RENEWABLES FIRST

Pakistan's Power Market Insights

November 2025

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Disclaimer:

All the information and analysis provided in this document are accurate and to the best of our knowledge and understanding. In case you identify any errors, feel free to reach out to us at: info@renewablesfirst.org

Introduction

Our power market insights highlight important trends shaping Pakistan's power sector. This document focuses on long-term changes, such as the effects of fuel cost variations and shifts in the generation mix. The goal is to provide businesses and consumers with a monthly overview of how the country's power sector is evolving.

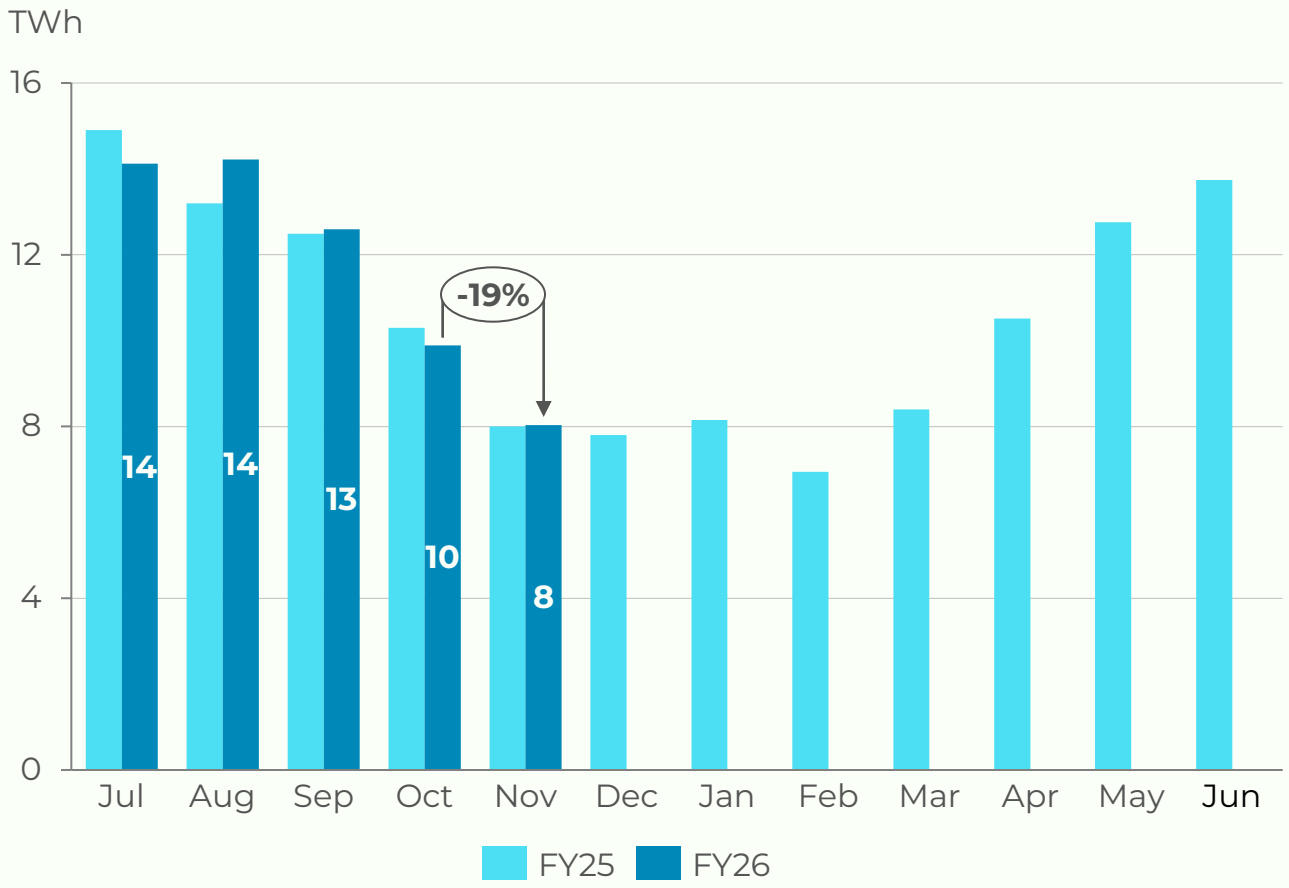
Key highlights

- Monthly power generation stood at 8.1 TWh in Nov 25, remaining nearly flat year-on-year (YoY).
- Hydel's share in generation mix rose to 39% in the month, helping lower overall generation costs.
- Fuel costs in Nov 25 came in 14% below the reference, resulting in a PKR 0.93 per kWh negative adjustment.
- For calendar year (CY) 2026, power procurement costs are projected to decline by PKR 0.66 per kWh, with total power purchase price (PPP) estimated at PKR 3.1 trillion (T).

