

# Prospects of Energy Cooperation in Northeast Asia



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# Where Do We Stand?

## Northeast Asia

### International Relations

- Lack of full reconciliation
- North Korean nuclear issue
- Competition for hegemony

### Economy

- Emergence of China as the World's factory and market
- Japan's high-tech capacity
- No FTA yet

### Culture

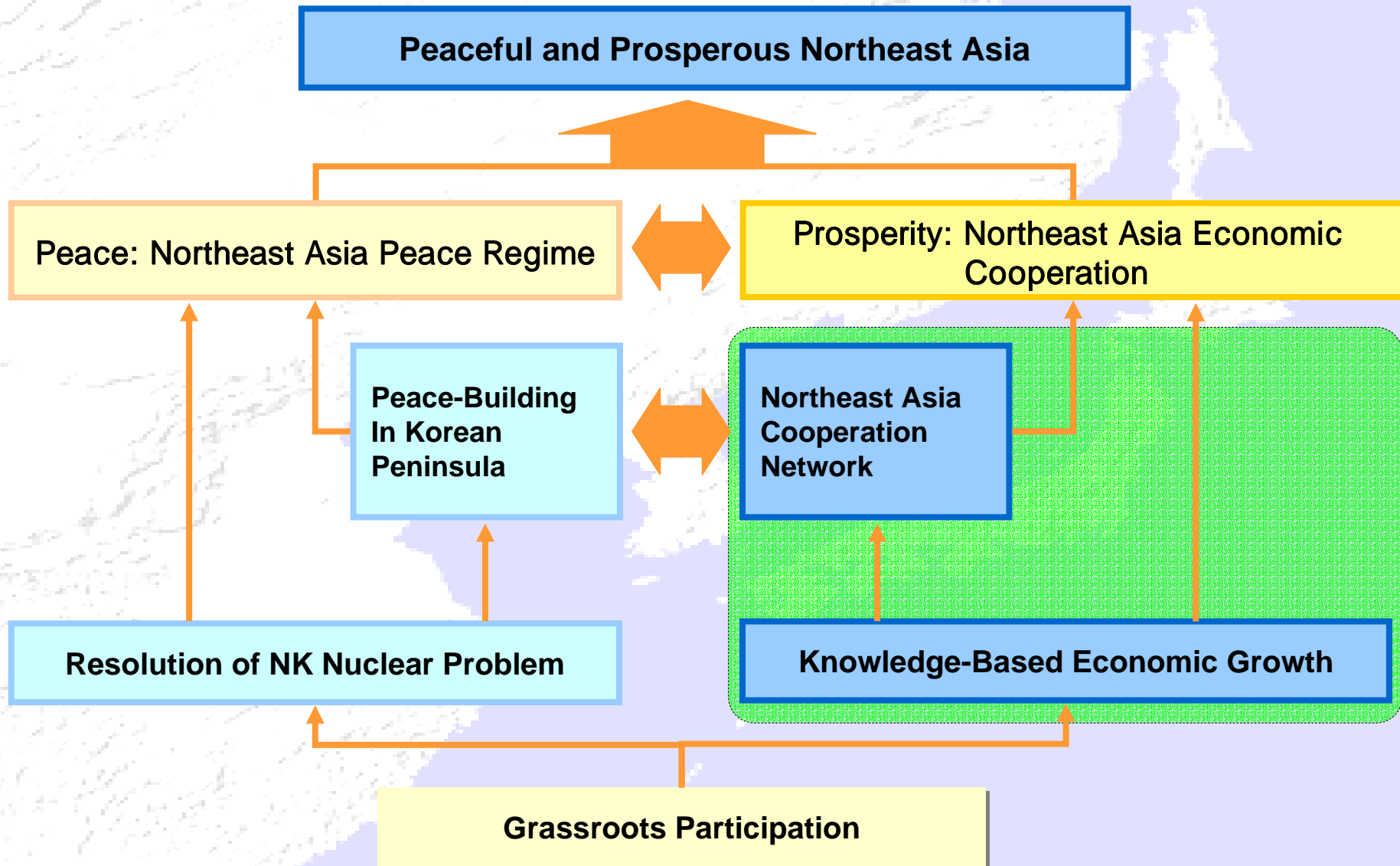
- No sense of common identity as Northeast Asian community
- Collision of nationalism

