, with 27,515 MW on-grid and 3,223 MW off-grid (Figure 1)
 - The peak electricity demand stands at **16,477 MW** (Figure 2), resulting in a reserve margin of **14,261 MW**
 - This constitutes **46.4%** of the installed capacity
- Despite significant underutilization, ongoing addition to the grid persists resulting in capacity payment burden
 - According to the CPD estimates electricity demand to reach about **19,377 MW by 2030**
 - Factoring in a 25% reserve margin as proposed by the IEPMP, the projected capacity would be **23,252 MW**, which is lower than the current installed capacity of **30,738 MW**
 - *Further budgetary allocations for fossil-fuel based power generation projects will **only aggravate** the existing overcapacity crisis*

Figure 1: 'Total installed capacity (MW)', 'Maximum Peak Demand', '% of share of over capacity of installed capacity' by 'Year'



Source: BPDB Key statistics

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.1 Increasing over-generation capacity during FY2024

- Given the **balance of payment challenges** and **high energy prices** of imported fossil fuel which likely to continue in the coming years, **reduction of the fossil-fuel** based energy mix and replacing those with renewable energy based on overseas investment would reduce the financial burden of the BPDB.
 - Natural gas has remained** the main energy source for power generation (11859 MW, 38.6%), followed by Fuel oil (7069 MW, 23%) and coal (5107 MW, 16.6%) (**Figure 3**)
 - While **renewable**-based power plant capacity remains low at 1374 MW (**4.5%**) including on-grid and off-grid
- The government paid a total of around **Tk.1.05 trillion in 14 years** as capacity payments to power plant owners up to August 2023, according to State Minister for Power, energy and Mineral Resources.
 - To lower the burden of capacity payment and for transitioning toward renewables,*
 - Budgetary measures should be to limit allocations for new fossil fuel-based generation projects and to increase allocation for renewable based power projects*
 - Policy measures are required to phase-out fossil-fuel based power plants*

Figure 2: Power Generation Scenario during FY2017-24

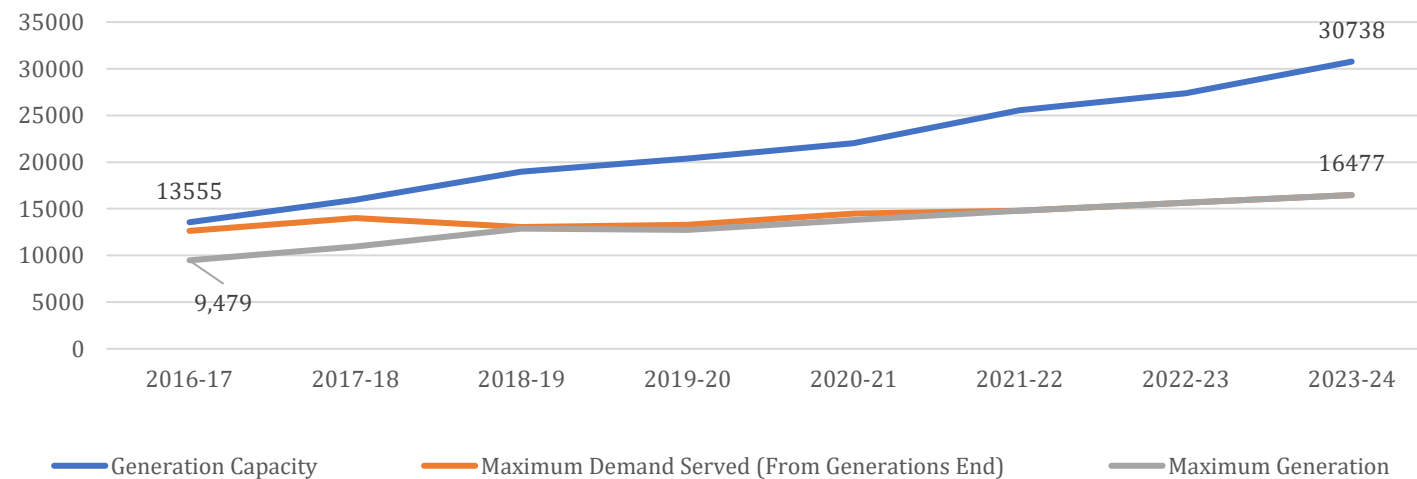
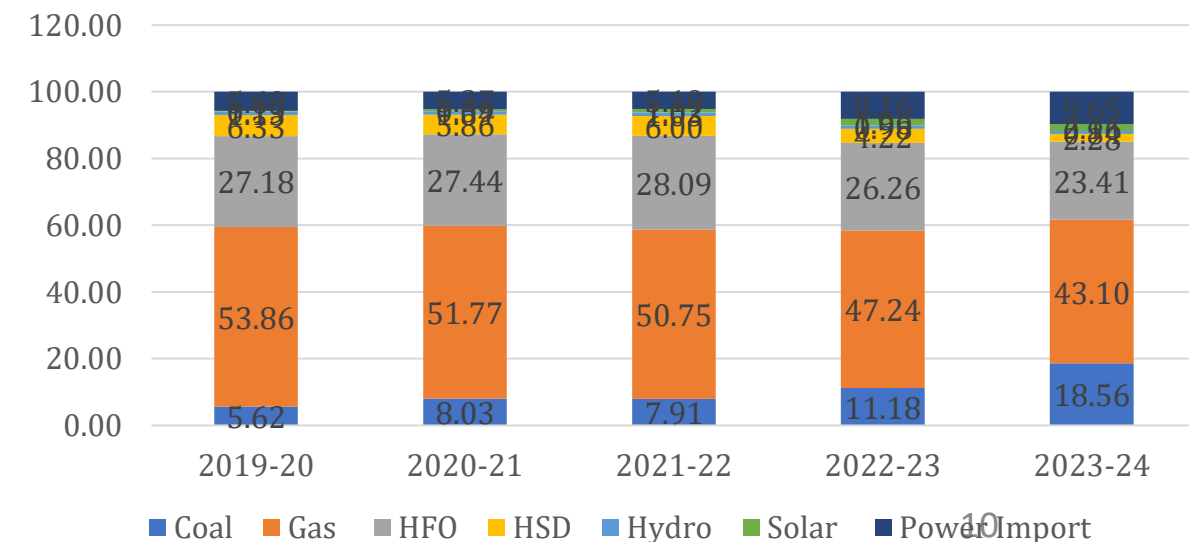


Figure 3: Share of Fuel mix during FY2020-24



Source: BPDB Key statistics

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.2 Continuous load shedding during FY2024 caused economic losses

- Despite having overgeneration capacity, the availability of electricity for economic activities **remain unsatisfactory**
- Electricity disruptions generally stem from supply-demand gap due to two reasons
 - **Fuel shortages**
 - Power outages caused by **lack/poor transmission-substation** grid network
- During FY2024, the demand and supply gap of power generation varied between **1100 MW** in July 2023 to **666 MW** in March 2024 (Figure 4)
 - On a daily basis, regions such as **Mymensingh, Khulna, and Cumilla** experience more power outages relative to other regions in the country (Figure 5)
 - In addition, **Mymensingh, Sylhet, and Cumilla** continues to experience power outages even during the **winter season** when demand is relatively lowest

Figure 4: Monthly Peak Loadshed (MW)

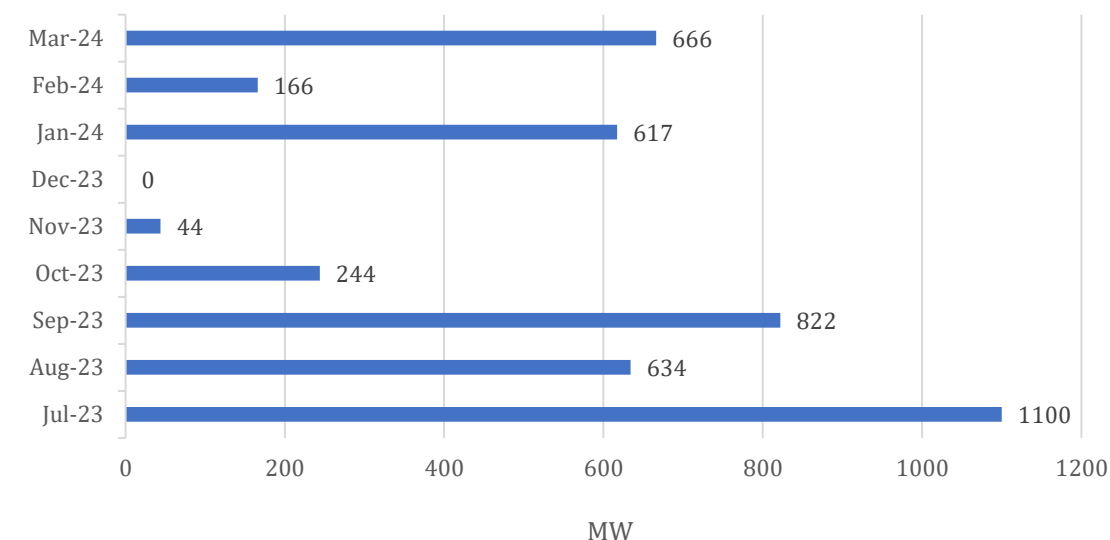
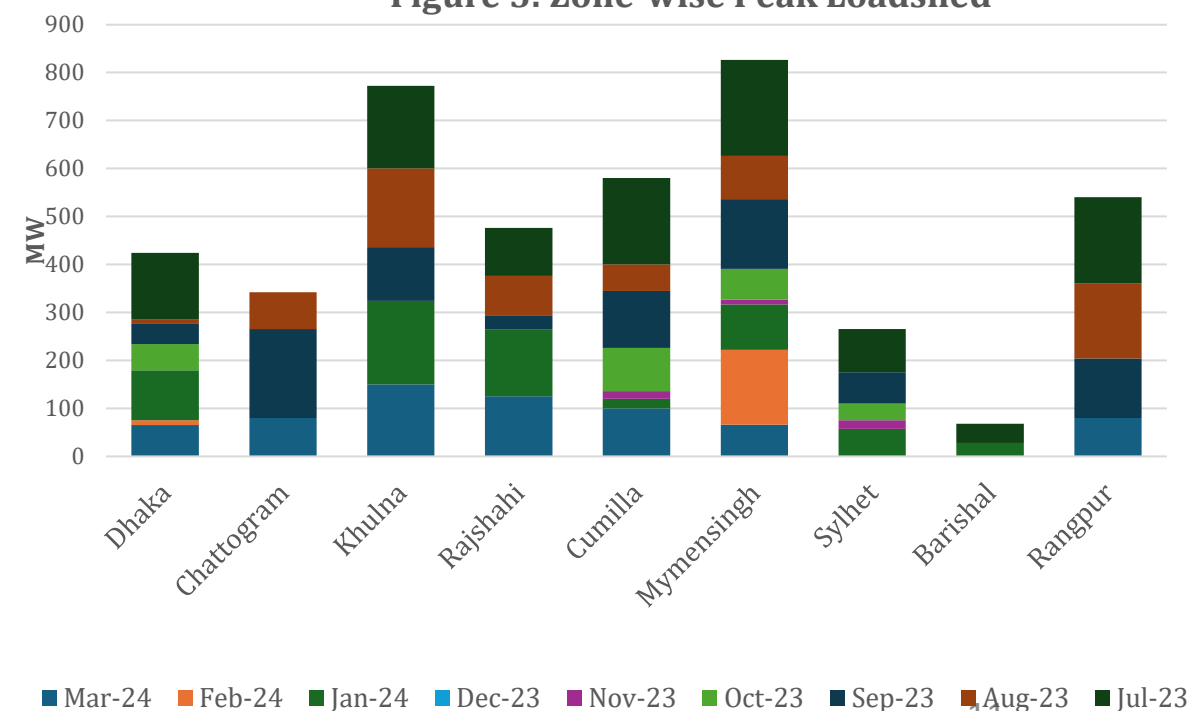


