

2nd
QUARTER
2026

RENEWABLE GENERATION REPORT



April 2026 – June 2026

Introduction:

Sri Lanka's electricity sector is undergoing a significant transition towards a more renewable-based generation mix, driven by the country's energy security objectives, the need to reduce dependence on imported fossil fuels, and the national commitment to increase the share of renewable energy in electricity generation. The national policy direction targets **70% of electricity generation from renewable energy sources by 2030**, together with the longer-term objective of achieving carbon neutrality in power generation by 2050. These objectives have increasingly shaped electricity-sector planning, investment, regulation, and system development in recent years.

The renewable energy landscape in Sri Lanka has also evolved considerably, particularly with the rapid expansion of **solar photovoltaic (PV) generation**. Rooftop solar has emerged as a major source of new renewable capacity, complemented by utility-scale and ground-mounted solar developments. Wind power is also expected to play an increasingly important role, particularly through the development of the country's substantial onshore and offshore wind potential. Mini hydro, biomass and municipal solid waste-based generation continue to contribute to the renewable energy mix, although opportunities for further development of some of these resources are comparatively more limited.

Recent developments demonstrate the increasing contribution of variable renewable energy (VRE), particularly solar and wind, to the national electricity system. As renewable capacity expands, the characteristics of electricity generation are also changing, with greater variability and increased requirements for system flexibility, forecasting, balancing and network capability. Consequently, the development of renewable generation is increasingly being considered together with enabling infrastructure and technologies such as **battery energy storage systems (BESS), pumped storage, grid modernization, demand-side management and improved renewable energy monitoring and control mechanisms**. The approved Long Term Generation Expansion Plan (LTGEP) 2025–2044 identifies solar as the leading source of future renewable capacity additions, followed by wind, mini hydro and biomass, while emphasizing the importance of energy storage and other measures to facilitate reliable integration of increasing levels of renewable generation.

The rapid growth of rooftop solar has been particularly significant. By the end of 2025, the installed capacity of rooftop solar connected to the CEB and LECO networks had reached approximately **2,120 MW and 352 MW**, respectively. During 2025, rooftop solar contributed approximately **1,938 GWh** of electricity generation, highlighting its growing role within Sri Lanka's renewable energy sector. Major hydroelectric generation continued to account for the largest share of renewable electricity generation, while wind, utility-scale solar, mini hydro, biomass and municipal solid waste generation provided additional contributions.

At the same time, achieving the 2030 renewable energy target requires continued development of both generation capacity and the institutional, regulatory and technical arrangements

necessary to support such expansion. Recent stakeholder consultations have identified several challenges affecting renewable energy development, including project implementation and approval timelines, tariff and power purchase agreement considerations, grid integration constraints, financing, environmental and land-use issues, and the need for appropriate regulatory arrangements for rooftop solar and other renewable technologies.

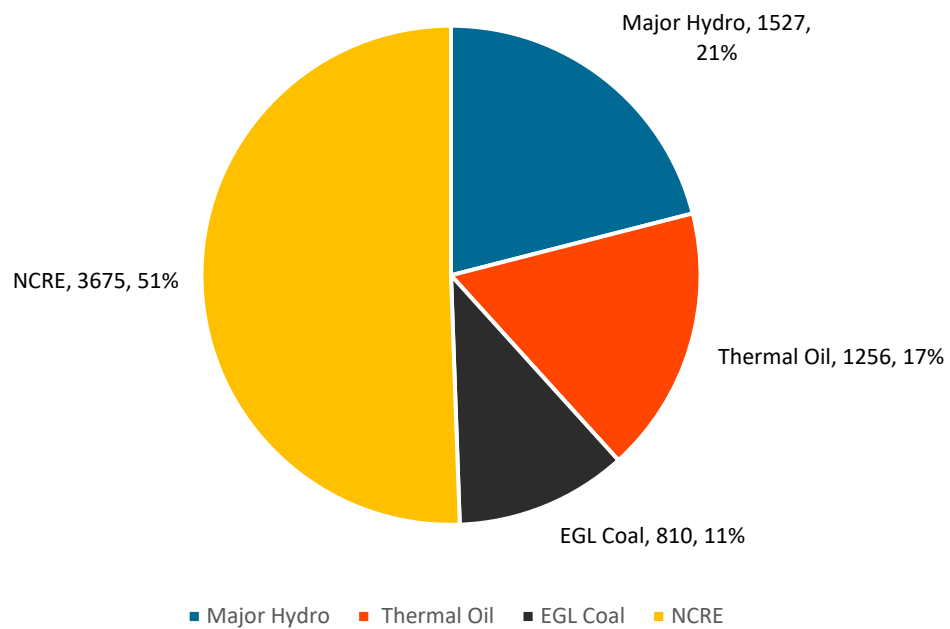
Against this background, the **Quarterly Renewable Energy Generation Report** provides an updated assessment of renewable electricity generation and capacity developments in Sri Lanka. The report presents quarterly trends in renewable energy generation, installed capacity and the contribution of individual renewable energy technologies, enabling changes in the sector to be monitored over time. Particular attention is given to **Mini Hydro, Wind, Solar PV, Biomass and Municipal Solid Waste (MSW)**, together with rooftop solar and major hydro generation where relevant to the overall renewable energy profile.

The analysis presented in this report is intended to provide an evidence-based overview of the development and performance of Sri Lanka's renewable energy sector. It may support policymakers, regulators, investors, project developers, utilities and other stakeholders in understanding current trends, identifying emerging developments and assessing the progress of the electricity sector towards the national renewable energy objectives.

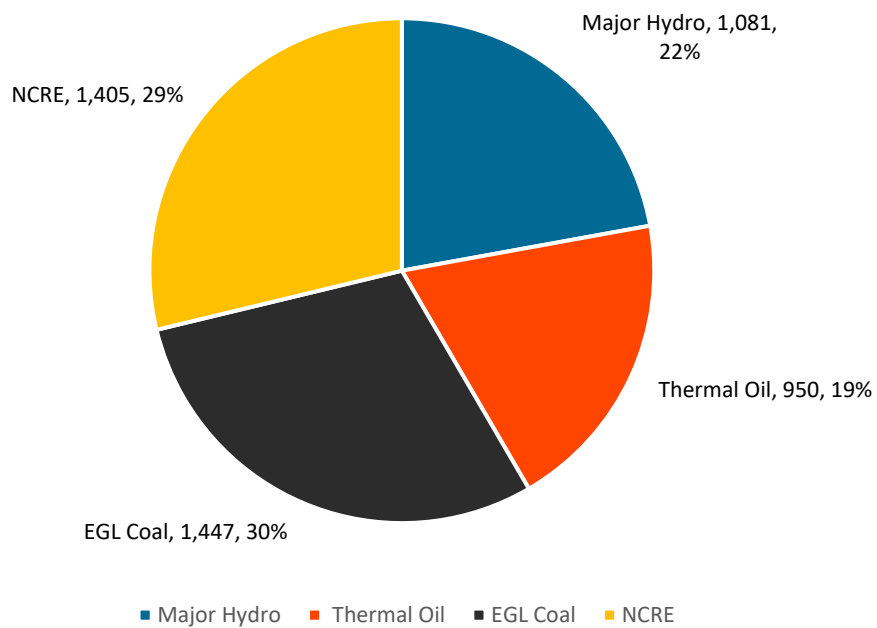
Accordingly, this report serves not only as a record of quarterly renewable energy generation, but also as a basis for monitoring the evolving renewable energy landscape and the increasing requirements for integrating higher levels of renewable generation into a **secure, reliable, economical and sustainable electricity system**.

Target: To increase the renewable energy (RE) share from 50% to 70% by 2030.

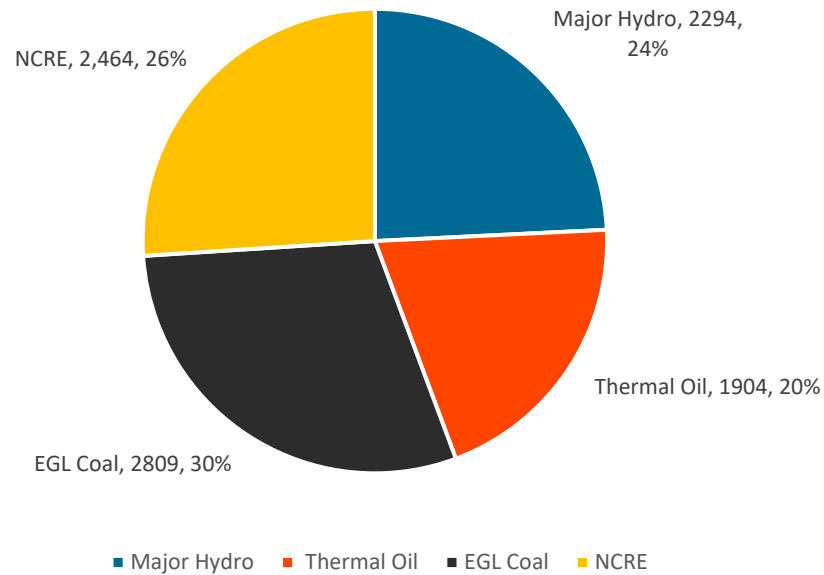
Installed Capacity (MW) by Source - as at 30.06.2026



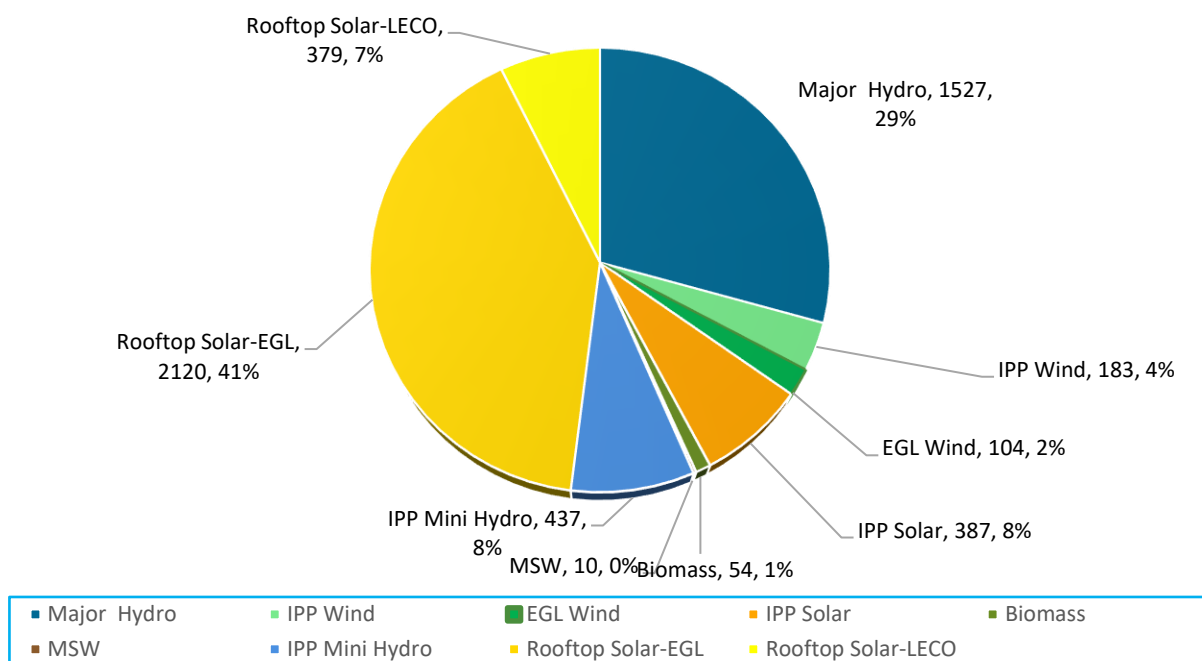
Generation by Source (GWh) - 2nd Quarter 2026



