

IEEJ's Research Themes for FY 2013

As a reference to "Future APERC Activities"

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Emerging landscape with regard to energy security/sustainability

- **Historic volatility in global energy prices**
- **Growing energy demand in Asia and its implication to global energy security**
- **Emerging concerns for energy supply constraints**
 - **Geopolitical risks, resource nationalism and issues of market power**
 - **Ongoing “MENA crisis”, “Iranian crisis”, etc.**
 - **Lack of timely investment in resource development**
 - **Importance of stability of energy transportation**
- **Impacts of Unconventional Oil & Gas Development**
 - **Impacts of US Shale Gas Revolution**
 - **Impacts of US Energy Independence**
- **Environmental challenges for sustainability**
 - **Climate change and global environmental problems**
 - **Local and regional environmental problems**
- **Unprecedented impacts of “March 11th” (East Japan Great Earthquake and “Fukushima Daiichi accident”)**



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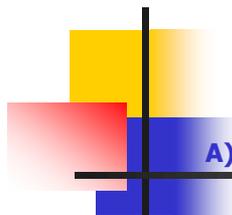
- 1. Analysis on Japan's energy and environment policy (for both short and long term)**
- 2. Comprehensive analysis on international energy situation surrounding Japan**
- 3. Comprehensive analysis on international climate change policy and Japan strategy**
- 4. Analysis on energy challenges in Asia (and other major region) and the way forward to promote energy cooperation**
- 5. Analysis on energy challenges by type of energy**
- 6. Development of data/information on energy supply-demand and prices**



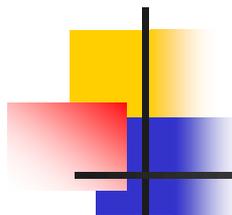
1. Analysis on Japan's energy and environment policy (for both short and long term)

- A) **Objective and quantitative analysis for Japan's "Best Energy Mix"**
- B) **Analysis on the respective challenges for energy savings, renewable energy, fossil fuels and nuclear in Japan**
- C) **Analysis on policy issues for energy industry structure (power, gas, oil and renewable industries) in Japan**
- D) **Analysis on Japan's climate change policy goal which is consistent with energy policy goal**
- E) **Analysis on Japan's international energy strategy for enhancing energy supply security**
- F) **Analysis on Japan/Asian and the world energy outlook**

2. Comprehensive analysis on international energy situation surrounding Japan

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- A) Analysis on energy policy of major countries including US, China, etc. under the respective new administration/leadership**
 - B) Analysis on MENA (“Arab Spring”, Iranian issues, etc.) and Russia/FSU situations**
 - C) Analysis on unconventional energy resource development in the world and its impact on the world energy market**
 - D) Analysis on “US energy independence” and its implication on global geopolitics of energy**
 - E) Analysis on the world oil and gas market increasingly influenced by world economy and financial markets**
 - F) Analysis on nuclear energy policy in US, Europe, Asia and the Middle East**
 - G) Analysis on the challenges to further promote energy savings and renewable energy introduction in the world**

3. Comprehensive analysis on international climate change policy and Japan strategy

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- A decorative graphic consisting of overlapping colored squares (yellow, red, blue) and a black crosshair.
- A) Analysis on global climate change policy goal under the new political, economic and energy market situation in the world**
 - B) Analysis on climate change policy of US, EU, China, India and other major countries**
 - C) Analysis on international negotiations on climate change issues and Japan's strategy**
 - D) Analysis on such measures for climate change as low carbon technology, credit system, FIT system, etc.**
 - E) Analysis on carbon market and emission trading system**
 - F) Analysis on international rules for technical and financial cooperation toward the developing countries to combat climate change**
 - G) Analysis on technology development for solving climate change**



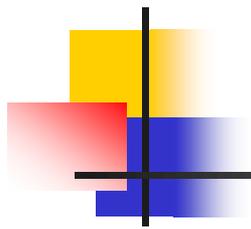
4. Analysis on energy challenges in Asia (and other major region) and the way forward to promote energy cooperation

- A) Comprehensive analysis on energy security and environment problems for Northeast Asia (including Russia)**
- B) Analysis on Japan's international energy policy towards China, India, Korea, ASEAN, etc.**
- C) Analysis on APEC and Middle East energy situations and Japan's energy cooperation**
- D) Analysis on multilateral energy cooperation in Asia and Japan's strategy**
- E) Joint studies with research institutions in Asia on the topics of common interests such as "Asian premium on LNG prices", etc.**

5. Analysis on energy challenges by type of energy

- A) **Oil: Security of oil supply and international competitiveness of Japan's oil industry**
- B) **Gas: Security of gas supply and challenges for increased role of gas in Japan**
- C) **Power: Challenges for Japan's power industry structure and market reform**
- D) **Nuclear: Nuclear re-start and long term nuclear policy for Japan**
- E) **Renewable: Challenges for renewable promotion policy in Japan and the world**
- F) **Coal: Global coal market analysis and CCT development**
- G) **Energy saving: Challenges for further promotion of energy saving in Japan and international cooperation for energy saving**

6. Development of data/information on energy supply-demand and prices

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- A) Enhancement of basic energy data/information collection in Japan and the world**
 - B) Monitoring of oil product prices and market in Japan and Asia**
 - C) Data/information activities by Green Energy Certificate Center**
 - D) Enhancement of international networking for energy statistics**
 - E) Activities to enhance data transparency in the world oil and gas market (JODI)**

Closing...

- **IEEJ's Mission**

- **“Consider the Energy-Environmental Issues of Japan and Asia from a Global Perspective and Propose Policy Solutions”**

- **I hope IEEJ's research concept will be of any help to APERC research activities, and would like to welcome initiatives to enhance our collaboration between IEEJ and APERC**