Figure 5: Zone-wise Peak Loadshed



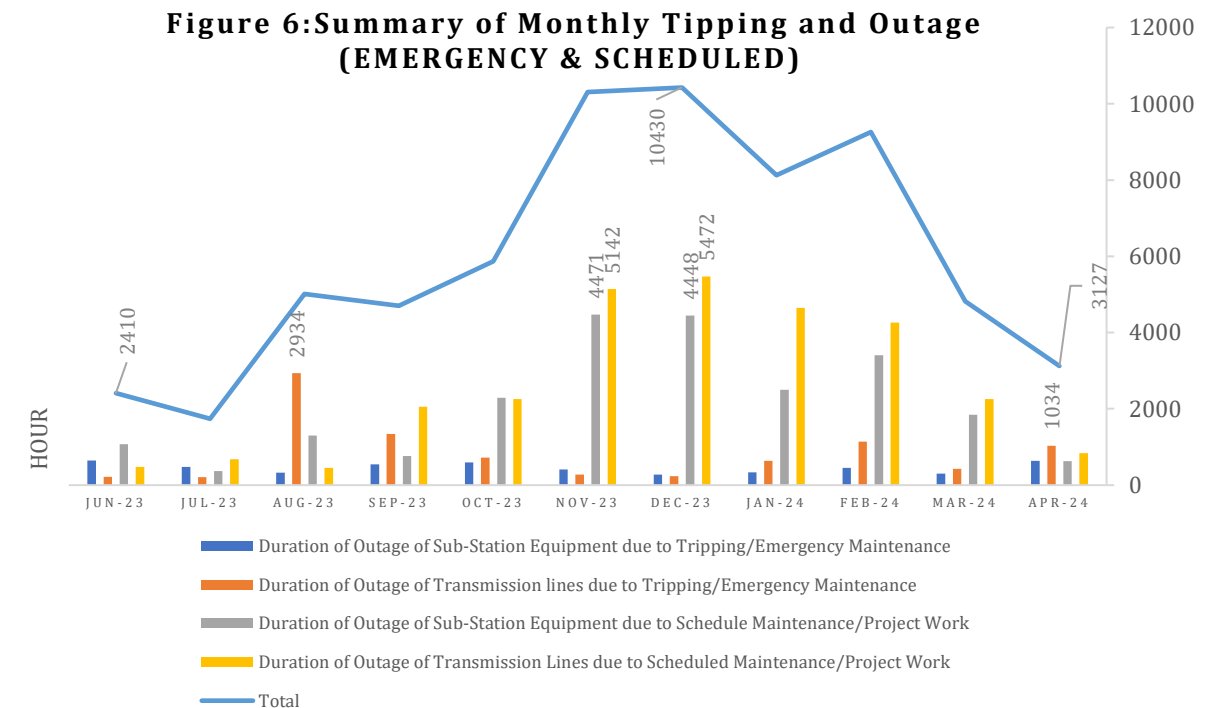
2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.2 Continuous load shedding load-shedding during FY2024

- In addition, interruptions in the transmission grid network rose significantly
 - From around 2,410 hours of electricity outage in June 2023 to 10,430 hours by the end of December and then slowly declining to 3127 hours in April 2024
 - *July 2023*: the PGCB also reported a **partial grid failure** in the Sylhet zone, causing a load shed of 630MW
 - *August 2023*: Prolonged outages primarily caused by tripping and emergency maintenance of transmission lines
 - *November 2023 to January 2024*: Shift in power outages to **maintenance and project work** on the transmission-substation network, possibly influenced by previous emergency tripping incidents.
 - *April*: Outages recur due to **emergency tripping** in the grid system, suggesting recent development efforts may not have fully resolved underlying grid issues

- Considering the ongoing flood, it is anticipated that the South Surma Power Substation in Sylhet will be shut down, potentially resulting in the loss of electricity in several areas

- **Priority** in the National Budget should be given to strengthening **transmission distribution** of electricity
- In addition, projects aimed at **geographical locations** experiencing frequent disruptions, such as Sylhet, Mymensingh, and Comilla, should be actively encouraged and **prioritized**
- To reduce fuel shortage, it is important to **reduce dependence on import of fossil fuel** and to focus on **investing on RE and exploring domestic gas**.



Source: PGCB monthly report

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.3 Taking riskier way to import energy during FY2024

The Financial Burden due to Energy Import

- Compared to the pre-Covid year 2019, the import of crude oil and refined oil has been increased **moderately**
 - However, the **cost incurred for import** of oils have been increased **significantly** to as much as 108.74%
 - Such high import cost has been leading to very high loan and debt of PetroBangla to different international banks and financial institutions

Table: % change in fuel import in FY23 compared to FY19

	% change in imported amount (MT)	% change in price (BDT)	% change in price (USD)
Crude Oil	13.87	80.39	49.40
JP, Kerosine, Octane, HSD	13.29	108.74	-
Furnace Oil	36.71	67.34	-

Disadvantage of Short-Term Credit

- International Islamic Trade Finance Corporation (ITFC) is funding **\$2.1 billion for BPC petroleum product** imports and Petrobangla for LNG import
 - The ITFC will disburse the loan after sourcing funds from various organisations
 - This creates a **risk of unsustainable flow of fund** which could halt at any moment
- Bangladesh has been already struggling to **pay-off its initial debts** which forced the country to turn last year to the IMF for a \$4.7 billion bailout
- The interest rate would be 'Secured Overnight Financing Rate' (SOFR)-**plus 2 per cent**, which currently totals **around 7.31%**
 - The global SOFR rate is 5.3%
- **Paying such a high-cost credit** within a short period (less than one year) **would further aggravate the balance of payment** situation and would further squeeze the capacity of essential borrowing in the future
- *Reduce dependence on such high-cost credit requires **low-cost long-term financing and investment for alternate energy***

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.4 Slow progress of transmission and distribution system during FY2024

- **Transmission Line Development:** From FY23 to FY24, the length of transmission lines increased from 14,717 km to 15,357 km, marking a growth of 4.3%, compared to 6.0% and 8.2% from the previous fiscal years.
- **Distribution Line Development:** FY24, there was an increase to 643,000 km, demonstrating a 2.2% growth. This is an improvement, considering the previous year's stagnation, against 7.9% growth from FY20 to FY21.
- **Grid Substation Development:** Grid substation capacity saw a substantial increase from 61,525 MVA in FY23 to 68,564 MVA in FY24, with an 11.4% growth rate, consistent with the rate from FY21 to FY22.
- The fluctuating growth rates in the distribution and transmission systems reveal a **lack of clarity** in government strategies for sustainable power solutions.
- *There is a need for greater emphasis on enhancing the transmission and distribution networks to fully leverage the existing generation capacity and to prepare for future demands.*

Table 2: Progress of transmission and distribution system during FY20 and FY24

Year	Transmission line (Km)	Progress in transmission line (%)	Grid substation capacity (MVA)	Progress in grid substation capacity (%)	Year	Distribution line (Km)	Progress in distribution line (%)
FY20	12283	-	45194	-	FY20	567000	-
FY21	12836	4.5	50359	11.4	FY21	612000	7.9
FY22	13889	8.2	56682	12.6	FY22	629000	2.8
FY23	14717	6.0	61525	8.5	FY23	629000	0.0
FY24 (Up to March)	15357	4.3	68564	11.4	FY24 (Up to March)	643000	2.2

Source: Authors' compilation of BPDB monthly reports

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.5 Less attention given towards the renewable energy expansion

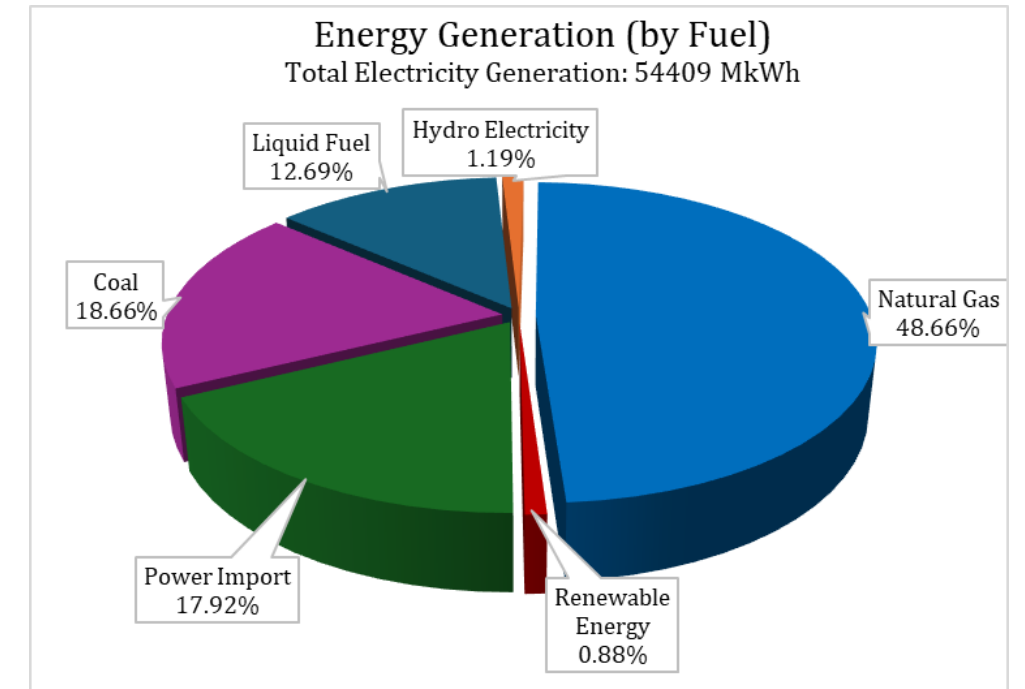
- Against the target of 40% of RE by 2040, current RE generation capacity is **only 4.5%** while the actual generation is much lower (Table 3)
- According to CPD estimates, 40% of RE by 2041 indicates **14,000 MW** of electricity
 - Considering the current capacity of 1374MW, an additional **12,626MW** worth of RE investment will be required
- As per BPDB, a total of **4,850 MW** will be generated from renewable energy-based power generation by **2027** (Table 4)
- To achieve 40% renewable energy by 2041, an additional **7776MW** worth of RE based power generation capacity needs to be installed between 2028-2041
- As renewable energy is variable energy, the **existing grid of Bangladesh can not integrate** renewable energy

Table 3: Generation Capacity of RE based Power Plants

Technology	Off-grid (MW)	On-grid (MW)	Total (MW)
Solar	373.82	705.99	1079.82
Wind	2	60.9	62.9
Hydro	0	230	230
Biogas to Electricity	0.69	0	0.69
Biomass to Electricity	0.4	0	0.4
Total	376.91	996.89	1373.81

Source: SREDA Website

Figure 7: Energy Generation (By Fuel)



Source: Bangladesh Economic Review FY 2025

Table 4: Planned RE Based Power Generation (MW)

Year	2024	2025	2026	2027	Total
Public	178	88	453	222	941
Private	359	1182	2038	330	3909
Total	537	1270	2491	552	4850

Source: BPDB Progress Report

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.5 Less attention given towards the renewable energy expansion

