

1st
QUARTER
2026

RENEWABLE GENERATION REPORT



January 2026 – March 2026

Introduction:

This report offers comprehensive insights into the quarterly performance of renewable energy generation in Sri Lanka. The data and analysis presented herein aim to guide investment decisions within the country's electricity sector. The main focus is on Non-Conventional Renewable Energy (NCRE) sources, including Mini Hydro, Wind, Solar PV, Biomass, and Municipal Solid Waste.

Most solar PV systems tend to be either utility-scale installations with a capacity usually above 1 megawatt (MW) or rooftop PV typically below 1 MW. Residences may be limited to small systems usually up to 20 kilowatts (kW), while larger public, commercial, and industrial buildings may have systems with a capacity as large as 1 MW or even more. Land based wind power projects have been implemented so far while offshore wind projects are considered in the pipeline.

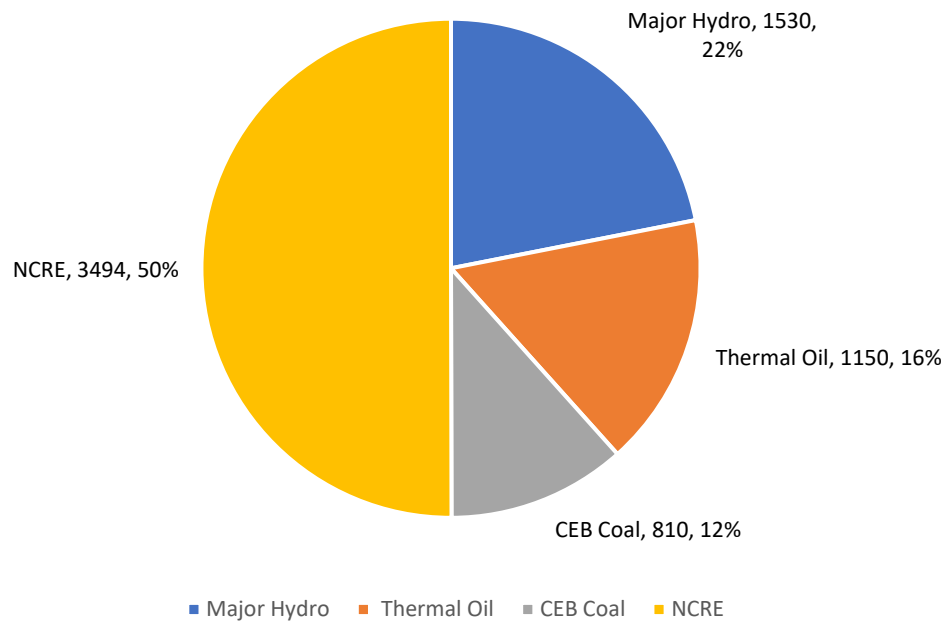
In 2019, the Minister of Power, Energy, and Business Development published the National Energy Policy & Strategies of Sri Lanka, prepared after reviewing and revising the National Energy Policy and Strategies of Sri Lanka published in the Gazette Extraordinary No. 1553/10 of 10.06.2008. The primary objective of the energy policy is to ensure energy security through supplies that are cleaner, secure, economical, and reliable, and to provide convenient, affordable energy services to support the socially equitable development of Sri Lanka.

Policy guidelines such as the 'General Policy Guidelines on the Electricity Industry' as required under Sri Lanka Electricity Act No. 20 of 2009 statutorily required to be issued for each sub-sector, are expected to be prepared and issued, based on this national energy policy.

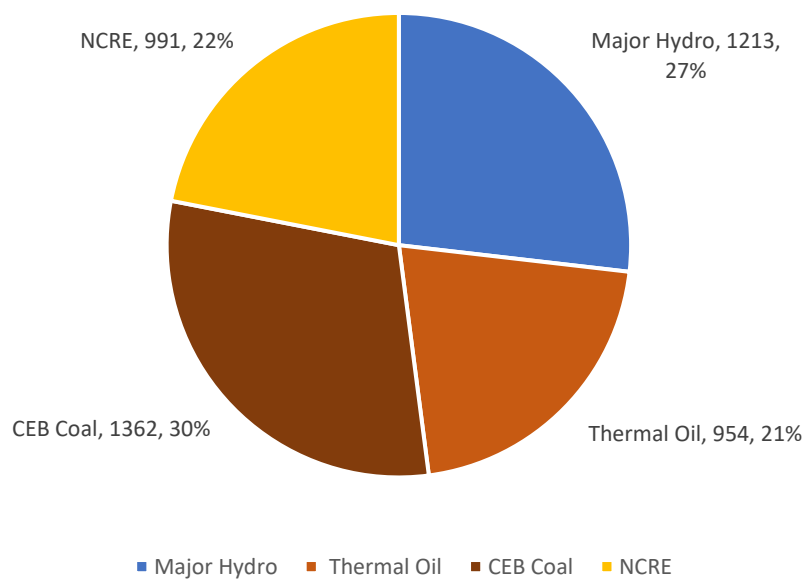
Sri Lanka's power sector development is carried out based on the Long-term generation expansion plan (LTGEP) prepared by the Transmission Licensee (ie. Ceylon Electricity Board (CEB)) and approved by the Public Utilities Commission of Sri Lanka (PUCSL). LTGEP is a rolling plan prepared in every two years incorporating the changes introduced by the varying economic and technical parameters used in the planning process.

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

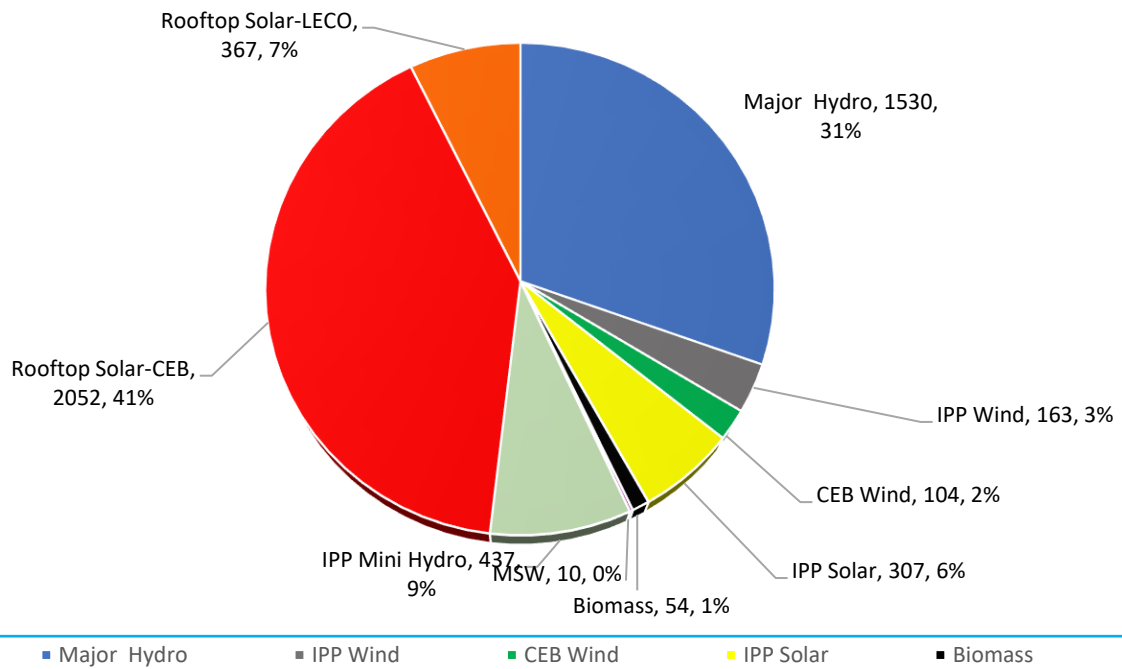
Installed Capacity (MW) by Source - as at 31.03.2026



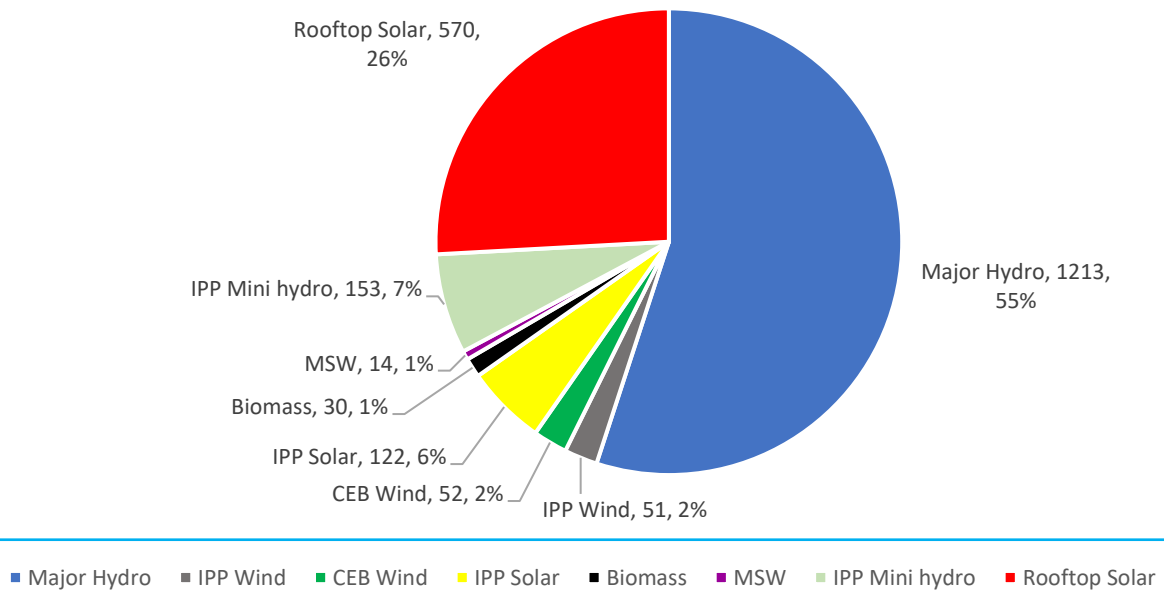
Annual Cumulative Generation by Source (GWh)
as at 31.03.2026



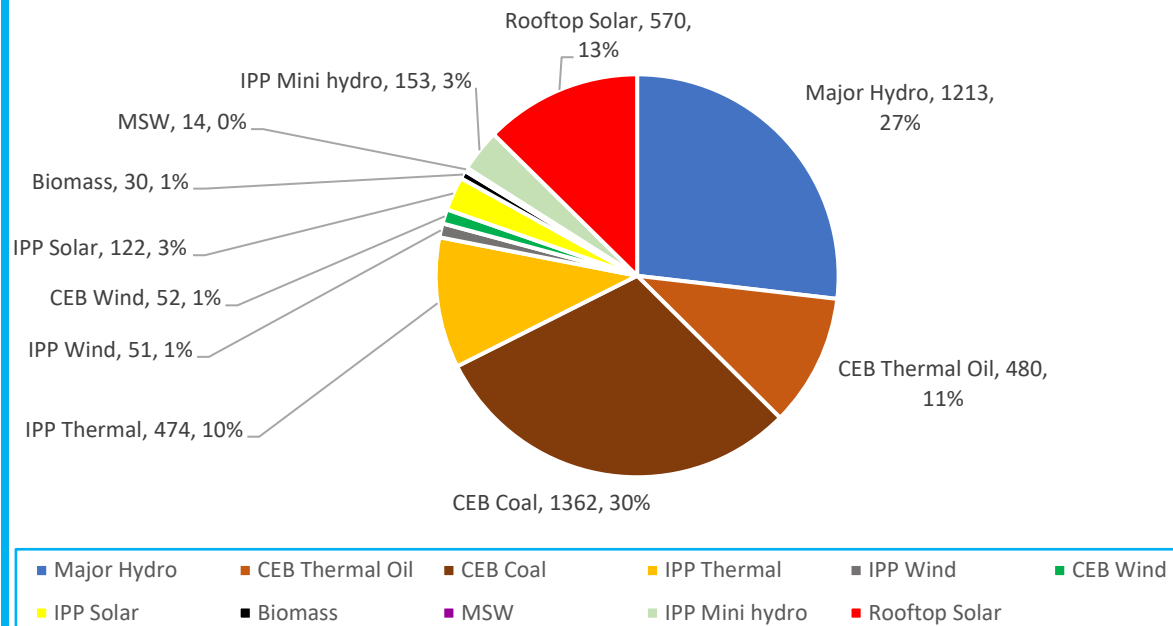
Renewable Energy Capacity (MW) as at 31.03.2026



