### **FUTURE ENERGY SECURITY**

Damitha Kumarasinghe March 06, 2025

## PRESENT AND FUTURE OF ELECTRICITY DEMAND

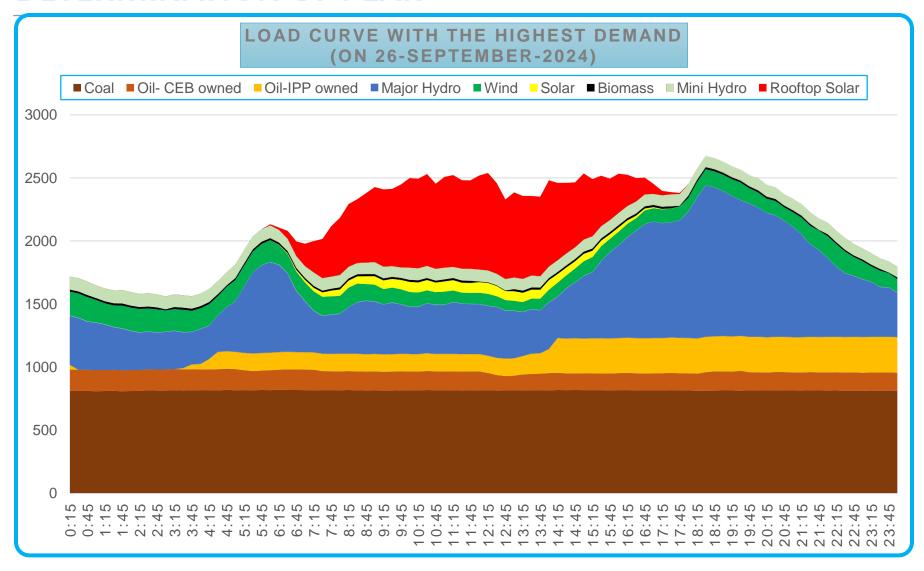
#### **ELECTRICITY GENERATION MIX 2024**

Technology	Generation in GWh
CEB Hydro	5,431
CEB Thermal Oil	1,572
CEB Coal	5,485
IPP Thermal	768
Renewable	3,248
Total	16,504

### **INSTALLED CAPACITY 2024**

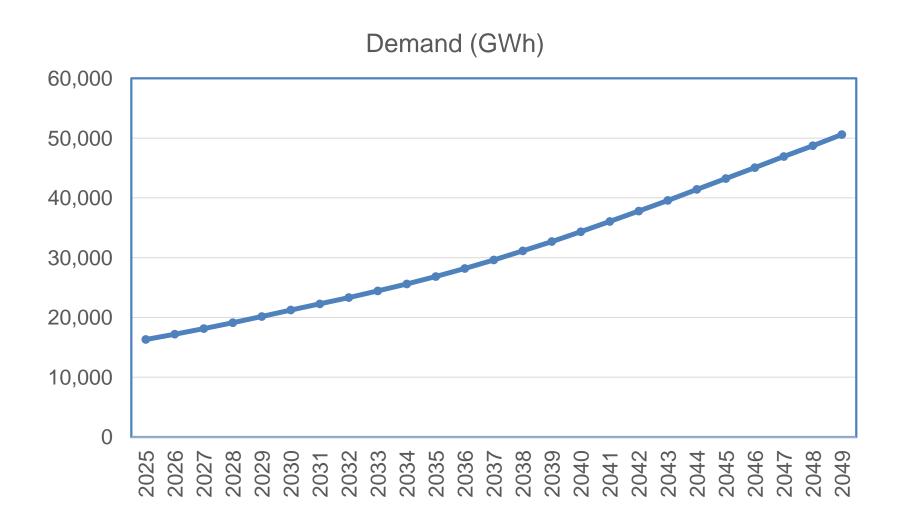
Technology	MW
CEB Hydro	1,531
CEB Thermal Oil	771
CEB Coal	810
IPP Thermal	482
Renewable	2,058
Total	5,652

