

**APEC EGNRET 52, Hong Kong, China**

# EGNRET Pre Meeting Discussion

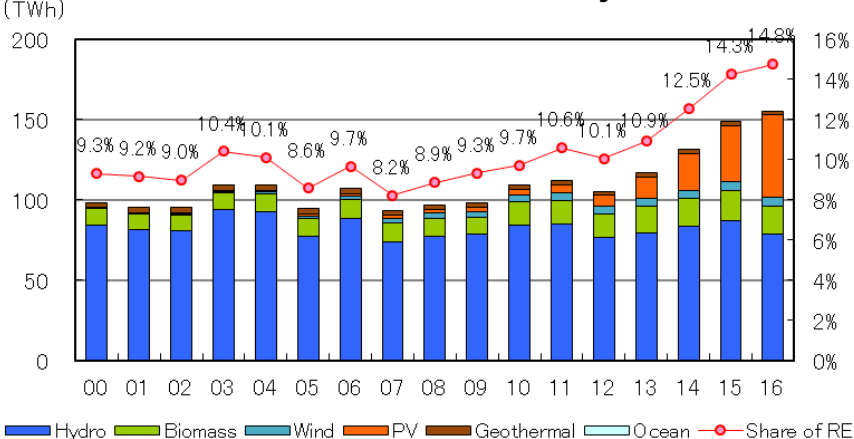
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# Current status of Renewable Energy Share in Japan

## RE Share in Electricity



(Source) IEA, World Energy Statistics and Balances 2018

## RE Heating/Cooling in 2016

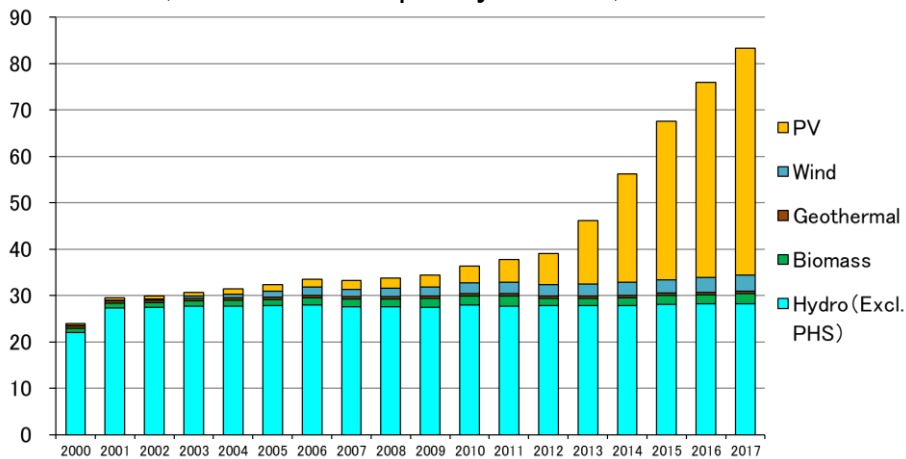
Solar Heat 248(10<sup>10</sup>kcal)  
 Geothermal 652(10<sup>10</sup>kcal)  
 Waste to Energy 1,892(10<sup>10</sup>kcal)

(Source) EDMC, IEEJ

Heating/Cooling in 2016  
 Total 505,341(10<sup>10</sup>kcal)

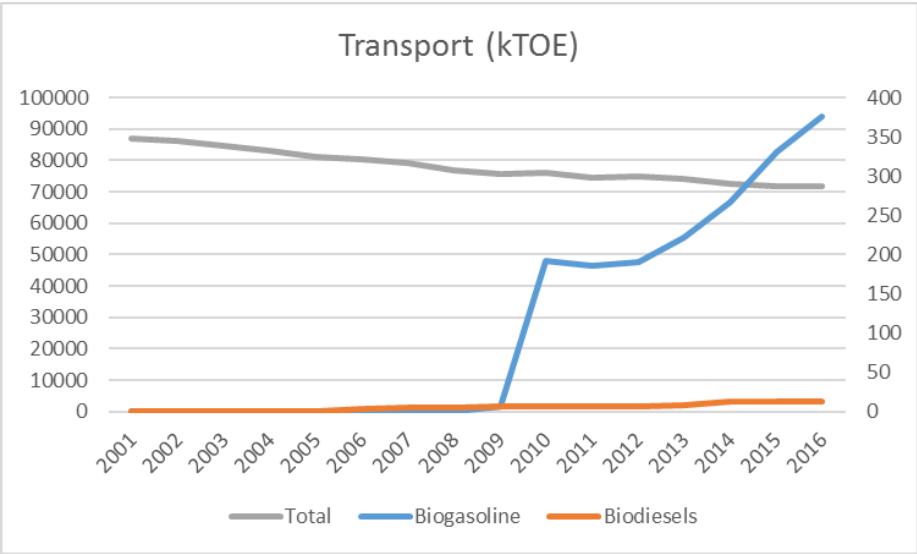
(Source) METI

## RE Capacity in Electricity (TTL Power Capacity 300GW)



(Source) Source: IRENA Renewable Electricity Capacity and Generation Statistics, June 2018

