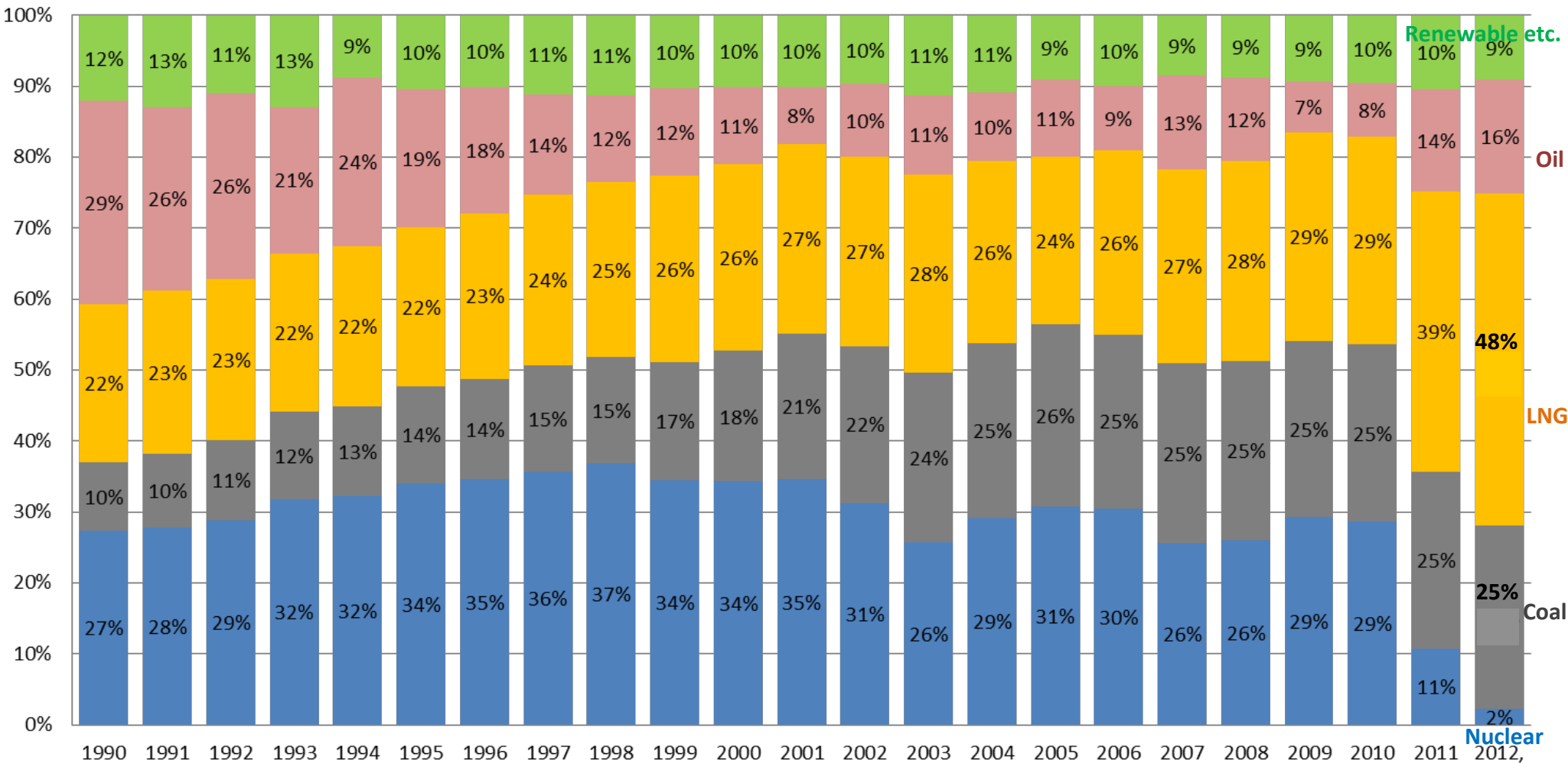


Current Energy Mix in Japan

LNG increase compensates for the decline of nuclear power.

Electricity Generation by Fuel



Source: Compiled by METI based on "Outline of Electric Power Development in FY 2010" etc.