- There is a tendency to not provide enough attention towards the expansion of renewable Energy based power generation as well
- During FY2024 a **total of 13-16 RE based power plants** were at different levels of implementation with combined capacity of 477 MW.
 - During the **first half of FY2024, no renewable energy- based power plants** were fully operational and on time
 - Almost all the power plants were **delayed** in terms of being fully operational
- ***More budgetary allocation needs to be ensured for speedy expansion of the renewable energy***
- ***Renewable energy friendly fiscal and budgetary incentives should be proposed and recommended***
- ***The integration of renewable energy into the grid has a lot to do with the upgradation of transmission and distribution system***

Table 5: RE based Power Plants Currently Under Development

Progress Status	Number of Power Plants in Q1 of FY24	Number of Power Plants in Q2 of FY24	Number of Power Plants in Q3 of FY24
Total	13	21	16
Fully Operational on Time	0	0	2
Fully Operational but Delayed	3	0	0
Partially Operational but on Time	1	0	3
Partially Operational but Delayed	0	2	0
Delayed	9	8	10
Construction Starts	N/A	1	0
Projects Approved	N/A	10	1

Source: BPDB Progress Report

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.6 Continuous Financial Loss of Public Authorities in FY2024

- The **largest increase in loss** is projected for BPDB for FY25
 - This represents a **nearly 196%** increase in the budgeted loss or a change of -11,989 crore BDT

Table 6: Net Income of government organizations during FY23 and FY25

Organizations	FY25 (According to BFY25)	FY24 (According to RBFY24)	FY24 (According to BFY24)	FY23 (According to Actual FY23)
BPDB	-18,106.3	-6,117.2	-5,219.5	-11,166

Source: Authors' compilation from the SOE Budget Summary FY25

- The substantial net loss of BPDB is largely due to **non-revenue generating expenses**, such as **capacity charges**, which significantly inflate operational costs
 - Despite only a **20% increase in total generation cost** from the previous year, these expenses continue to strain BPDB's financial profile
- *The net loss has to be managed through **subsidy or debt, or both**. However, it remains a concern **whether the institution has enough financial depth** to facilitate such a huge net loss through debt*
 - *Review of its expenditure on non-revenue generating activities and **prioritize initiatives that either reduce these costs or convert them into revenue-generating operations***

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.6 Continuous Financial Loss of Public Authorities in FY2024

- Petrobangla, BPC units, and BEREC continue to showcase financial resilience.
 - Despite a decline, BOGMC remains profitable.
 - **BPC units exhibit steady profit growth** compared to previous fiscal years
 - BEREC also reports a slight profit increase in FY25 over Revised FY24, although still below FY23 levels
- **BPC shows a significant budgetary reversal**, from a profit in the Revised FY24 Budget to a projected loss in FY25, indicating a negative change of 9,404.5 crore
 - Notably, in the proposed FY24 budget, they initially proposed a loss, but the Revised FY24 Budget shows a profit, highlighting a positive change in their financial performance
- This suggests an alarming tendency of the BPC
 - They propose increasing debt equity ratio whereas their debt equity ratio can be kept lower and they **have been performing at a lower debt equity ratio** for past years

Table 7: Net Income of government organizations during FY23 and FY25

Organizations	FY25 (According to BFY25)	FY24 (According to RBFY24)	FY24 (According to BFY24)	FY23 (According to Actual FY23)
Petrobangla	277.8	414.6	448.8	501.2
BPC	-5,563	3,841.5	-10,019	4,586.1
BPC Units	1,102.3	1,033.9	905.7	1,067.8
BEREC	21.8	20.4	8.1	40

Source: Authors' compilation from the SOE Budget Summary FY25
 Note: BOGMC – Bangladesh Oil, Gas and Mineral Corporation

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.6 Continuous Financial Vulnerability of public authorities in FY2024

- Following the net loss of BPDB, the debt-equity ratio of **111:-11 in FY25** implies that for every 100 units of equity, it has 111 units of debt, effectively making the equity negative, reflecting **severe financial distress and an unhealthy level of debt**
 - BPDB's negative equity indicates its liabilities exceed assets by 11 units
 - It might be attributed to **non-revenue generating expenses** such as capacity payments which in turns increases the liabilities
 - This is because BPDB has been **incurring debts for payment** purpose

Table 8: Debt-equity ratio of government organizations during FY23 and FY25

Organisations	FY25 (According to BFY25)	FY24 (According to RBFY24)	FY24 (According to BFY24)	FY23 (According to Actual FY23)
BPDB	111:-11	101:-1	98:2	98:2

Source: Authors' compilation from the SOE Budget Summary FY25

2. Major Challenges Confronted by the Power and Energy Sector during FY2024

2.6 Continuous Financial Vulnerability of public authorities in FY2024

- Petrobangla has been in a dire financial situation, with a **heavily skewed debt-equity ratio of 133:-33** in the proposed FY24 budget. Although still negative, the debt-equity ratio is moving in a better direction
- **BPC has maintained** a relatively stable debt-equity ratio, indicating efforts to keep its financial structure balanced. The consistency between FY23 and FY25 reflects a positive trend, though the debt level remains somewhat high
- *Standard practice: implement **robust debt management strategies** that include refinancing options, improved terms on existing debts, and potentially restructuring debt to more manageable levels*
 - *Moreover, **additional asset generating fund allocation** will improve the financial distress*

Table 9: Debt-equity ratio of government organizations during FY23 and FY25

Organisations	FY25 (According to BFY25)	FY24 (According to RBFY24)	FY24 (According to BFY24)	FY23 (According to Actual FY23)
Petrobangla	133:-33	134:-34	184:-84	135:-35
BPC	72:28	63:37	94:6	64:36
BPC Units	82:18	82:18	78:22	81:19
BERC	-11:111	-6:106	-13:113	0:100

Source: Authors' compilation from the SOE Budget Summary FY25

3. Reflection of the Power and Energy Sector in the Budget Speeches

3. Reflection of the Power and Energy Sector in the Budget Speeches

3.1 Reflection of the Power and Energy Sector in the National Budget Speech for FY2025

- In his budget speech, the finance minister highlighted **several budgetary measures** related to power and energy sector
 - Expansion of power generation capacity, distribution and transmission line, renewable energy, domestic recourse exploration are some of the key areas addressed in the national budget speech

Table 10: Reflection in the national budget speech for FY2025

Issues	Commitments for FY2025	Perspectives on energy landscape
Power Generation Expansion	<ul style="list-style-type: none"> • Power generation target is set at 40,000 MW by 2030 and 60,000 MW by 2040 	Energy anti-sustainability
Power Transmission and Distribution	<ul style="list-style-type: none"> • Smart grid: By 2041, Smart grid will be established 	Energy Transition
Renewable Energy Expansion	<ul style="list-style-type: none"> • It is targeted to generate 40% of renewable energy by 2041 • An investment allocation: TK. 100 crore was proposed to expedite renewable energy 	Energy Transition
Gas exploration	<ul style="list-style-type: none"> • BAPEX plans to drill and workover 48 wells under Petrobangla between January 2023 and December 2025 to explore and extract oil/gas in onshore areas to meet the increasing gas demand of the country • Considering the importance of extracting marine resources and its fair use, allocation of Tk. 100 crore for research and development activities have been proposed in this sector 	Energy Sustainability

3. Reflection of the Power and Energy Sector in the Budget Speeches

3.1 Reflection of the Power and Energy Sector in the National Budget Speech for FY2025

Issue	Commitments for FY2025	Perspectives on energy landscape
Fiscal incentives	<ul style="list-style-type: none"> • Petroleum Products: To align the value of the furnace oil with the international market price the budget proposes to fix the minimum value for furnace oil as USD 480 per Metric Ton (MT) 	Anti-energy transition
	<ul style="list-style-type: none"> • CNG/LPG filling station: At present, materials used for establishing or operating CNG/LPG stations can be imported at a concessionary duty of only 3% • Reduction in the facility was proposed, increase of the customs duty to 5% for imports under this notification was recommended 	Anti-energy transition
	<ul style="list-style-type: none"> • Amendment of notification related to Rampal power plant and rental power companies: Presently different types of power generation companies can import their plant, equipment, and erection materials totally duty free (0%) • As a measure of rationalizing tax expenditure, the budget proposes reduction of benefit and proposes to impose 5% CD for imports of such items by power generation companies. • The budget proposes to keep the notification in force till June 30, 2028 	Anti-energy transition

- The speech is **full of contradiction from energy sustainability and energy transition** points of view.
 - Some important issues that required very distinctive fiscal measures are **not being addressed** in the budget speech such as **fossil fuel phaseout, retirement of rental quick rental power plants, ending capacity payment and incentivizing renewable energy** through fiscal measures etc.

3. Reflection of the Power and Energy Sector in the Budget Speeches

3.2 Follow-up Status of Activities Mentioned in the National Budget Speech of FY2024

- In the budget speech of FY2024, budgetary measures and propositions were made on addition of generation, transmission and distribution capacity, power import, renewable energy expansion and gas exploration
- However, the proposed targets and commitments do not align with the initiatives and activities taken during the ongoing fiscal year

Table 11: Follow-up Status of Activities Mentioned in the National Budget Speech of FY2024

Issue	Commitments for FY2024	Status of Progress
Power Import	<ul style="list-style-type: none"> • As a part of importing 9000 MW of electricity from neighboring countries by 2041 • Signing of an agreement for import of 500 MW electricity from a hydroelectric power plant to be constructed in collaboration with Nepal was said to be at final stage in FY2024 budget speech 	<ul style="list-style-type: none"> • Even in 2024, no progress has been made and it is still in the final stage
Power Transmission and Distribution	<ul style="list-style-type: none"> • In case of transmission line, the target to expand the transmission lines to 28,000 km by 2030 was mentioned. • However, the progress is still not enough 	<ul style="list-style-type: none"> • From 2009 to 2024, only 7357 km of transmission line has been increased • The transmission line needs to be increased by 12,643 km in next 6 years to attain the target
Renewable energy expansion	<ul style="list-style-type: none"> • A renewable energy target of 10% of total electricity generation by 2030 • By 2041, 40% of the total electricity production from clean energy was proposed 	<ul style="list-style-type: none"> • The notion clean energy is faulty itself as it includes fossil fuels in disguise of advanced technologies

3. Reflection of the Power and Energy Sector in the Budget Speeches

3.2 Follow-up Status of Activities Mentioned in the National Budget Speech of FY2024

Issue	Commitments for FY2024	Status of Progress
Fuel mix	<ul style="list-style-type: none"> • Usage of environment friendly fuel for power generation was promoted and recommended. • In order to diversify the use of energy in power generation in addition to setting up gas-based power plants, emphasis is being laid on coal, LNG, liquid fuel, dual-fuel, nuclear power plants and renewable energy-based power generation 	<ul style="list-style-type: none"> • Not enough measures have been taken to diversify the fuel mix • Dependance on LNG import based power generation has been increased
Gas exploration	<ul style="list-style-type: none"> • The last budget speech included the initiative to dug 46 gas wells by December 2024 	<ul style="list-style-type: none"> • But only 8 gas wells were explored so far
Fiscal incentive	<ul style="list-style-type: none"> • Necessary amendment in the notification regarding concessional facility on import of coal for use in power generation plants were made 	

3. Reflection of the Power and Energy Sector in the Budget Speeches

3.3 Oversight of the Parliamentary Standing Committee of Power Energy and Minera; Resources

- The activities of the Ministry of Power Energy and Mineral Resources **are to be oversighted** by the National Parliament
 - Only two meetings were held of the Parliamentary Standing Committee on Power, Energy and Mineral Resources during FY2024 (26 September 2023 and 21 April 2024)
- **Little public reporting** about the meeting agenda, discussion and decision of the meeting reflecting weak role played by the standing committee
 - **Limited number of meetings** of the standing committee indicates its weak functionality

Meetings of the Standing Committee of Power Energy and Mineral Resources during FY2024