## Transport (kTOE)



(Source) IEA, World Energy Statistics and Balances 2018

# Renewable Energy Target in Japan

## ➤ 5th Energy Master Plan (2018)

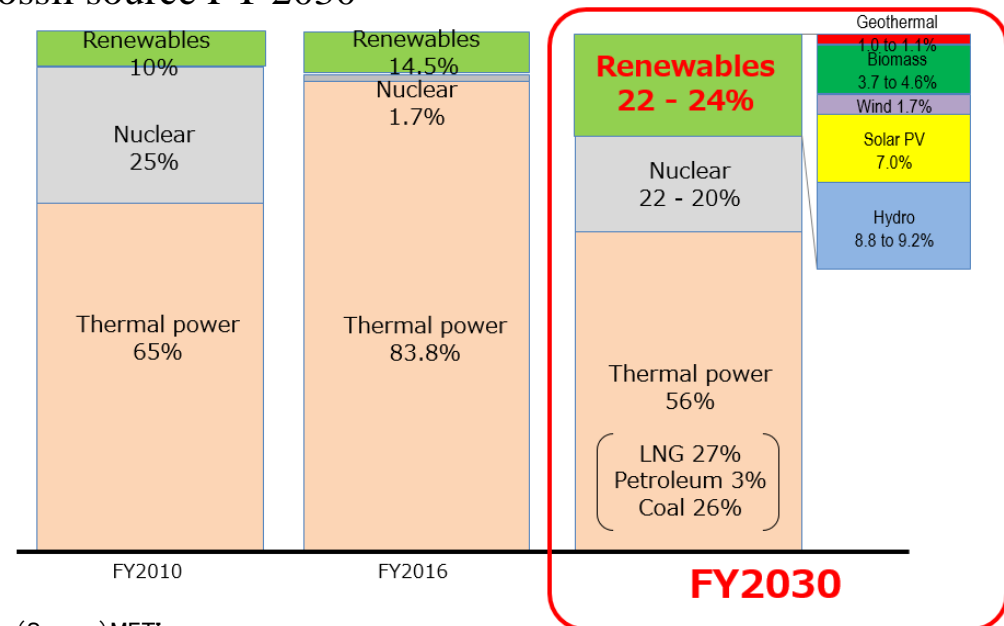
- 22-24% Renewable Energy in Electricity Mix (20-22% Nuclear) in 2030
- Target is not changed from previous version

## ➤ Law regarding Advanced Energy Supply Structures (2010 Nov)

- Law regarding promote the effective utilization of raw materials of fossil energy and use of non-fossil energy sources (Law regarding Advanced Energy Supply Structures) was passed in July 2009.

Related ministerial order including ethanol introduction target was in effect in November 2010

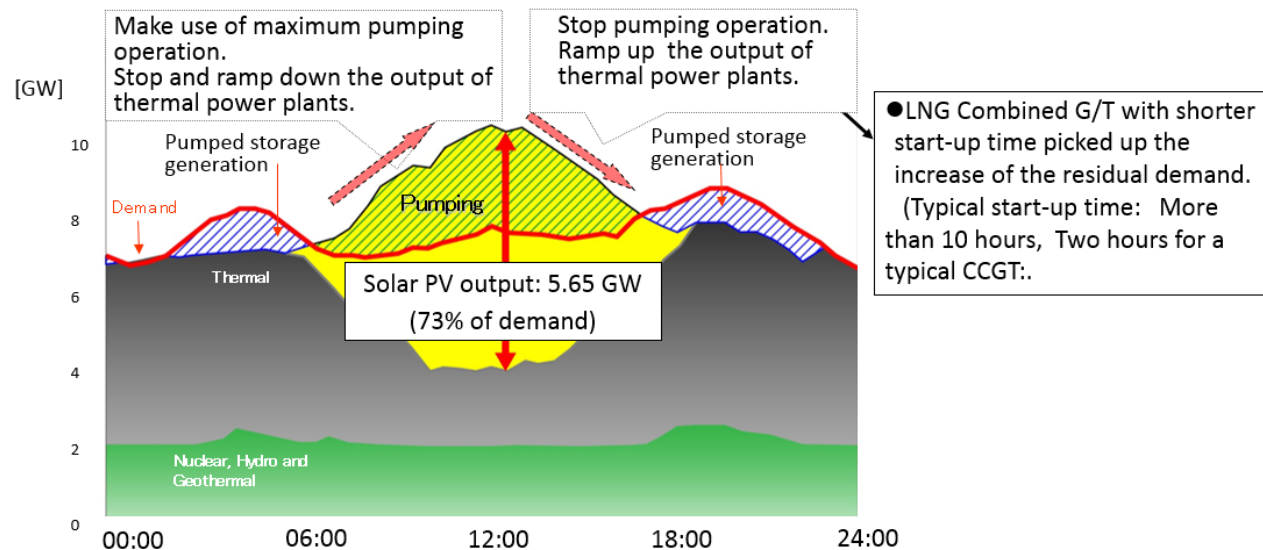
- Mandate of biofuel usage from FY 2011 to FY 2017 and extended to FY2022
- Mandate of 44% of electricity from non-fossil source FY 2030



(Source) METI

# Main Issues for promoting Renewable Energy

- Cost Reduction
- After FIT (some rooftop PV FIT will finish the contract from 2019)
- Limitation of T&D grid  
(RE potential is different from current T&D system location)
- Output fluctuation from Variable Renewables
- Solar PV accounts for 95% in newly installed capacity under FIT  
(Need diversification to increase other renewables)



# Policy for Promoting Renewable Energy

- Law regarding Advanced Energy Supply Structures (2010 Nov)  
(Mandate non-fossil fuel and non-fossil electricity)
- FIT is key policy for promoting Renewable Energy after 2012
- Auction system for large PV is started from 2017 which is expanded to Biomass from 2018. (For Cost Reduction)  
  
\*Auction for Large PV is currently over 2.0 MW.  
Auction over 0.5MW of PV in the future is considered
- New private RE transmission company/Japanese version of Connect & Manage (T&D limitation)
- “Act on Promotion of Utilization of Sea Areas for the Development of Marine Renewable Energy Generation Facilities” passed in November 2019 (For increase offshore wind)

**Thank you for your attention!**