**No foundation for sound competition and cooperation**

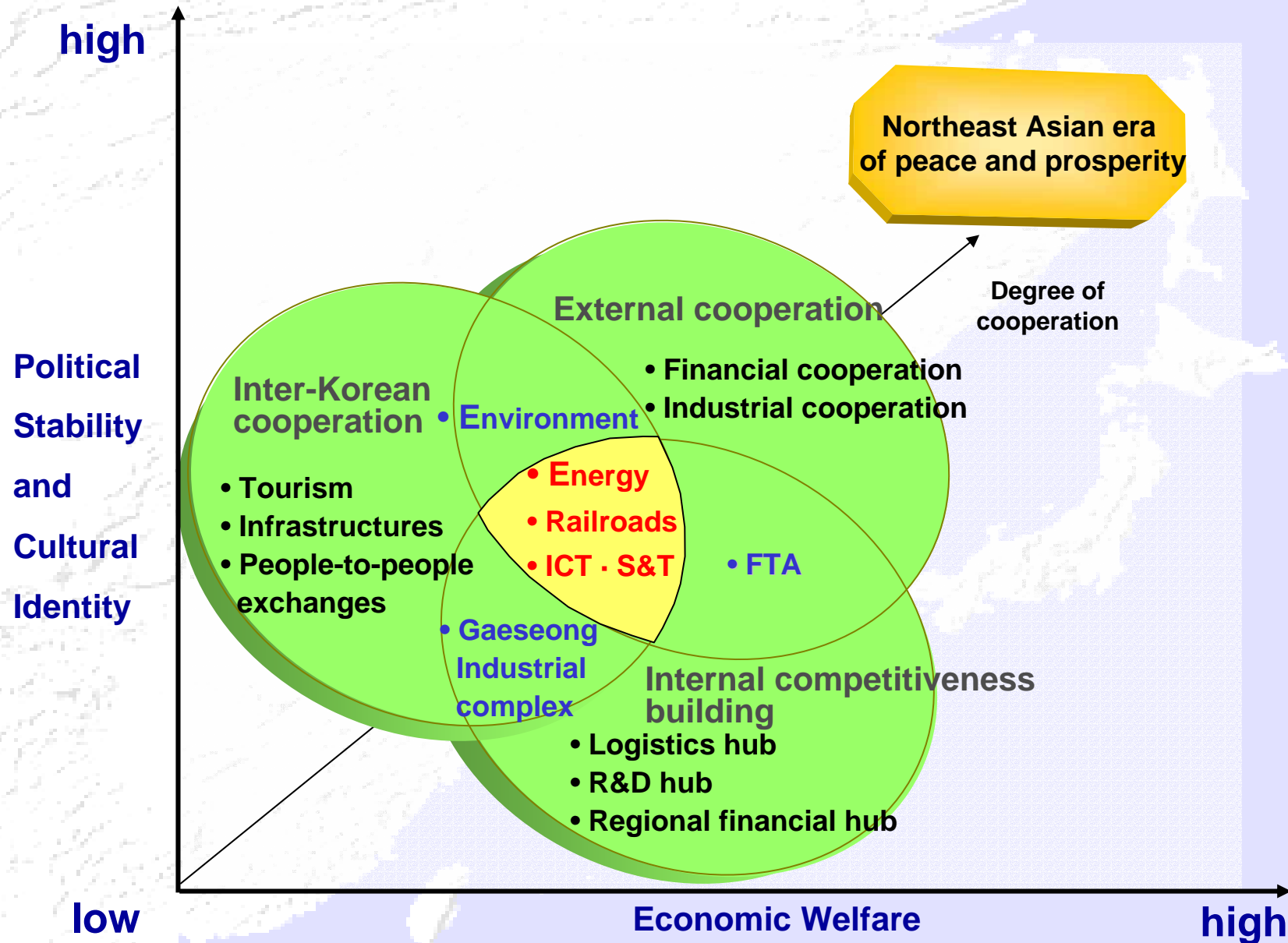


**Common ground for Northeast Asia**

# Where Are We Headed for ?



# Where Are We Headed for ?(continued)



## Possible Areas for Cooperation

### . Projects of infrastructure construction contributing to peace in the region

1. Energy Cooperation
2. Linking of inter-Korean and Trans-Asian railroads
3. Development of nodes for inter-Korean economic cooperation
4. Cooperation in ICT and other leading edge technologies
5. Mobilization of financial resources for regional development