#### **DETERMINATION OF PEAK**



Effect of Duck Curve is starting to become visible

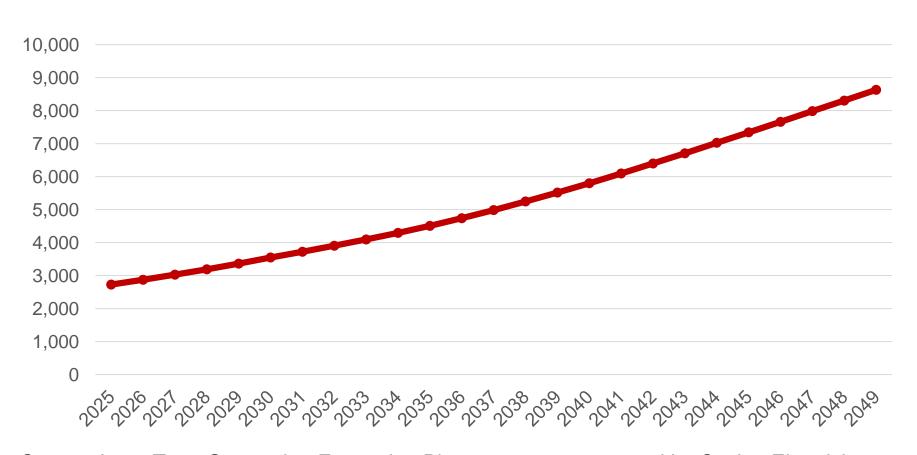
## Electricity Demand (GWh)



Source: Long Term Generation Expansion Plan 2025-2044 prepared by Ceylon Electricity Board (Base Case Forecast)

## Peak Demand (MW)

Peak Demand (MW)



Source: Long Term Generation Expansion Plan 2025-2044 prepared by Ceylon Electricity Board (Base Case Forecast)

## **ENERGY SECURITY**

# "THE UNINTERRUPTED AVAILABILITY OF ENERGY SOURCES AT AN AFFORDABLE PRICE" -IEA

- Availability
- Affordability
- Acceptability
- Accessibility
  - Geopolitical
  - Geographical
  - Technological
  - Economical/financial
  - Human Resources

## POLICY

#### General Policy Guidelines (2021)

**ELECTRICITY TARIFF** 10, Tariff chargeable by the licensees, namely, Transmission Licensee in the case of transmission and bulk sale tariffs, and distribution licensees in the case of distributOn and supply tariffs should reflect the costs reasonably associated with delivering the services.

9. The GOSL has set the targets of achieving 70% of electricity generation in the country using renewable energy sources by 2030 and carbon neutrality in power generation by 2050, and has decided to cease building of new coal-fired power plants. The Cabinet of Ministers has approved these two policy elements that shall form the basis of Sri Lanka's future electricity capacity expansion planning!. Further, new addition of firm capacity will be from clean energy sources such as regasified liquefied natural gas (RLNG).

Cabinet Decisions of 13-09-2021 on Cabinet Memoranda No. 21/1666/321/012-11 dated 10-09-2021 by the Minister of Environment and No. 21/1628/313/046 dated 20-08-2021 by the Minister of Power.

## COST

## Legal Provisions on Electricity Tariff Setting

- Section 30 of Electricity Act No.20 of 2009
- Section 17(h) of the PUCSL Act No.35 of 2002
- Commission approved Tariff Methodology (2021)

## Establishing Cost Reflectivity across Tariff Revision Cycles

- - -Provisions for OPEX claw-back on TL and DLs
- Clause 2.5.4 of Tariff Methodology
  - -Provisions for adjustment of any surplus/deficit of TL (Single Buyer) incurred in the bulk supply operation business (BSOB)
- Clauses 2.3.2.5 and 3.1.2.5 of Tariff Methodology
  - -Provisions for CAPEX claw-back on TL and DLs