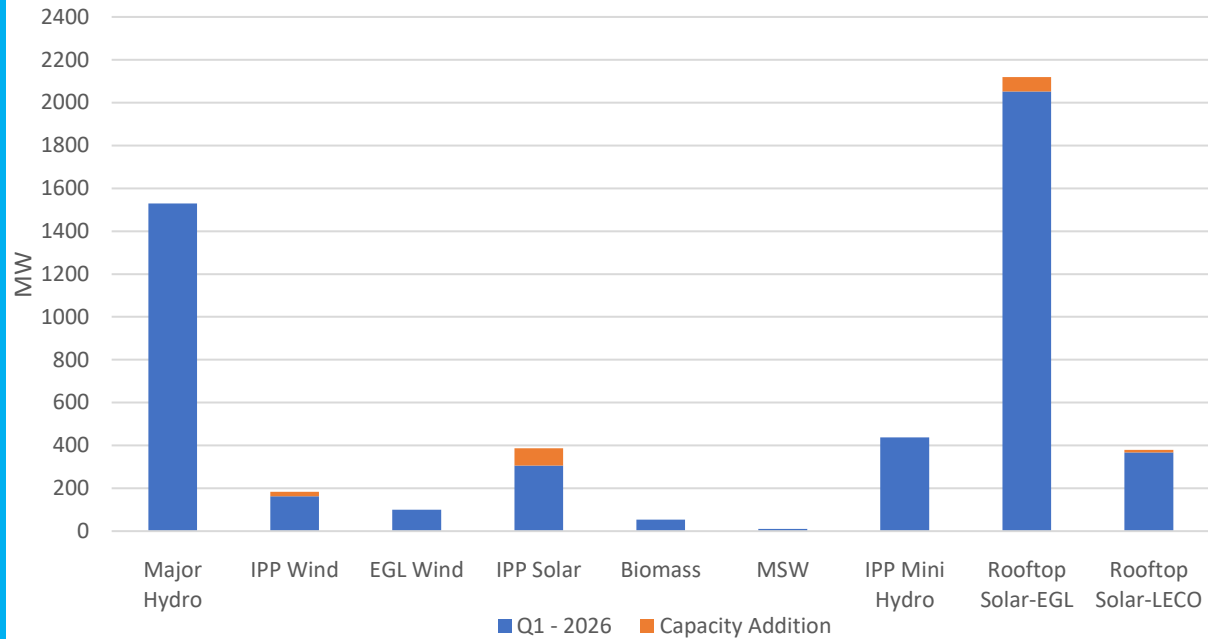
Annual Cumulative Generation by Source (GWh) as at 30.06.2026



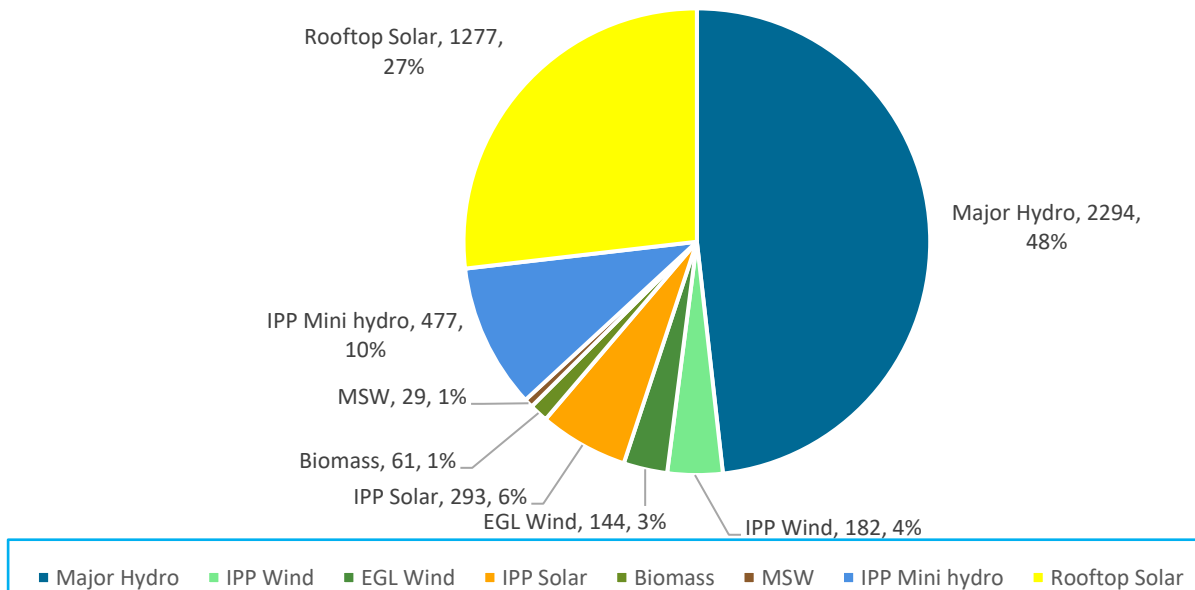
Renewable Energy Capacity (MW) as at 30.06.2026



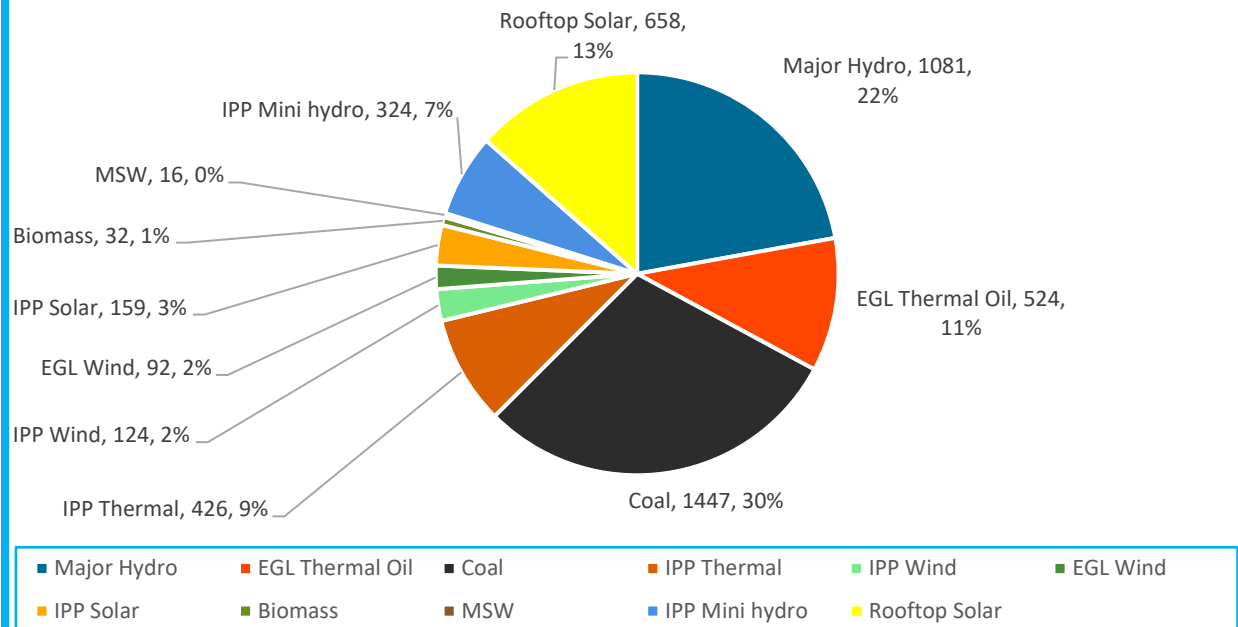
Capacity Addition by compared to 1st Quarter of 2026



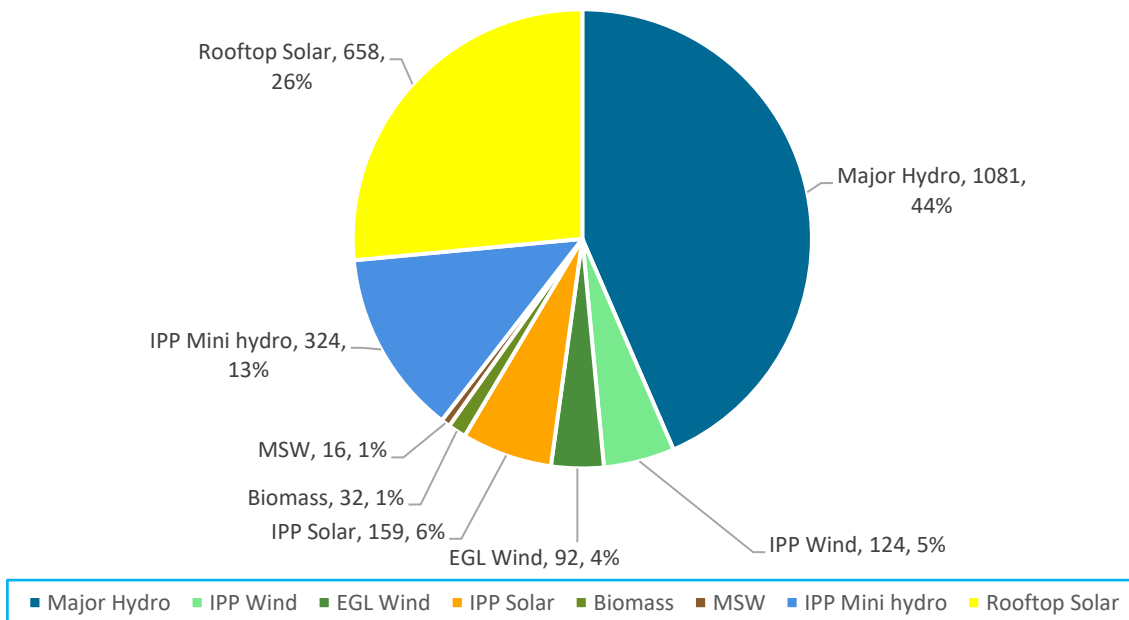
Annual Cumulative Renewable Generation (GWh) 01.03.2026 to 30.06.2026



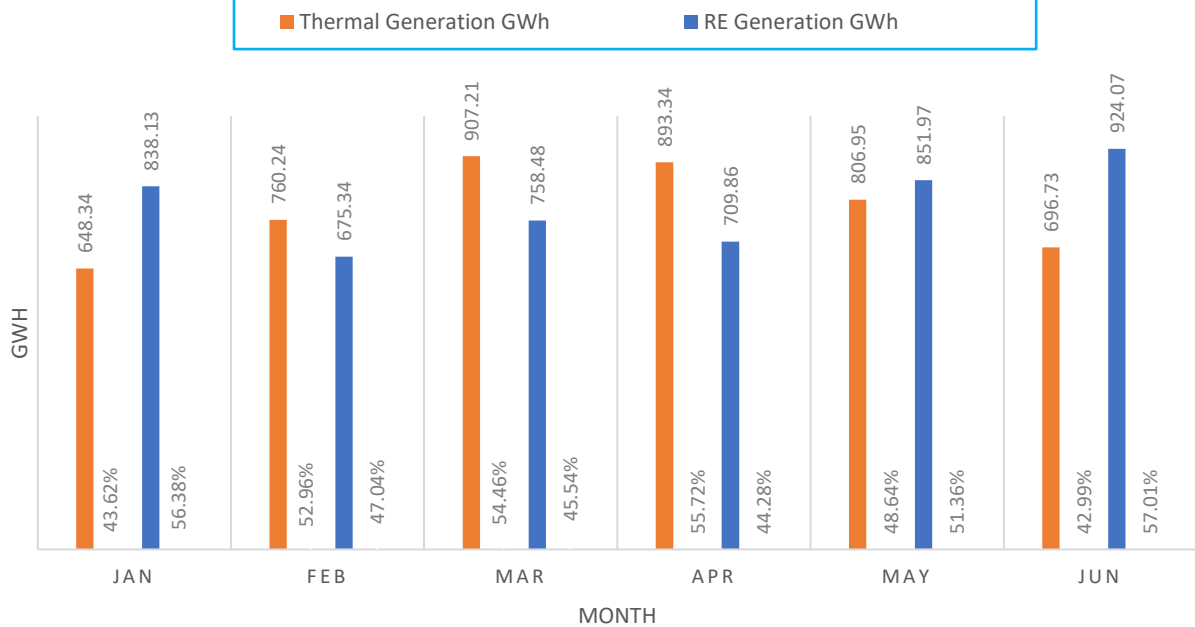
Generation Mix by Technology (GWh)- 2nd Quarter 2026