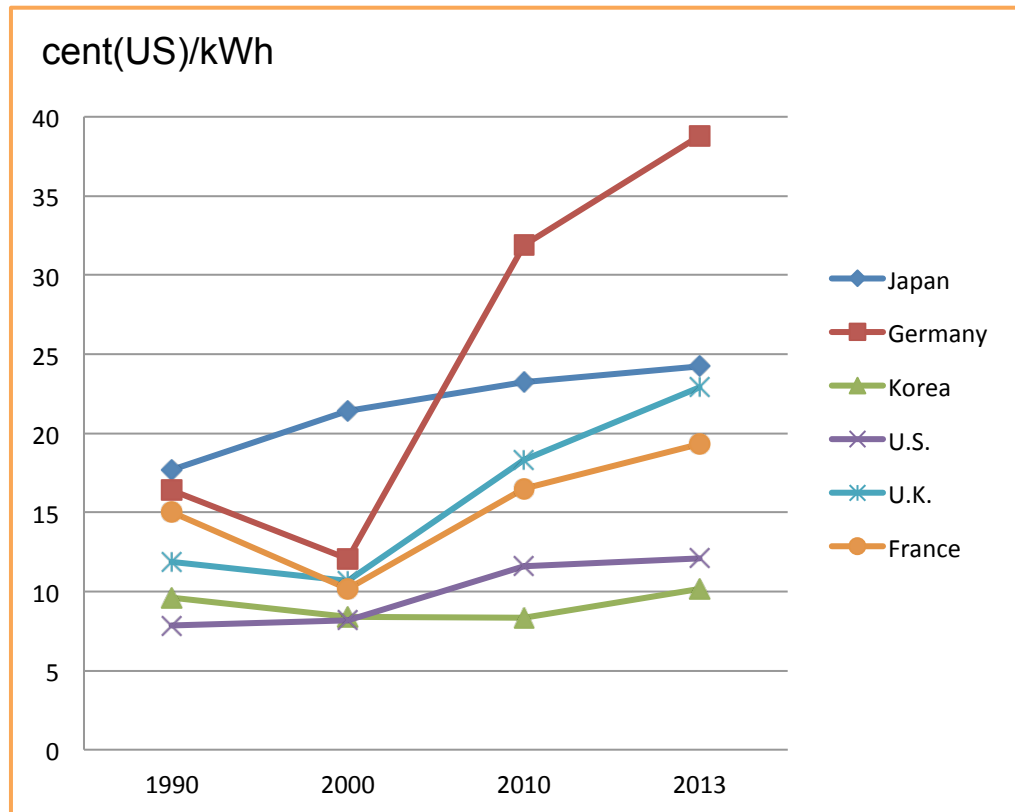
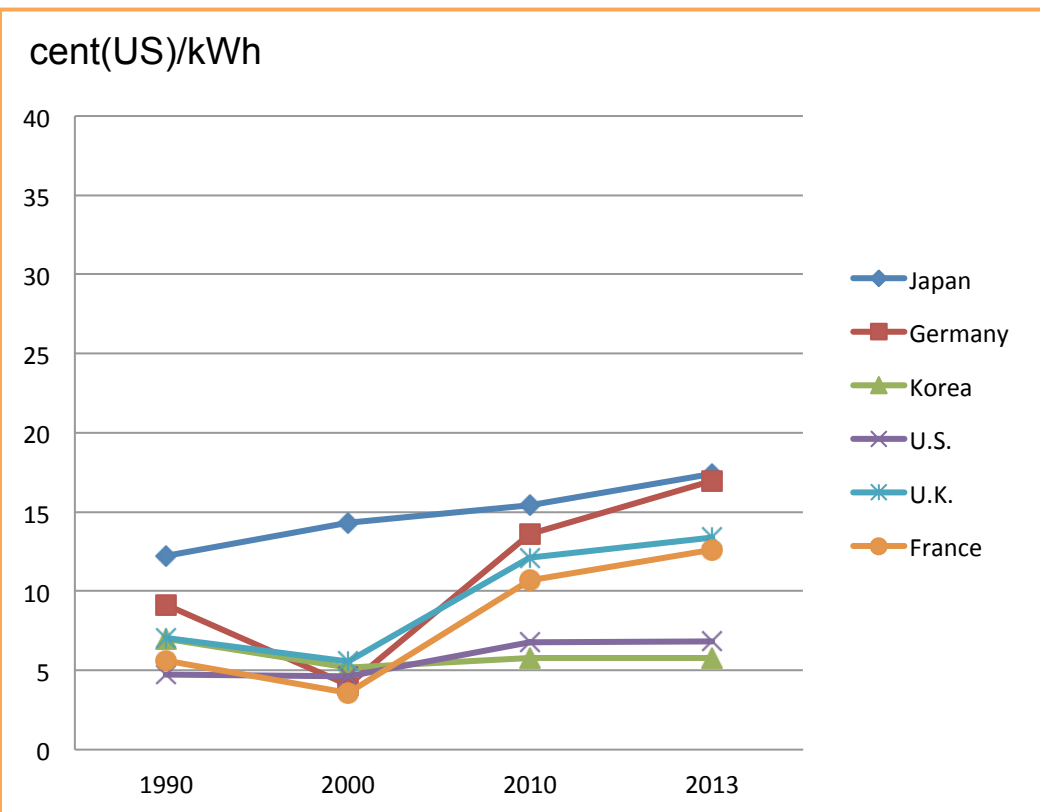
Comparison of Electricity Rate