### . Projects leading to a Northeast Asian community

6. East Asia FTA (EAFTA)
7. Regional financial and monetary cooperation
8. Cooperation on environment
9. Social and cultural exchanges

# Why Energy Cooperation in NEA?

- ▶ **To prepare for a possible crisis on energy security**
  - Importance of energy security is growing due to increased world demand for primary energy.

## < World Primary Energy Demand 2030 >

(Unit : Million

toe)

	2000	2030
<b>Oil</b>	3,604	5,769
<b>Natural gas</b>	2,085	4,203
<b>Coal</b>	2,355	3,606
<b>Nuclear power</b>	674	703
<b>Hydro power</b>	228	366
<b>Other renewable</b>	233	618
<b>Total</b>	<b>9,179</b>	<b>15,267</b>

\* Source: World Energy Outlook 2002.

## Why Energy Cooperation in NEA? (continued)

### ► To manage energy competition among Northeast Asian countries

- Energy consumption of South Korea, China, and Japan amounts to 17% of the world's. However, their production and reserve are only 5% and 2%, respectively.
- As Northeast Asia is showing faster economic growth than any other region in the world, energy demand in the region is likely to rapidly increase.

### < Energy Demand in Northeast Asian Countries >

	Energy Demand (Mtoe)				Growth Rates (%)			
	1990	1999	2010	2020	'90-'99	'99-'10	'10-'20	'99-'20
<b>Japan</b>	294	342	376	409	1.7	0.9	0.9	0.9
<b>Korea</b>	67	125	190	250	7.1	3.9	2.8	3.3
<b>China</b>	493	754	1,002	1,322	4.8	2.6	2.8	2.7