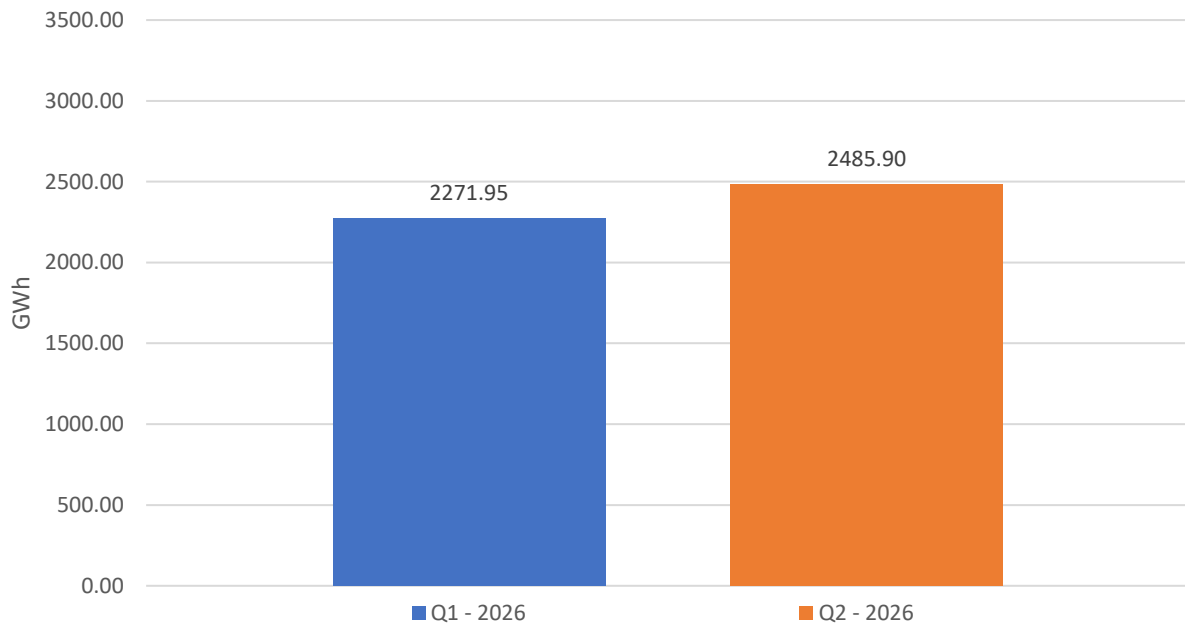
Renewable Generation Mix by Technology (GWh) - 2nd Quarter 2026



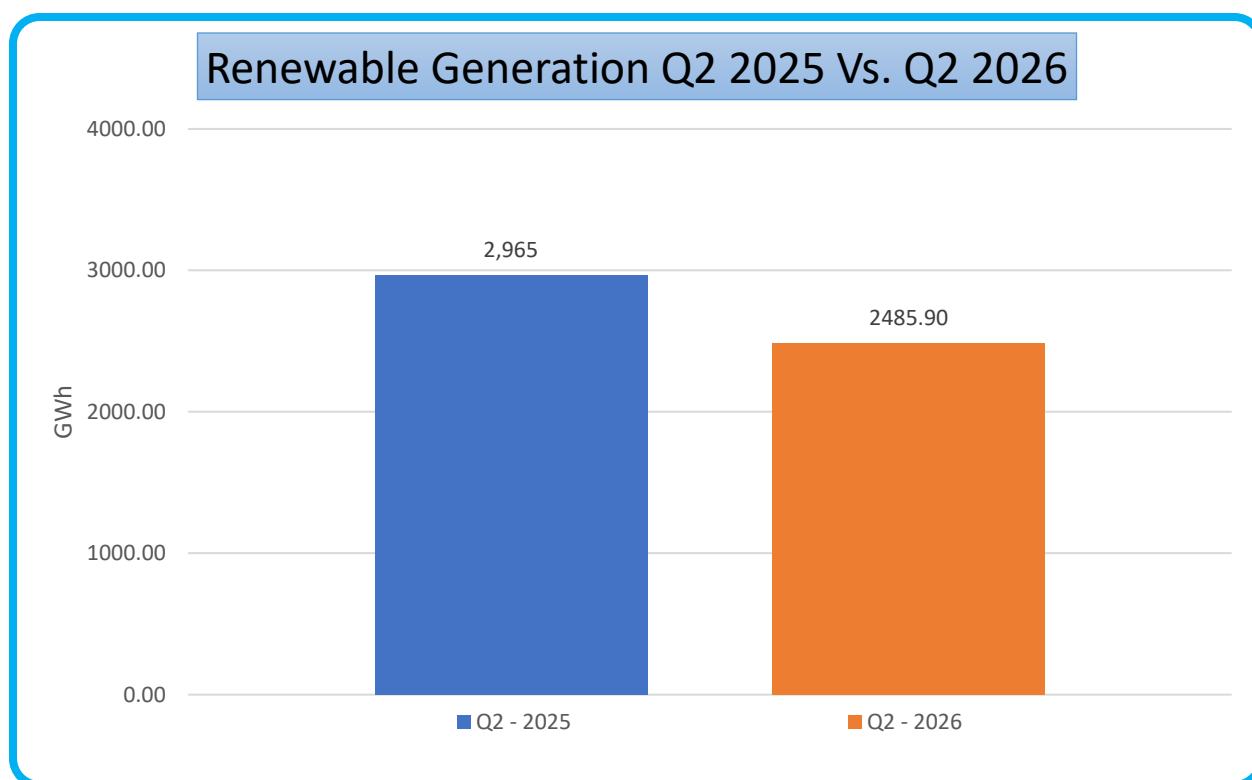
MONTHLY GENERATION COMPARISON - 2026



Renewable Generation Q1 2026 Vs. Q2 2026



RE Generation in Q2 2026 decreased by 9.4% as compared to Q1 2026

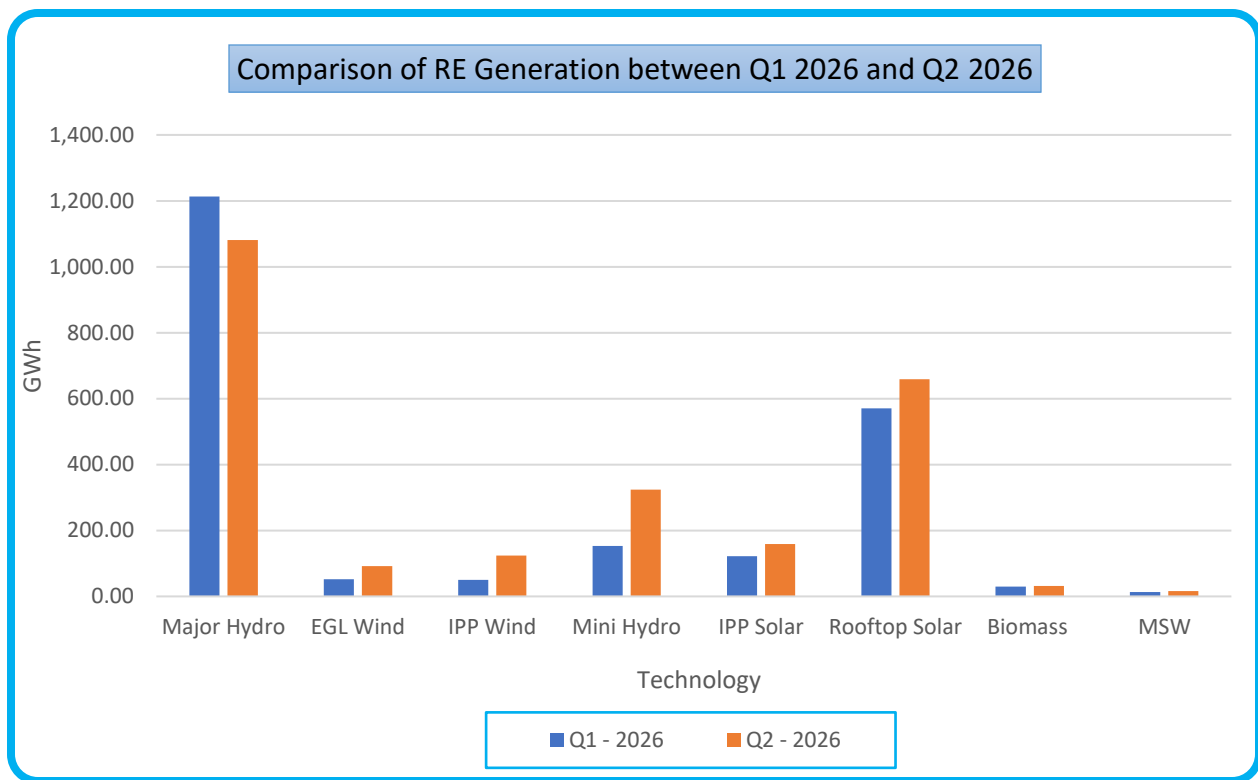


RE Generation in Q2 2026 decreased by 16.2% as compared to Q2 2025

Renewable Generation Comparison

Renewable Generation (GWh) – 1st Quarter 2026 Vs 2nd Quarter 2026

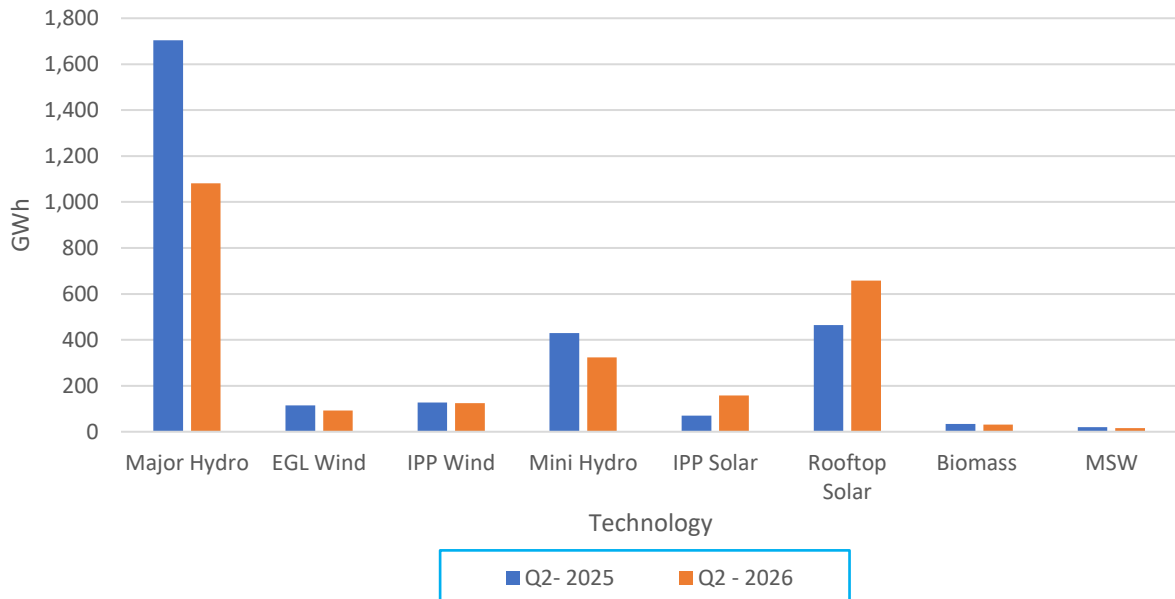
Technology	Q1 - 2026	Q2 - 2026	Deviation (%)
Major Hydro	1,212.78	1,081.32	-11%
EGL Wind	52.42	91.86	75%
IPP Wind	50.64	124.23	145%
Mini Hydro	152.85	323.73	112%
IPP Solar	122.39	158.57	30%
Rooftop Solar	570.07	658.50	16%
Biomass	29.57	31.76	7%
MSW	13.51	15.93	18%