#RFPowerMarketInsights

Nov 25 generation dropped 19% MoM to 8.1 TWh amid seasonal winter demand transition

Month-wise electricity generation in FY25 & FY26

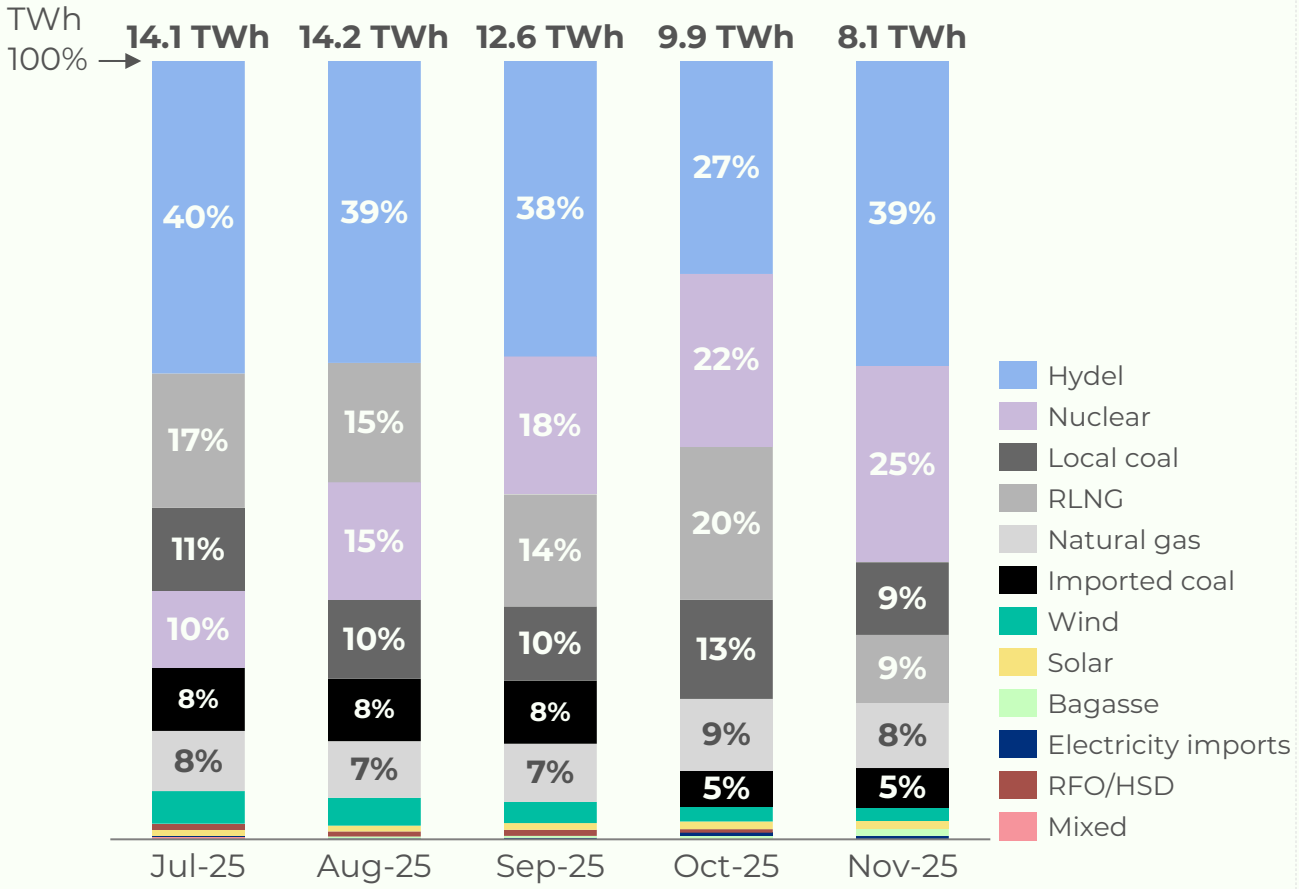


- In Nov 25, actual generation stood at 8.05 TWh, coming in slightly below the reference projection and recording a 1% shortfall.
- Generation remained broadly flat YoY at ~59 TWh in the first five months (5M) of FY26, even as captive consumers increased their reliance on the grid following the Off-the-Grid (CPP) Levy Act, 2025.
- Compared with the reference projection of 62 TWh, actual generation in 5M FY26 fell short by 5%, despite a projected demand growth target of 2.8% for FY26.