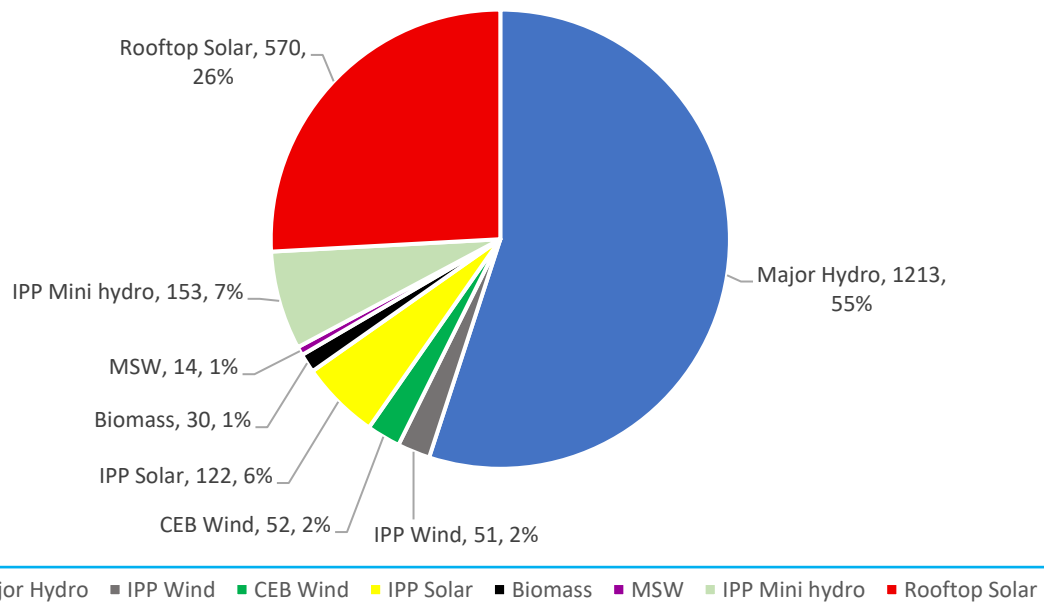
Annual Cumulative Renewable Generation (GWh) 01.01.2026 to 31.03.2026



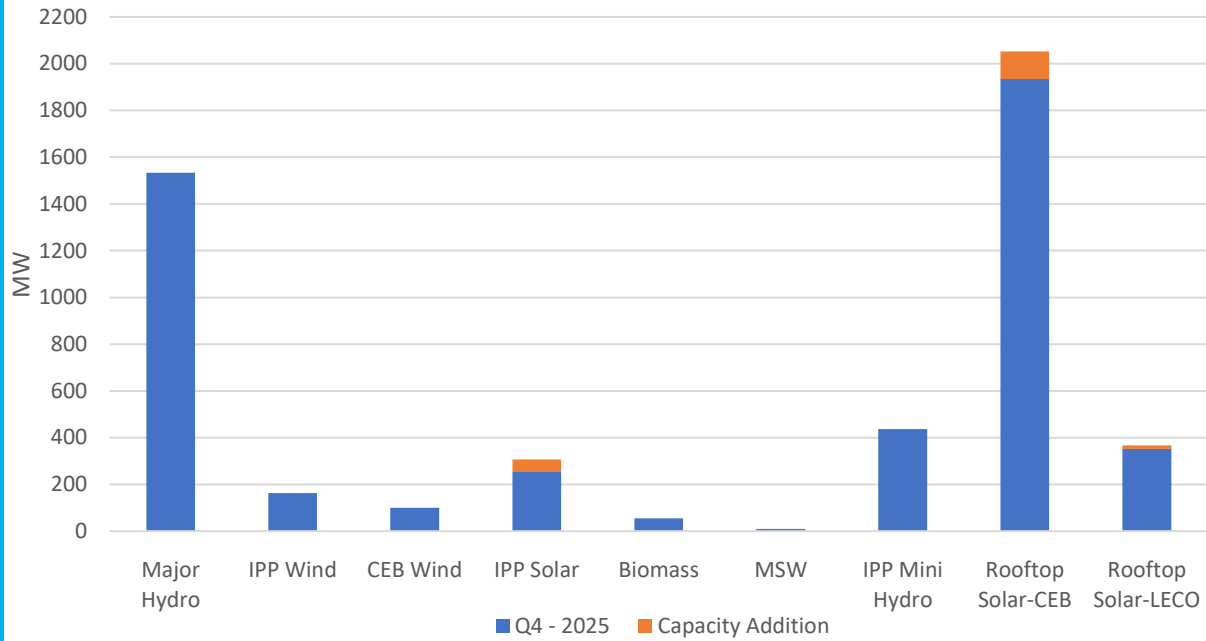
Generation Mix by Technology (GWh)- 1st Quarter 2026



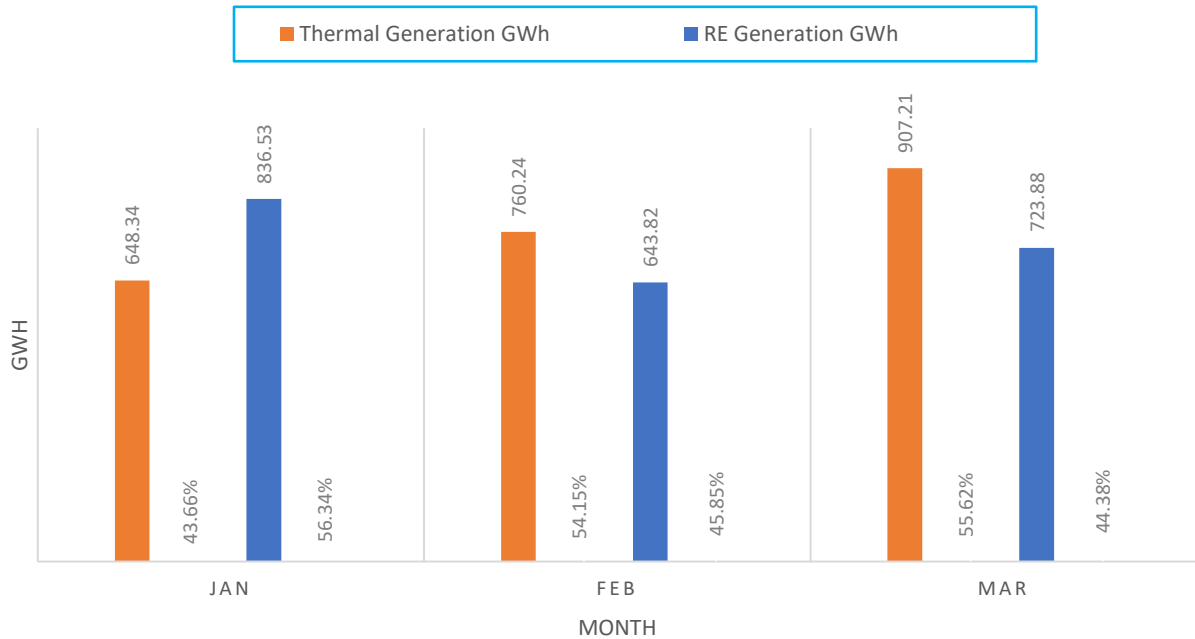
Renewable Generation Mix by Technology (GWh) - 1st Quarter 2026



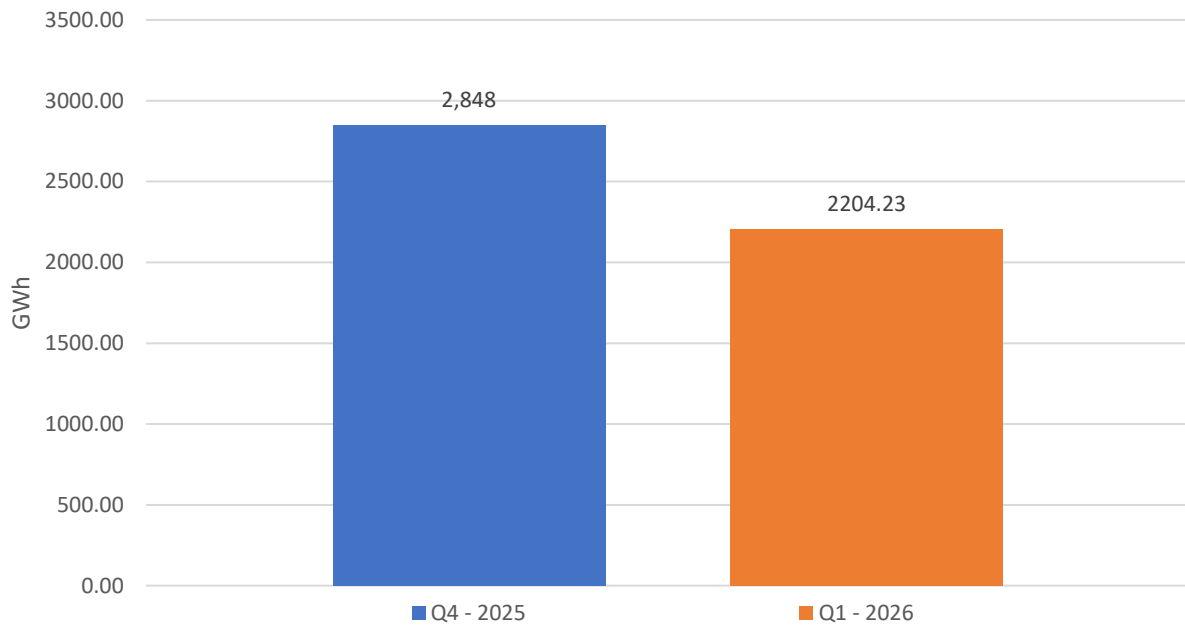
Capacity Addition by compared to 4th Quarter of 2025