Meeting date	Meeting agenda
Meeting held on 26 September 2023	a) Update and review the progress of last meetings decisions
	b) Discussion on how to reduce load shedding in the REB areas
	c) Discussion on status of progress of implementation of coal, liquid fuel and natural gas related power plants
Meeting held on 21 April 2024	a) Introduction with the staffs of the power, energy and mineral resources departments and associated organizations

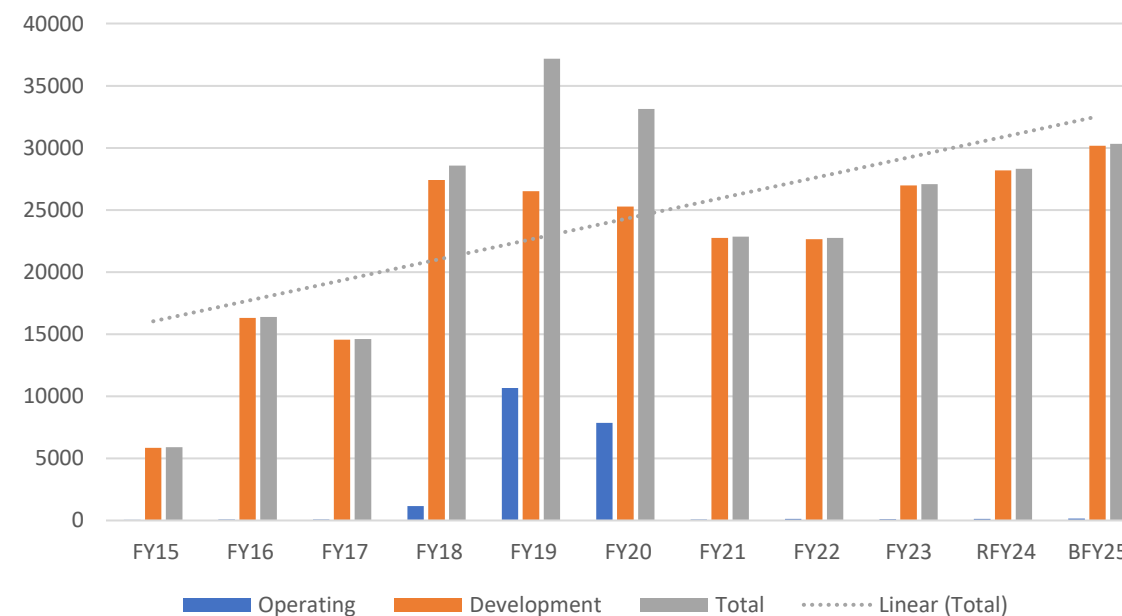
4. Power and Energy Sector in the National Budget FY2025

4. Power and Energy Sector in the National Budget FY2025

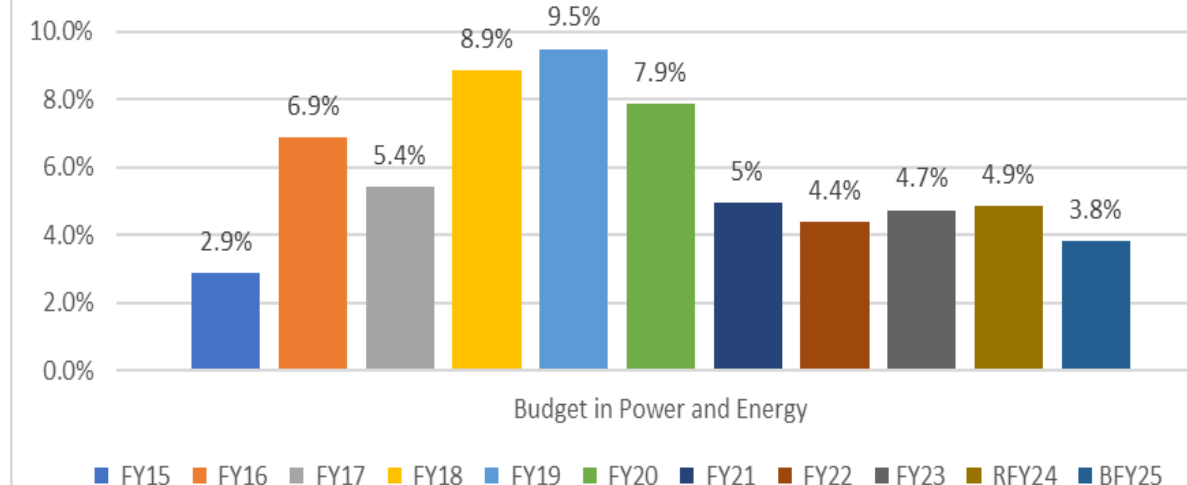
4.1 Overview

- The Power and Energy sector in the proposed budget for FY2024-25 has received major share of budget allocation
 - In last one decade, the budgetary allocation of this sector shows a linear upward trend
- In FY2024-25, the Power and Energy sector has received an allocation of Tk. 30,317 crore (**increased by 7% from RFY24**)
 - This accounts for **3.8% of FY25** total budget, lower than that of FY24 revised budget (**RFY24: 4.6%**)
 - Both the operating and development budget for FY25 have increased compared to the revised budget for FY24 by 11% and 7% respectively
- The **power division gets the lions** share of total budget allocation
 - There is an upward trend in the allocation over the last 5 years
- As much as 96.5% of total budget for the ministry is being allocated for the power division in the proposed budget for FY2024-25
 - This indicates the overall priority of the power sector under the power and energy sector development in the country

Figure 8: Power and Energy Sector Budget



Share of Power and Energy in National Budget (% of the total budget)

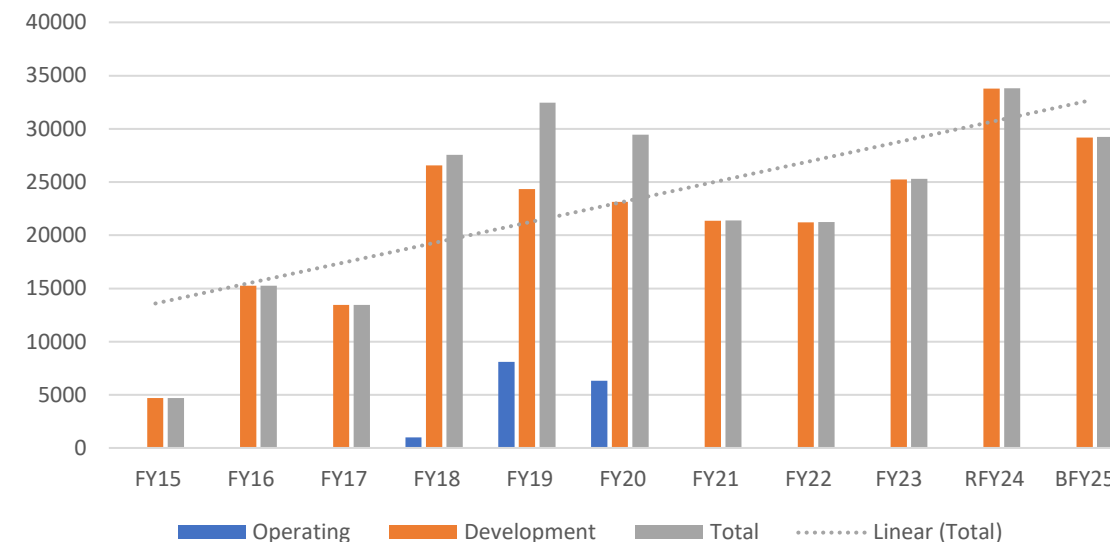


4. Power and Energy Sector in the National Budget FY2025

4.2 National Budget for Power Division

- The allocation for power division has increased by 7.56% compared to R FY24 mainly because of higher allocation for the operating budget (10.42%)
 - Development budget had a lower rise of 7.5% compared to the last year
- Compared to last year, the number of generation related projects have decreased (from 17 to 13)
- The number of **carry-over projects have decreased** as well (from 29 to 28)
 - Majority of the projects** are in concluding phase whose number also increased (from 34 to 41)
- FY25 budget **didn't give due importance** towards generation of renewable energy-based power generation
- In FY25, there are **allocation for only 3 renewable energy-based** projects

Figure 10: Budget of the Power Division over the years



Source: Budget in Brief, Ministry of Finance

Table 11: Project completion status by types of project (in number)

Project	New	Continuing	Concluding	Carry-over	Total
Generation	0	3	7	3	13
Transmission	0	3	10	3	16
Distribution	0	7	12	9	28
Total	0	13	29	15	57

Source: Authors' calculation from the ADP FY25

4. Power and Energy Sector in the National Budget FY2025

4.2 National Budget for Power Division

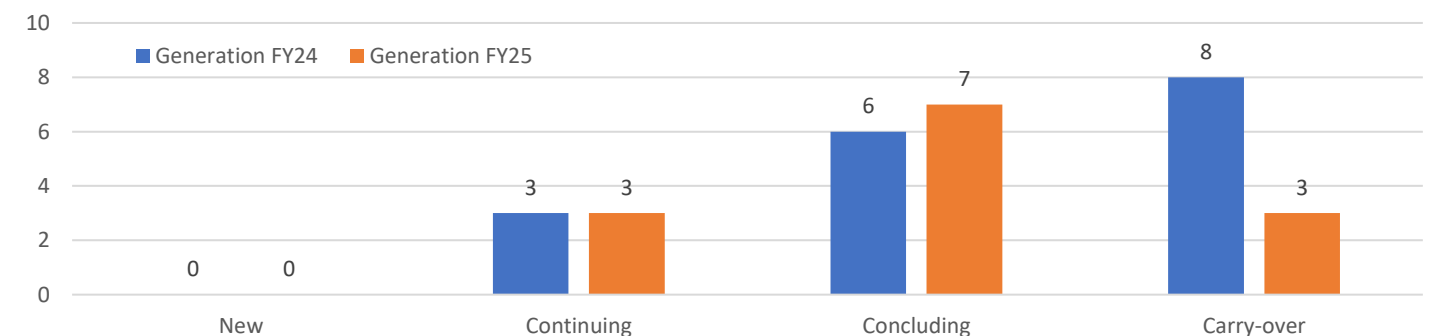
4.2.1 Generation

- In FY24, there are **total 13 generation related projects**
 - Of these, 3 are carry-over projects, 7 are concluding and 3 are continuing projects
 - It is appreciated that not only the number of generation related projects decreased but also the number of carry-over projects decreased (from 8 to 3)
- It is also positive that **no new generation-based projects** have been approved for FY25
- Projects like “**Rauzan 400MW combined cycle power plant**” **needs reconsideration** since the completion rate is 0% but it is already a carry-over project
- **SREDA has yet to disclose** the findings of the renewable energy resource assessment and piloting projects
- Since the **Matarbari power plant** is close to completion and there are **enough land space yet to utilise**, those lands can be used for solar and wind related projects

Table 12: Selected Generation Projects

Name of the Project	Maximum Completion Rate	Organisation	Project Status
Ghorashal 4th unit repowering programme (2nd revised)	85%	BPDB	Carry-over
Ghorashal 3rd unit repairing programme	100%	BPDB	Continuing
Saidpur 150MW +-10% simple cycle (HSD) based power plant construction	97%	BPDB	Concluding
Matarbari 2*600 MW ultra super critical coal fired power project	94%	CPGCBL	Continuing
Rupsha 800MW combined cycle power plant	54%	NWPGCL	Concluding
Project of Gas pipeline for Mymensingh combined cycle power station from Dhanua to Mymensingh	95%	RPC	Concluding
100 MW solar power plant building in Madarganj	95%	RPC	Concluding
Rauzan 400MW combined cycle power plant	0%	BPDB	Carry-over
Mymensingh 360MW dual fuel combined cycle power plant project	100%	RPC	Concluding
Technical support project for renewable energy resource assessment and piloting	94%	SREDA	Carry-over

