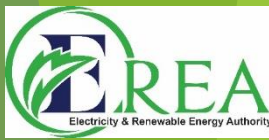


MINISTRY OF INDUSTRY AND TRADE  
ELECTRICITY AND RENEWABLE ENERGY AUTHORITY



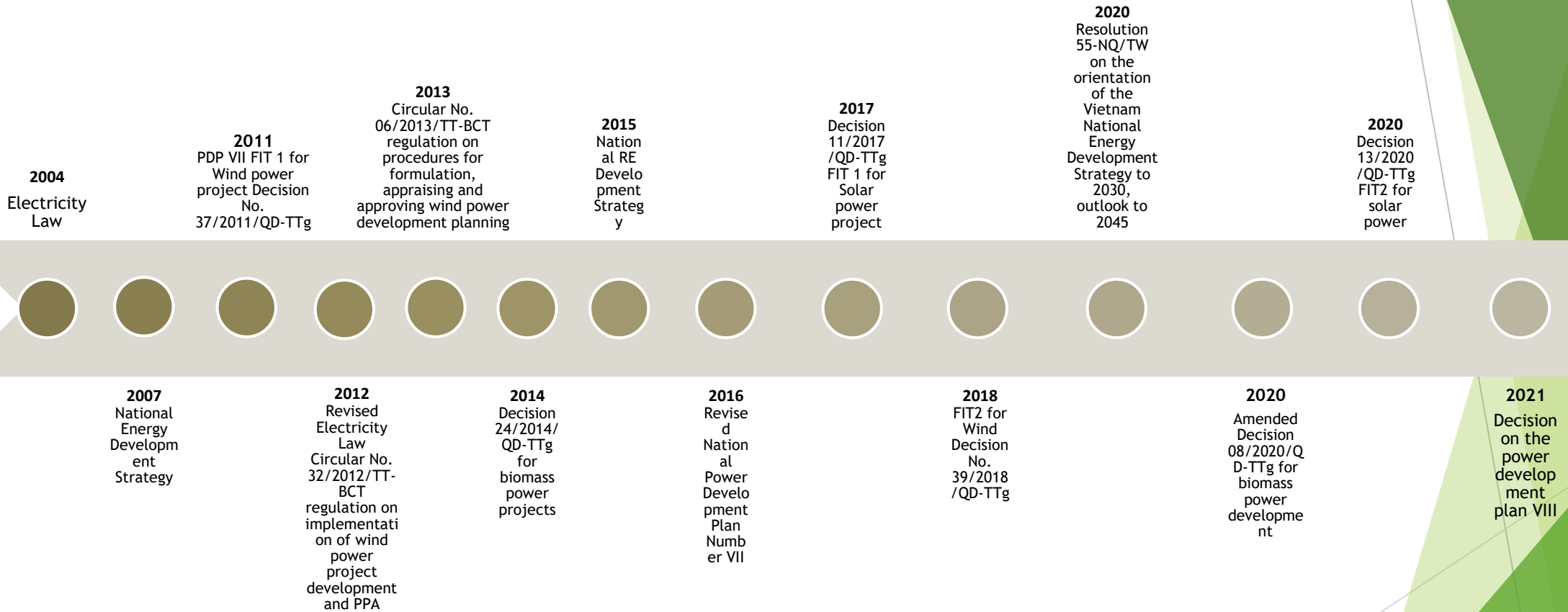
THE 4<sup>TH</sup> HIGH LEVEL MEETING  
VIETNAM ENERGY PARTNERSHIP GROUP