MONTHLY GENERATION COMPARISON - 2026

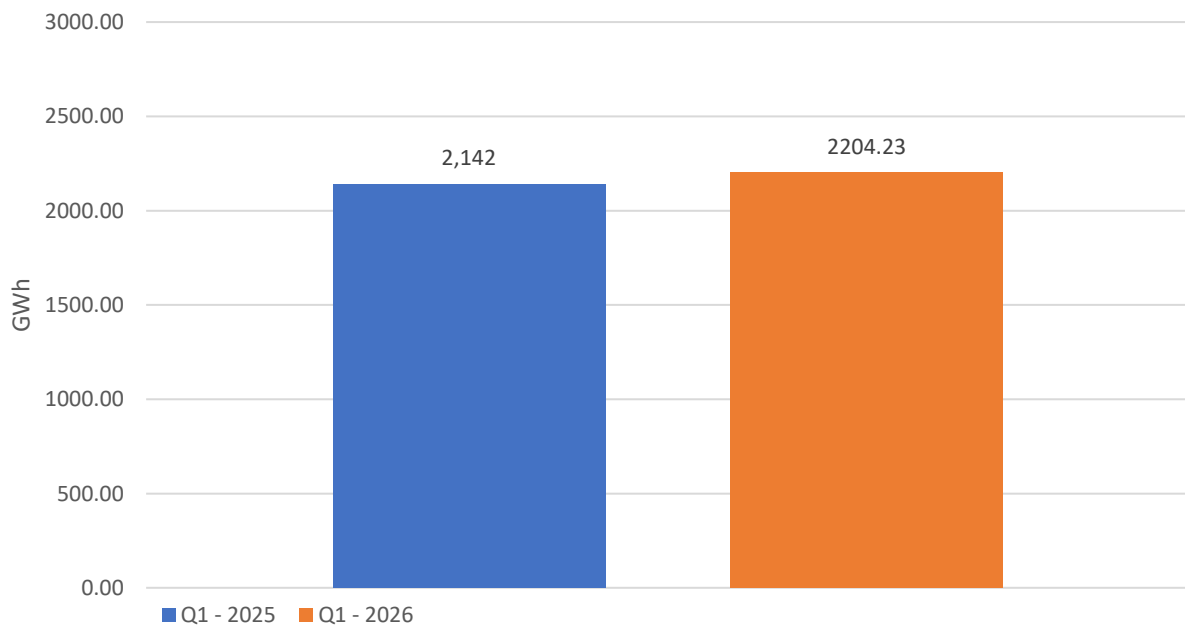


Renewable Generation Q4 2025 Vs. Q1 2026



RE Generation in Q1 - 2026 decreased by 22.6% as compared to Q4 – 2026

Renewable Generation Q1 2025 Vs. Q1 2026

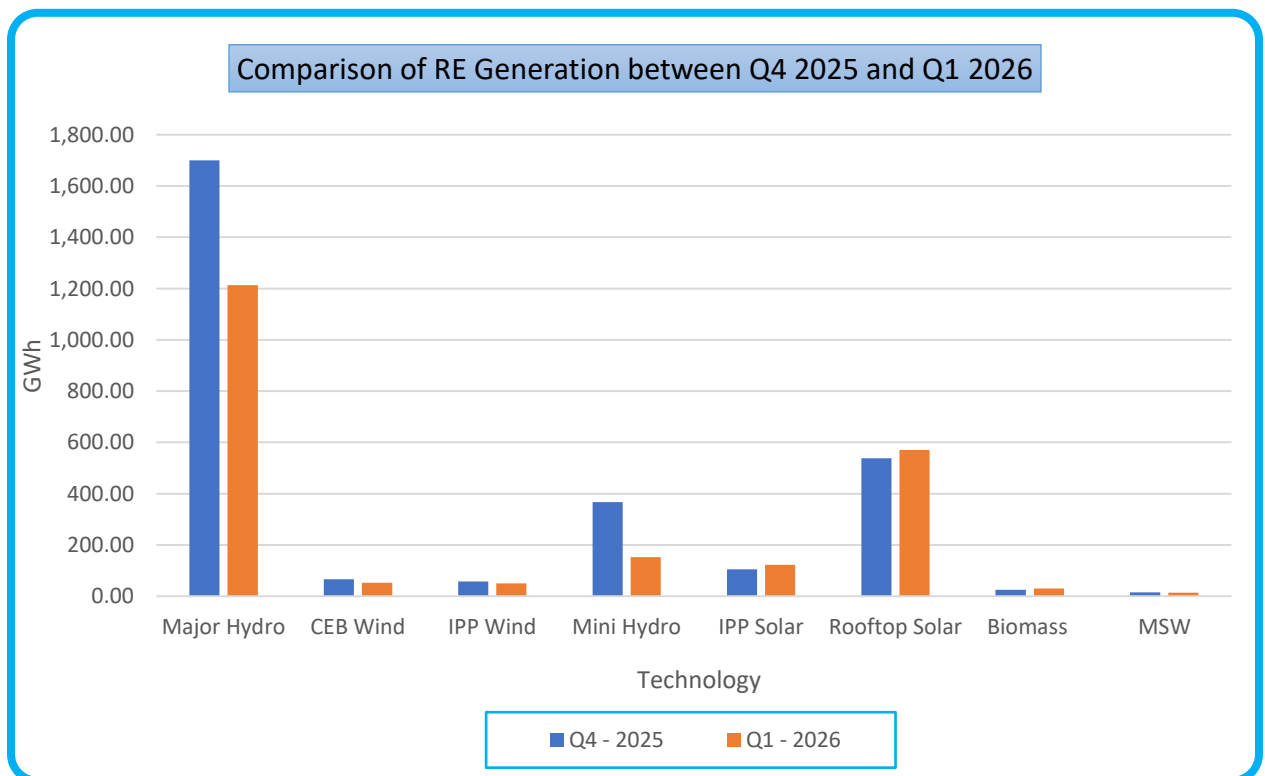


RE Generation in Q1 - 2026 increased by 2.9% as compared to Q1 – 2026

Renewable Generation Comparison

Renewable Generation (GWh) – 4th Quarter 2025 Vs 1st Quarter 2026

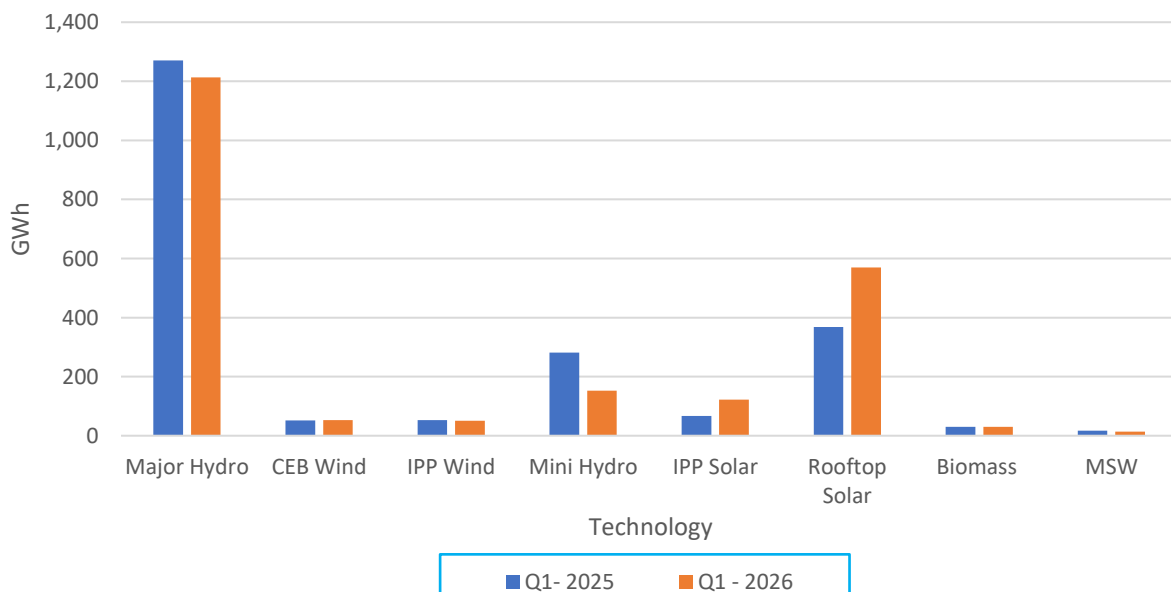
Technology	Q4 - 2025	Q1 - 2026	Deviation (%)
Major Hydro	1,699.75	1,212.78	-29%
CEB Wind	66.71	52.42	-21%
IPP Wind	58.04	50.64	-13%
Mini Hydro	367.17	152.85	-58%
IPP Solar	104.71	122.39	17%
Rooftop Solar	537.61	570.07	6%
Biomass	24.88	29.57	19%
MSW	15.65	13.51	-14%



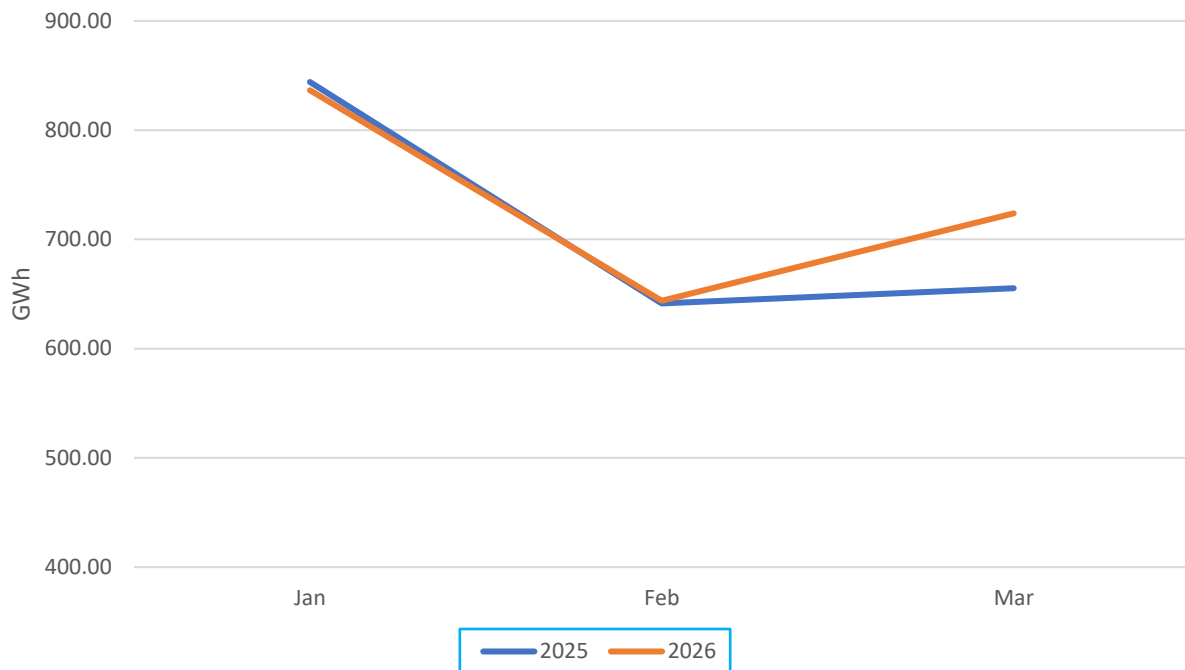
Renewable Generation (GWh) – 1st Quarter 2025 vs 1st Quarter 2026

Technology	Q1- 2025	Q1 - 2026	Deviation
Major Hydro	1,271	1,213	-5%
CEB Wind	52	52	1%
IPP Wind	53	51	-4%
Mini Hydro	281	153	-46%
IPP Solar	67	122	82%
Rooftop Solar	368	570	55%
Biomass	30	30	0%
MSW	17	14	-19%