Data Source: NEPRA & Renewables First's calculations

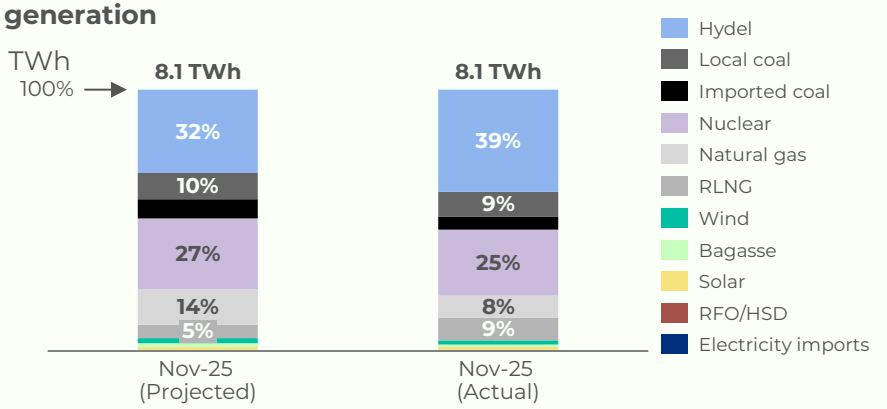
Hydel and RLNG exceeded projections in Nov 25, offsetting the lower share of natural gas in the generation mix

Energy source-wise generation mix, 5M FY26



- Hydel generation exceeded projections, accounting for 3.15 TWh vs the reference assumption 2.59 TWh, followed by nuclear at 2.20 TWh. This higher share of low-cost sources contributed to a negative FCA adjustment for Nov 25.
- RLNG-based generation remained above projections in Nov 25, contributing 9% to the generation mix vs the 5% reference. The increase reflects the power sector's use of allocated RLNG quotas to manage line-pack pressures, with 180 MMCFD allocated for Nov 25, of which 150 MMCFD was actually consumed.