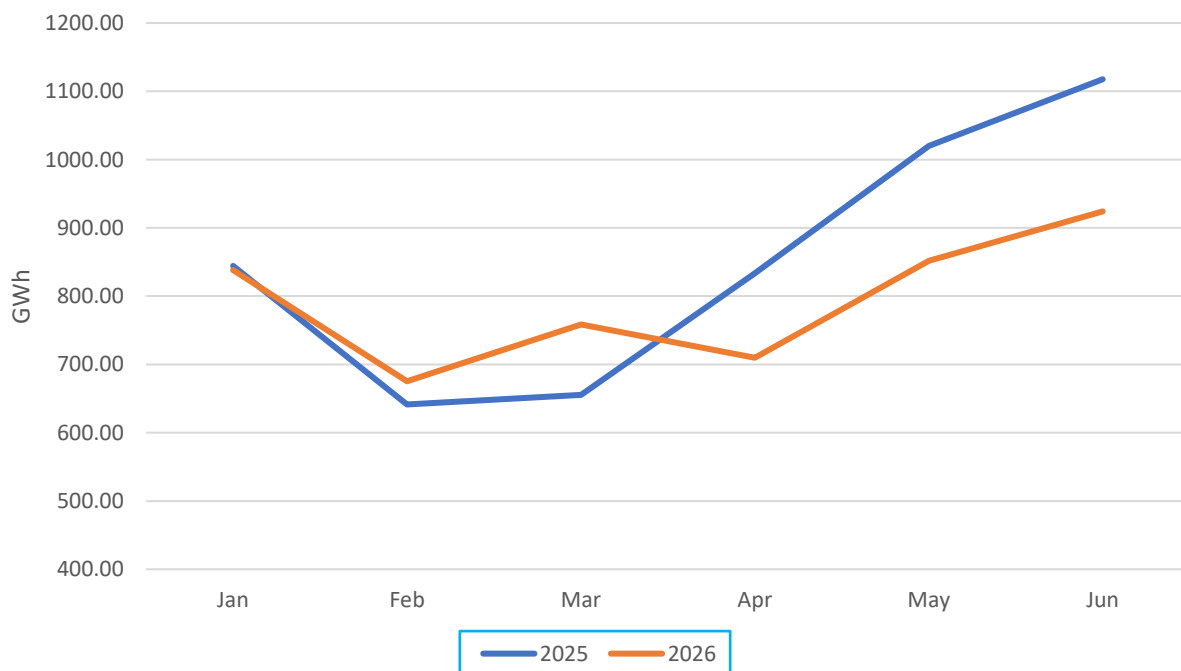
Renewable Generation (GWh) – 2nd Quarter 2025 vs 2nd Quarter 2026

Technology	Q2- 2025	Q2 - 2026	Deviation
Major Hydro	1,704	1,081	-37%
EGL Wind	115	92	-20%
IPP Wind	128	124	-3%
Mini Hydro	430	324	-25%
IPP Solar	71	159	124%
Rooftop Solar	464	658	42%
Biomass	34	32	-7%
MSW	20	16	-22%

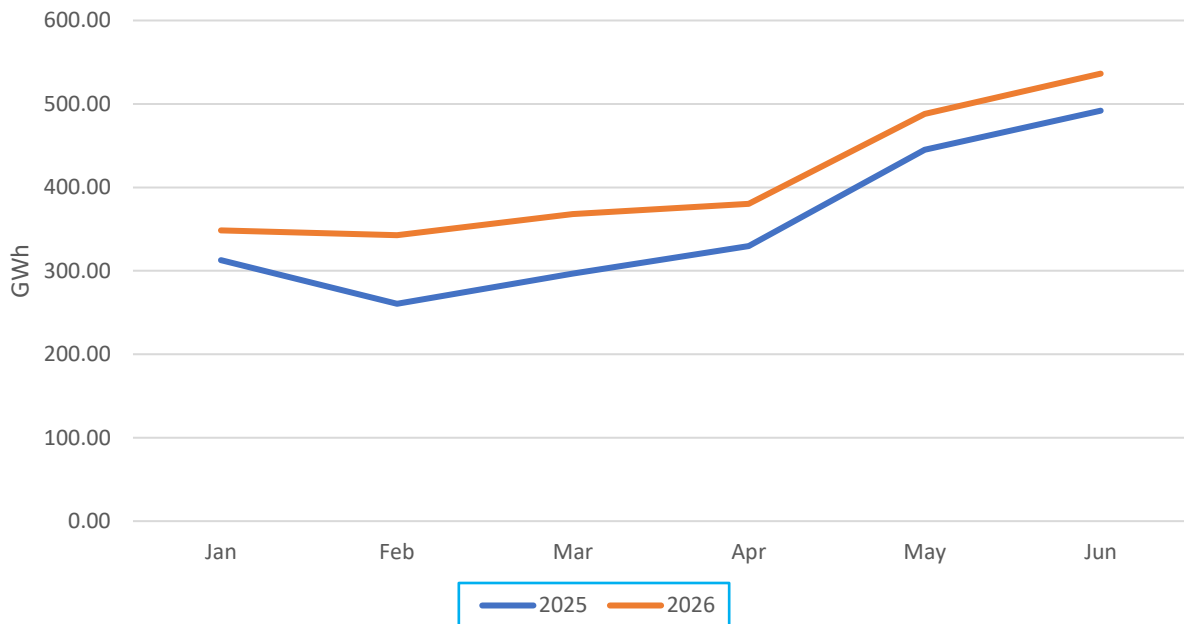
Comparison of RE Generation between Q2 2025 and Q2 2026



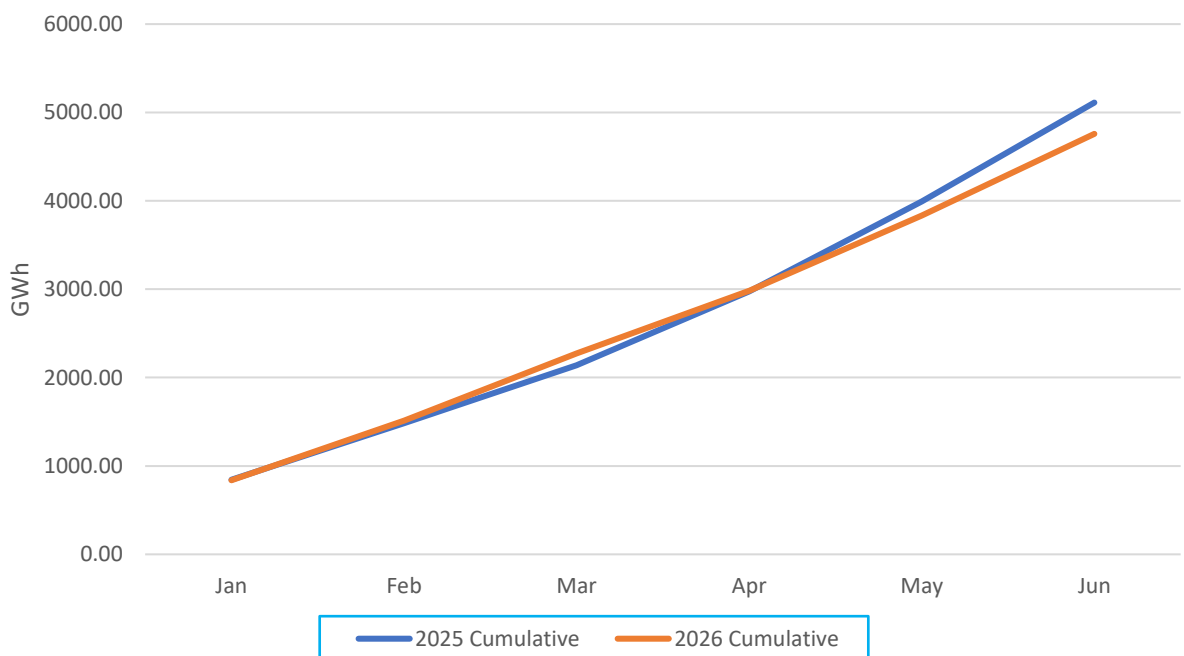
Monthly Renewable Energy Generation - 2025 vs 2026