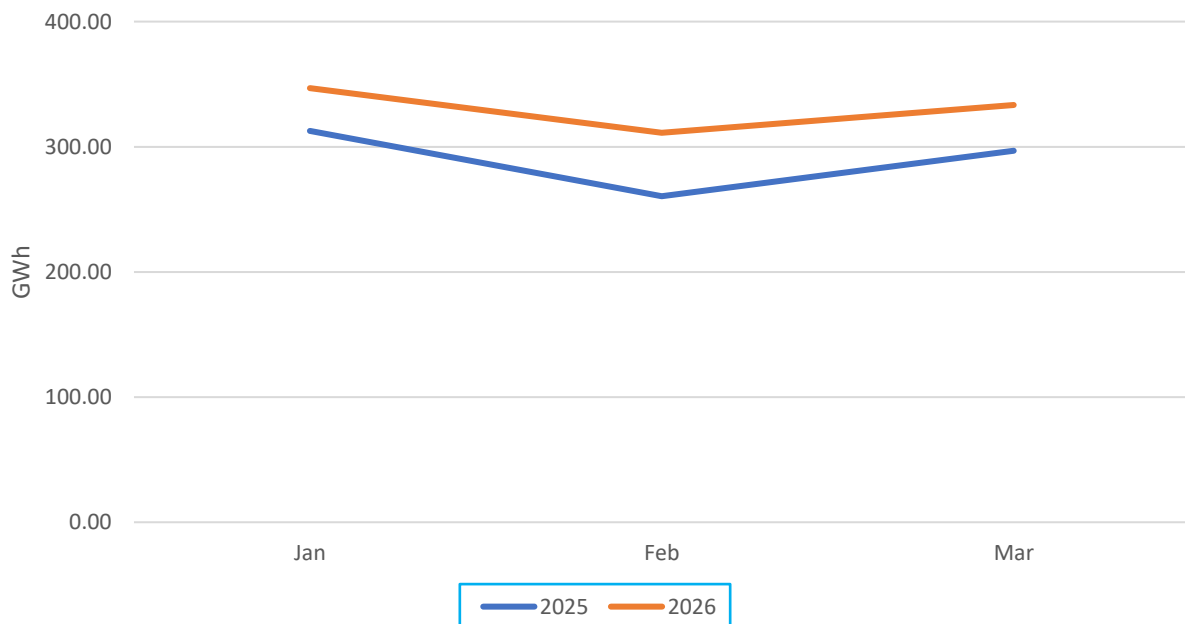
Comparison of RE Generation between Q1 2025 and Q1 2026

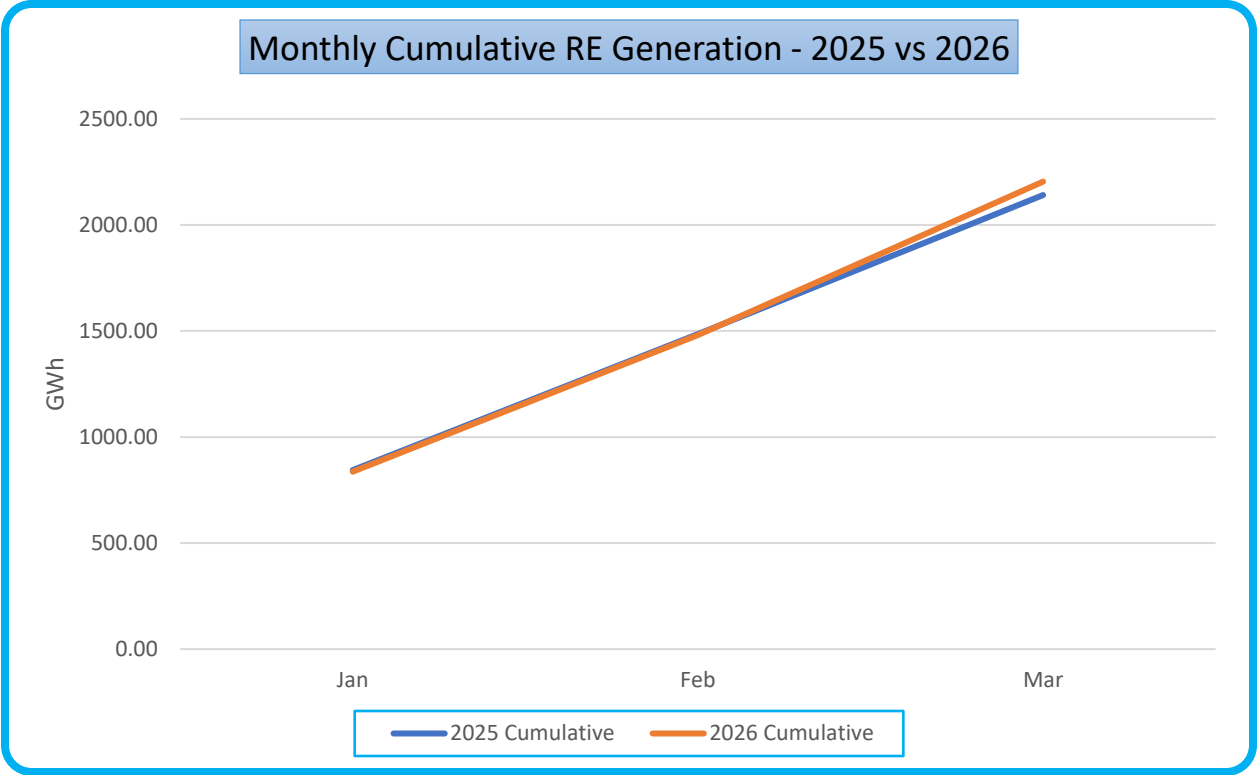


Monthly Renewable Energy Generation - 2025 vs 2026

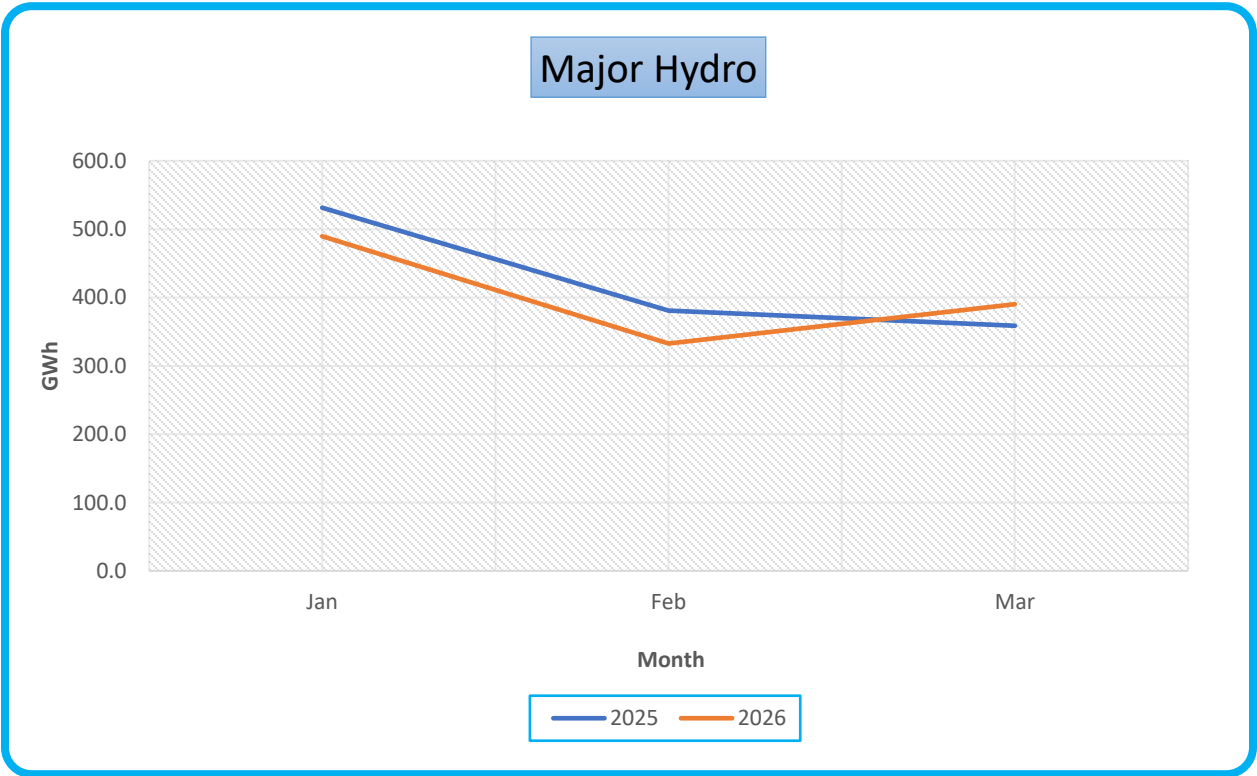


Monthly Renewable Energy Generation (without Major Hydro) - 2025 vs 2026

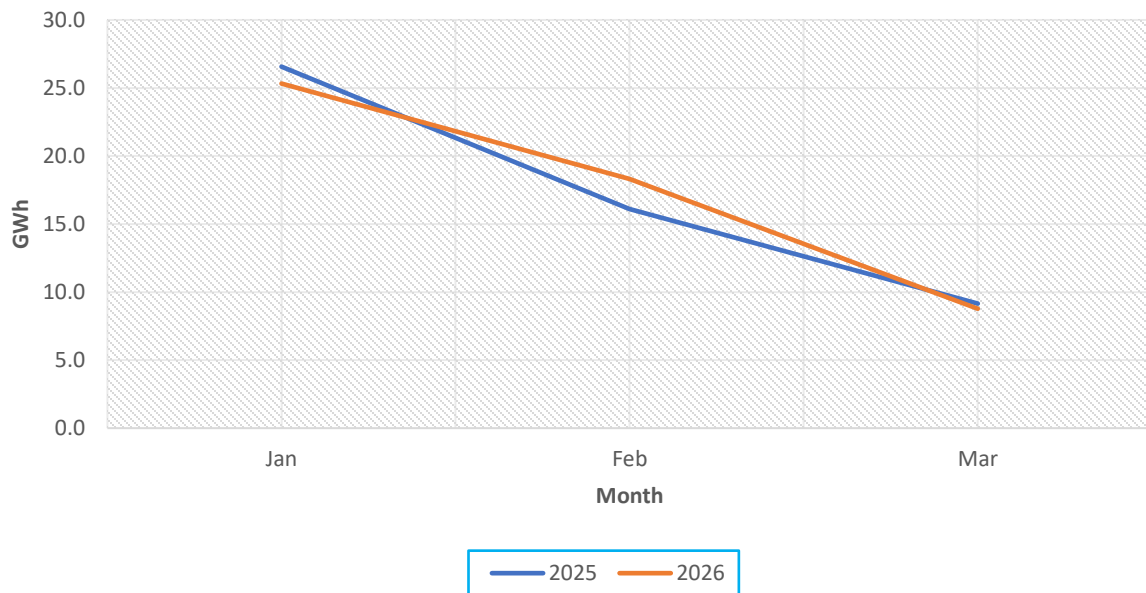




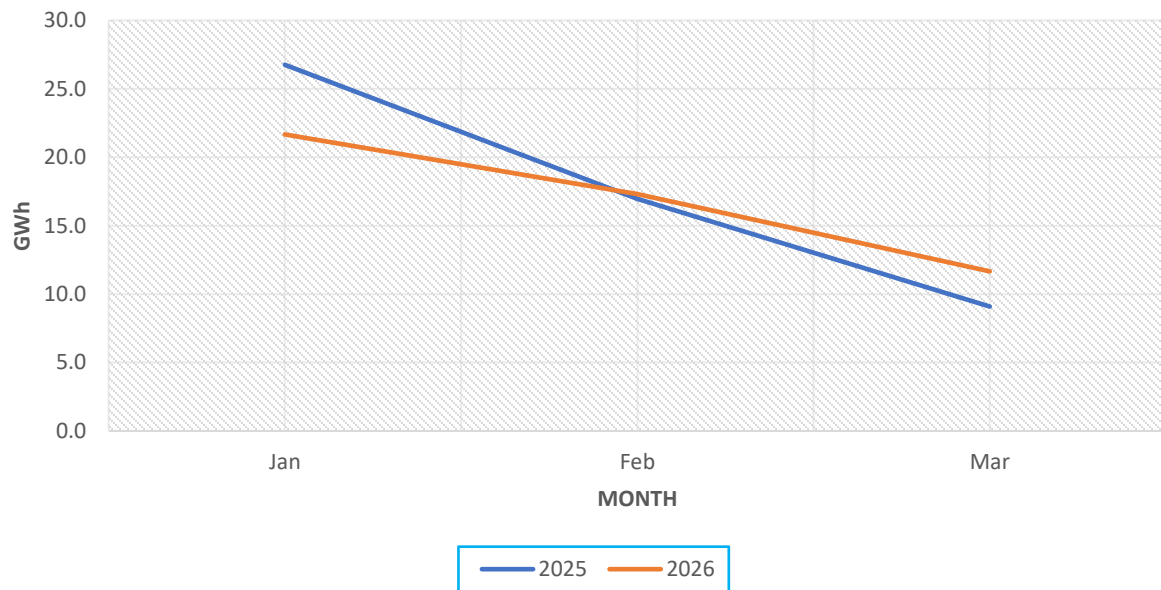
Monthly Variation of RE Generation - 2025 vs 2026 – Technology Wise