Energy source-wise generation mix Nov 25, projected vs actual generation

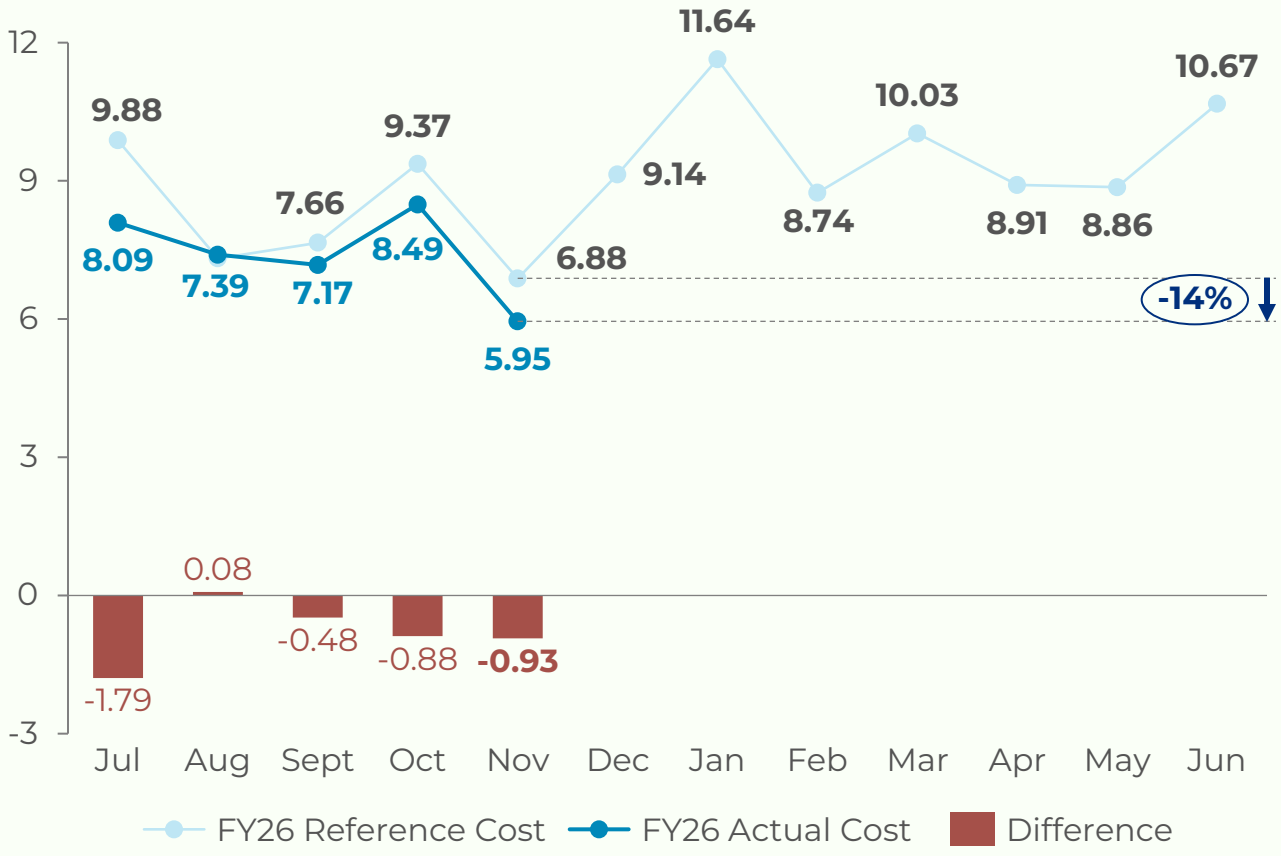


Data Source: NEPRA & Renewables First's calculations

MMCFD: Million Metric Cubic Feet per Day

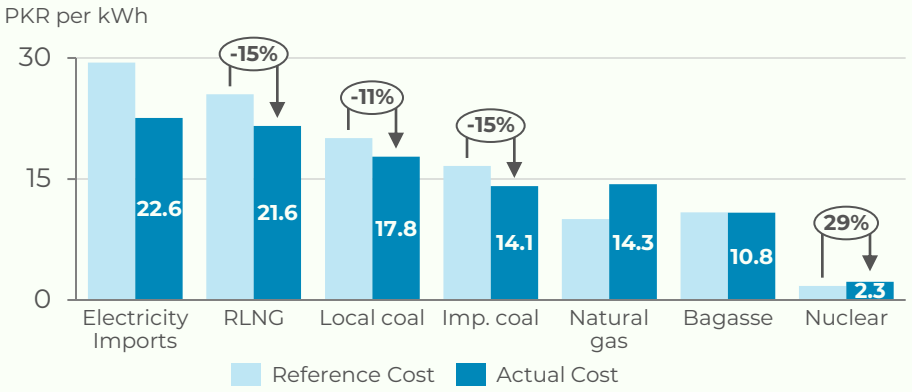
Fuel costs in Nov 25 were 14% below reference, with a negative adjustment of PKR 0.93 per kWh

Fuel cost adjustments in FY26



- Nuclear fuel cost was PKR 2.27 per kWh, above the reference of PKR 1.76 per kWh. Although its generation share was lower than projected, nuclear remained the cheapest thermal source, helping contain overall fuel costs for the month.
- RLNG, local coal, and imported coal prices stayed below projections, further contributing to the negative fuel cost adjustment for Nov 25.
- For Nov 25, fuel cost adjustment of PKR 0.93 per kWh is approved by authorities, which would translate into consumer relief of PKR 6.58 billion (B) to be adjusted in the billing month of Jan 26.

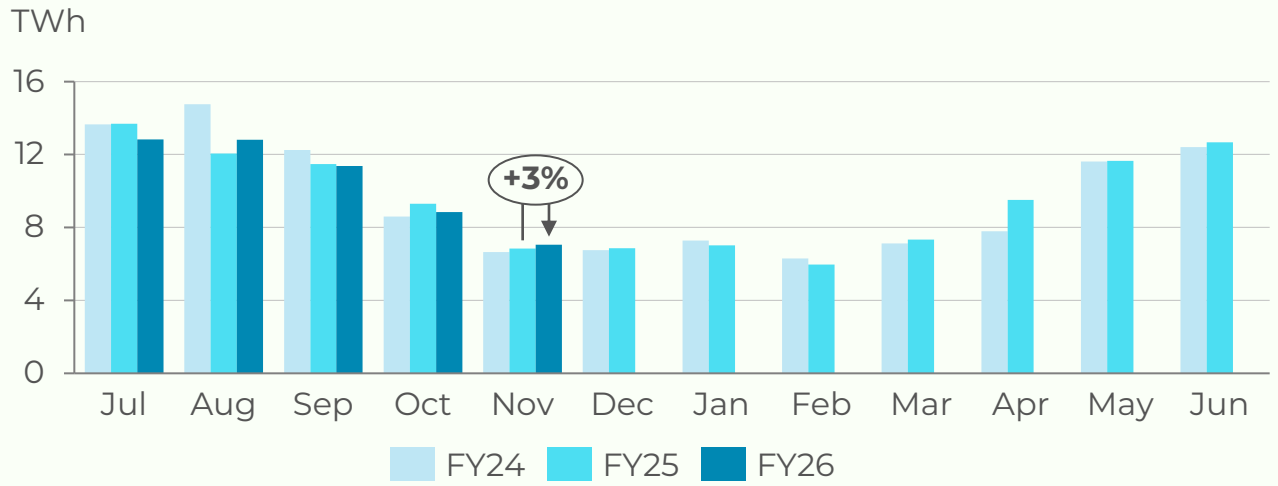
Per unit fuel cost comparison for Nov 25, reference vs. actual