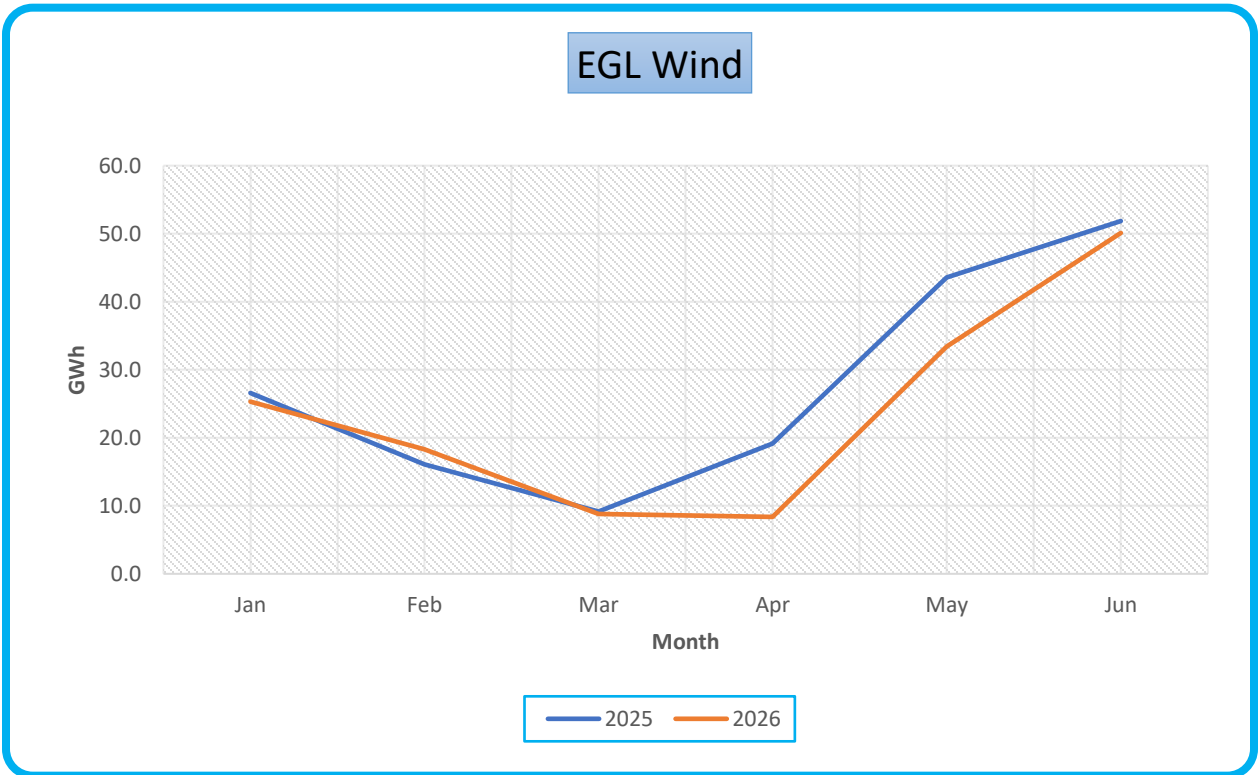
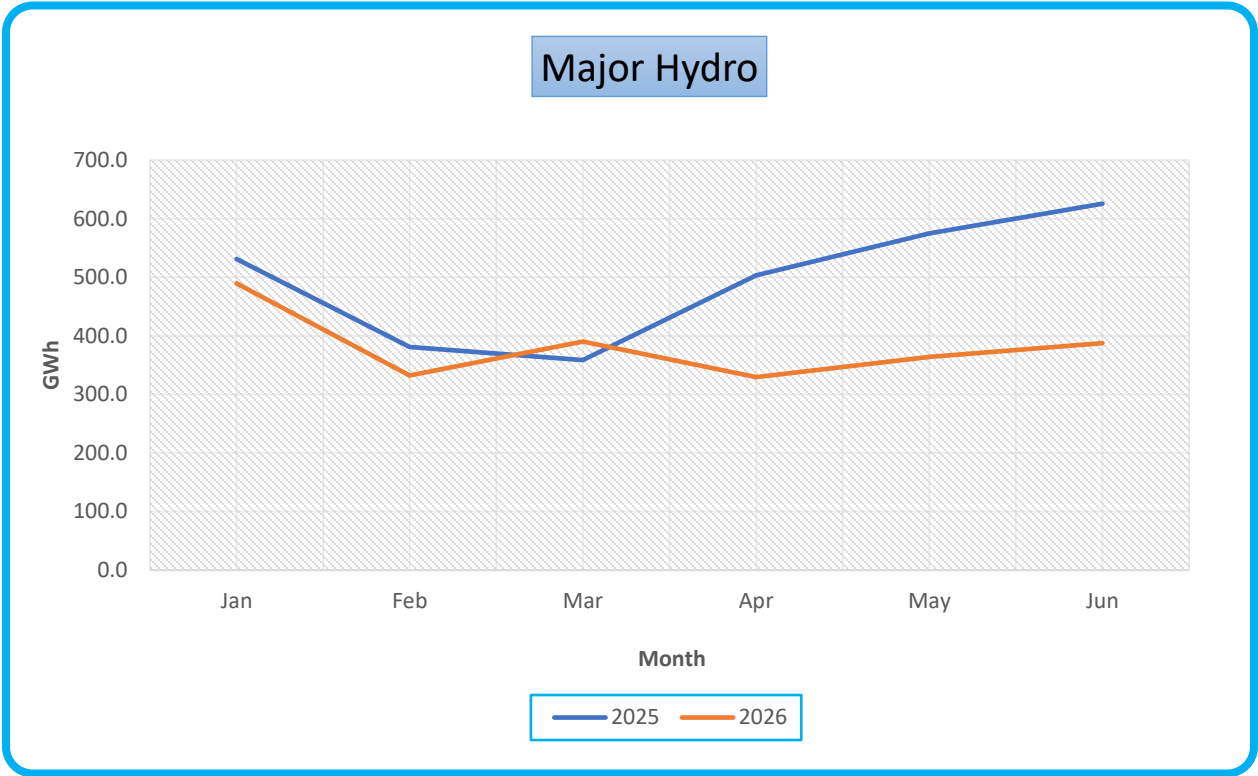
Monthly Renewable Energy Generation (without Major Hydro) -
2025 vs 2026



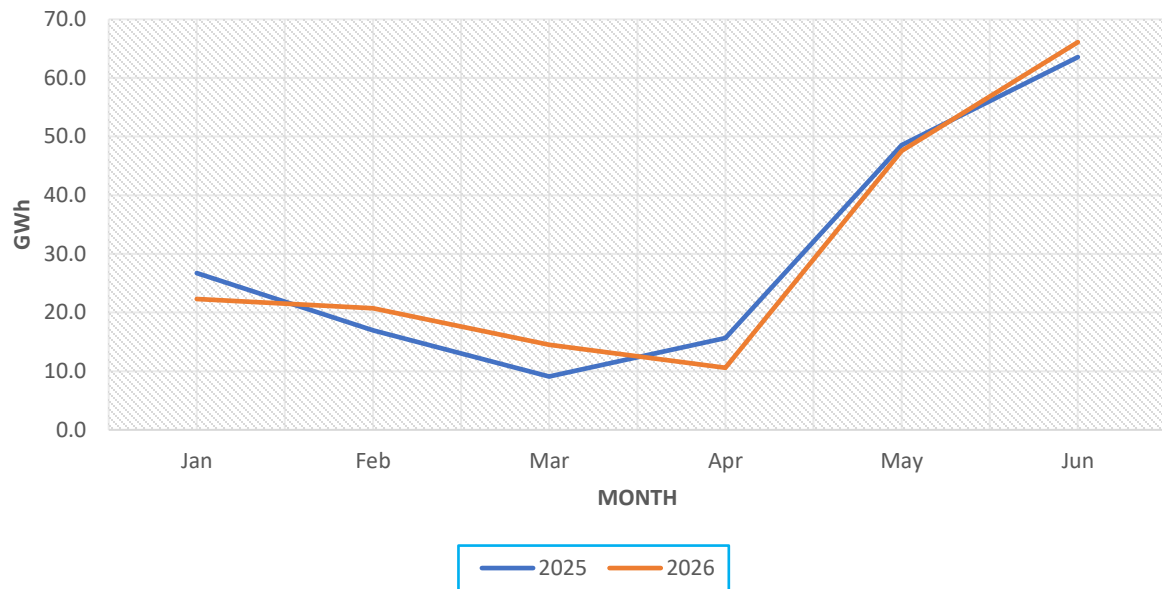
Monthly Cumulative RE Generation - 2025 vs 2026



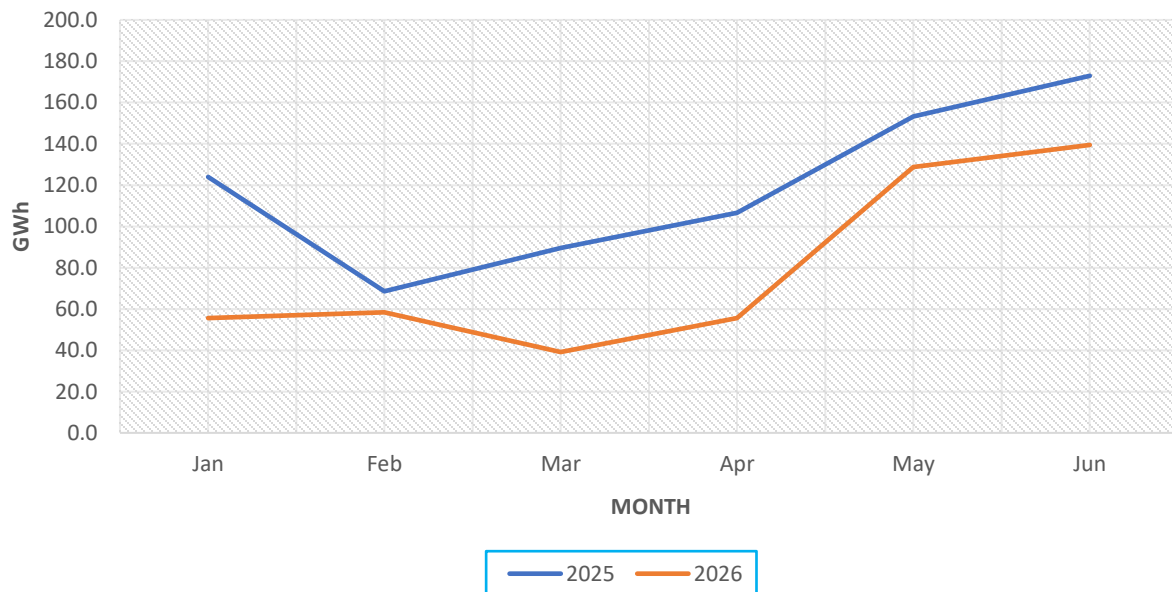
Monthly Variation of RE Generation - 2025 vs 2026 – Technology Wise