Figure 11: Generation Projects in FY24 and FY25



Source: ADP of FY24

4. Power and Energy Sector in the National Budget FY2025

4.2 National Budget for Power Division

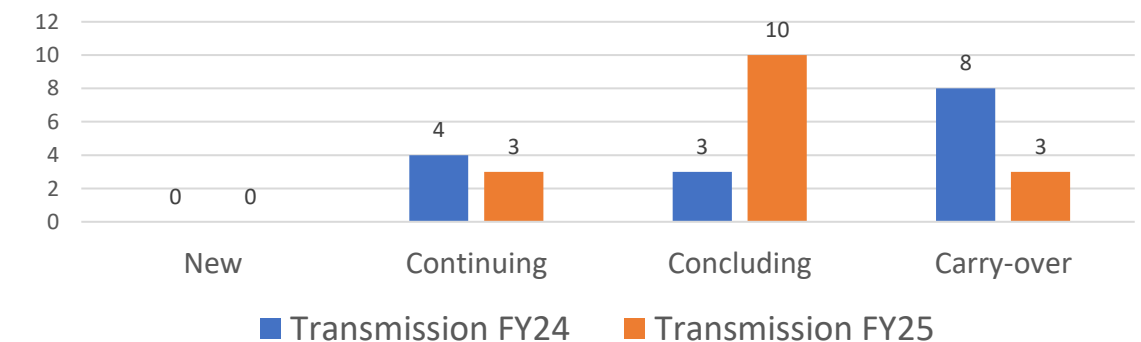
4.2.2 Transmission

- In FY25, there are total **16 transmission related** projects
 - Of these, 3 are carry-over projects, **10 are concluding** and 3 are continuing projects
 - **8** of the 16 projects are concerned with **grid upgradation**
- Compared to FY24, the number of **carry-over projects decreased** (from 8 to 3) and the number of concluding projects increased (from 6 to 10)
- Many concluding projects have low completion rate which **could become carry-over projects** in the next year
 - Projects with less than 50% completion rate by the end of FY25 is concerning since it will defeat the purpose of reducing carry-over projects
- **More allocation is needed to quickly implement** the transmission related projects
 - The 3 carry-over projects have already achieved more than 50% completion rate
 - Completing these 3 projects is an emergency to maintain the equal distribution of power over the country

Table 13: Selected Transmission Projects

Name of the Project	Maximum Completion Rate	Organisation	Project Status
Replacing old AIS Ashuganj 132KV substation by new GIS 132KV substation	78%	PGCB	Carry-over
Power grid network strengthening project under PGCB (Revised)	63%	PGCB	Carry-over
Bangladesh power system reliability and efficiency improvement	49%	PGCB	Concluding
Enhancement and capacity enhancement of eastern grid network	84%	PGCB	Carry-over
Feasibility test and technical assistance project for Madunaghat-Bhulta 765KV transmission line	19%	PGCB	Concluding
Dhaka and western grid transmission network enhancement project	49%	PGCB	Concluding

Figure 12: Transmission Projects in FY24 and FY25



Source: ADP of FY24

4. Power and Energy Sector in the National Budget FY2025

Table 14: Selected Distribution Projects

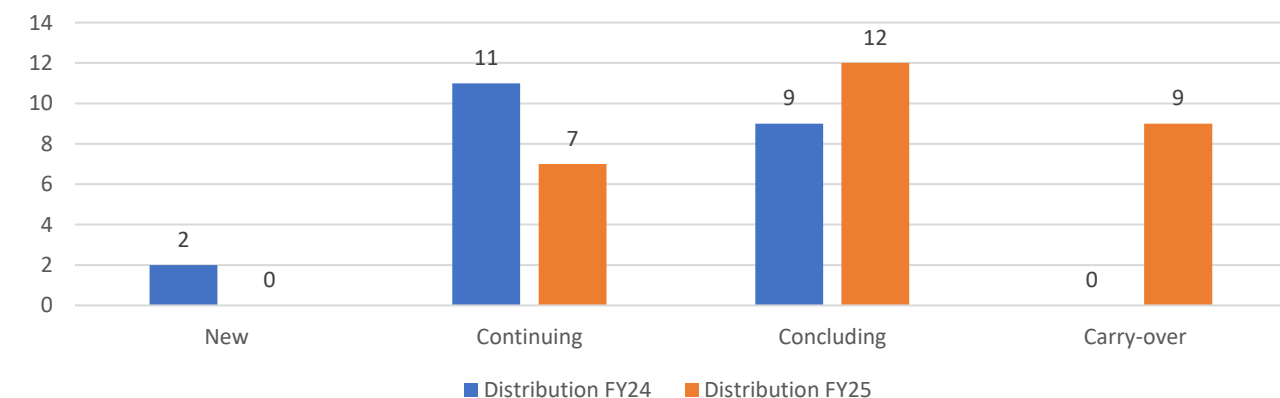
Name of the Project	Maximum Completion Rate	Organisation	Project Status
Power distribution system development projects, Sylhet division (2nd revised)	90%	BPDB	Carry-over
Pre payment metering for distribution of Cumilla and Mymensingh	98%	BPDB	Carry-over
Agriculture irrigation through solar driven pump	75%	BREB	Concluding
Expansion and upgradation of electricity distribution system in Western zone (2nd revised)	95%	OZoPaDiKo	Carry-over
Smart pre payment meter supply and establishment programme in DESCO region	99%	DESCO	Carry-over
0.85 million smart pre payment meter establishment programme in the area under DPDC	84%	DPDC	Concluding
Pre paid metering project for six NOCS division under DPDC	89%	DPDC	Carry-over

4.2 National Budget for Power Division

4.2.3 Distribution

- The number of distribution related projects has decreased in the upcoming fiscal year **-from 30 to 28**
 - Of these, 9 are carry-over projects, 12 are concluding and 7 are continuing projects
 - The number of concluding and carry-over projects have increased
- 6 projects are related with metering** but 3 of them are already **carry-over**
 - The initiative for meter upgradation is praiseworthy but being carry-over creates a burden on the power division
- The completion rate of all the concluding projects are above 70% at least which is a **good sign**
- The number of projects **outside of Dhaka has increased** and zonal prioritisation are being given
- Focus on T&D projects have increased** compared to FY24
 - However, unless more allocations are made, the projects could soon be turned carry-over by the next fiscal year

Figure 12: Distribution Projects in FY24 and FY25



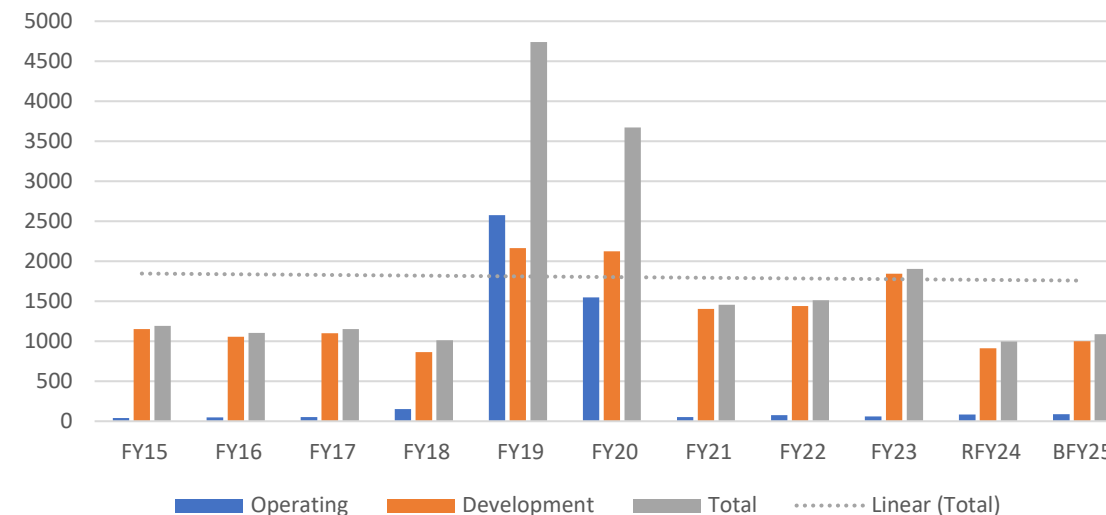
Source: ADP of FY24

4. Power and Energy Sector in the National Budget FY2025

4.3 National Budget for Energy and Mineral Resource Division

- In FY2025, Energy Sector has received an allocation of Tk. 1086 crore (Decreased by 4.9% from RFY24)
 - This accounts for **0.13%** of total FY25 budget, lower than that of revised FY24 budget (RFY24: **0.16%**)
 - Even though the **operating budget increased by 10.5%**, development budget decreased by 6.1%
- The number of **project has increased from 34 to 35**
 - The number of carry over project remained same but the number of concluding project decreased
 - High number of concluding and carry-over projects** is a concerning issue since it indicates the inefficiency and the lack of proper and required allotment in the energy sector
- A **new project has** been undertaken concerning **well workover**
 - This is appreciated since it focuses on local gas exploration

Figure 13: Budget of the Energy and Mineral Resources Division over the years

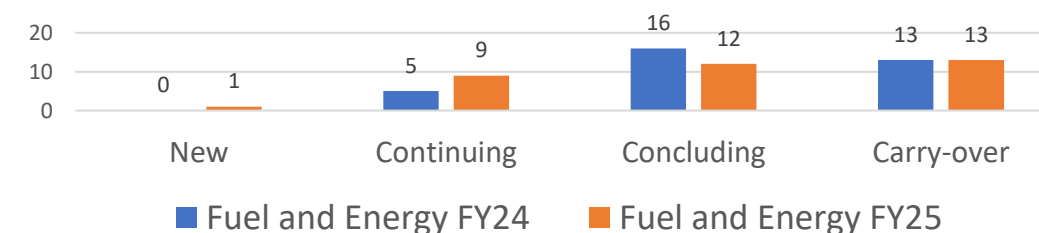


Source: Budget in Brief, Ministry of Finance

Table 15: Project completion status by types of project (in number)