➤ After the Great East Japan Earthquake, the electricity rate keeps rising due to the rate revisions owing to the increase of fossil fuel costs as a result of suspended NPPs, the rising cost of fuel prices, and the rising renewable power energy promotion surcharge.

(※0.29JPY/kwh (2012) → 0.4JPY/kwh (2013) → 0.75JPY/kwh (2014))

Electricity rate for industry

Electricity rate for household



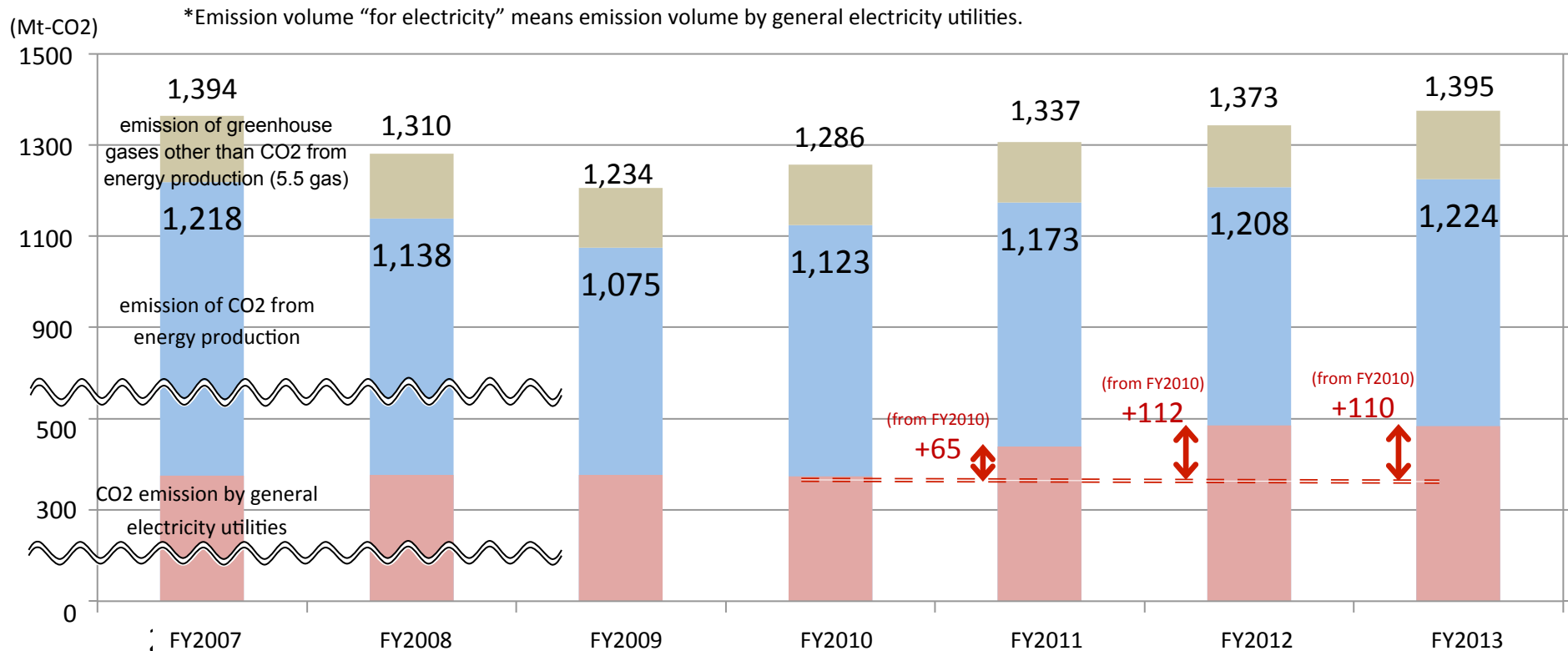
※Electricity rate for industry of Korea use the 2009 data for 2010 and 2013, and Electricity rate for industry of U.K. use the 2012 data for 2013