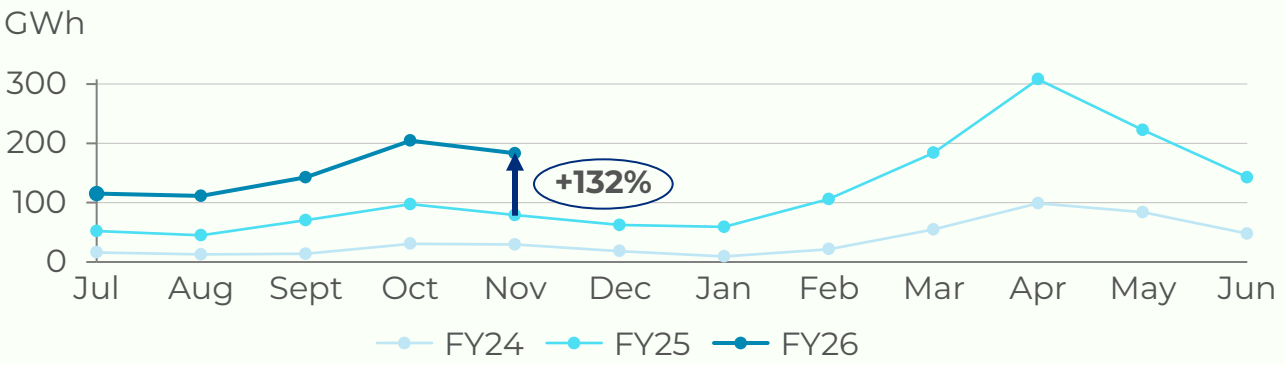
Data Source: NEPRA & Renewables First's calculations

In Nov, total units procured by DISCOs increased to 7.0 TWh, marking a 3% YoY increase

Total units procured by DISCOs (FY24 - FY26)



Comparison of DISCOs' net-metering units procured (FY24 – FY26)



- Overall DISCO procurement declined 1% YoY in the first five months of FY26, showing a slight dip in demand.
- Net-metering units procured by DISCOs reached 183 GWh in Nov 25, up 132% YoY, reflecting rapid consumer adoption of solar.
- Despite strong growth, net-metering units still account for a small share of total DISCO procurement.

Data Source: NEPRA & Renewables First's calculations

Power Purchase Price (PPP) adjustments

FY26
Jul 25 – Jun 26

Electricity demand growth: **2.8%**

Exchange rate (USD): **PKR 290**

US inflation rate: **2%**

Pak inflation rate: **8.65%**

KIBOR: **11%**

SOFR: **4.07%**

CY26
Jan 26 – Dec 26

Electricity demand growth: **1**%

Exchange rate (USD): **PKR 282/285**

US inflation rate: **2.30%**

Pak inflation rate: **7.74%**

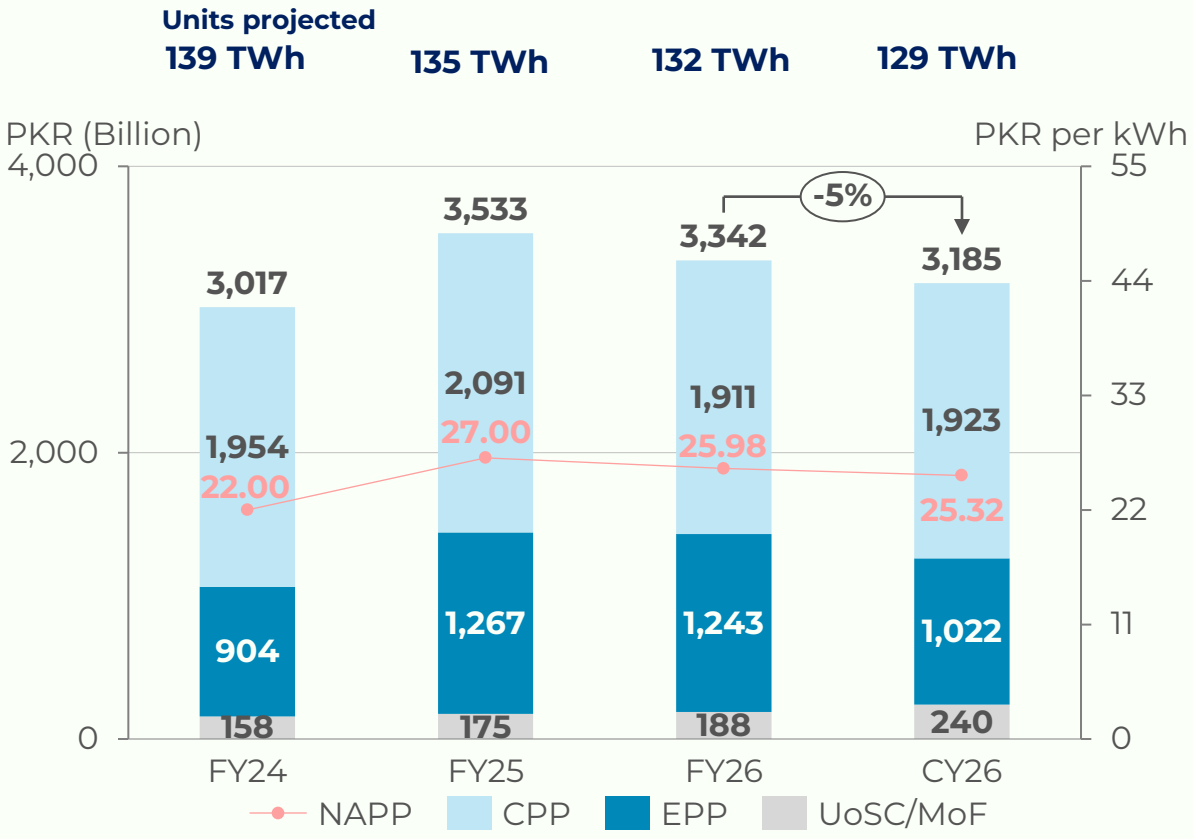
KIBOR: **10.7% (Jan 26 – Jun 26)**
10.5% (Jul 26 – Dec 26)