Project	New	Continuing	Concluding	Carry-over	Total
Fuel and Energy	1	9	12	13	35

Figure 14: Fuel and Energy Projects in FY24 and FY25



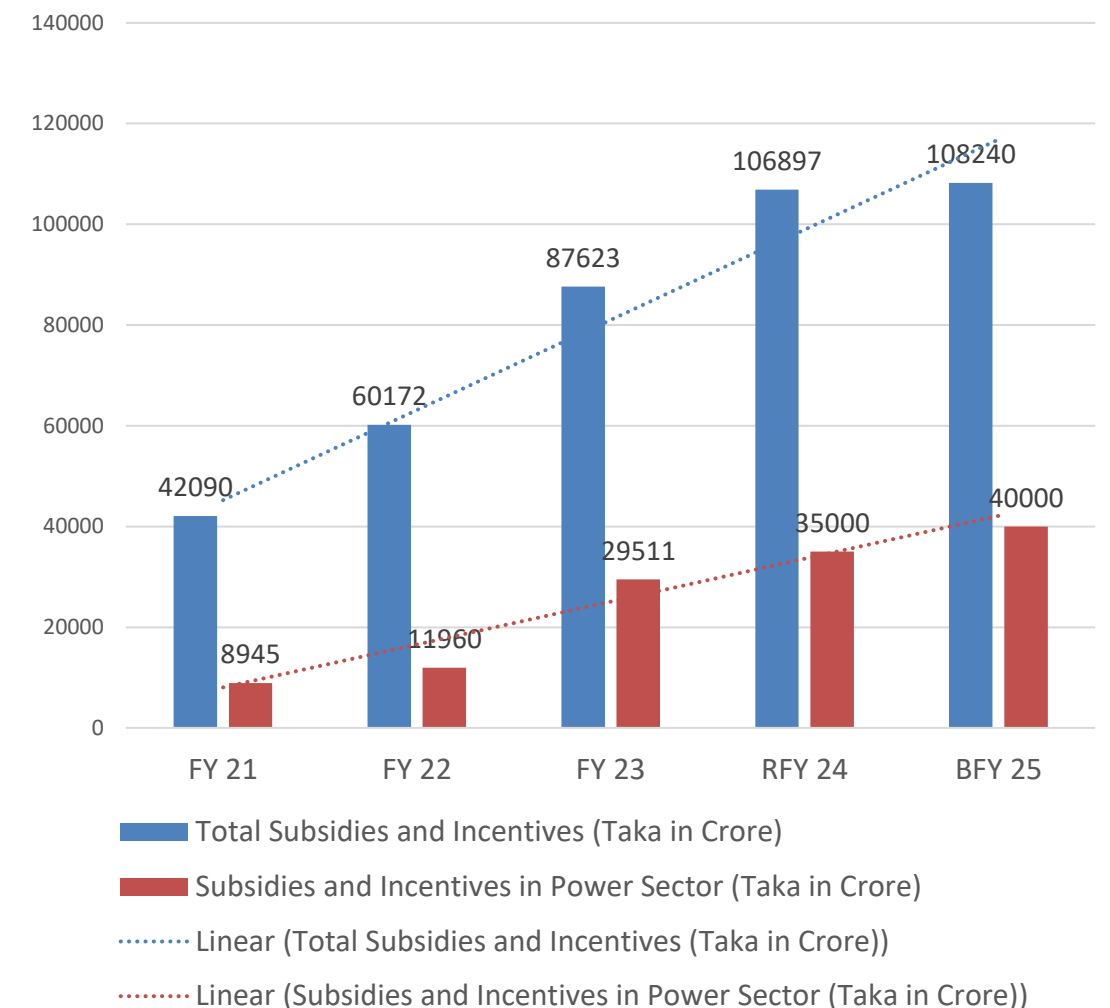
Source: Authors' calculation from the ADP FY25

4. Power and Energy Sector in the National Budget FY2025

4.4 Subsidy Allocation and Fiscal Incentives

- More than a **third of the subsidies (37%)** allocated in the new budget is for the power sector totaling **Tk 40,000 crore**
 - Most of the allocation is spent on paying the capacity charges
- As per IEA, fossil fuel consumption subsidy is decreasing globally but in case of **Bangladesh, it is increasing**
- **Upward tariff revision of electricity and energy is indeed a faulty** and inefficient measure to rationalize subsidy under IMF conditionality
- BPDB has reported a **net loss of Tk 6,117 crore in FY2023-24** and has projected a **loss of Tk. 18,106 crore for FY2024-25**
 - Despite increasing the **power tariff four times** and planning to increase further by 2024, it has projected such net loss
 - Besides a **huge amount subsidy allocation** of Tk. 40,000 crore has been proposed to power division
 - On top of that, **BPC has been selling the fuel oils at a very high tariff rate**, whereas the international price trend shows a sharp decline from March onwards
 - Hence, **an upward tariff rationalization is not the appropriate way to reduce subsidy burden**

Table 15: Subsidies and Incentives in Budget



Source: Authors' illustration from Budget in brief, MoF

4. Power and Energy Sector in the National Budget FY2025

4.5 MTBF for the Energy and Mineral Resources Division

Energy and Mineral Resources Division			
Description	Budget 2024-25	Projection (Taka in Thousands)	
		2025-26	2026-27
Operating Expenditure	88,96,00	97,88,00	107,69,00
Development Expenditure	997,59,00	1097,35,00	1207,08,00
Total	1086,55,00	1195,23,00	1314,77,00

For the Energy and Mineral Resources Division, the following activities are planned under *four* major targets as per the mid-term budgetary framework –

1. Ensuring energy security

- Carry out geological **mapping** and surveys
- **Exploring various** sources of energy
- Conducting workshops, seminars, research, and training activities
- Enhancing fuel storage capacity and refining crude petroleum

2. Ensuring energy supply & its efficient use

- Expanding **gas transmission** and distribution pipelines
- Installing pre-paid and remote meters
- Disconnecting illegal gas connections
- **Importing, refining, and distributing crude oil and petroleum**
- Increasing **LPG supply**
- Installing pipelines and conducting feasibility studies for automation
- Issuing and renewing no objection certificates for safe handling of flammable materials
- Examining explosives
- Preparing energy reserve survey reports

3. Exploration & extraction of non-oil and gas mineral resources

- **Leasing out and issuing** licenses for resource extraction
- Exploring mineral resources through drilling
- Extracting hard rocks

4. Extraction and increase of production of energy

- Conducting **2D and 3D seismic surveys**
- Drilling **gas development and workover wells**
- Extracting gas through national companies and IOCs
- **Engaging in coal mining** as an alternative fuel
- Producing petroleum products

4. Power and Energy Sector in the National Budget FY2025

4.5 MTBF for the Power Division

Power Division			
Description	Budget 2024-25	Projection (Taka in Thousands)	
		2025-26	2026-27
Operating Expenditure	53,22,50	56,93,50	60,91,50
Development Expenditure	29176,70,00	31220,66,00	33407,87,00
Total	29229,92,50	31277,59,50	33468,78,50

For the Power Division, the following activities are planned under *five* major targets as per the mid-term budgetary framework –

1. Development of power distribution system

- **Increase distribution lines**
- Enhance sub-station capacity
- Ensure **uninterrupted electricity supply**
- Issue and renew electrician and electrical supervisor licenses
- Issue and renew electrical contractor licenses
- Approve electrical substations and fault-free transformers

2. Enhancing institutional capacity in the power sector

- **Encourage research** in the power sector
- Build capacity of officials and employees
- Reduce distribution system losses
- Reduce arrears
- Increase customer service standards
- Conduct survey activities for development and reform of the power sector

3. Development of power generation system

- Enhance power generation capacity
- Improve electricity quality
- **Implement fast-track projects**

4. Development of power transmission system

- **Increase transmission lines**
- Increase the capacity of grid substations
- **Reduce transmission loss**

5. Development of sustainable and renewable energy sector

- **Expand renewable energy**
- **Enhance energy efficiency and conservation activities**

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges in the Power and Energy Sector

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.1 Reducing over generation capacity

- In FY24, ADP allocation for **power generation projects decreased** from 52% in FY24 to 47% in FY25
 - In addition, there is also a decrease of foreign aid (55%) in power generation sector
 - CPD **appreciates such readjustment** in allocation **prioritising TnD** overextending generation capacity
- Still there are a **total of 13 generation-related projects** are being implemented with a **capacity of 6,235 MW**
 - Among these, 3 are carry-over projects, 7 are concluding, and 3 are continuing projects
 - It is **notable that both** the overall number of generation-related projects and the number of carry-over projects have decreased (from 8 to 3)
- To reduce the over-generation capacity, projects such as the "Rauzan 400MW combined cycle power plant" **could be dropped** as its completion rate will be only 0% despite being a carry-over project
 - With the Matarbari power plant nearing completion and available land space, consideration should be given to **utilizing these lands for solar and wind projects**
- The budget should reiterate government's commitment to phase out of the old, dated, expensive fuel based and plants ending contractual periods***

Table 16: Distribution of ADP Projects focused on Generation

Issues	FY2025	FY2024
New	0	0
Continuing	3 (23.1%)	3 (17.6%)
Concluding	7(53.8)	6 (35.2%)
Carry over	3 (23.1%)	8 (47.1%)
Total	13	17

Name of the Project	Maximum Completion Rate	Organisation	Project Status
Ghorashal 4th unit repowering programme (2nd revised)	85%	BPDB	Carry-over
Ghorashal 3rd unit repairing programme	100%	BPDB	Continuing
Saidpur 150MW +-10% simple cycle (HSD) based power plant construction	97%	BPDB	Concluding
Matarbari 2*600 MW ultra super critical coal fired power project	94%	CPGCBL	Continuing
Rupsha 800MW combined cycle power plant	54%	NWPGCL	Concluding
Project of Gas pipeline for Mymensingh combined cycle power station from Dhanua to Mymensingh	95%	RPC	Concluding
100 MW solar power plant building in Madarganj	95%	RPC	Concluding
Rauzan 400MW combined cycle power plant	0%	BPDB	Carry-over
Mymensingh 360MW dual fuel combined cycle power plant project	100%	RPC	Concluding
Technical support project for renewable energy resource assessment and piloting	94%	SREDA	Carry-over

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.2. load-shedding

- In FY25, **several budgetary measures are undertaken** for reducing fuel shortages which would help to reduce load shedding
- As per the budget speech, 48 wells will be dug by December 2025
 - However, **only 6 new wells** are currently in the drilling phase and 7 will start in FY25
 - In FY25, five gas-well related projects (totaling 15 wells) got allocations. Among them, **5 are new wells and 10 wells are old and need workover.**
- The **commitment is to dig 48 wells** by December 2025 starting from FY23. Currently, 8 new wells have been dug. Upon completion of 5 more wells, the total will be 13 new wells out of the committed 48
 - The target set of drilling 48 wells by December 2025 **will not be possible**
- Prioritising the distribution and transmission network of the **drilled gas is appreciated**
 - In addition, power distribution system development projects, Cumilla division (Maximum completion possible by FY25 with proposed allocation: 98%) may also reduce the locational disparities in electricity availability
- The transmission system shows a higher **percentage of projects concluding in FY25, at 62.5%**.
 - This indicates a strong focus on completing current projects and potentially freeing up resources for future development
- ***The budget should enhance allocation for drilling more gas wells to reach the target.***

Table 16: Well related projects that got allocation in FY25

SL	Projects	No of well
1	Digging 2 exploration well and 1 valuation cum development well	3
2	Digging Sylhet well no. 10 (evaluation/developing well)	1
3	Digging Koilastila 8 no. well (inquiry well)	1
4	Well workover at Kailastila-2, Rashidpur-5 and Sylhet-7	3
5	7 well workover in Titash, Habiganj, Bakhrabad and Meghna field	7
Total		15

Source: ADP FY25

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.3 Expediting renewable energy projects

- There are only **5 RE related projects** to be implemented in FY2025
 - Even during this budget, the number of renewable energy projects have not increased compared to FY24
- Of these five projects, **three are generation related and two are distribution related**
 - There five projects will be implemented by five public agencies – RPC, SREDA, Power Cell, BPDB and BREB
 - One assertive point is most of the projects are concluding projects
- To reach the targeted level by 2027 and 2030, **public sector-based RE projects need to be implemented** along with private sector-based projects
 - **BPDB and SREDA should be more proactive** in taking more RE based projects: Solar (rooftop, utility scale, solar park), off-shore and on-shore wind-based power plants
- There is only two distribution related projects and one of those is mini grid distribution
 - **No project related to development of smart grid system** is included in FY25
 - To upgrade the grid system to smart grid by 2030, it is important to invest in smart grid transmission system
- ***Public investment in RE based generation and transmission including smart grid system needs urgent attention***

Table 17: Renewable Energy Projects

Name of the Project	Maximum Completion Rate	Organisation	Type of Project	Project Status	Ministry
100 MW solar power plant building in Madarganj	95%	RPC	Generation	Concluding	MoPEMR
Technical support project for renewable energy resource assessment and piloting	94%	SREDA	Generation	Carried- over	MoPEMR
TA for strengthening and development of sustainable power sector in Bangladesh	49%	Power Cell	Generation	Concluding	MoPEMR
100% sustainable and reliable electrification in Hatia, Nijhum and Kutubdia Island	91%	BPDB	Distribution	Concluding	MoPEMR
Agriculture irrigation through solar driven pump	75%	BREB	Distribution	Concluding	MoPEMR