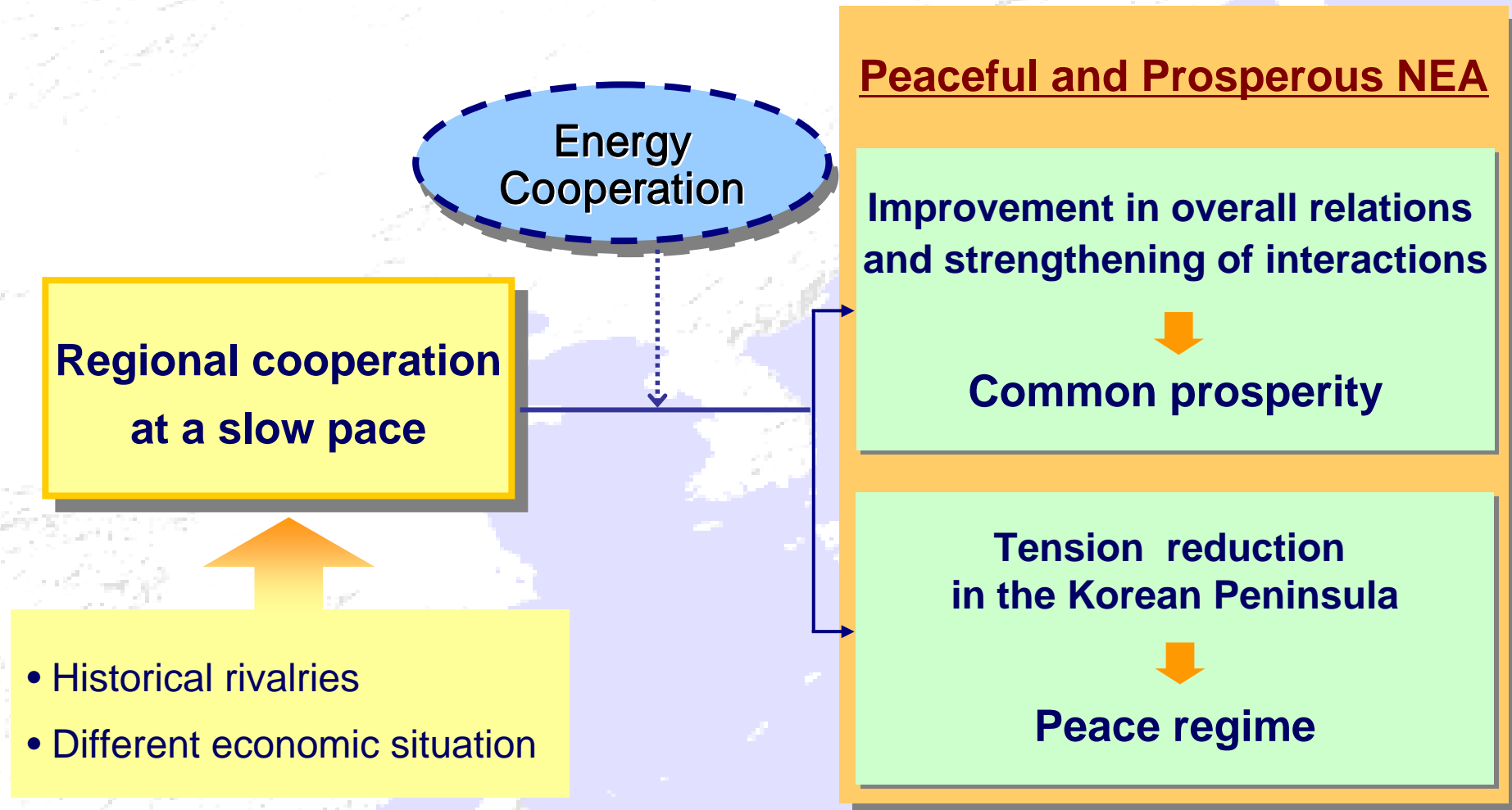
\* Source: ARERC, 2002. APEC Energy Demand and Supply Outlook

- Energy competition is expected to get worse as China moves aggressively to gain secure access.



# Why Energy Cooperation in NEA? (continued)

- ▶ To help establish a peaceful and prosperous Northeast Asia

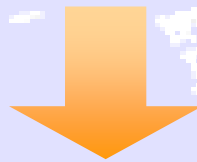


## Is Energy Cooperation in NEA Feasible?

### ▶ **Complementarity in the energy production/consumption structures of Northeast Asian countries**

- Russia is the only country in the region with energy capacity to export to other countries;
- While China, Korea and Japan, as energy consuming countries, are seeking stable energy sources within the region by diversifying their traditional energy sources.

