

# **Safeguarding Energy Transition**

ERRA - Energy Regulators Forum 15 May 2024 Bangkok





## Malaysia's National Energy Policy (2022 - 2040)

#### **Objectives:**

- A. Macroeconomic resilience and energy security
- B. Social equity and affordability
- C. Environmental sustainability

#### **Strategic Thrusts:**

- 1. Optimise energy resources to stimulate sustainable economic growth
- 2. Stimulate growth, market opportunities and cost advantage for economy and citizens
- 3. Enhance energy sector contribution towards environmental sustainability
- 4. Ensure energy security towards fiscal sustainability



### **National Energy Transition Roadmap (NETR)**

Launched Aug'23

#### Goal:

Accelerate energy transition and change the way energy is generated to improve climate resilience

#### Highlights:

- 1. Achieve net zero by 2050
- RE mix increased to 70% by 2050 (from 40% target previously) constituting an 11 fold increase in RE generation plant-up required
- 3. RM 182 billion of investment required in Grid development, strengthening and modernisation
- 4. Uplift GDP by 9x: from RM25 bn in 2023 to RM220 bn by 2050
- 5. Gas = transition fuel to achieve RE mix target above. No new coal policy already in-place.



### **National Energy Transition Roadmap (NETR)**

Launched Aug'23

The NETR commits to sustainability for Malaysia, aiming to achieve **net-zero emissions by 2050** 

Renewable Energy Mix Targets 27%

41%

70%



**Latest under NETR** 

NETR aims to accelerate the energy transition by shifting towards cleaner, more sustainable energy sources, ensuring climate resilience and long-term sustainability across multiple sectors. Six (6) energy transition levers have been strategically structured:





Energy Efficiency (EE)



Renewable Energy (RE)



Hydrogen



**Bioenergy** 



**Green Mobility** 



Carbon Capture, Utilisation and Storage (CCUS)



## **Existing RE Policies (summary)**

- **1.** Large Scale Solar (LSS): currently in 5<sup>th</sup> iteration, i.e. LSS5: Total 2GW
- 2. New Enhanced Dispatch Arrangement (NEDA)
  - i. Merchants can sell 'excess' RE to Single Buyer at System Marginal Price ('SMP')
  - ii. Total capacity participation = c.140MW
- 3. Corporate Green Power Programme (CGPPA)
  - i. Virtual PPA between solar producer and corporate offtaker
- 4. Net Energy Metering (NEM) = 1.55 GW current quota
- 5. **Green Electricity Tariff (GET)** = 6,600 Gwh (per annum)
- 6. Energy Exchange Malaysia (ENEGEM) see next slide

Solar PV capacity (as at Apr 24)

Distribution = 2 GW Grid = 1.5 GW

### **ENERGY EXCHANGE MALAYSIA (ENEGEM)**

- Driving growth in the renewable energy industry

Malaysia has introduced the Energy Exchange Malaysia (ENEGEM) to trade green electricity with neighbouring countries.

100 green energy
MW as a pilot run



Key features of the auction for the purchase of green electricity:

- a) opened to Renewable Energy (RE) Bidders who hold import license (issued by EMA) for the Singapore Electricity Market;
- b) register with Single Buyer to participate in the auction;
- c) successful applicants will be notified to proceed with auction to purchase Green Electricity on auction day; and
- d) winning bidders **shall enter into RE Supply Agreement** with Single Buyer for the sales and purchase of green electricity.