SOFR: **4.47%**

Assumption set

CY26 is projected to see a 5% reduction in the PPP, with total cost estimated at PKR 3.1 T against the projected generation of 129 TWh

PPP, NAPP, and projected generation, FY24 - FY26 & CY26

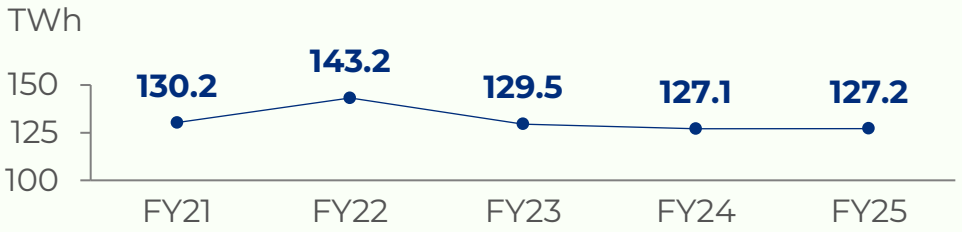


NAPP: National Average Purchase Price
UoSC/MoF: Use of system charges/ Market operator fee

CPP: Capacity Purchase Price
EPP: Energy Purchase Price

- Previously, tariff rebasing was conducted around July each year, but higher FCA adjustments in summer tended to amplify consumer bills. To mitigate this, the rebasing exercise has been shifted to winter (low-demand months), effective each January. The recent PPP for CY26 has been approved for the period Jan – Dec 2026
- Electricity demand growth has stagnated in recent years. However, expected demand stimulation by the industrial package introduced in Dec 25 and the increased reliance of captive plants on the grid after the imposition of the "off-the-grid (CPP) Levy Act, 2025", demand is projected to grow by 1% in CY26.
- Although the overall power purchase price (PPP) has been revised downward to PKR 3.1 trillion, capacity payments are expected to rise to PKR 1.92 trillion with the addition of three new hydro plants i.e., Koto, Lavi, and Khel Khawar, in CY26.

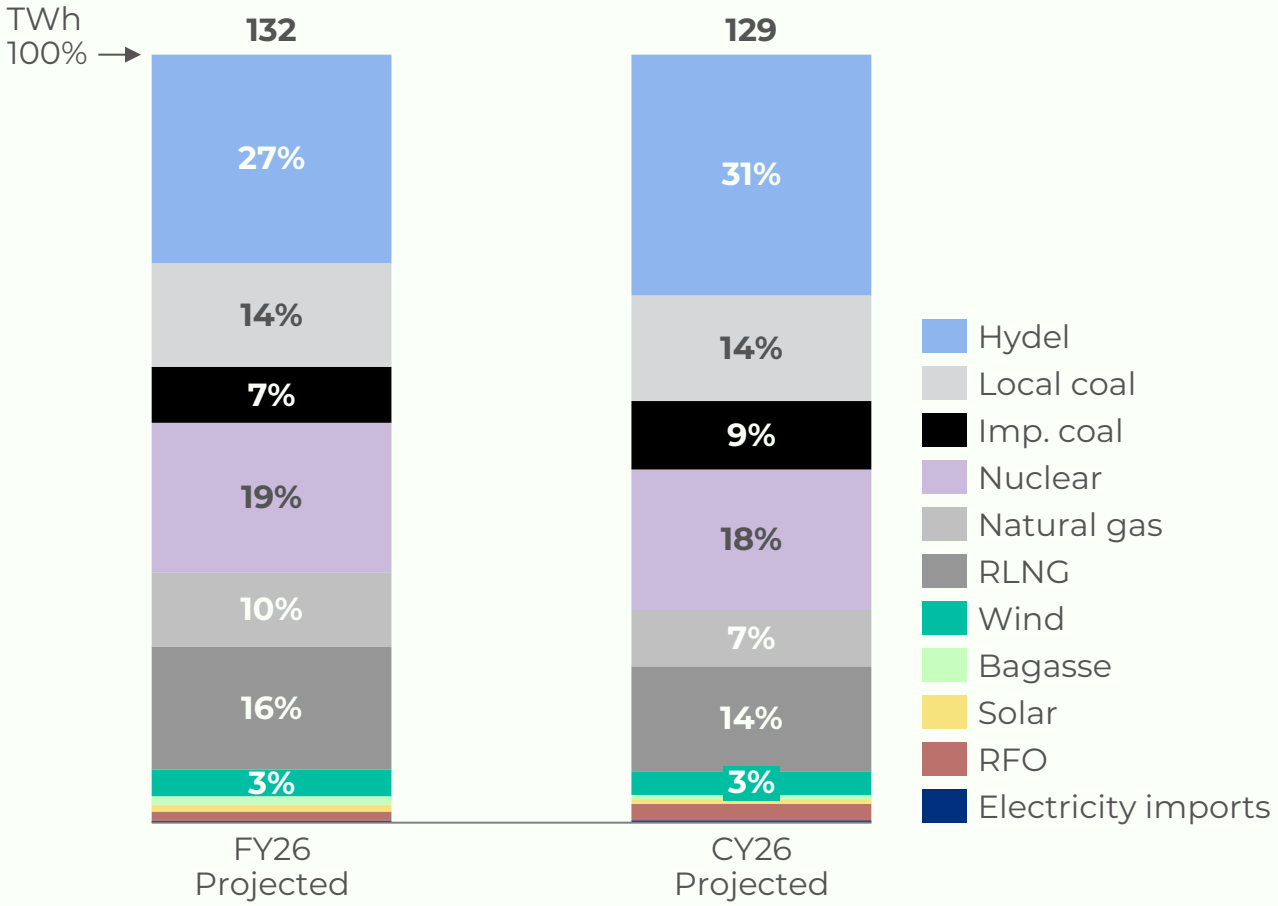
Actual electricity generation, FY21 - FY25



