APEC Expert Group on New and Renewable Energy Technologies

# EGNRET Pre-Meeting Discussion



**EGNRET 52** 



## **Progress of Renewable Energy Development**

- Current status of renewable energy share
- ☐ Current RE share/capacity in electricity, heating and cooling, transport

There has been no specific statistics in RE share/capacity in electricity, heating and cooling, transport in Viet Nam.



# **Progress of Renewable Energy Development**

- Renewable energy target in your economy
- Overall RE target and RE targets in electricity, heating and cooling, transport respectively
- To bring the rate of biomass energy in the total electricity production from approximately 1.0% in 2015 up to 3.0% in 2020; 6.3% in 2030 and 8.1% in 2050.
- To increase the rate of wind energy in the total electricity production from negligible level to approximately 1.0% by 2020, 2.7% by 2030 and 5.0 % in 2050
- To bring the rate of solar energy source in the total electricity production from the negligible level to approximately 0.5% by 2020, 6% by 2030 and 20% into 2050.

Page 3



## **Progress of Renewable Energy Development**

- Renewable energy support policies
- Main policies, regulations and measures for supporting RE
- Extend FIT scheme for 20 years (onshore wind power: 8.5 UScent / kWh; 9.8 UScent offshore wind power / kWh, biomass CHP: 5, 8 UScent / kWh,, Wte: 10,05 UScent / kWh, solar power 9.35 UScent / kWh).
- The selling price of electricity is set in USD, payment made in VND at the time of payment.
- Power Purchase Agreement template is issued by the Ministry of Industry and Trade so investors can save much time from negotiation.
- Tax incentives of highest rate are offered to reduce corporate income and land use.



## **Progress of Renewable Energy Development**

Main challenges and opportunities for promoting renewable energy

#### Main challenges:

- Renewable energy sources are unstable, constantly changing, significantly dependent on weather. It finds difficulties in ensuring electricity quality and in operating the grid.
- Because of the low operating time of renewable energy sources per year (the sun is about 1,500-2,000 hours / year, the wind is from 2,500-3,500 hours / year), the investment efficiency in power lines and stations is not so high.
- Wind and solar power sources are usually concentrated in some provinces with low electricity demand, so it is necessary to transmit this electricity to big cities such as Ho Chi Minh City, Ba Ria Vung Tau and Binh Duong. This requires to invest in building more transmission and distribution systems.
- Renewable electricity projects use larger land than traditional ones.



## **Progress of Renewable Energy Development**

Main challenges and opportunities for promoting renewable energy

#### Main opportunities:

- Wind power: Viet Nam has potential of about 25-50 GW of onshore wind power. If the potential for wind power development is even greater if offshore areas are included.
- Solar energy: the average solar radiation in Viet Nam is quite high from 4.5 to 5.5 kWh/m2.
- Biomass energy: As a developing agriculture-based economy, Viet Nam has great potential with biomass resources that can be exploited for electricity production.