Source: IEA Energy Prices and Taxes (using the exchange rate of OECD)

CO2 emission before and after the Great East Japan Earthquake

- CO2 emission for FY2013 increased 101 million tons compared to FY2010.
- Although emission except for electricity (*) are decreasing slightly, the emission from electricity production have increased by 110 million tons compared to FY2010, because of increased use of thermal power generation as this makes up for nuclear power.

(Million t-CO ₂)	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
Greenhouse gas emission volume	1,394	1,310	1,234	1,286	1,337	1,373	1,395
CO ₂ emission volume from energy production	1,218	1,138	1,075	1,123	1,173	1,208	1,224
Of which, for electricity*	375	376	377	374	439	486	484
Of which, except for electricity	843	762	698	749	734	722	740



1. Principles of Energy Policy and Viewpoints for Reformation

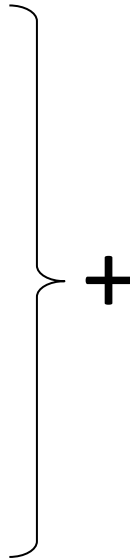
(1) Confirmation of basic viewpoint of energy policies (3E + S)

Stable Supply (Energy Security)

Cost Reduction (Economic Efficiency)

Environment

Safety



Global Viewpoint

- Developing energy policies with international movement appropriately
- Internationalizing energy industries by facilitating business overseas.

Economic Growth

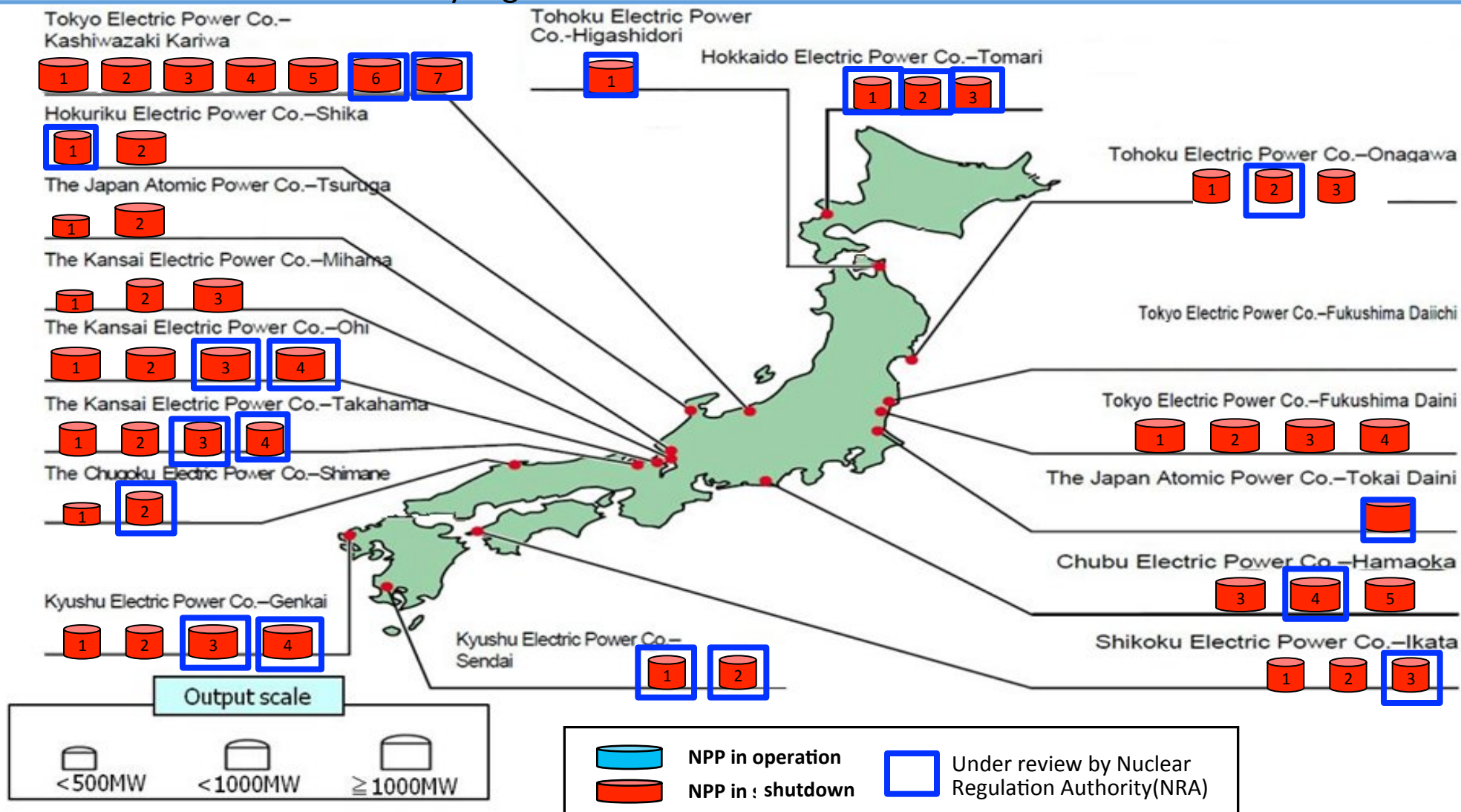
- Contribution to reinforce Japan's locational competitiveness.
- Activating Japan's energy market through energy system reform.