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.3 Expediting renewable energy projects

- A **special allocation of Tk 100 crore has been** proposed by the Finance Minister to encourage the development and use of renewable energy
 - Though the amount is small, the initiative **is appreciated** since it will accelerate the breaking of carbon lock-in in the country
 - Since the budget is quite small to undertake any big initiatives, the following measures could be undertaken: **(a) Researching methods** to balance load and manage demand-response in a grid with high renewable penetration; **(b)** Developing technologies for better grid management and integration of power from both conventional and renewable source of energy; **(c)** conducting research on effective methods to raise public awareness and support for renewable energy adoption to break the carbon lock-in; **(d)** investigating other energy storage methods such as pumped hydro storage, compressed air energy storage, or flywheel energy storage in the context of Bangladesh; **(e)** researching improvements in turbine technology to increase the efficiency and lifespan of Kaptai hydropower plant
- *The budget needs to **extend tax holidays from 5 years to 10 years** for renewables-based power plants, provide **100 per cent duty waivers** to small-scale solar-based projects, and lower the cumulative tax rate on solar power-related accessories.*

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.4 Reducing Energy Import Dependency

5.4.1 Major Development Projects in Gas

- In FY25, a total of **16 gas related projects** is currently under implementation, 7 less than FY24
 - Of these, 5 are carry-over projects, 8 are concluding, 2 are continuing projects and 1 new project
 - The lack of allocation in the FY24's continuing project has increased the number of carry-over projects in FY25
- The increase of well digging, metering and survey projects is appreciated
- As per the budget speech, 48 wells will be dug by December 2025
 - However, only 6 new wells are currently in the drilling phase and 7 will start in FY25
- Prioritising the distribution and transmission network of the drilled gas is appreciated
- ***The target set of drilling 48 wells by 2025 will not be possible unless the priority is shifted from LNG import to domestic gas exploration***
- ***More well workover projects should be undertaken to ensure the daily gas requirement (2,000mmcf/d) is mostly met with the local gas***

Table 18: Rate of Implementation of Gas related Projects

Project	Project Type	Maximum Possible Completion by FY25	Organisation	Project status
Bakhrabad-Meghnaghat-Haripur gas transmission pipeline construction	Gas	91%	Petrobangla	Carry-over
Gas distribution pipeline network building in Rangpur, Nilphamari, Pirganj and adjacent area	Gas	85%	Petrobangla	Continuing
Digging 2 exploration well and 1 valuation cum development well	Gas	52%	Petrobangla	Carry-over
Gas transmission pipeline construction programme in Bangabandhu Sheikh Mujib Railway bridge	Gas	16%	Petrobangla	Concluding
Establishing and modification of gas station project for GTCL's off-transmission point	Gas	46%	Petrobangla	Carry-over
Well workover at Kailastila-2, Rashidpur-5 and Sylhet-7	Gas	71%	Petrobangla	Concluding
2d seismic survey over exploration block-6B South and 10	Gas	51%	Petrobangla	Concluding
7 well workover in Titash, Habiganj, Bakhrabad and Meghna field	Gas	46%	Petrobangla	New

Source: ADP of FY25

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.4 Reducing Energy Import Dependency

5.4.2 Major Development Projects in LNG

- In FY25, there are **2 LNG related projects**
- Conducting study on the LNG terminal at Matarbari has already become a carry-over project
 - The project should not be advanced since it contradicts with the commitment of achieving energy security
- Petrobangla has cancelled some spot LNG purchase due to one of the two damaged terminal
- Bangladesh has seen **annual LNG imports increase**, and 2023 shipped in 5.2 million tonnes of the fuel
 - It has imported 2.6 million tonnes of LNG so far in 2024
 - **This increase of LNG import will only hinder the renewable energy transition**
- **Subsidy allocation of TK 7,000 crore in LNG import** is proposed in FY25
 - In FY24, it was Tk 6,000 crore
 - This allocation is more than the total export sector
 - Rather than enhancing LNG import, **the fund should be allocated in the domestic gas exploration**
- ***Relying heavily on imported LNG could make Bangladesh more vulnerable to changes in global prices and political issues between countries***

Table 19: Rate of Implementation of LNG related Projects

Project	Project Type	Maximum Possible Completion by FY25	Organisation	Project status
Perform technical and economic feasibility study, engineering and tender management services for the construction of the land based LNG terminal at Matarbari, Cox's Bazar	LNG	79%	Petrobangla	Carry-over
Procurement of an individual legal consultant for LNG terminal development, LNG import, and other LNG activities	LNG	81%	Petrobangla	Continuing

Source: ADP of FY25

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.5 Implementation of transmission and distribution system

Distribution of projects

- Both the distribution and transmission systems report zero new projects for FY25, indicating a focus on managing and completing existing initiatives rather than starting new ones.

Table 20: ADP Projects under Distribution and Transmission System in FY25 and FY24

	Distribution System in FY25	Distribution System in FY24	Transmission System in FY25	Transmission System in FY24
New Project	0	2	0	0
Carry over	9 (31%)	8	3 (18.75%)	8
Concluding	8 (27.6%)	9	10 (62.5%)	3
Continuing	12 (41.4%)	11	3 (18.75%)	4
Total	29	30	16	15

Source: ADP of FY25

- In the distribution system, carry over projects account for 31% of the total, suggesting a significant portion of ongoing work from past. The transmission system has a smaller proportion, with carry over projects covering only 18.75%.
- The **transmission system shows a higher percentage of projects concluding** in FY25, at 62.5%. Conversely, the distribution system has fewer projects concluding, with 27.6%.
 - This indicates a **strong focus on completing current projects** and potentially freeing up resources.
- The FY25 ADP for the transmission system shows a **more robust emphasis on concluding projects**
 - This indicates a focus on completing existing projects rather than starting new ones, which could be seen as an improvement in terms of project completion and utilization of resources.
- Distribution System: There is a minor decrease in total projects and new initiatives, with a small increase in carry-over and continuing projects.
 - The **decline in new projects and an increase of concluding projects** might suggest a focus on managing ongoing projects rather than expansion.
- A focus on witnessing immediate, visible results of development rather than allocating funds to new projects whose benefits and outcomes would materialize over a longer term.

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.5 Speedy implementation of transmission and distribution system

- **Reallocation on some selected projects**
 - With the ADP allocation of FY25, it is found more than 90% of 14 projects can be completed and some additional allocation to these projects from slow progressing projects can induce these projects to be completed.
 - This will boost the implementation of a faster and functioning transmission and distribution system
- **Concluding projects**
 - It is observed that the **current allocation of ADP fund will not be sufficient** for the below mentioned projects to be concluded by the scheduled deadline (30 June 2025)

Table 21: Some selected concluding projects for reallocation of funds in the distribution system

Project Name (Distribution system)	Maximum completion possible by FY25
Integrated Capacity Development Project in Bangladesh Electricity Transmission Management	97%
400/230/132KV grid network development projects (1st revised)	92%
Dhaka-Chattogram main power grid strengthening programme	87%
Capacity development project for grid-based power supply	87%
Expansion and strengthening of power transmission system in Chattogram region	80%

Source: Authors' calculation based on ADP FY25

Table 22: Some selected concluding projects for reallocation of funds in the transmission system

Project Name (Transmission system)	Maximum completion possible by FY25
Expansion and upgradation of electricity distribution system in Monpura island	99%
Implementing Smart Distribution System project in NESCO area	98%
Electricity distribution line and sub station expansion and reintegration in Rajshahi division	98%
Electricity distribution line and sub station expansion and reintegration in Rangpur division	95%
100% sustainable and reliable electrification in Hatia, Nijhum and Kutubdia Island	91%

Source: Authors' calculation based on ADP FY25

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.5 Speedy implementation of transmission and distribution system

Reallocation on some selected projects

- Carry-over projects
 - It is observed that the current **allocation of ADP fund will not be sufficient for the** below mentioned carry-over projects to be concluded by the end of FY25

Table 23: Some selected concluding projects for reallocation of funds in the distribution and transmission system

Project Name (Distribution system)	Maximum completion possible by FY25
Smart pre-payment meter supply and establishment programme in DESCO region	99%
Expansion and extension project of power distribution system in West Zone area	98%
Pre-payment metering for distribution of Cumilla and Mymensingh	98%
Power distribution system development projects, Mymensingh zone (1st revised)	96%
Expansion and upgradation of electricity distribution system in Western zone (2nd revised)	95%
Development of electricity distribution system in the area under DPDC	92%
Project Name (Transmission system)	Maximum completion possible by FY25
Enhancement and capacity enhancement of eastern grid network	84%
Replacing old AIS Ashuganj 132KV substation by new GIS 132KV substation	78%

Source: Authors' calculation based on ADP FY25

- **Continuing projects**
 - It is observed that the progress of a project has been progressed better than estimated and some extra allocation on these projects will help the project conclude.
 - Such as: Power distribution system development projects, Cumilla division (Maximum completion possible by FY25 with proposed allocation: 98%)

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.6 Addressing continuous financial vulnerability of public authorities in FY2024

Issues with BPDB

- Following the discussion, it is mentionable that in FY25, **generation cost will increase by 20% from revised FY24 against a 196% increase in the net loss** even though electricity tariff will be increased over time.
 - Depreciating exchange rate required to buy fossil fuel will increase the cost
 - Capacity payment (Tk 28,000 crore in FY23)
 - Due to the lack of electricity purchases from contracted power plants, BPDB is incurring increasing debts through mandatory capacity payments to IPPs, rental, quick rental (oil-fired), and coal-fired power plants.
- Power sector **remains the leading sector in terms of receiving guarantees** (contingent liability) from the government (45.8% of total in FY25 and 52.2% in FY24)
 - Government has been reducing guarantees in the power sector over the recent years although the amount of guarantee remains the highest. However, the amount of guarantee has been increased from 51,496 cr. taka in FY24 to 53,596 taka in FY25
- Moreover, the need for subsidies in the upcoming fiscal year is attributed to capacity payments and rising international energy prices.
 - Despite potential increases in power prices, subsidies remain essential due to impending capacity charges from new power plants
 - The government also plans to raise power tariffs three to four times annually over the next three years to decrease subsidies, following an 8.5% increase in February this year and three 5% increases last year.
- The total subsidy allocation is Tk 108,240 crore, with the power sector receiving Tk 40,000 crore, accounting for 37% of the total.
 - FY24: The power sector received Tk 35,000 crore out of the total Tk 106,897 crore subsidy
 - The philosophy behind increasing the electricity tariff – reduce subsidy from the power sector, seems conflicting
- The **BPDB would have gone bankrupt by this point if the authority had not received subsidy and contingent liability facility** from the government (Supports the analysis published in the Financial Express on March 2024)
 - Additionally, it is more **alarming that the BPDB is planning to incur more debt against absent equity for the FY25** amidst this bankruptcy facilitating financial vulnerability

5. Effectiveness of the Proposed Budgetary Measures to Address Major Challenges

5.6 Addressing continuous financial vulnerability of public authorities in FY2024

• Issues with BPDB (Continued)

- With the current financial structure of the organization – an unhealthily deeper insolvency, the concern revolves around the fact that whether fossil fuel based energy source is a viable solution or not.
 - The burden of capacity payment must not fall on the consumers as a form of increasing electricity price
 - The financial scenario of the BPDB requires an alternative and financially sustainable energy source, such as renewable energy
- BPDB needs to focus on
 - Reducing **capacity payment through** structural reformation to dampen the amount of debt
 - **Reallocating funds towards transmission and** distribution system, as mentioned above, **to build infrastructure** which will be accounted for additional assets and it will improve the insolvency problem by improving the debt-equity ratio
 - **Transitioning towards renewable and financially sustainable** powerplants which does not require the BPC to spend money non-revenue generating activities