### CEB Profit/Loss for 2023/2024 period

- 2023 January to June: Rs. 13.8 Billion Loss
- 2023 July to December: Rs. 74.9 Billion Profit
- 2024 January to June: Rs. 119.2 Billion Profit
- 2024 July to December: Rs. 25.2 Billion Profit

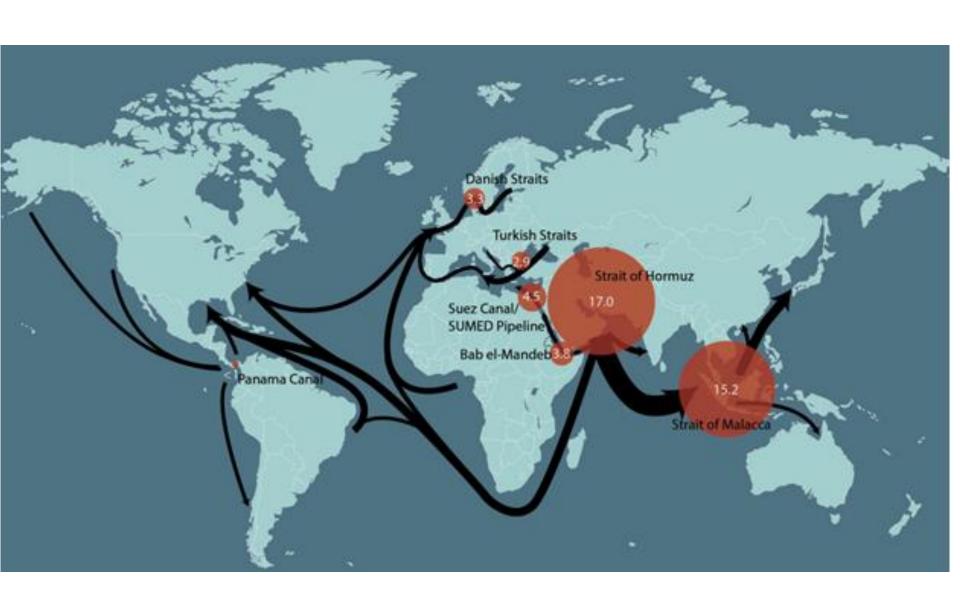
Note – Profit/Loss amounts are as per financial accounts

## Tariff Revision – January 2025

Description	2025H1 CEB Forecast (Including LECO Allowed Revenue) -Rs. million	2025H1 PUCSL Forecast -Rs. million	Remarks
Generation	205,066	188,832	Non-Conventional Renewable Energy and Major Hydro dispatch is adjusted
Transmission and Distribution	59,055	52,761	Clawback of over recovery of Transmission and Distribution costs through tariff in 2023
Finance cost	7,728	7,728	-
<b>Total Cost</b>	271,849	249,321	
Total Revenue	232,932	242,297	Corrected revenue as per sales forecast
Surplus/(Deficit)	(38,917)	(7,024)	
Profits of Transmission for the period of Jan-June 2024 (in BSOB)	41,251	51,098	Correction of calculation error. Correct amount of 2024 Jan-June profit earned by Transmission (TL) in bulk Supply Operation Business is passed to 2025 Jan-June
Final Surplus/(Deficit)	2,334	44,075	
Revision percentage	-1.11%	-20.08%	

## SECURITY OF ENERGY

Security of energy supply is the resilience of the energy system to unique and unforeseeable events that threaten the physical integrity of energy flows or that lead to discontinuous energy price rises, independent of economic fundamentals



## **FUTURE**

 The transition to Clean energy is happening worldwide and it is unstoppable. Its not a question of 'if' it is just a matter of 'how soon' – and the sooner the better for all of us" – Fatih Birol (Executive Director- IEA)

## THANK YOU