(2) Building multilayered and diversified flexible energy demand-supply structure

- Establishing resilient, realistic and multi-layered energy supply structure, where each energy source can exert its advantage and complement others' drawbacks.
- Creating a flexible and efficient supply/demand structure where various players can participate and various alternatives are prepared by system reforms.
- Improving self-sufficiency ratio by developing and introducing domestic resources to minimize influence from overseas' situation.

Nuclear Power Plants in Japan

- There are 48 nuclear power plant units in Japan.
- **All units (in red)** are in a state of temporary shutdown as of February 24 2014.
- **20 units (in blue squares)** are under review for restart by the Nuclear Regulation Authority in accordance with its new safety regulations.

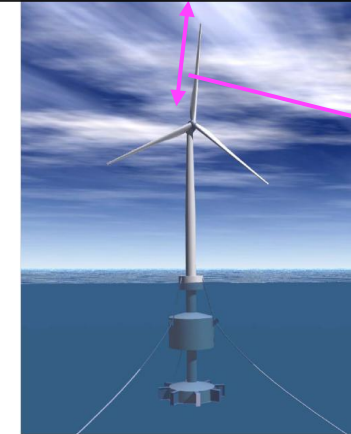


Acceleration of introduction of renewable energy

Steps toward problem solution – Technology development & corroboration, transmission & distribution network construction, rationalization of procedure for environmental assessment

Technology development & corroboration

[7MW station, world's largest in scale]



Blade radius: 80 m

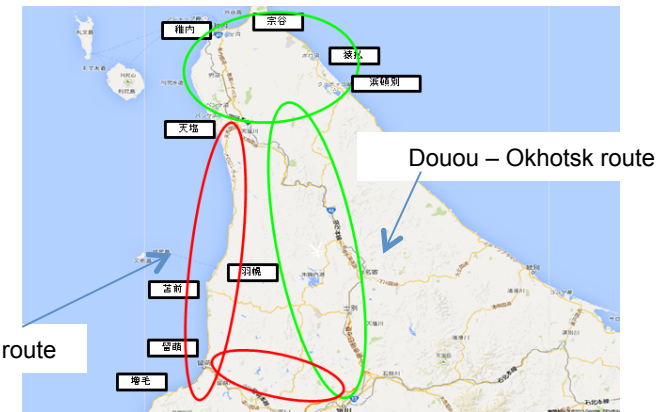
Floating wind power generation station off Fukushima aiming at first actual operation in world

(Two 7MW stations will be installed from 2014 and onward)

Construction of transmission and distribution networks

[Route scheduled for constructing transmission/distribution network in Hokkaido]

GOJ paying for half the cost of constructing and testing transmission and distribution networks in appropriate places for wind power in Hokkaido and Tohoku

