

# **Energy Security in Asia and the Cooperation Alternatives**

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# Energy in the world and Asia

- World energy demand will increase steadily,, with Asia contributes about half of the increase
- Fossil fuels still dominate the primary supply, so does in Asia
- Oil still ranks the first although the share will decline; Natural gas increases fast than others, may surpass oil in the future

# Energy in the world and Asia

- The demand of Oil and natural gas have great potential in Asia
- Coal will increase with uncertainty
- Different perspective on nuclear
- Renewable can contribute significantly after 2030
- Energy demand in developing countries increase faster than that in developed countries, China and India may take the lead

# Energy balance in the world

- Fossil resources can meet the demand with estimated increase
- Energy trade will increase significantly
- Technology improvement will increase supply both in traditional and non-traditional fossil fuels

# Impacts from climate change policy

- Already influence energy consumption and supply in many countries
- May become important criteria for energy development in the next decades
- May introduce strict ceiling on emissions
- Uncertainty is high
- Not included in many forecasts, especially for reference cases

# Economic blossom in Asia

- Driving force for economic and energy growth of the world
- The third and strongest economic region in the world, both in GDP and growth rate
- 10+China CAFTA will have great impact
- 10+3 and whole East Asia FTA possible?

# Energy security challenge in Asia

- Asia has the biggest oil and natural gas reserves (ME, Siberian Russia, Middle Asia)
- Major suppliers to the world
- More attention on increasing demand from East Asia, especially from China, and potentially from India
- Security concern focus on East Asia
- Interdependence between suppliers and users

# Barriers of energy security

- Political separation of Asian countries due to historical or present causes
- Insufficient infrastructure: pipelines, transportation facilities, distribution systems, etc
- Lack of financing mechanism for cross-board investment for Asian countries in energy sector
- No international oil giant companies based on Asian countries



# Barriers of energy security

- Absence of sufficient economic (and political) organization between Asian countries
- No integrated long term energy strategy between energy suppliers and consumers in Asia
- Lack of group dialogue mechanism in energy issues
- Faint influence on ME political and economic stability
- Vulnerable under outside intervention

# How to improve the energy security

- Establish and maintain peace and stability of Asia, and the world
- China will proceed peaceful catch-up
- Develop the friendly political, economic relation with neighbor countries first: Good relations with neighbors, to be amicable to neighbor, and benefit the neighbors .
- Promote regional stability and economic relations such as Shanghai Cooperation Organization
- CAFTA and 10+3, etc.

# Improve the energy security

- Recognize the importance of ME's stability to energy security to East Asia and the world
- Develop policy cooperation on keeping the peace and stability in ME
- Encourage the development of Asian supply capacity: Siberia, Middle Asia, and ME
- Establish and Improve energy transportation network towards East Asia

# Cooperation in Siberia and Mid-Asia

- Combined demand from East Asia become basis for create oil and gas supply and pipeline network towards East Asia
- Cooperation between Korea, Japan and China with Russia in explore Siberian oil and gas, focusing on increase supply capacity
- Long term development of the Caspian oil and the transport facility towards east

# More cooperation of East Asia

- Regional cooperation on Strategic storage
- Cooperation on policy and dialogue with OPEC
- Cooperation on elimination of Asian premium of oil price
- Cooperation on LNG development and technology
- Cooperation on security of the oil channels (Malacca straits and Kara isthmus, etc.)
- Jointly explore the oil and gas in South China Sea
- Energy efficiency first
  - Efficiency improvement is fundamental to keep the energy balance in the future
  - Per capita energy consumption is a challenge for Asia due to Asian population
  - Market force will not lead the sustainable development approach
  - Create highest energy efficiency in Asia
  - China prepares to learn from others

# Cooperation subjects in energy efficiency

- Cooperation on energy efficiency policy and technology
- Develop and populate high efficient vehicles in Asian countries (Hybrid, high efficient diesel engine, high quality fuel, )
- Common energy equipments and facility ( power generation, transmission, boilers, industrial equipments,etc.)
- Exchange experiences on, and promote energy management, regional standards, codes, etc.
- China is willing to learn and to explore jointly

# Improve energy technology and equipment market

- China and Asia have largest electricity market
- Energy efficiency technology and material in building
- Nuclear development
- Renewable technology

# Change the Concept

- Opportunity is larger than conflict, cooperative benefit is greater than competition
- Establish and cultivate politic trusts, and break the cold-war concept
- China is learning how to face globalization of energy market
- Encourage energy policy dialogue, realize others interests and policy intention
- Establish information exchange mechanism on important energy policy and activity
- Start from bilateral and regional cooperation initiating framework



# Attach importance to Taiwan Province issue

- Taiwan issue may become a practical threat on energy security of East Asia
- Never Taiwan independence, it is the principal interest of China,
- Arming Taiwan increases threat on energy security of this region