



# **Issues of Designing Energy System Integration in Northeast Asia**

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**Sang Yul Shim**  
**Korea Energy Economics Institute**

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# Topics of Presentation

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- Background to energy system integration: vision, potential, and fundamental elements
- Korea initiative, and major activities and achievements of UN ESCAP
- Some points at issue for the promotion of energy system integration



# Long-term Vision of Regional Integration of Energy Systems

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*Quoted from  
the Khabarovsk Communiqué (October 24, 2001)*

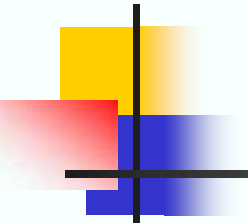
- Increase the supply of energy from the region
- Optimize the efficiency of supply and use of energy
- Minimize the environmental impact of energy projects through improved energy mix



# Potential Integration of Energy Systems

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- **Physical Integration**
  - Interstate connection of network facility
  - Shared use of independent facilities
- **Non-physical Integration**
  - Joint R&D
  - E-commerce
  - Policy coordination
  - Regional energy market integration, etc



# Fundamental Elements of Energy System Integration

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- Build-up of confidence, trust and consensus thru informal and formal consultative process
- Legal frameworks and institutional arrangements
- Contractual frameworks and institutional arrangements
- Establishment and operation of interstate integration of energy systems



## Korea Initiative . . .

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Korea has closely collaborated with UN ESCAP since 2001 to promote energy cooperation in Northeast Asia.

In particular, they are pursuing *an inter-governmental consultative framework* which will provide guidance for the design of regional energy cooperation.



# Major Activities and Achievements of UN ESCAP

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**Communiqué** adopted at the North-East Asia Expert Group Meeting, Khabarovsk, Russia, 23-24 October 2001

**Vladivostok Statement** adopted at the Senior Officials Meeting (SOM), Vladivostok, Russia, 10 April 2003

- ❖ Senior officials on energy of **DPRK, Mongolia, ROK and Russian Federation**, assisted by experts from business and research sectors



# **Khabarovsk Communiqué**

## **Objectives of Energy Cooperation in NEA**

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- Increase the supply of energy from the region
- Optimize the efficiency of supply and use of energy
- Minimize the environmental impact of energy projects through improved energy mix





# **Khabarovsk Communiqué**

## **Principles for Energy Cooperation**

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- Recognition of sovereign rights
- Free and fair trade
- Free and non-discriminatory transit of energy products
- Special support to DPRK and Mongolia in recognition of disparate economic development
- Investment promotion and protection
- Environmental protection



# Khabarovsk Communiqué

## Institutional Arrangement Suggested

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- *A Senior Officials Meeting and a Secretariat*
- *Working Groups on:*
  - Energy Planning, Programming and Restructuring
  - Emerging Energy Technology and Scientific Cooperation and their Financial, Social and Environmental Impact
  - Electric Power Interconnection
  - Interstate Transit of Fossil Fuels
  - Development of a North-East Asian Energy Charter



# Vladivostok Statement

## Further Consensus

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- Periodical Meeting of Senior Officials
- Establishment of working groups on:
  - Electric power and interconnection
  - Interstate transit of fossil fuels
  - Prospective energy planning and programming
- *Immediate establishment of a Task Force on Energy to draft an Inter-governmental Consultative Mechanism*
- Further consultation for the foundation of *a Research Centre for Energy Cooperation in North-East Asia*



# Vladivostok Statement

## A Consultative Mechanism Proposed

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- Geographical coverage
- Objectives and principles
- Envisaged collaborative multilateral energy projects
- Establishment and formality of a Senior Officials Committee and a Secretariat
- Establishment and formality of Working Groups
- Financing consideration



# Issues Relevant to an Inter-governmental Consultative Mechanism

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- Levels of participating officials in view of the extent of willingness to cooperate
- Political and diplomatic tension
  - Reluctance of some countries to the establishment of an official mechanism
- Differences in economic development and growth, and the roles of the market



## Issues...consultative mechanism...continued

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- Functions and tasks of the mechanism
- Major rules of operating the mechanism
  - Voluntary participation in the consultative process, and non-binding decision by consensus
- Access to best practices
  - Good working relationship with international organizations, WTO, ECT, IEA, APEC etc
  - ❖ UN ESCAP to be invited as an interim secretariat to a committee of senior officials on energy



# Issues Relevant to Legal Frameworks and Institutional Arrangements

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- Pros and cons of
  - New region-specific legal frameworks
  - Coverage of frameworks in terms of supporting either all interstate energy cooperation or specific projects
- Major subjects of legal frameworks, focusing on inter-governmental policies and measures, and institutional arrangements
  - Mitigation or sharing of political and financial risks, etc
- Adapted use of best practices



# Issues Relevant to the Realization of Regional Integration of Energy Systems

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- Wide invitation of private sectors to businesses for interstate integration of energy systems
- Free economic activities of private sectors in regard to contracts and business development and operation under legal frameworks
- Inter-governmental measures and activities to assist private sectors in their businesses
- Adapted use of best practices