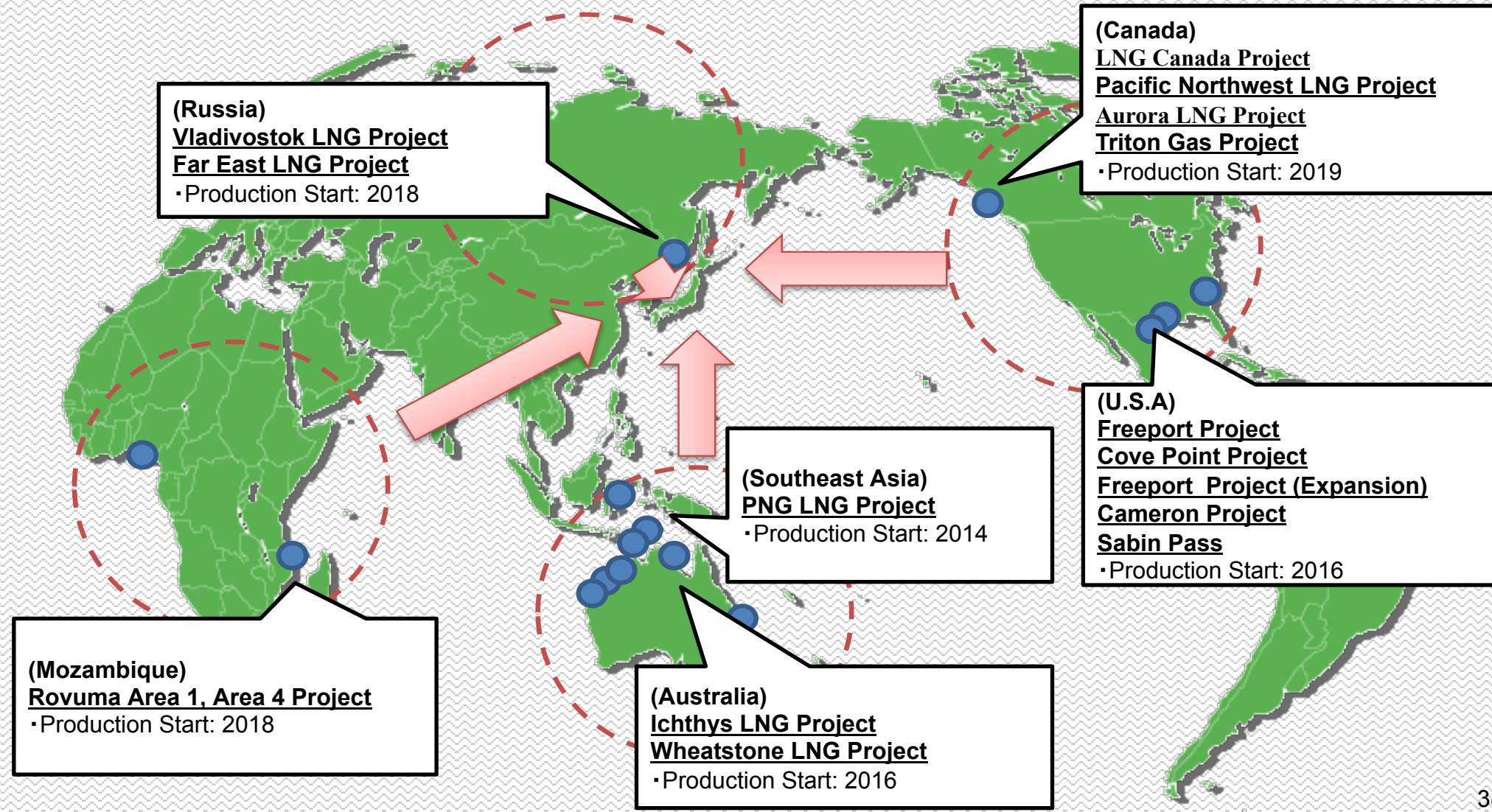


Rationalization of procedure for environmental assessment

To shorten period of procedure for environment assessment of wind and thermal power generation, which usually takes 3 or 4 years