Data Source: NEPRA & Renewables First's calculations

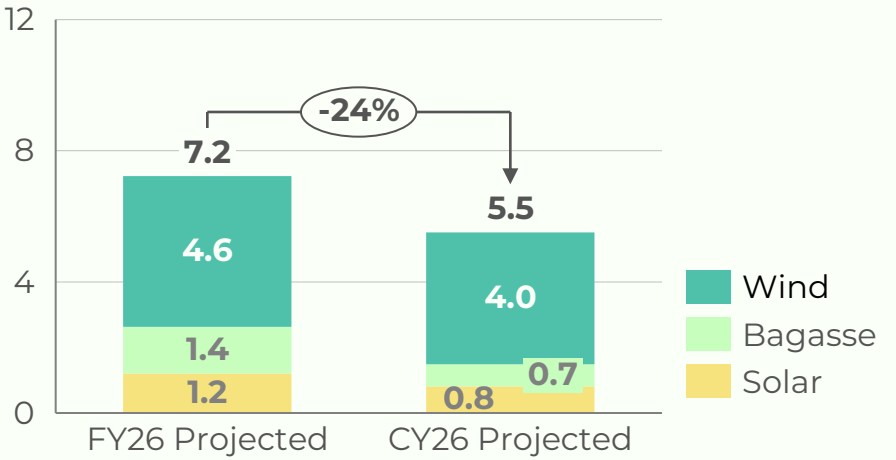
Hydel gains share in the projected CY26 generation mix, while imported coal rises to offset the reduced share of natural gas