• Overall Observation

- Apart from the BPDB and BERC, all other public authorities will contribute a share of their net profit to the national treasury
 - BERC will not contribute because of its institutional framework whereas the BPDP will not contribute anything because of its alarming and weak financial scenario
 - Highest contributor: BPC
- The debt-equity ratio for all the public authorities should be aimed towards reduction
 - Even though the debt-equity ratio of the BPC is somewhat better than other public authorities, the ratio is still higher against the standard (66.67:33.33).
 - A tendency to increase debt-equity ratio can be observed in the BPC, which is alarming and BPC should refrain from it
- ***The government's top priority should be focusing on improving the bankruptcy-level of insolvency or financial position of the BPDB while controlling the debt-equity ratio of the other public authorities and reduce them slowly over time to a healthy level.***

6. Proposed Budget Allocation for Energy Transition:
Review of Climate Budget

6. Proposed Budget Allocation for Energy Transition: Review of Climate Budget

6.1 Overview

- “Climate Financing for Sustainable Development: Budget Report 2024-25” is the 6th Annual Climate Budget Report of GoB as a part of Bangladesh Climate Change Strategic Action Plan (BCCSAP)
 - The previous edition was published in 2021
 - It is appreciated that climate budget has come in focus again after 4 years
- The **budget for ‘mitigation and low-carbon development’ can be considered as budget for energy transition**
 - This budget is fluctuated, with a significant increase proposed for the **2024-25 fiscal year to Tk.5,765 crore**
 - The proportion of 25 ministries’ total budget dedicated to mitigation and low-carbon development has **decreased from 1.47% in FY22 to 1.19% in FY24, and slightly increased in the FY25**
 - This trend indicates competing **priorities within the ministry and varying levels of commitment** to climate mitigating initiatives over the years
- The consistent decrease in the actual expenditure against both the budgeted and revised figures points to systemic issues such as **bureaucratic delays, challenges in project implementation, and shifting priorities within the government**
 - This **reduction raises concerns about the long-term commitment** and effectiveness of the government’s strategy toward achieving its low-carbon development goals

Table 24: Climate-relevant Allocation and Expenditure of 25 Ministries/Divisions in Mitigation and Low Carbon Development

Budget Description	Annual Budget/Expenditure (amount in crore taka)											
	2024-25	2023-24		2022-23			2021-2022			2020-21		
	Budget	Budget	Revised	Budget	Revised	Actual	Budget	Revised	Actual	Budget	Revised	Actual
Mitigation and low-carbon development	5,765.21	4,893.75	4,518.17	4,340.04	3,847.26	3,362.00	5,082.71	4,280.52	3,341.57	3,919.62	2,585.29	2,752.13
% of total CC-relevant allocation	13.66	13.20	10.88	13.39	10.34	9.96	18.15	15.09	12.73	16.28	11.27	13.27
% of Ministry budget	1.38	1.19	1.18	1.15	1.03	1.01	1.47	1.25	1.08	1.22	0.81	0.97

Source: Climate Financing for Sustainable Development: Budget Report 2024-25

6. Proposed Budget Allocation for Energy Transition: Review of Climate Budget

6.2 Climate Budget Analysis of Energy and Mineral Resources Division

- The actual per centage used tends to be slightly less than the allocated per centage in climate relevant allocation of mitigation and low-carbon development
 - It suggests **inefficiency of the ministry to take necessary actions** for renewable energy transition
- Consistent funding levels should be maintained to support long-term planning and effective project implementation in climate mitigation efforts
- The share of the Energy and Mineral Resources Division budget **dedicated to mitigation should be boosted** to emphasize its importance and potentially attract more international support
- Though the per centage of total budget is increasing, a lion's share is yet utilised in activities irrelevant to climate change
 - The **report should provide more insights on what kind of sectors and projects** the other per centages are being used on
- Unless the share in the **total budget is increased by reducing fossil fuel import**, the mitigatory actions of BCCSAP through this division will be slower than it should be

Table 25: BCCSAP Thematic Area-wise Budget and Expenditure in Energy and Mineral Resources Division

Budget Description	Annual Budget/Expenditure (amount in crore taka)											
	2024-25	2023-24		2022-23			2021-2022			2020-21		
BCCSAP Thematic Areas	Budget	Budget	Revised	Budget	Revised	Actual	Budget	Revised	Actual	Budget	Revised	Actual
Mitigation and low-carbon development	125.63	64.03	58.46	104.88	101	80.38	123.63	107.27	102.98	102.78	132.41	97.08
% of climate-relevant allocation	98.55	97.19	97.22	97.24	97.12	98.57	95.47	95.23	98.68	95.8	96.8	98.86
% of Ministry/Division budget	11.56	6.44	5.11	5.61	5.31	4.53	5.93	6.52	6.88	5.39	7.33	6.66
Capacity building and institutional strengthening	1.85	1.85	1.67	2.98	2.99	1.17	5.86	5.37	1.38	4.51	4.38	1.12
% of climate-relevant allocation	1.45	2.81	2.78	2.76	2.88	1.43	4.53	4.77	1.32	4.2	3.2	1.14
% of Ministry/Division budget	0.17	0.19	0.15	0.16	0.16	0.07	0.28	0.33	0.09	0.24	0.24	0.08
Total Climate Relevance (TK.)	127.48	65.88	60.13	107.86	103.99	81.55	129.49	112.64	104.36	107.29	136.79	98.2
% of Total Budget	11.73	6.63	5.26	5.77	5.47	4.6	6.21	6.85	6.97	5.63	7.57	6.74

Source: Climate Financing for Sustainable Development: Budget Report 2024-25

6. Proposed Budget Allocation for Energy Transition: Review of Climate Budget

6.3 Climate Budget Analysis of Power Division

- The noticeable increase in the budget allocation for mitigation and low-carbon development over the years, with a significant **jump in the FY25 to Tk.2211 crore from Tk.1849 crore in FY24 is praiseworthy**
 - It aligns with the global trends to prioritize reduction of carbon emissions
 - However, dependency on LNG import for power generation creates a fallacy
- **Regular monitoring and transparent reporting on budget utilisation** and project outcomes will help maintain focus and improve accountability in climate-relevant spending
 - This creates non-accountability and discrepancy in budget utilisation
- *The rest of the non-climate change relevant budget (92.42% in FY25) should not be utilized to promote fossil fuel-based power production rather a portion of that should be used for phasing-out fossil fuel-based power plants*
- *Unless the per centage in total budget is increased, it will remain critical to break the carbon lock-in in the power division*

Table 26: BCCSAP Thematic Area-wise Budget and Expenditure in Power Division

Budget Description	Annual Budget/Expenditure (amount in crore taka)											
	2024-25	2023-24		2022-23			2021-2022			2020-21		
BCCSAP Thematic Areas	Budget	Budget	Revised	Budget	Revised	Actual	Budget	Revised	Actual	Revised	Budget	Actual
Mitigation and low-carbon development	2210.89	1849.11	1691.96	903.69	985.94	944.71	1064.46	709.7	636.28	1197.75	593.52	599.39
% of total CC-relevant allocation	99.82	99.44	99.44	99.31	99.11	99.21	99.41	98.98	99.15	99.23	98.42	98.59
% of Ministry budget	7.56	5.47	6.23	3.73	3.9	3.73	4.19	3.1	3	4.82	2.7	2.8
Capacity building and institutional strengthening	4	10.44	9.61	6.3	8.85	7.57	6.27	7.28	5.46	9.3	9.5	8.55
% of total CC-relevant allocation	0.18	0.56	0.56	0.69	0.89	0.79	0.59	10.02	0.85	0.77	1.58	1.41
% of Ministry budget	0.01	0.03	0.04	0.03	0.03	0.03	0.02	0.03	0.03	0.04	0.04	0.04
Total CC Relevance (TK.)	2214.89	1859.55	1701.57	909.99	994.79	952.28	1070.73	716.98	641.74	1207.05	603.02	607.94
% of Total Budget	7.58	5.5	6.26	3.76	3.93	3.76	4.22	3.13	3.02	4.86	2.74	2.84

7. Conclusion and Recommendations

- The budget for the power and energy sector **fails to comply with required allocation** for energy sustainability and energy transition in the country
 - The budget for the power and energy sector **needs to be structured from energy sustainability and energy transition** point of view
 - Without **proper planning, allocation, implementation and monitoring** both energy sustainability and energy transition will not be achieved
 - Some of the electoral **commitments are reflected** in the budget, but a number of **the commitments are not reflected** there (e.g. retirement of rental and inefficient power plants, import of hydropower, smart grid etc.)
 - The budget tries to **promote some anti-transition and anti-sustainability measures** (such as promoting coal, setting unnecessarily ambitious power demand target, some MTBF targets)
- The power and energy sector is passing a challenging period which needs proper fiscal, budgetary and policy planning with regard to **generation, transmission and distribution of electricity and generation, transmission of domestic gas**
 - **Reducing over generation capacity: Stop funding for any new fossil-fuel** based power generation. The budget should reiterate government's commitment to **phase out of the old**, dated, expensive fuel based and plants ending contractual periods
 - **Reducing load-shedding: Contradictory measure:** funding for gas exploration is proposed to be reduced. The budget should **enhance allocation for drilling** more gas wells to reach the target
 - **Expediting renewable energy projects:** Public investment in RE **based generation and transmission including smart grid** system needs urgent attention
 - **Discriminatory fiscal structure** for RE based projects needs to be stopped.
 - The budget needs to **extend tax holidays from 5 years to 10 years** for renewables-based power plants, provide 100 per cent duty waivers to small-scale solar-based projects, and lower the cumulative tax rate on solar power-related accessories

7. Conclusion and Recommendations

- **Reducing Energy Import Dependency:** The target set of drilling **48 wells by 2025 will not be possible** unless the priority is **shifted from LNG import** to domestic gas exploration
 - **More well workover projects** should be undertaken to ensure the daily gas requirement (2,000mmcf/d) is mostly met with the local gas
 - **Relying heavily on imported LNG** could make Bangladesh more vulnerable to changes in global prices and political issues between countries
- **Implementation of transmission and distribution system: Targeted allocation is needed** for completion of T&D related projects
 - Need targeted allocation for development of **smart grid system**
- **Addressing continuous financial vulnerability of public authorities in FY2024:** The government's top priority should be focusing on improving the bankruptcy-level of insolvency or financial position of the BPDB while controlling the debt-equity ratio of the other public authorities and reduce them slowly over time to a healthy level
 - BPDB needs to focus on
 - Reducing **capacity payment through** structural reformation to dampen the amount of debt
 - **Reallocating funds towards transmission and** distribution system, as mentioned above, **to build infrastructure** which will be accounted for additional assets and it will improve the insolvency problem by improving the debt-equity ratio
 - **Transitioning towards renewable and financially sustainable** powerplants which does not require the BPC to spend money non-revenue generating activities

7. Conclusion and Recommendations

- **Budgetary allocation for energy transition:** The non-climate change relevant budget (92.42% in FY25) **should not be utilized to promote fossil fuel-based** power production rather a portion of that should be used for phasing-out fossil fuel-based power plants
 - Unless the per centage in total budget is increased, it will remain **critical to break the carbon lock-in** in the power division
- The Parliamentary Standing Committee on MoPEMR fail to ensure compliance in the power and energy sector – It should be proactive and do regular follow-up and ensure implementation of decisions taken in the meetings.

Thank you.