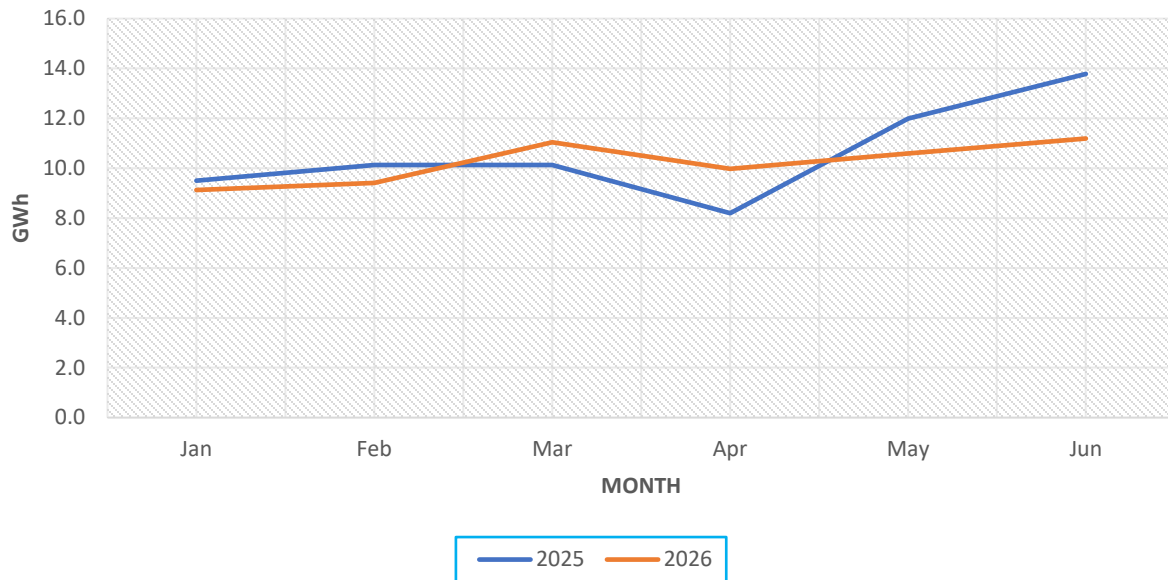
IPP Wind



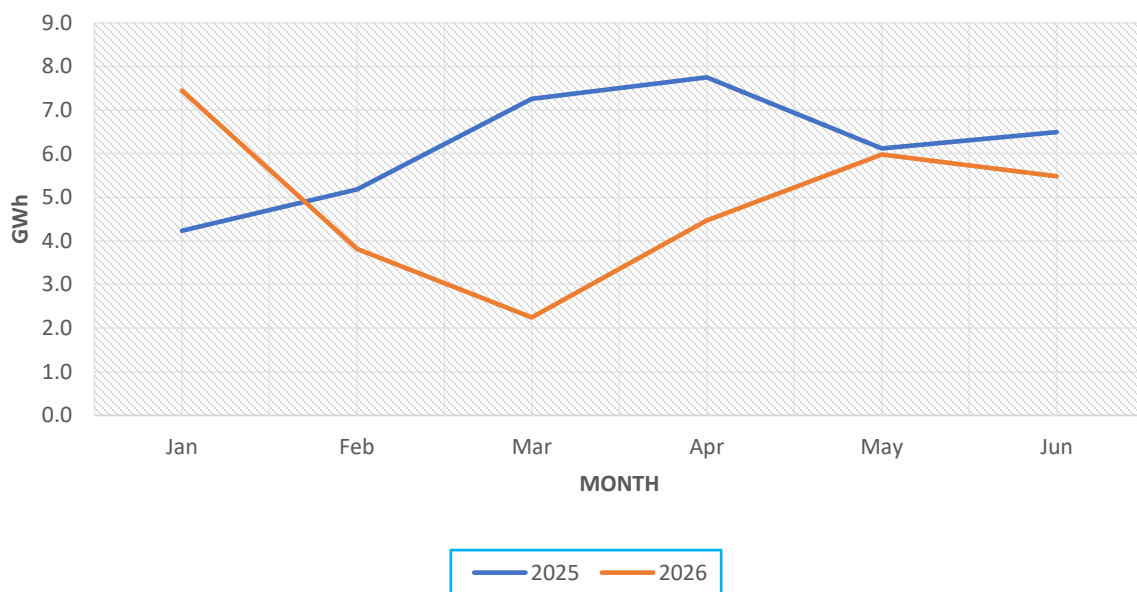
Mini Hydro



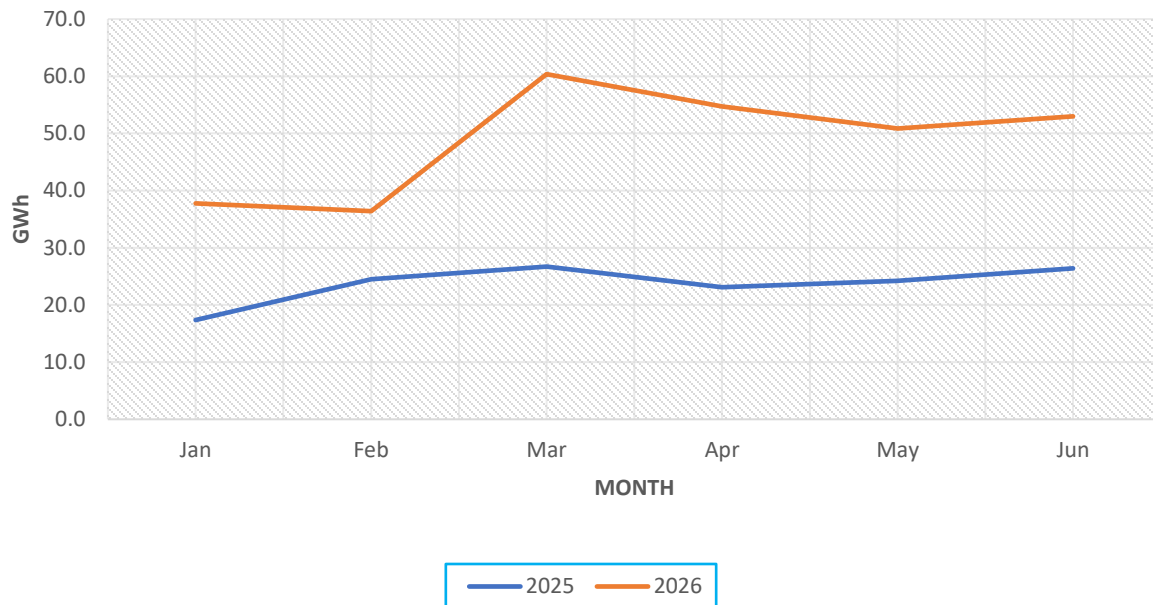
Biomass



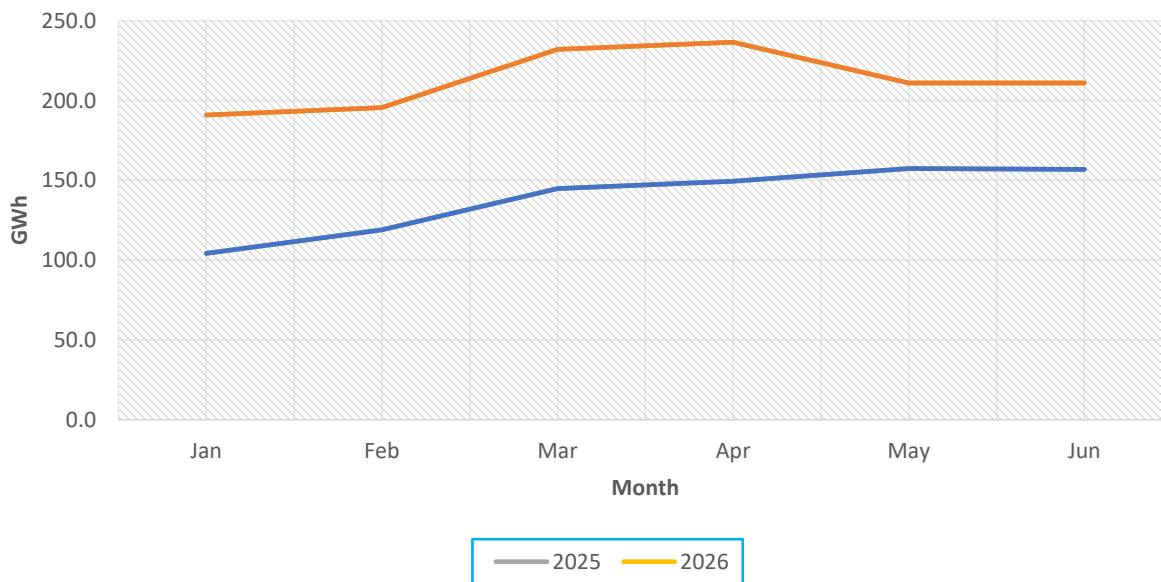
MSW



IPP Solar

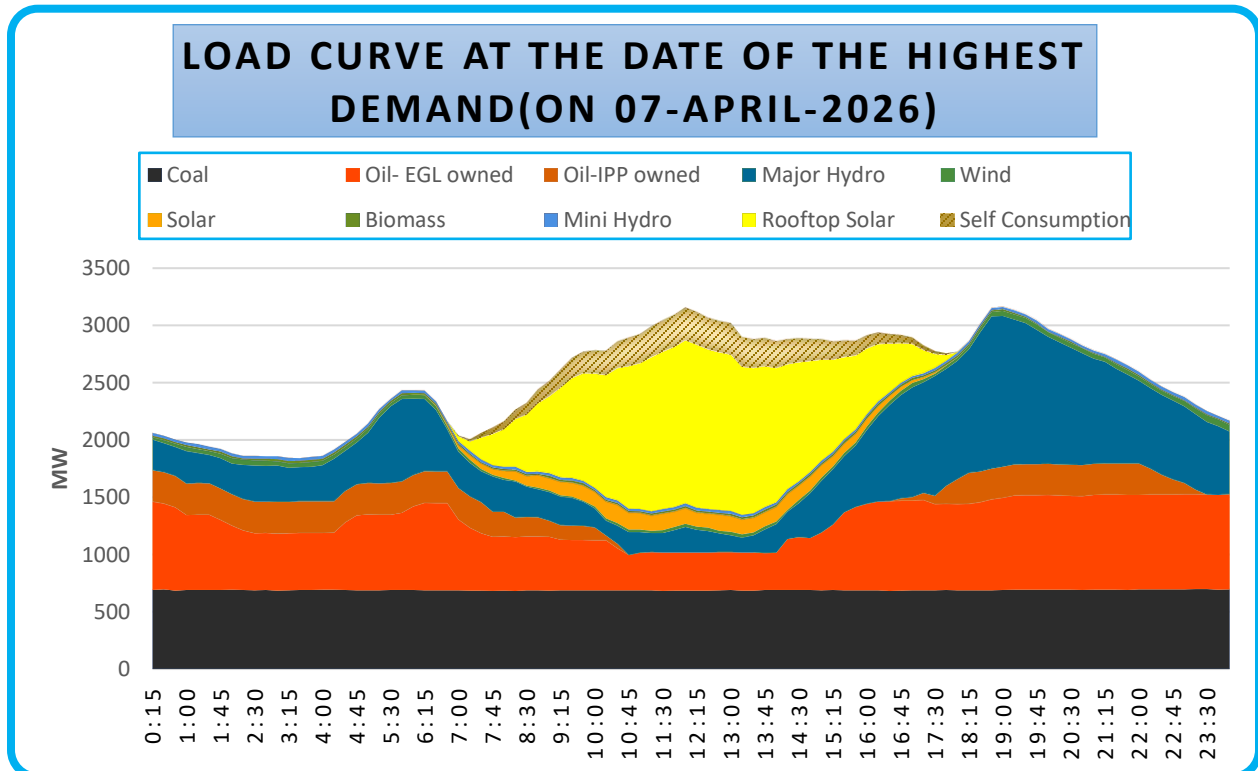
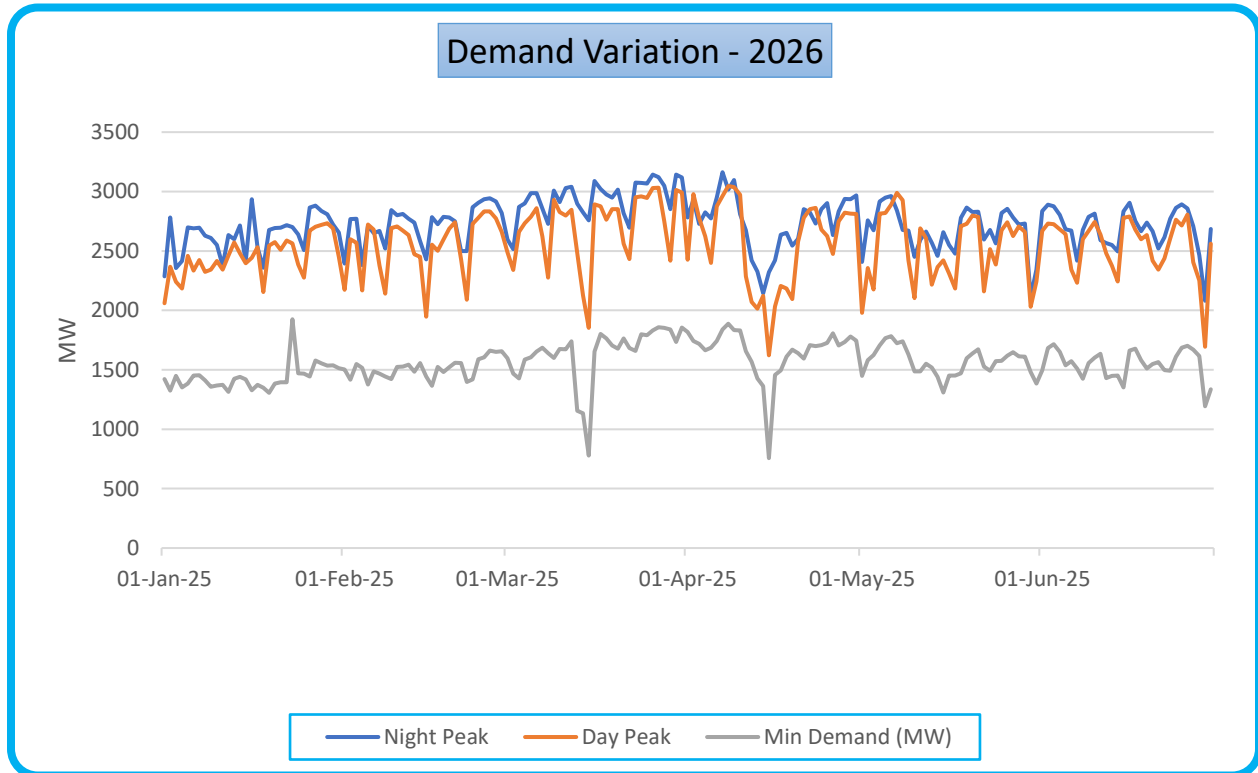