Energy source-wise projected generation mix, PPP FY26 vs PPP CY26



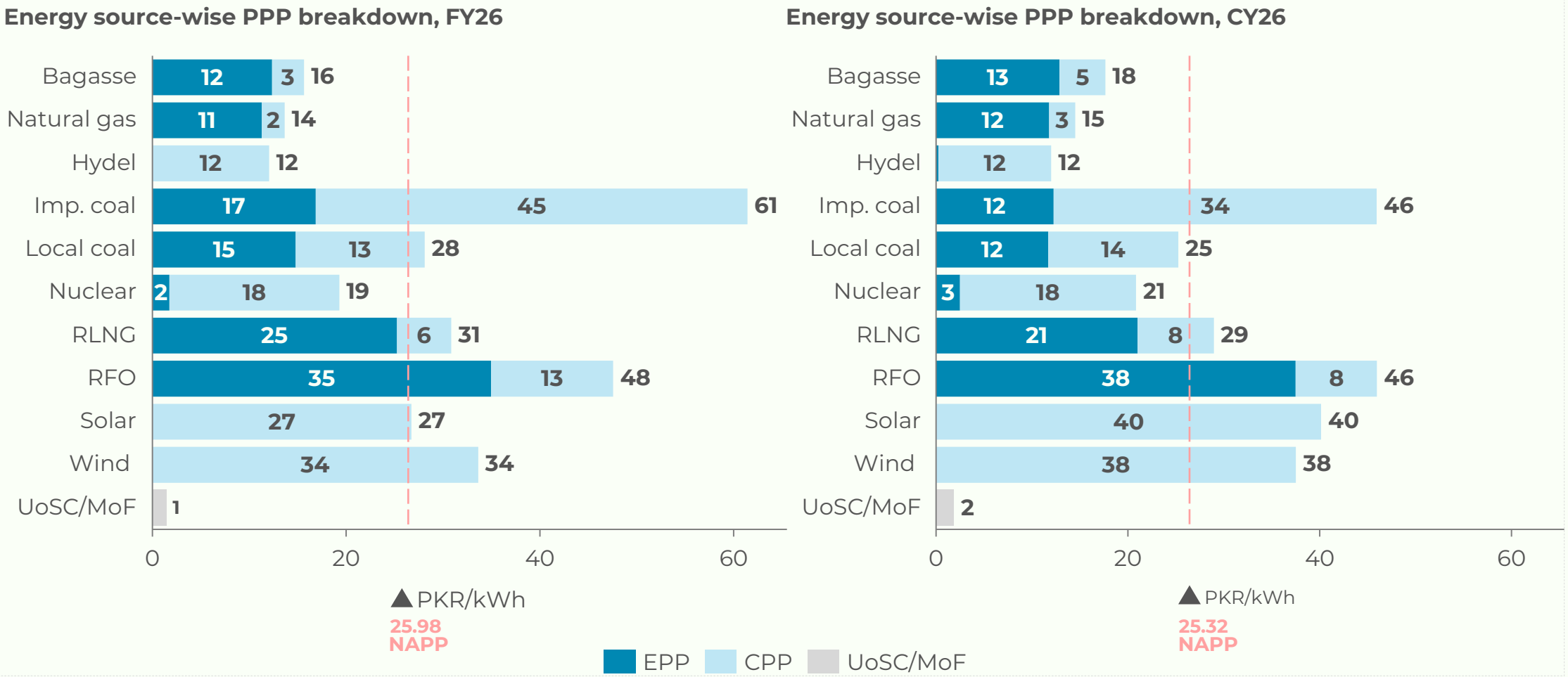
- Compared to projections for FY26, the share of renewable generation in CY26 has declined sharply by 24% (from 7.2 TWh to 5.5 TWh), resulting in higher per-unit CPP costs for these clean energy sources.
- RFO remains the most expensive fuel in the basket, with a PPP of PKR 46 per kWh. Its increased share in the CY26 generation mix will potentially raise overall generation costs

Projected generation from renewables, FY26 vs CY26



Data Source: NEPRA & Renewables First's calculations

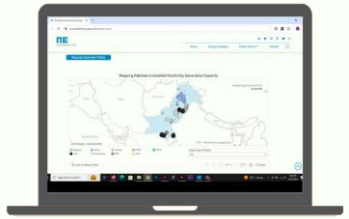
The projected NAPP is expected to decline by PKR 0.66 per kWh in CY26 in comparison to FY26



Data Source: NEPRA & Renewables First's calculations

For more insights, visit:

Pakistan Energy and Climate Insights Dashboard



www.peci.renewablesfirst.org

PECI, an initiative of Renewables First, is an innovative platform that consolidates fragmented energy data from various agencies, supporting informed decision-making across Pakistan's energy sector. By centralizing critical energy and climate data, PECI improves accessibility and clarifies environmental impacts and emissions for stakeholders. RF's collaboration with Herald Analytics led to the development of the PECI Dashboard, which drives insights and offers robust analytics for energy data.

Pakistan Electricity Review 2025

https://uploads.renewablesfirst.org/Pakistan_Electricity_Review_2025_80753f62aa.pdf

The Pakistan Electricity Review 2025 report aims to improve technical accessibility and awareness of critical aspects of power generation, transmission, and consumption. It presents a comprehensive analysis of key trends and challenges that shaped Pakistan's power sector during the fiscal year 2024 (FY24). The report utilizes publicly available data for the power sector, with NEPRA's state of industry report (SIR) serving as the primary data source.

Pakistan Energy Market Review 2025

https://uploads.renewablesfirst.org/Pakistan%20Energy%20Market%20Review%202025.pdf

The Pakistan Energy Market Review 2025 offers a concise overview of Pakistan's energy sector in FY24, drawing on the HDIP Energy Yearbook and OGRA's calculations. It highlights key trends in primary energy supplies showing how increasing solarization, LNG contract dilemma, gas circular debt and shifting consumption patterns are reshaping the country's energy market.

Renewables First (RF) is a think and do tank for energy and environment. Our work addresses critical energy and natural resource issues with the aim to make energy and climate transitions fair and inclusive.

Disclaimer:
All the information and analysis provided in this document are accurate and to the best of our knowledge and understanding. In case you identify any errors, please email:
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