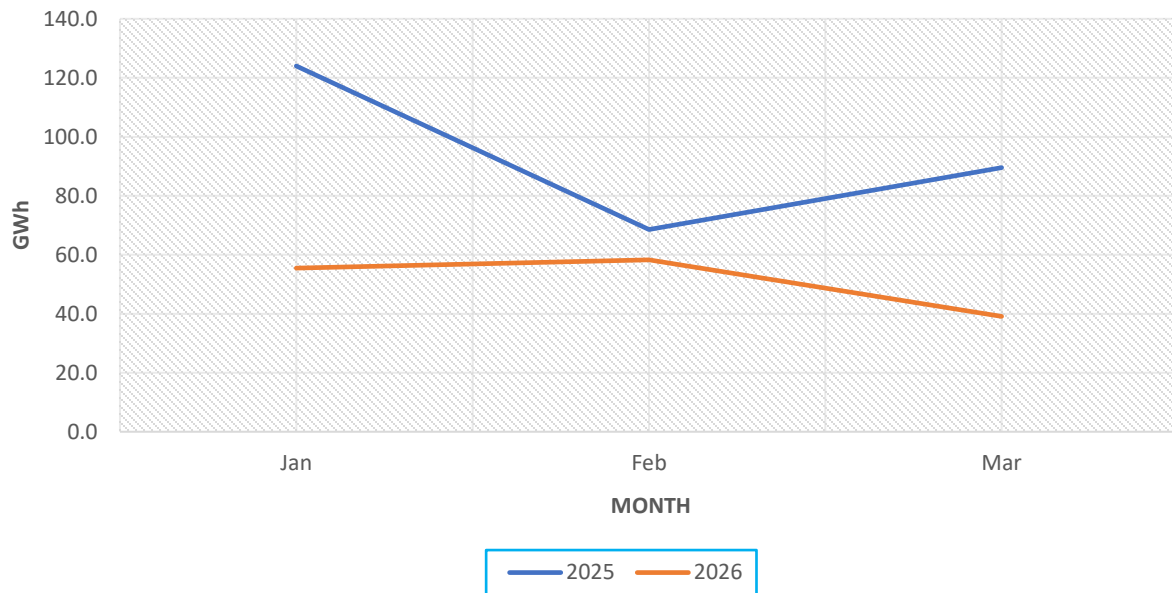
CEB Wind



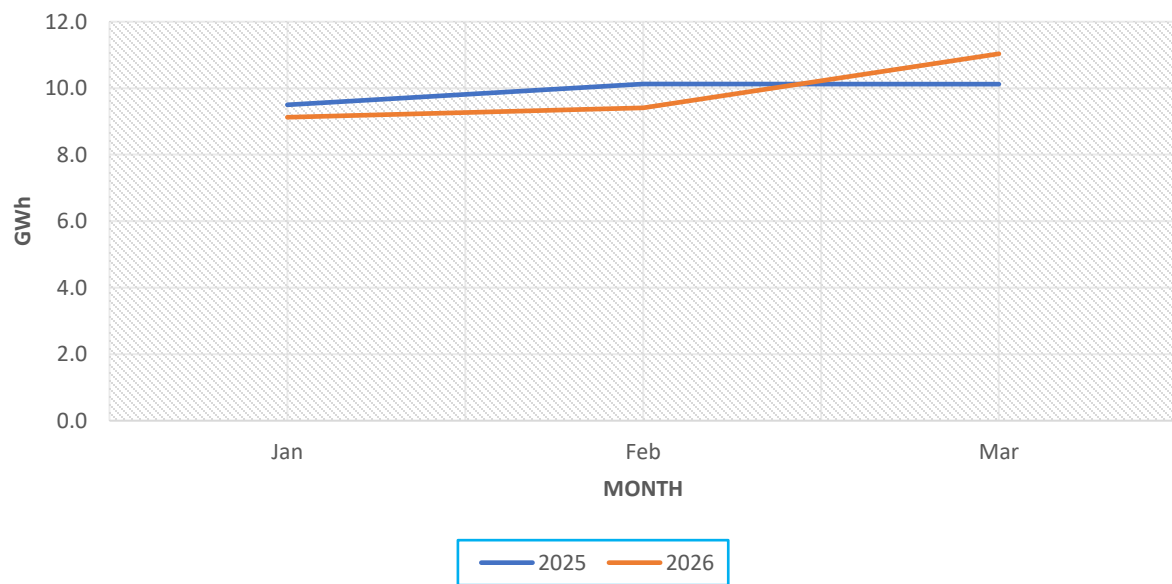
IPP Wind



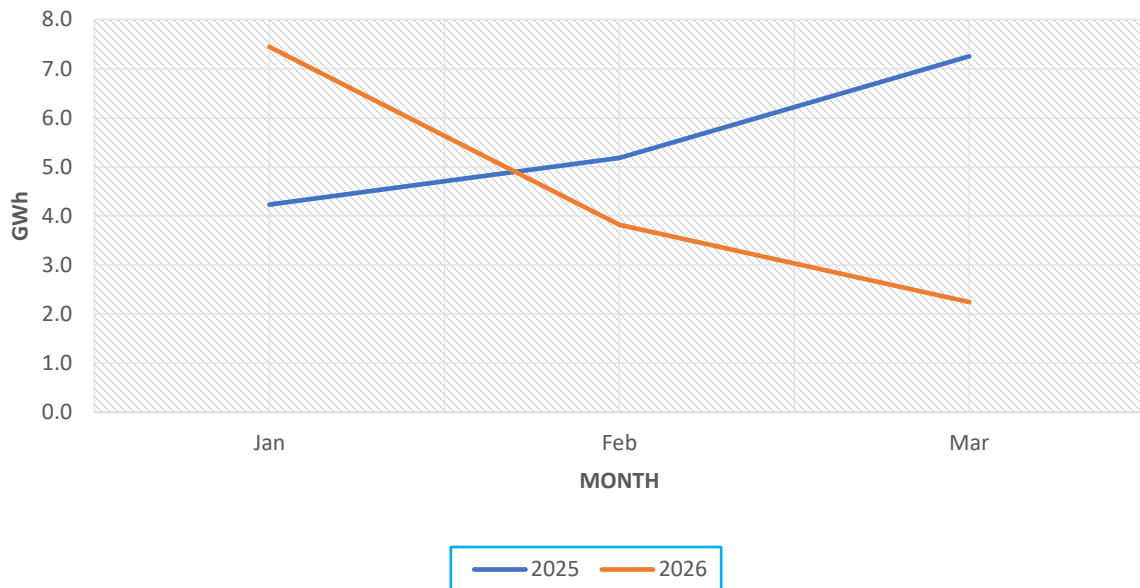
Mini Hydro



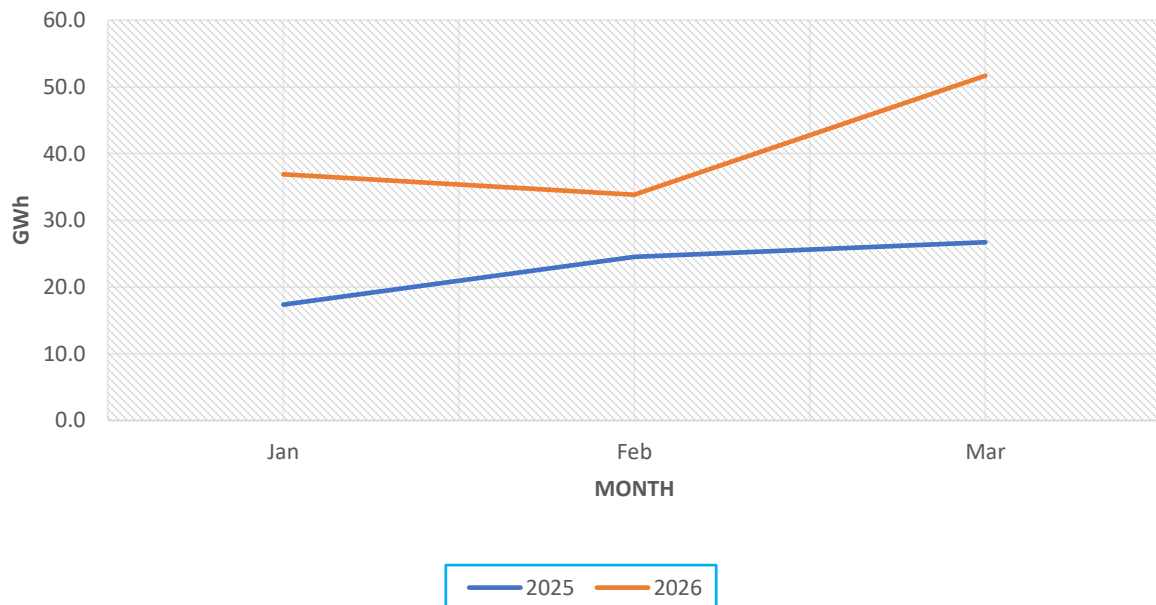
Biomass



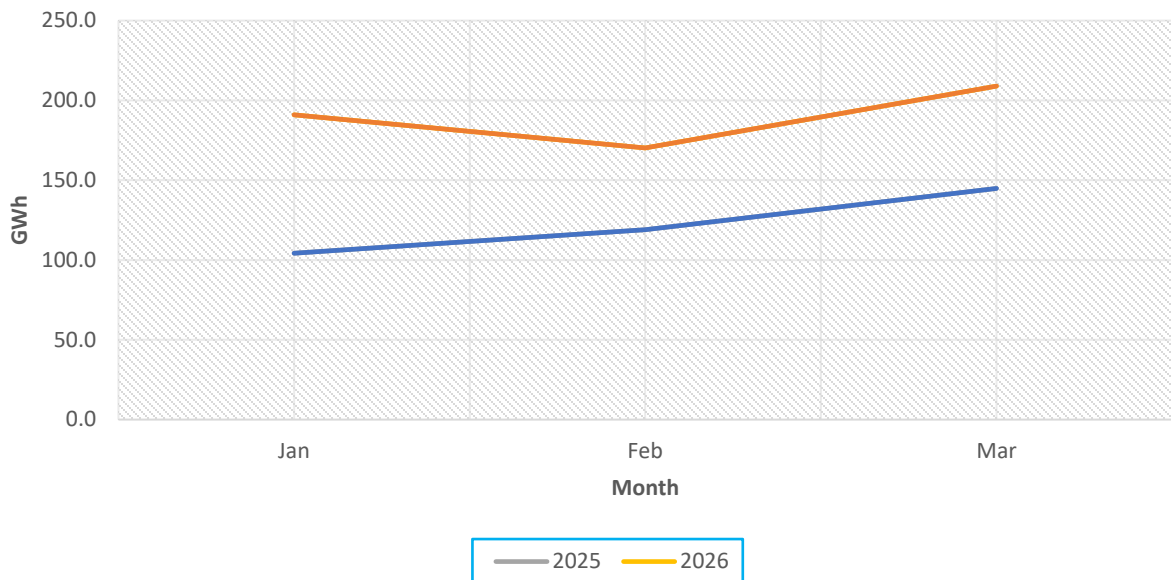
MSW



IPP Solar



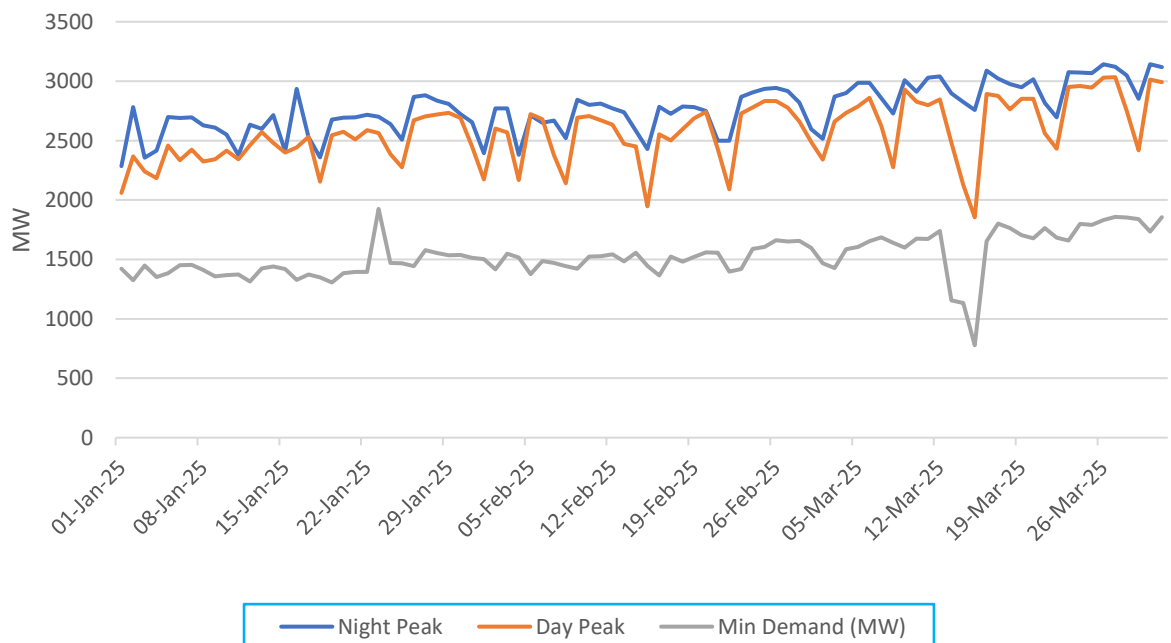
Rooftop Solar PV



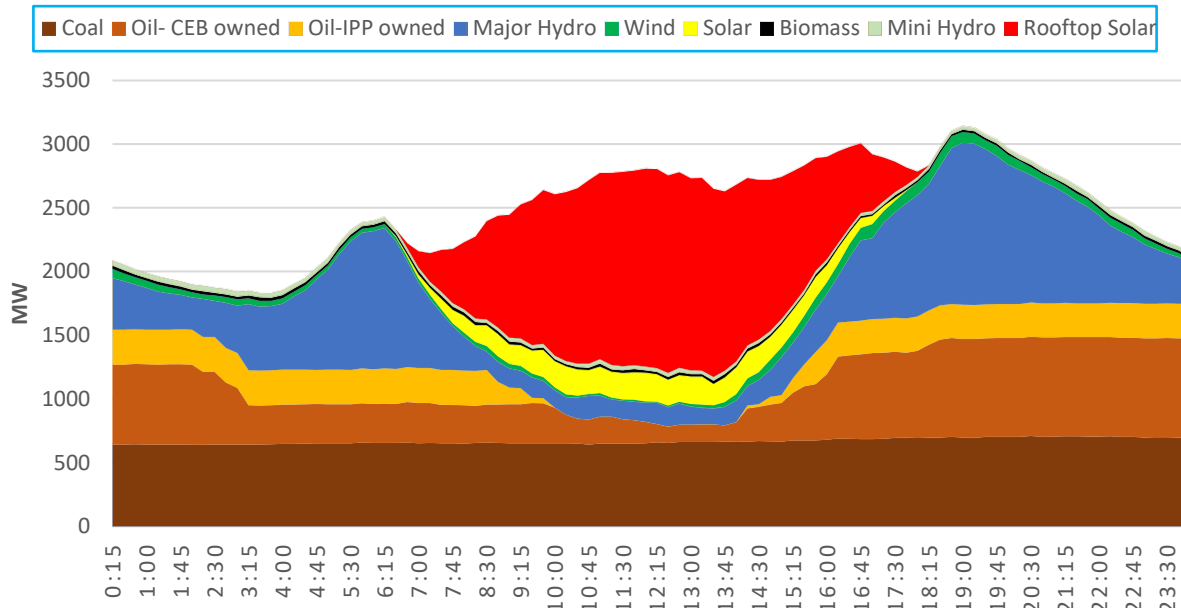
Source: CEB monthly Review Report

Daily Demand Variation

Demand Variation - 2026

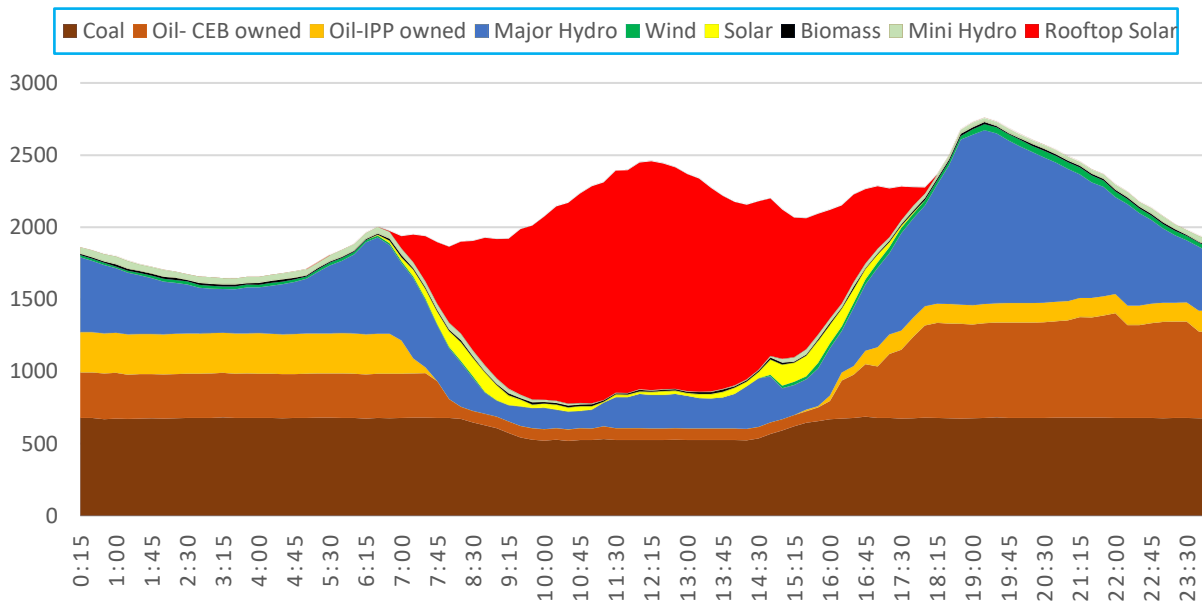