Rooftop Solar PV



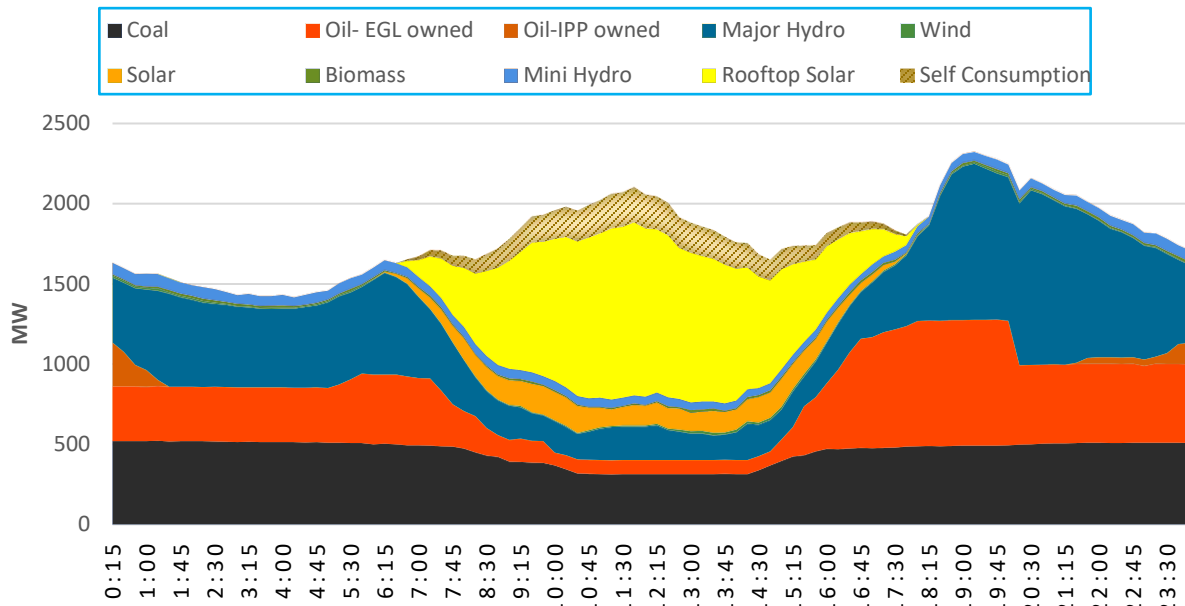
Source: CEB monthly Review Report

Daily Demand Variation



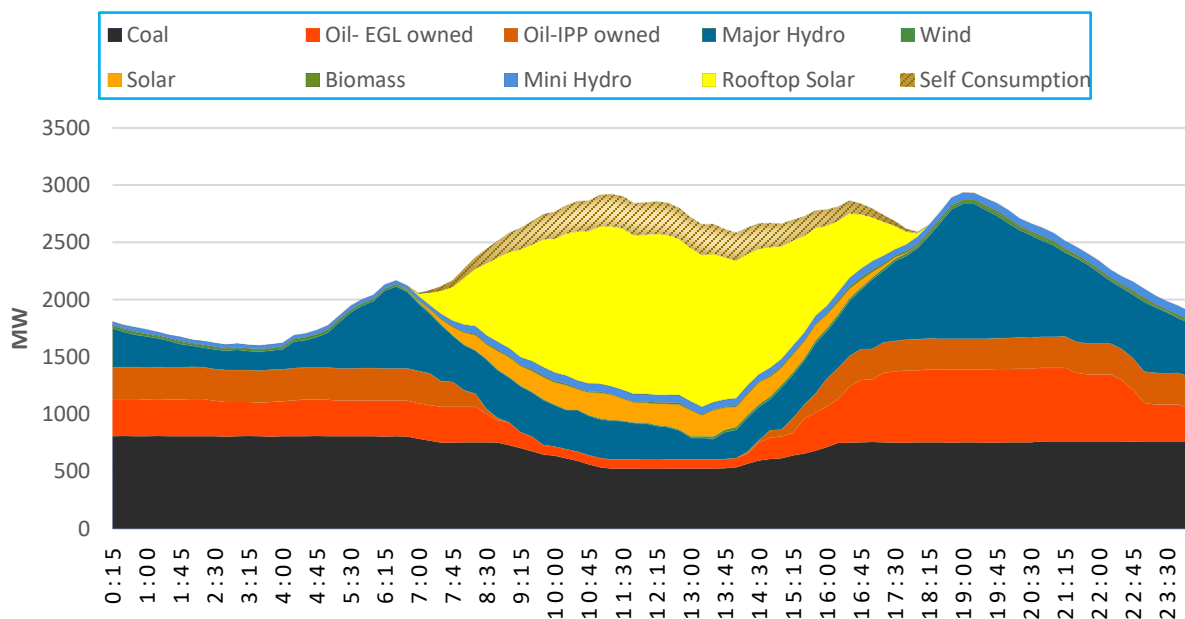
Note: Contribution from Rooftop Solar PV, IPP Solar (1MW), Self Consumption and Non-telemetered Mini Hydro is estimated based on the relevant actual generation and modelled in the generation profile

LOAD CURVE AT THE DATE OF THE LOWEST DEMAND (ON 15 APRIL 2026)



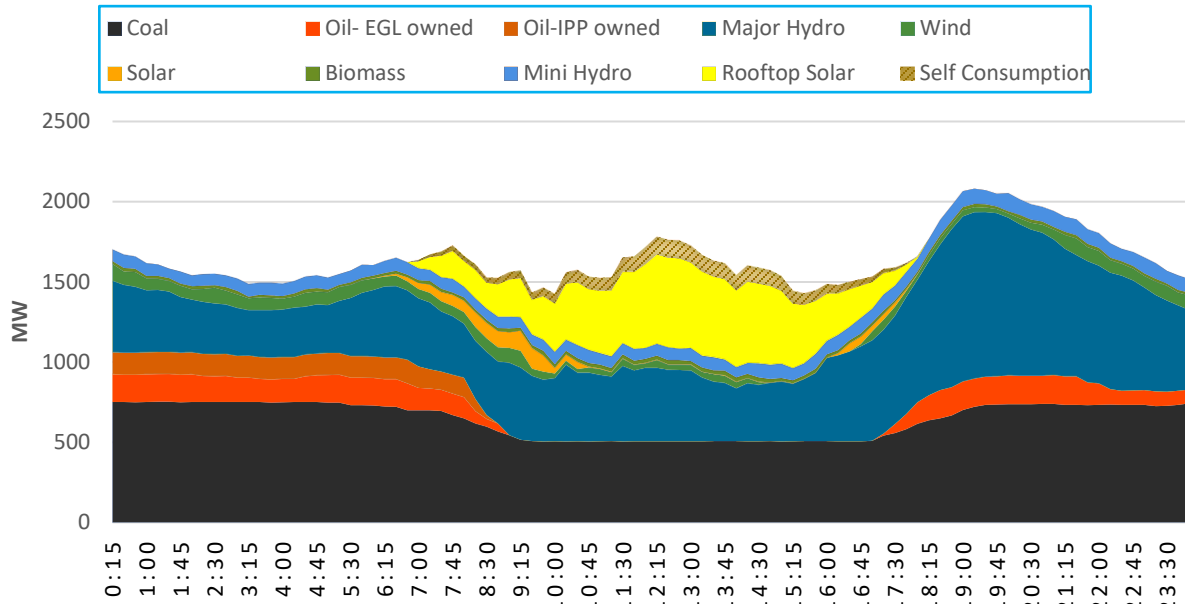
Note: Contribution from Rooftop Solar PV, IPP Solar (1MW), Self Consumption and Non-telemetered Mini Hydro is estimated based on the relevant actual generation and modelled in the generation profile

LOAD CURVE AT THE DATE OF HIGHEST SOLAR GENERATION (ON 25-FEB-2026)



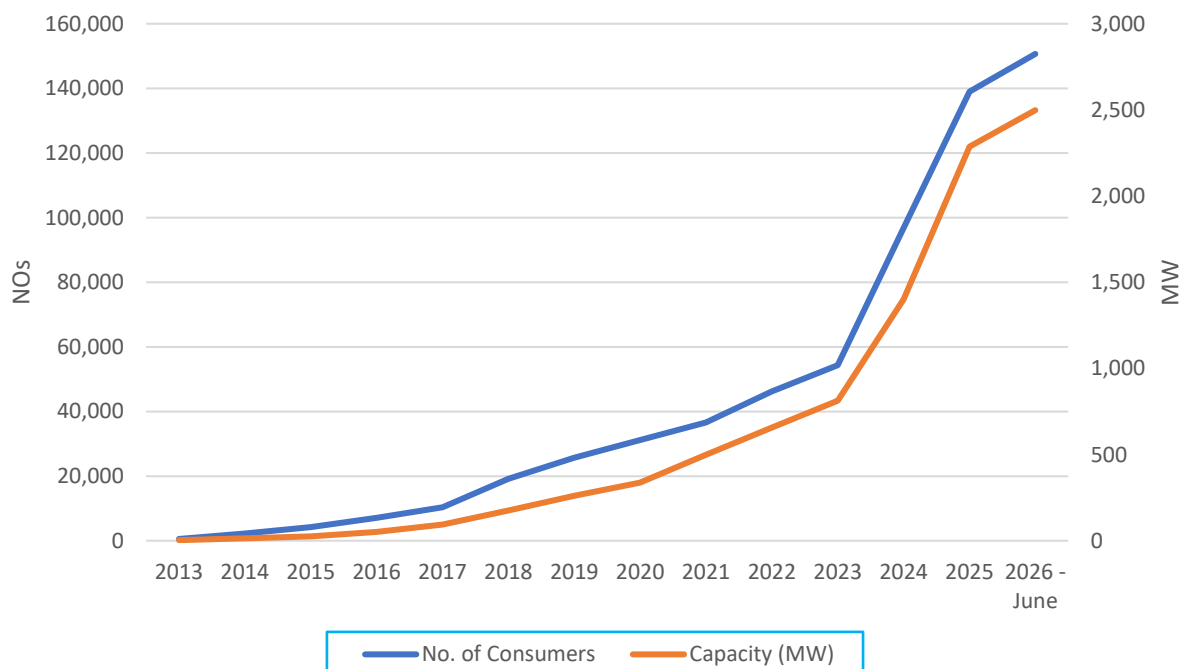
Note: Contribution from Rooftop Solar PV, IPP Solar (1MW), Self Consumption and Non-telemetered Mini Hydro is estimated based on the relevant actual generation and modelled in the generation profile

LOAD CURVE AT THE DATE WITH THE LOWEST SOLAR GENERATION (ON 29 JUNE 2026)