# VIETNAM ENERGY TRANSITION

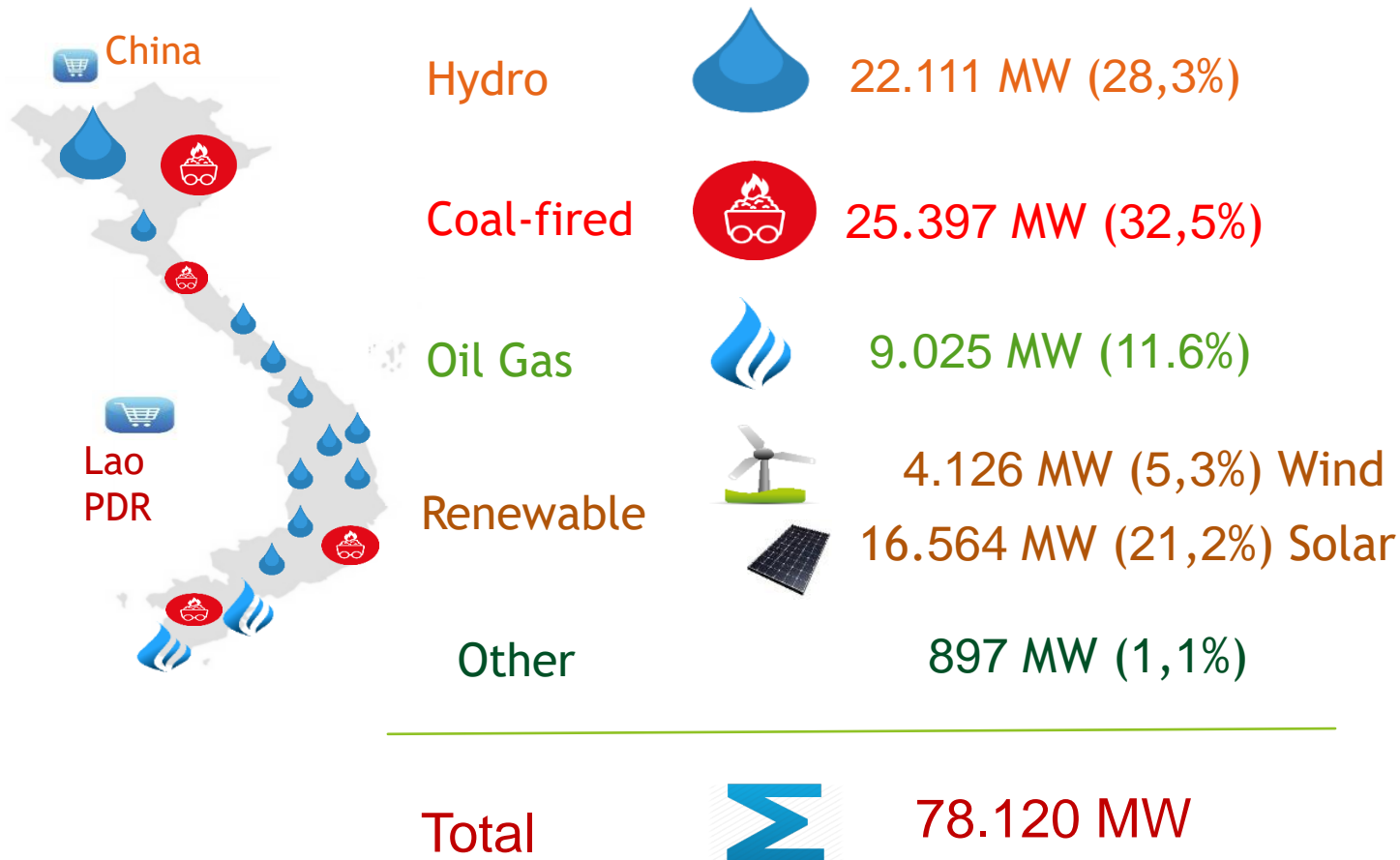


*Dr. Hoang Tien Dung – Director General*  
24 January 2022

# Policies for Power development



# Power Capacity and Power Sources in 2021

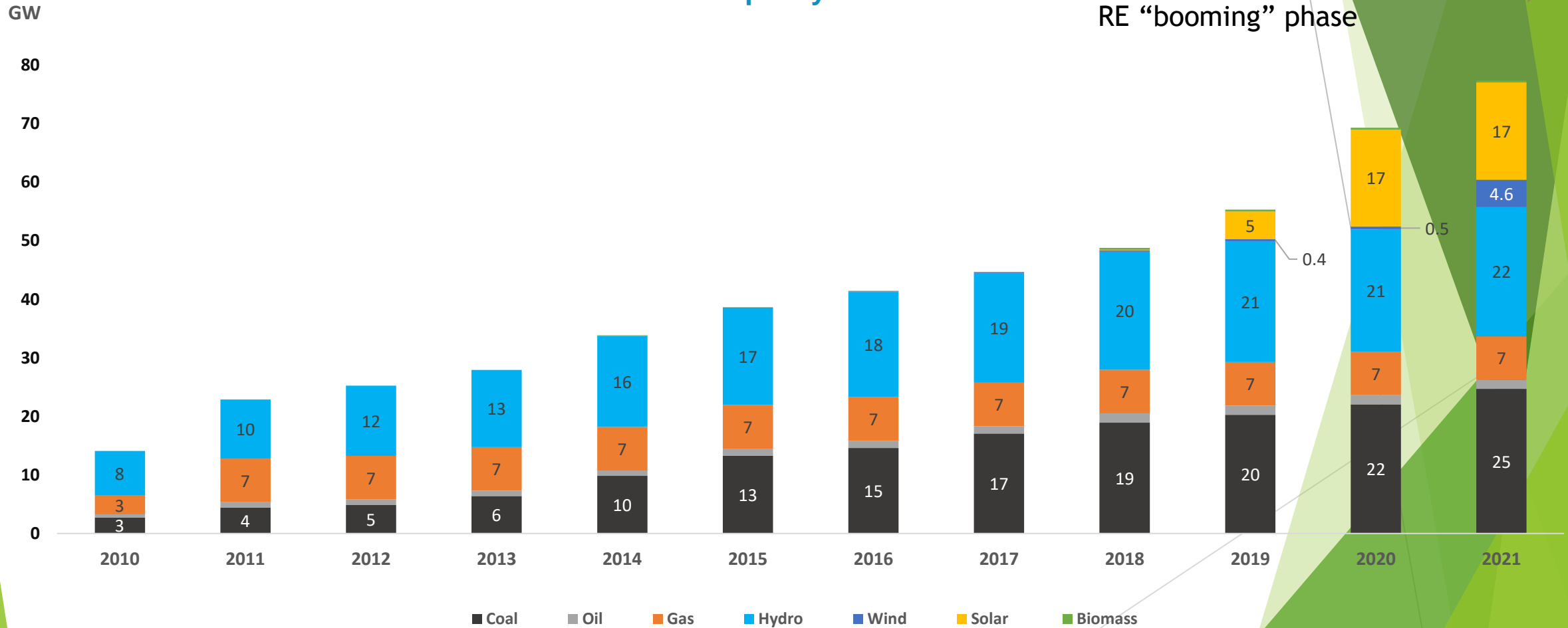


Updated:12/2021

# Power mix of Vietnam by installed capacity

Installed capacity 2010 - 2021

RE “booming” phase 



# General situation

- ▶ High rate of power consumption
- ▶ Rely on Fossil fuel: 50% of power from coal thermal power plants
- ▶ Challenges:
  - ▶ Limit of domestic energy resources
  - ▶ Imbalance energy mix
  - ▶ Increase import energy

Way forward: ENERGY TRANSITION

Vietnam's statement at COP 26 - Glasgow UK, Nov. 2021

**NET ZERO BY 2050**

# Energy transition direction

- **Resolution 55/NQ-TW** issued in Feb. 2020 by Politburo on Orientation of the national energy development strategy to 2030 with a vision to 2050
  - **Decision 1658/QD-TTg** issued in Oct. 2021 by the PM on National strategy on green growth for the period of 2021-2030, with vision to 2050
    - Ensure national energy security
    - Energy is the foundation for economic development
    - Minimize environmental impact through RE and EE promotion
    - Toward clean energy
    - Reduce portion of coal power plants in power supply
    - Strongly promote RE resources
- (Wind (onshore and offshore), Solar, Biomass, Solid Waste,...)

# Energy transition direction

**C. Power Development Plan No. 8** 2021-2030 with a vision to 2045:  
*(Draft updated in Nov. 2021. The draft is being reviewed and adjusted)*

- **Coal:** Reduce 16 GW by 2030

- **Natural Gas & LNG:** Increase from 10% (7GW) in 2020 to 39,6% in 2030

- **Renewable energy**

**Wind:** Increase from 600MW in 2020 to 20,9 GW in 2030 (offshore ~ 5 GW)

**Solar:** Increase from 16,500 MW in 2020 to 18,000 : 20,0000MW in 2030

**Hybrid, pump storage, battery storage:** Up to 3,1 GW in 2030

# RE development

## Strong promotion

- Incentive mechanisms (FIT, taxes, ...)
- Develop Laws and Regulations
- Attract investment (Foreign and private sector)
- RE projects investors would be selected through bidding process and the investors would negotiate price with EVN according to price frame issued by the MOIT.