LOAD CURVE AT THE DATE OF THE HIGHEST DEMAND(ON 26-MARCH-2026)



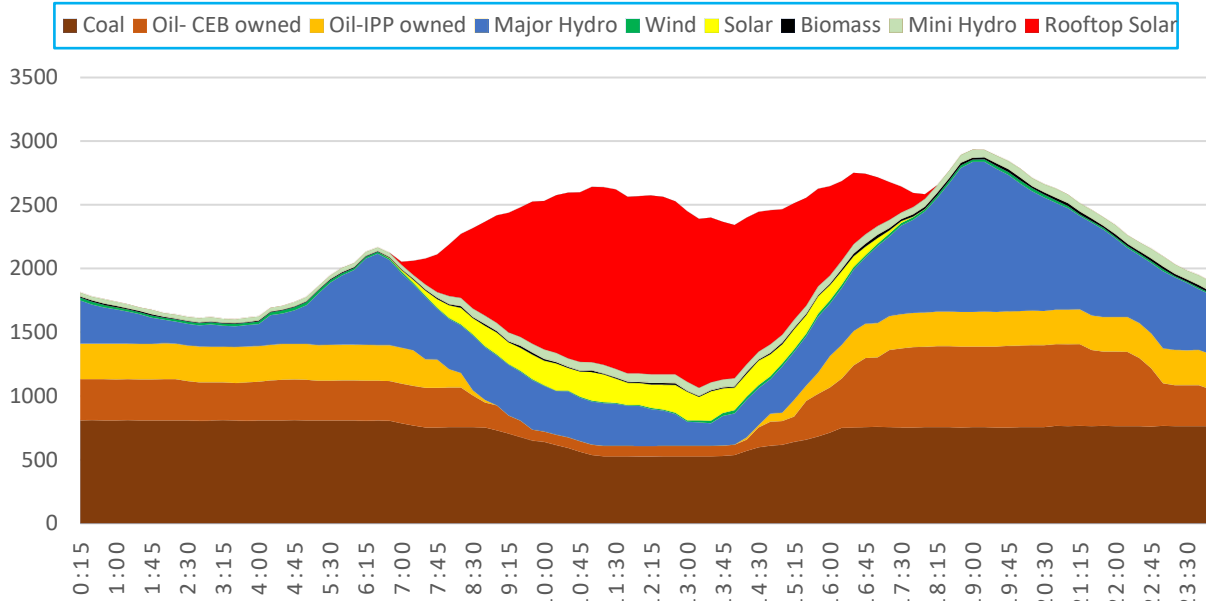
Note: Contribution from Rooftop Solar PV, IPP Solar (1MW), and Non-telemetered Mini Hydro is estimated based on the relevant actual generation and modelled in the generation profile

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



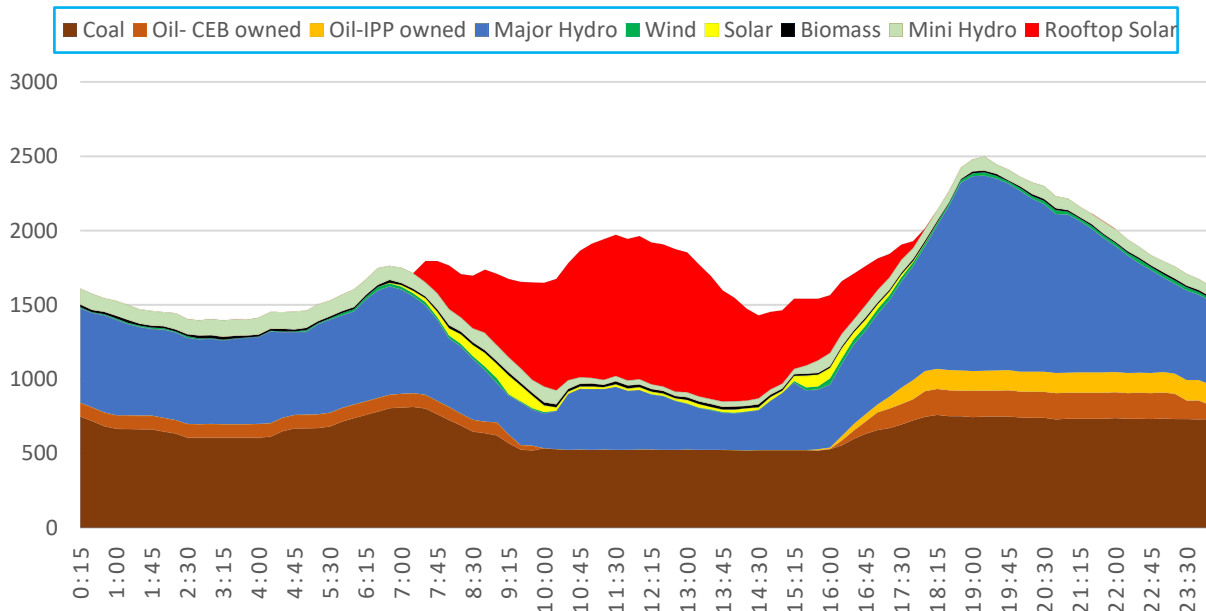
Note: Rooftop Solar PV, IPP Solar (1MW), and Non-telemetered Mini Hydro daily generation for Load Curves are calculated relative to actual monthly generations.