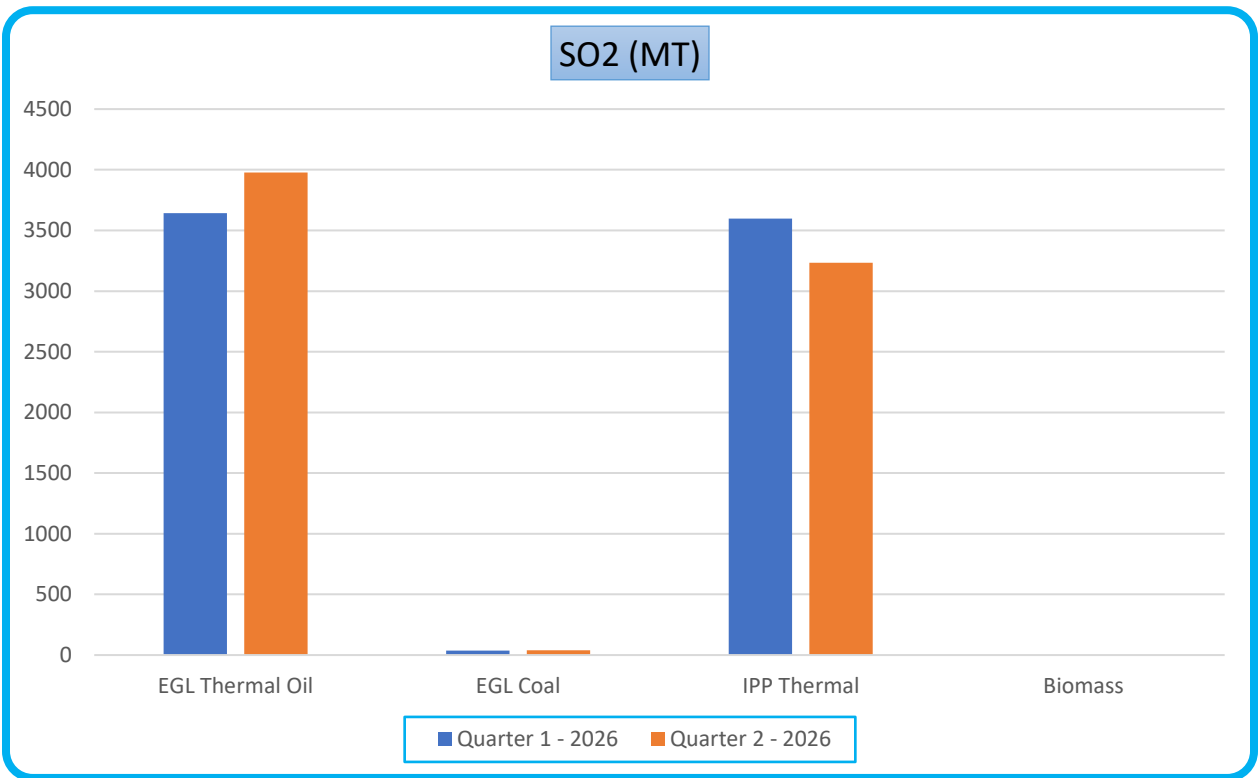
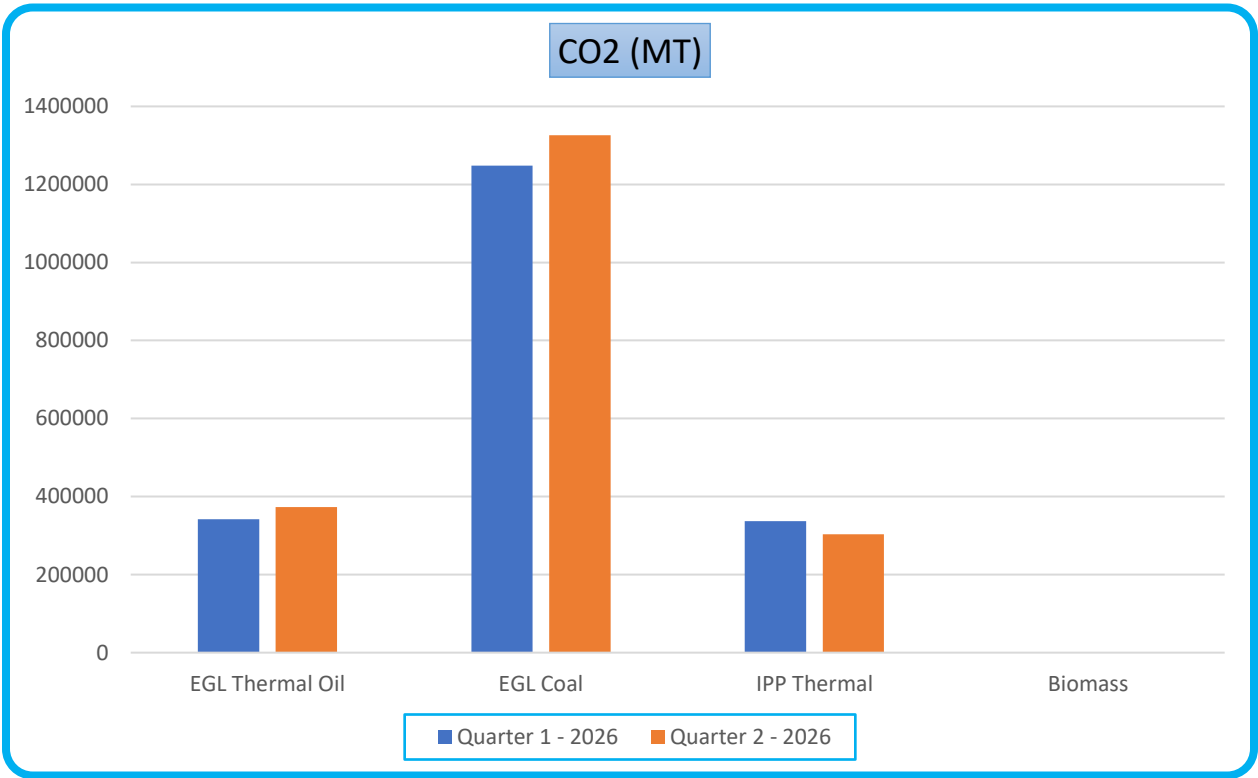


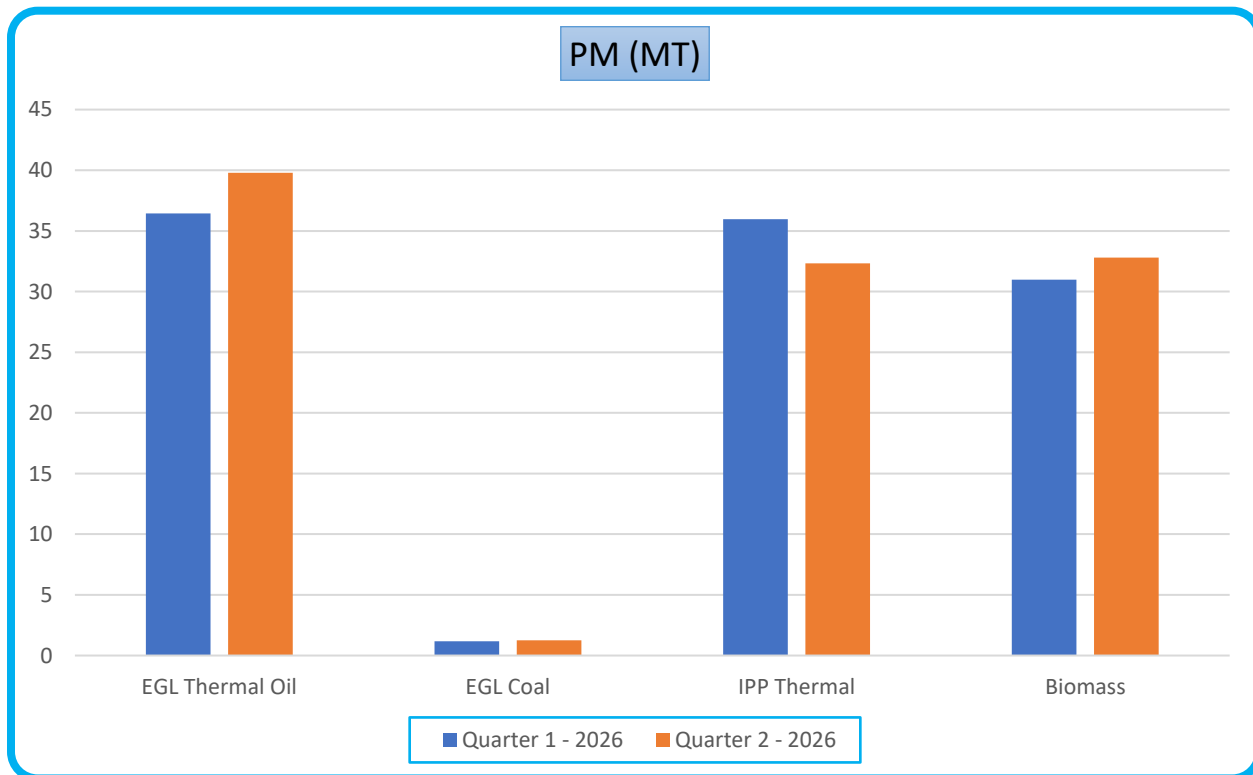
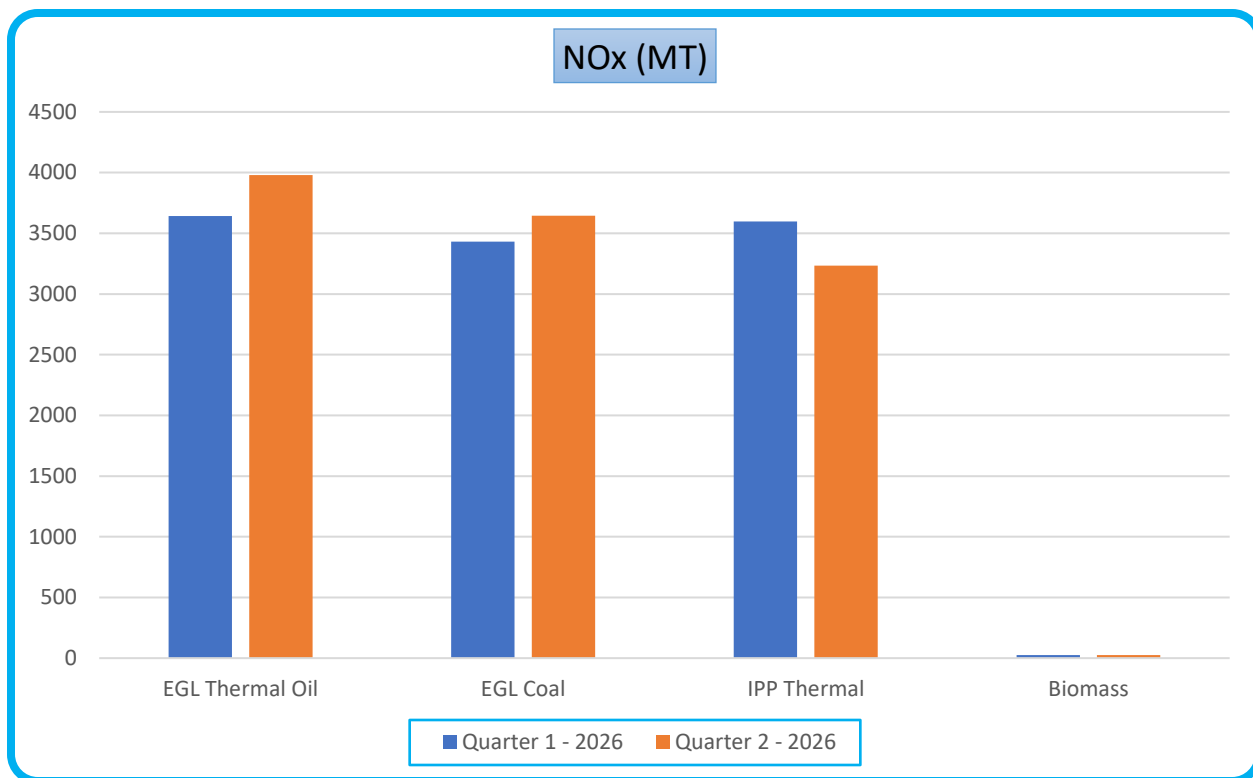
Note: Contribution from Rooftop Solar PV, IPP Solar (1MW), Self Consumption and Non-telemetered Mini Hydro is estimated based on the relevant actual generation and modelled in the generation profile

Rooftop Solar PV Growth 2013-2026



Generation Source wise Emission Q1 2026 vs Q2 2026





Source: Estimated based on actual generation

Generation Licensees - 2026

Generation License details can be found via the following.

Link: <https://www.pucsl.gov.lk/electricity/licensee/list-of-licensees/>

Renewable Generation Power Plants in Sri Lanka

Locations of the Renewable Power plants can be found via the following link.

<https://www.pucsl.gov.lk/electricity/quality/environment-and-renewable-energy/>

Electricity Dispatch Data Dashboard

Electricity Dispatch Data can be found via the following link.

<https://gendata.pucsl.gov.lk/home>

Long Term Generation Expansion Plan for 2025 – 2044

Latest Long Term Generation Expansion Plan can be found via the following link.

<https://www.pucsl.gov.lk/wp-content/uploads/2025/05/LTGEP-2025-2044-FINAL.pdf>