### ▶ **Geographical proximity**

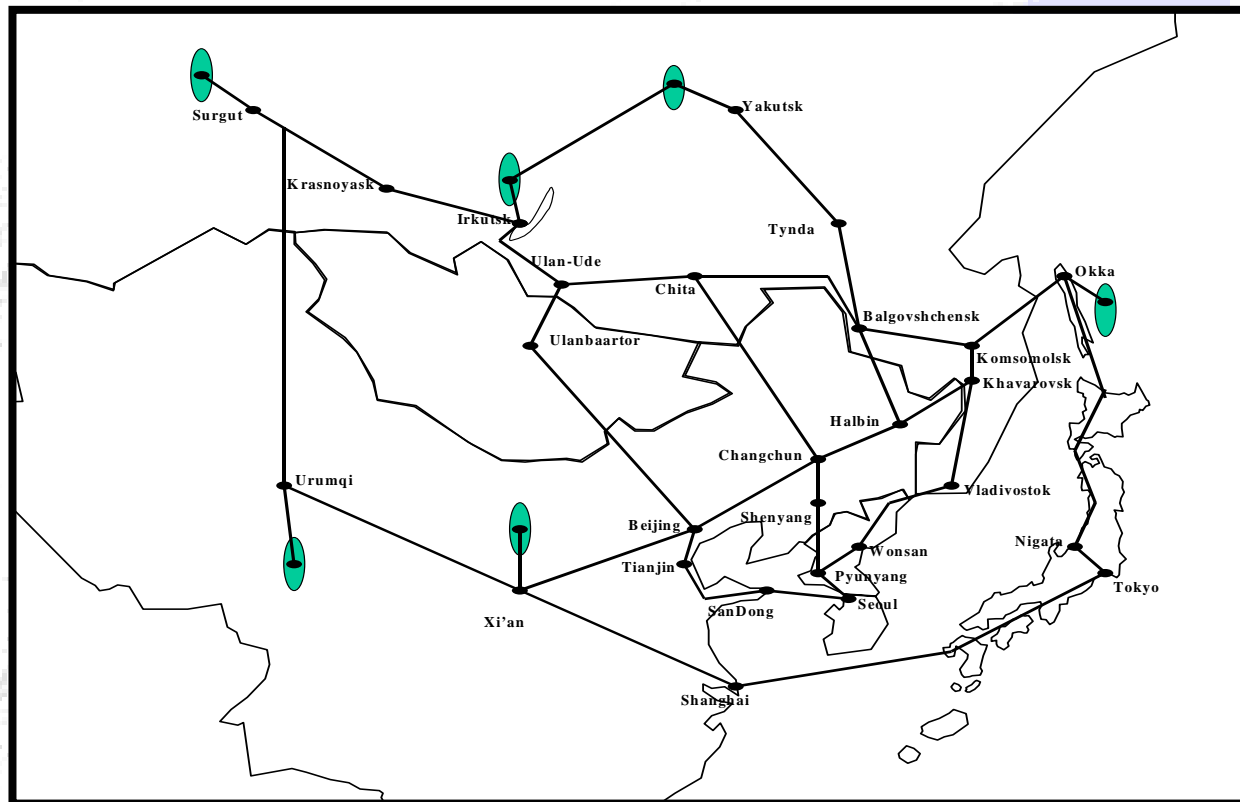


**Interests of countries converge towards cooperation.**

# On-going Cooperation Issues

- ▶ **Natural Gas : Exploration and pipeline (PNG) construction**
  - **Proposed projects : Irkutsk, Sakhalin, and Yakutsk**