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



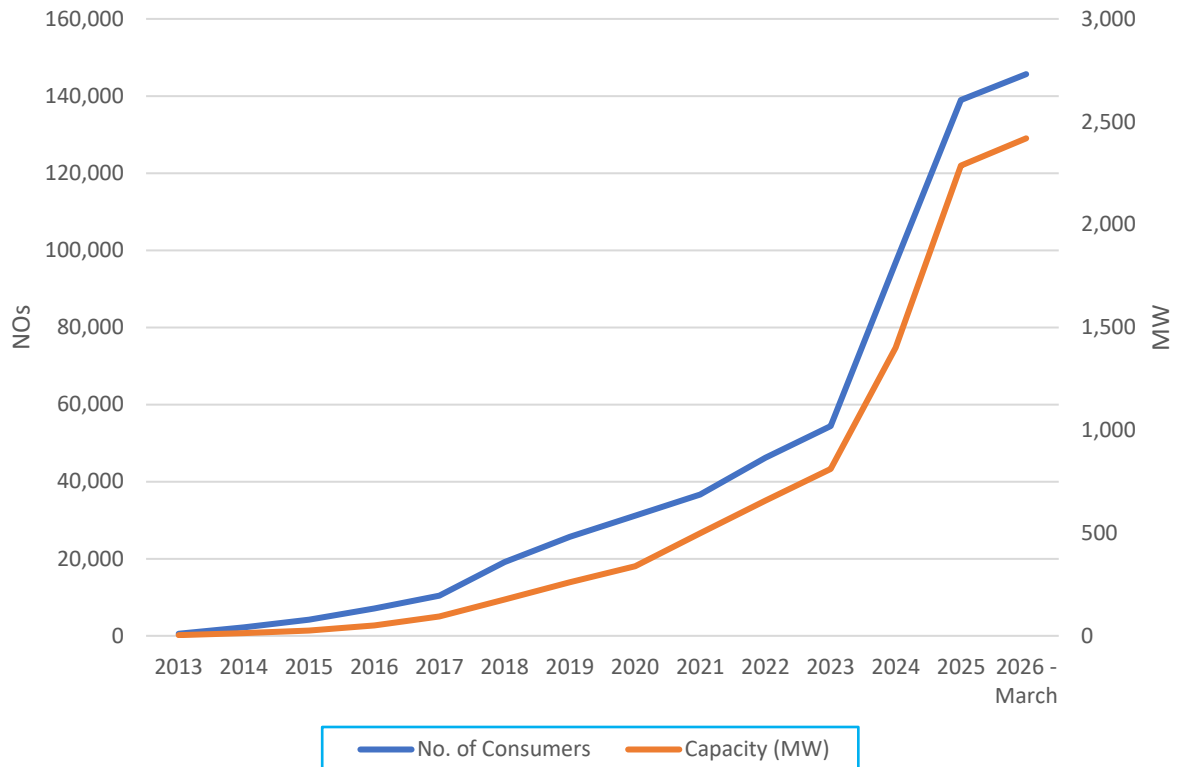
Note: Rooftop Solar PV, IPP Solar (1MW), and Non-telemetered Mini Hydro daily generation for Load Curves are calculated relative to actual monthly generations.

LOAD CURVE AT THE DATE WITH THE LOWEST SOLAR GENERATION (ON 22-FEB-2026)

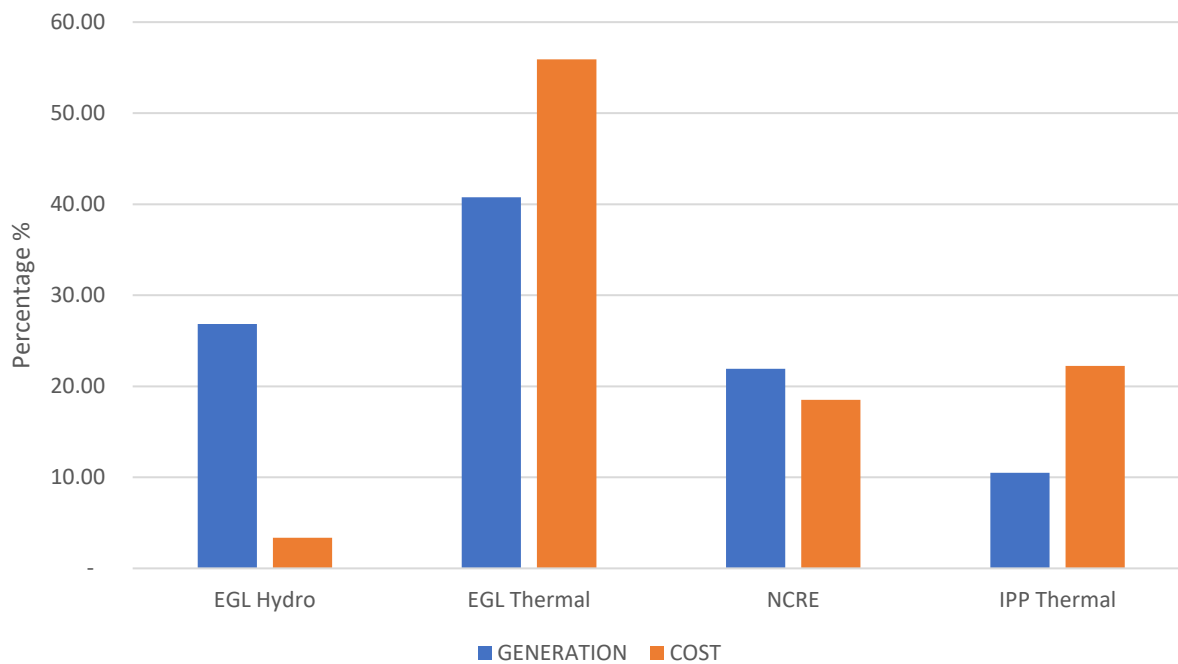


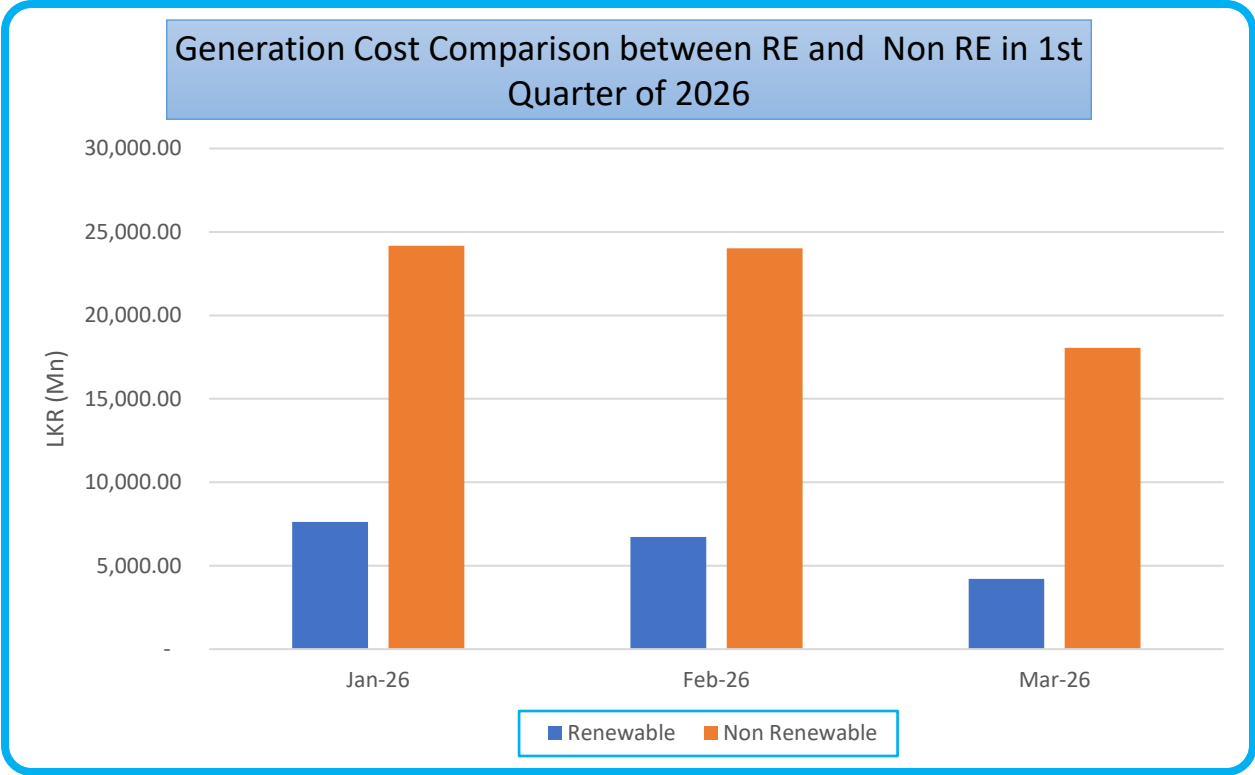
Note: Rooftop Solar PV, IPP Solar (1MW), and Non-telemetered Mini Hydro daily generation for Load Curves are calculated relative to actual monthly generations.