**Expect in 2030 RE share 15-20% of total primary energy supply  
(Most are from hydro, solar and wind)**

# Energy efficiency

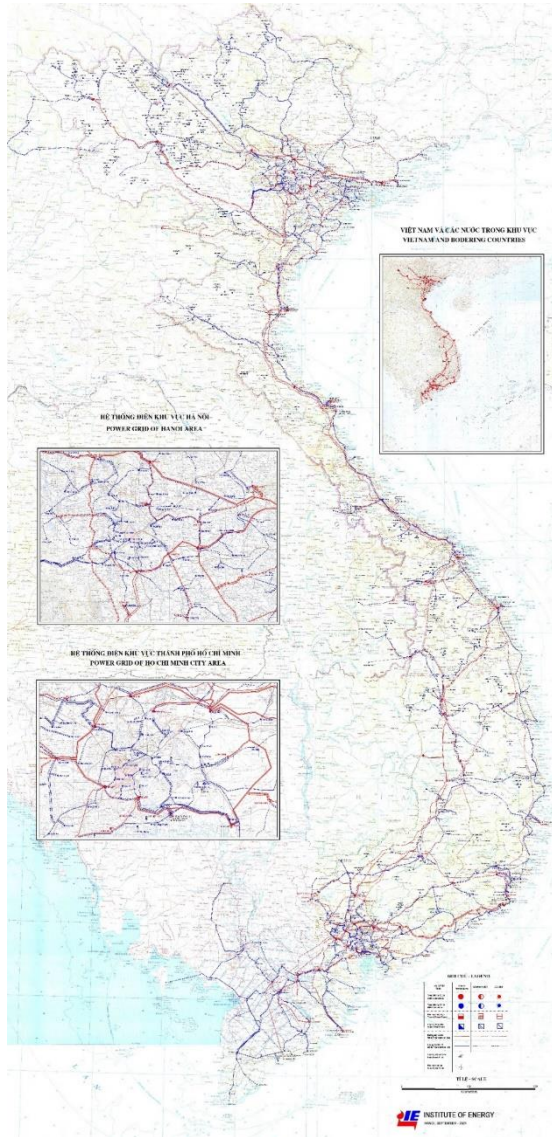
## EE promotion

- EE is considered as long term strategy
- Promote solutions to change electricity use practices
- Energy saving campaign
- Apply EE technology

## Target

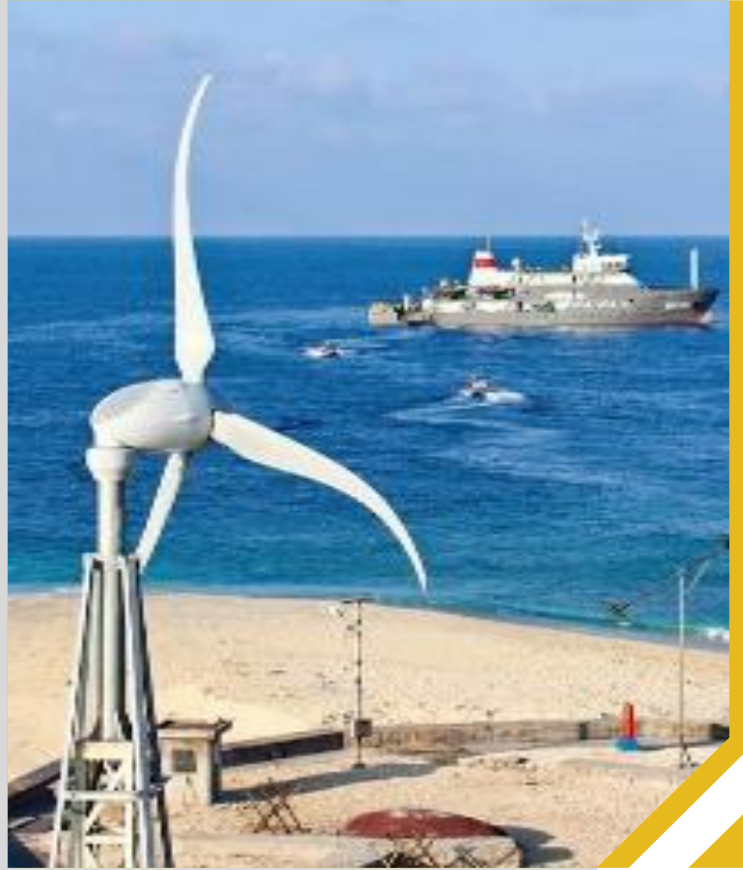
- + Energy consumption save 7% in 2030 and 14% in 2045
- + Reduce greenhouse gas emissions 15% in 2030 and 20% in 2045

# Grid expansion volume up to 2030



Transmission expansion volume	Units	2021-2025	2026-2030
<b>500kV level</b>			
Substations	MVA	49.350	33.900
Transmission lines	km	8.267	3.969
<b>220kV level</b>			
Substations	MVA	60.073	40.187
Transmission lines	km	17.354	4.701

- The 500 kV transmission system will become the backbone grid, stretching from North to South, connecting power centers and load centers.
- The 220 kV grid system will be regional in nature, connecting to 500/220 kV power substations, power plants and 220/110 kV loading substations.
- Criteria for reliability of power supply of the transmission grid: N-1; At critical load centers: N-2



THANK YOU!