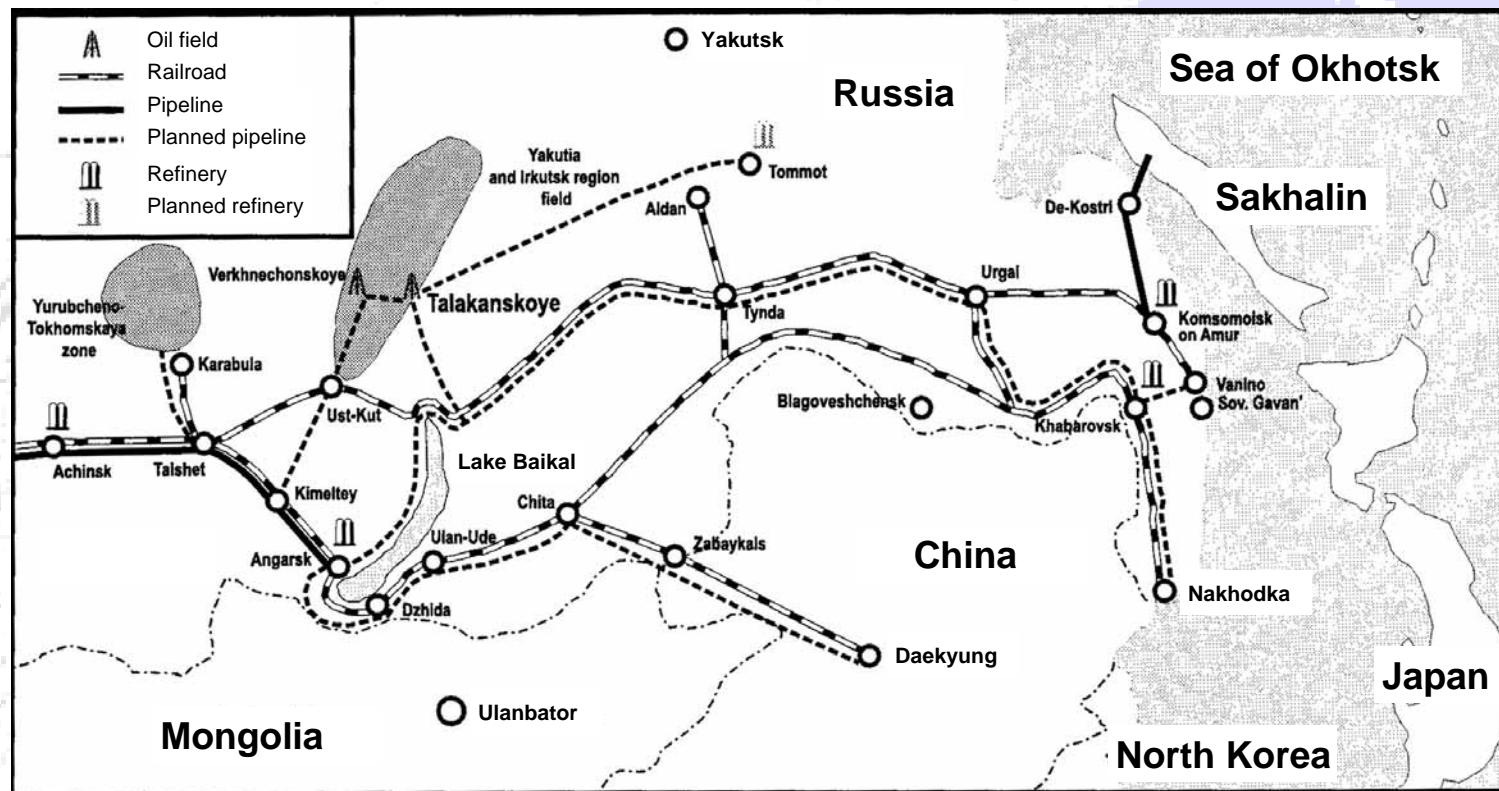
## < Prospective PNG Projects >



# On-going Cooperation Issues (continued)

- ▶ Oil : Oil pipeline, joint transportation and joint utilization of storage facilities

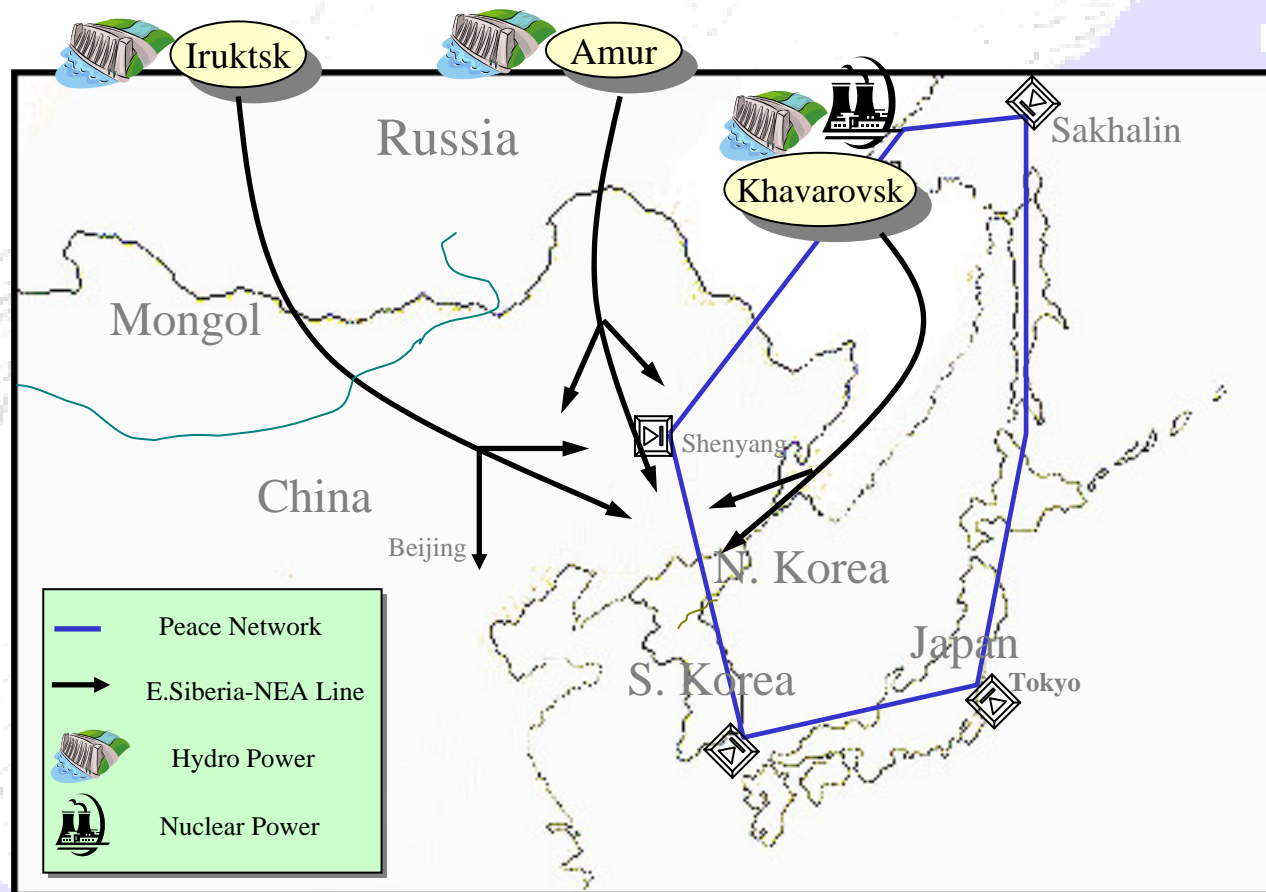
## < Prospective Oil Pipeline Projects >