Rooftop Solar PV Growth 2013-2026

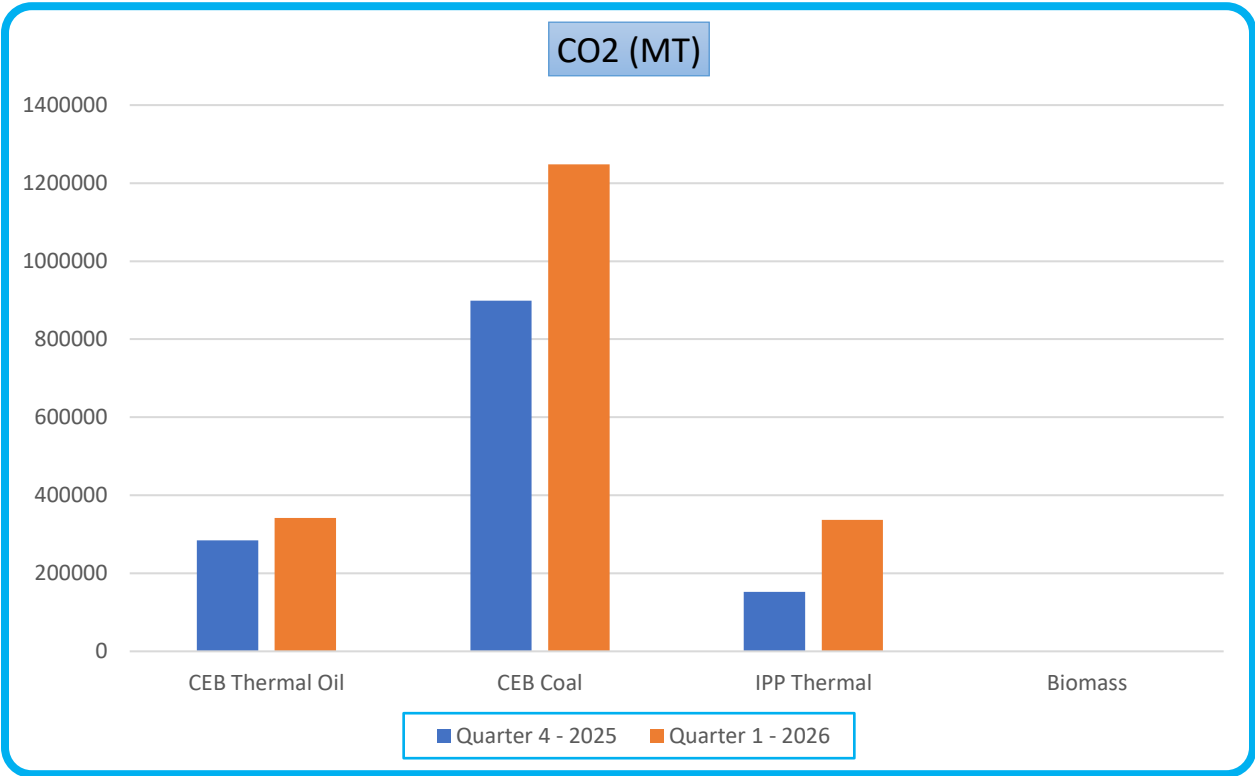


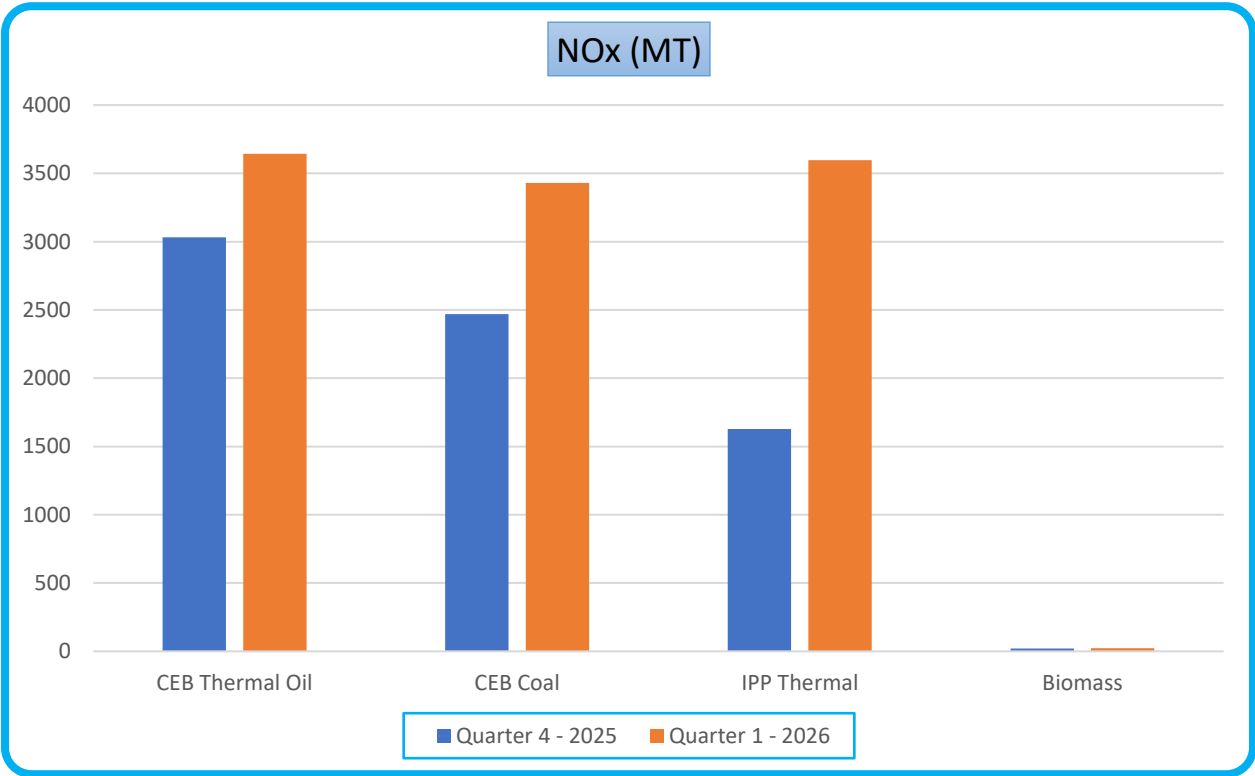
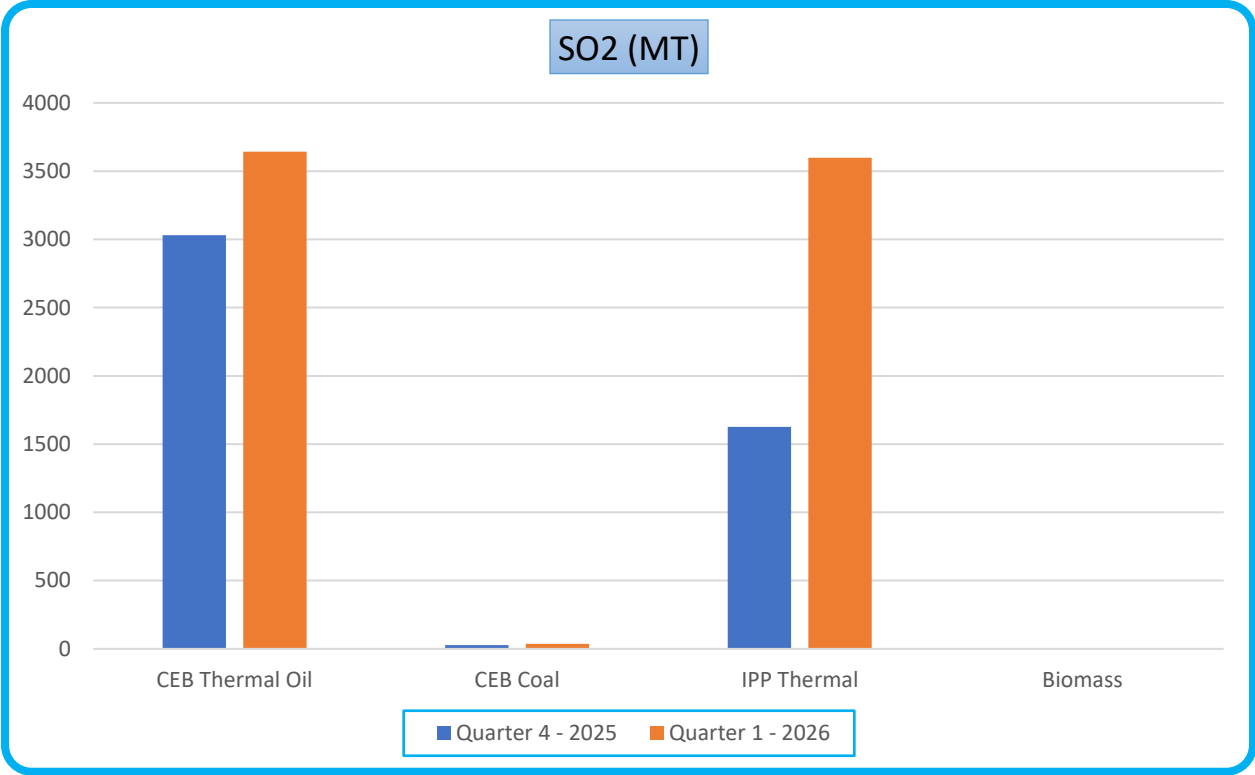
Comparison : Generation vs Cost for 1st Quarter 2026

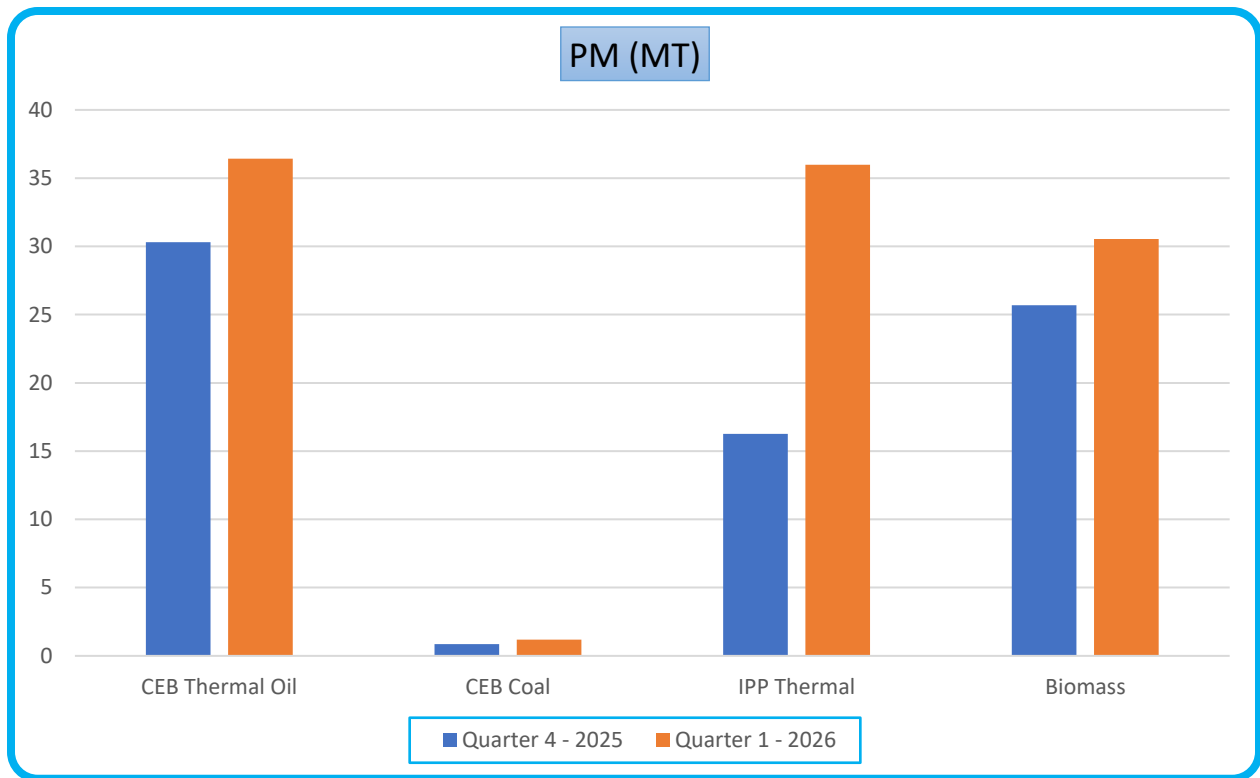




Generation Source wise Emission Q4 2025 vs Q1 2026







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>