Efforts to Diversify Supply Sources

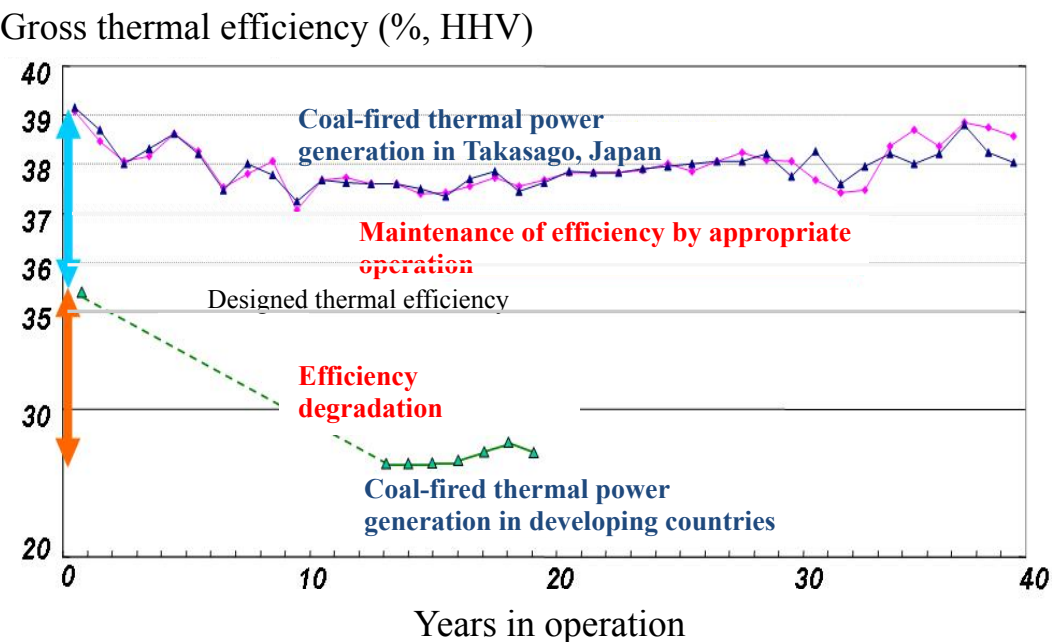
- New suppliers are preparing to enter the LNG market as represented by projects in the U.S. and Canada.
- First LNG exports from Papua New Guinea will ship to Japan in the near future.



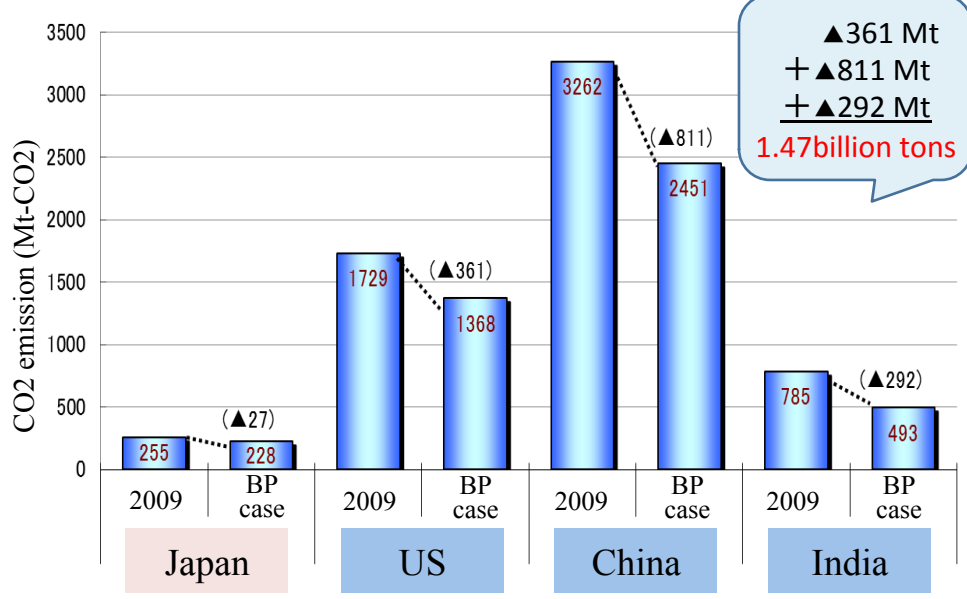
Coal-Fired Thermal Power (Promotion of Low-Carbon Technologies)

- Coal-fired thermal power generation in Japan achieved the highest level of efficiency in the world through utilization of efficient technology (Super Critical / Ultra Super Critical) and operation / management know-how. Its efficiency is maintained for long periods after operation.
- If the most advanced technology in operation in Japan is applied to coal-fired thermal power generation in the US, China and India, it is estimated that CO2 emission could be reduced by about 1.5 billion tons.

Change in efficiency across the ages



CO2 emission reduction by application of Japan's best practices



Source: IEA World Energy Outlook 2011, Ecofys International Comparison of Fossil Power Efficiency and CO2 Intensity 2012