Plenary 1.3

Japan’s Historical Transitions

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Long-term Transitions of Energy Sources in Japan

Source: EDMC Energy Statistical Handbook (2016) (Yr. 2015 is Quick Estimation)
Japan’s Experiences on Energy Transition

• **1st Energy Transition: From Oil to Non-Oil**
  - The oil crisis triggered promotion of gas, nuclear, and energy saving.
  - The transition has not yet completed – still oil has around 45% of Japan’s primary energy.

• **2nd Energy Transition: From Nuclear to Fossil Fuel**
  - Accidents in Fukushima led to stop nuclear power for thorough safety examination.
  - Nuclear is fully substituted by fossil fuel in 2014.
  - This is a transitory transition?
Past Transitions are like ‘Whac-A-Mole’

- Two transitions are symptomatic treatment for faced energy crisis.
- Real transition needs to change in whole system of our society.
- However, in many cases, national solutions are solutions for somebody that one is not.
- Some cities in Japan starts new challenges for realizing energy transition.
Traditional-type Development for Shinchi Town

- Newly located industries
- Komagamine
- Energy management
- LNG base
- LNG Power Plant
- To Natori
- New town around Station
- Plant factories
- Heat
- Cool
- Gas (LNG)
- Electricity

Soma city
Innovative Development Plan for Shinchi Town

- Newly located industries
- Plant factories
- Mega solar
- Energy management
- Komagamine
- LNG Power Plant
- LNG base
- Food industries
- Data center
- Soma city
- New town around Station
- To Natori

- Heat
- Cool
- Gas (LNG)
- Electricity

- Plant factories
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