# On-going Cooperation Issues (continued)

## ▶ Electricity : Power grid interconnection and power swap

### < Power Grid Interconnection Prospect >



# Vision for Energy Cooperation in the Region

## Economic Community

### ▶ Establishing an 'Energy Community' in the region

- Utilizing energy as a catalyst for regional economic cooperation, easing geopolitical tensions

### ▶ Strengthening energy security in Northeast Asia

- Promoting economic development by securing stable energy supply

# Barriers in Energy Cooperation

## Political and institutional issues

- Political relations among the countries within NEA and Inter-Korean tension
- Uncertainty in investment and market conditions, esp. in transitional economies
- Difference in the economic, social and political structures

## Economic issues

- Financing huge investment costs
- Competition with energy projects outside NEA
- Ensuring sufficient demand and market

## Geographical/technological issues

- Technological difficulties in the tundra area

# How to Realize the Vision ?

## Basic strategies

- ▶ **Gradual approach**
  - Forming consensus
  - Starting with easy and/or urgent projects
  - Setting up institutional arrangements
- ▶ **Open regionalism**
  - Welcoming participation of other non-regional countries
- ▶ **Division of roles between government and private sector**
  - Government to make institutional arrangements
  - Private sector to carry out projects
- ▶ **Bilateral and multilateral cooperation in parallel**
  - Bilateral cooperation for small scale & short-run projects
  - Multilateral cooperation for large scale & long-run projects
- ▶ **Incorporating environmental concerns**
  - Pursuing sustainable development
- ▶ **Linking with inter-Korean cooperation in energy sector**
  - Inducing North-Korea to join the regional cooperation projects



## How to Realize the Vision ? (continued)

### Immediate tasks

- ▶ **Promoting dialogue for energy cooperation**
- ▶ **Setting up institutional financing vehicles**
  - Financing to explore energy sources and construct infrastructure
  - Reducing investment risks
- ▶ **Establishing cooperative organizations**
  - Government officials meetings / Expert forums / Business forums
  - Umbrella organization : 'Council for Northeast Asia Energy Cooperation'
  - Establishing cooperative networks with related international organizations

An aerial photograph of a coastline, likely the Gulf of Mexico, showing a large body of water on the right and a landmass on the left. The text "Thank you." is centered in the image in a bold, black, sans-serif font.

**Thank you.**