APEC Expert Group on New and Renewable Energy Technologies

# EGNRET Pre Meeting Discussion



**September 11, 2018** 

**EGNRET 51** 

### **Current Situation and Target**



<b>Electricity</b> (	4.27%)
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19,684.4 MW

1. MSW	500	291.47			
2. Industrial waste	50	-			
3. Biomass	5,570	3,216.68			
4. Biogas (Wastewater)	600	484.29			
5. Small hydro	376	187.72			
6. Biogas (Energy crop)	680	-			
7. Wind	3,002	695.32			
8. Solar	6,000	2,697.27			
9. Large hydro	2,906.4	2,906.4			

Heat (19.15%)
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25,088 ktoe

1. MSW	495	10.60
2. Biomass	22,100	632.49
3. Biogas	1,283	52.86
4. Solar	1,200	0.83
5. Alternatives Heat Source*	10	-

<sup>\*</sup> Geothermal, pyrolysis oil, etc.

8,712.43 ktoe

1. Biodiesel (mil I/d)	14.0	4.27
2. Ethanol (mil I/d)	11.3	4.02
3. Pyrolysis oil (mil l/d)	0.53	-
4. CBG (ton/d)	4,800	-
4. Alternative fuels* (ktoe)	10	-

<sup>\*</sup> Bio-oil, Hydrogen and others

#### RE share 15.29% (May 2018)

Overall targets: 30% Renewable Energy in total energy consumption by 2036

#### **Progress of Renewable Energy Development**

Department of Alternative

Energy Development and Efficiency

INISTRY OF ENERGY

Others (Geothermal)

0.3

**Fuel (6.65%)** 

## **Policy for RE Promoting**



- Policy for promoting renewable energy
  - BOI privilege

(cooperate tax exception, tax holiday)

□ Feed-in Tariff (FiT)

(depend on located sites, size and technologies)

- SPP Hybrid
- VSPP Semi-Firm Contact ,
- Soft Loan, ESCO Revolving Fund
- □ Grant, Pilot Project Demonstration

## Main Issue for RE promoting



- Main issues for promoting renewable energy
  - Low potential in some energy sources e.g. geothermal, wind
  - ☐ Unclear policy for the RE development / no new PPA recently
  - ☐ RE thermal supportive
  - Unclear policy on biofuel against EV promotion
  - ☐ Inter-ministerial cooperation / difference in responsibilities
  - Data gathering for actual/accumulate installed capacity
  - Grid connection