Asian Energy Security

- Weak regional collaboration, low institutionalization, fossil-fuel based.
- How to meet rising demand (the Middle East, Russia, the US, Australia).
- The main source of energy insecurity is the dependence on the Middle East.
- Interference with the sea-lanes of communication.
- Difficulty with regional LNG cooperation (price, infrastructure).
- Low oil prices $\rightarrow$ low LNG consumption $\rightarrow$ low LNG prices.
- Oversupply of LNG, return of pipeline connections, return of nuclear, rise of renewables.
The GOAL of this presentation is to assess the state of Russia-China/Korea/Japan energy cooperation under low oil prices.

The resources of Asiatic Russia and the needs of China, Japan, and the two Koreas create enormous potential for economic partnerships. Despite numerous failures in the past, can Russia turn resource potential into real political power this time?

Russia plans to keep increasing its oil exports to Asia despite plummeting oil prices and Western sanctions, even as its oil supplies to the region hit record levels in 2015.
Russian Energy Exports to NEA (Stage 1)

- The year 2009 saw remarkable developments in Russia-NEA relations regarding both oil and gas.
- Diversification of exports to Asia: Oil 6% → 25% Natural Gas 0 → 20%
  - Supplied oil to China through ESPO (0.3 million bpd) Dec, 2010
  - Supplied gas to Japan through Sakhalin-II LNG. April, 2009
- Delay in Siberia PNG supply to China due to pricing problems.
- Reliance of Russian oil of 3 NE Asian nations (2011)
  - Japan: 4%
  - China: 8%
  - S. Korea: 6%
- Reliance of Russian LNG of 3 NE Asian nations (2011)
  - Japan: 9% (4% '09)
  - China: 0.5 bcm
  - S. Korea: 9% (4% '09)
Russian Energy Exports to NEA (Stage 2)

- Second stage of ESPO open in Dec. 2012.
- In the 2013 Sino-Russian summit Rosneft gained a contract to triple the size of current oil deliveries to China to 900,000 BPD, putting it on a par with Saudi deliveries to China.
- Russia's Pacific port of Kozmino exports 24.6 million tons of oil 2014 (494,000 barrels per day, or bpd), up from 21.3 million tons 2013.
- TWO PATTERNS: Oil-led Exports (Gas minimal), China-Centered Exports

<table>
<thead>
<tr>
<th></th>
<th>amount of oil (t)</th>
<th>starting date</th>
<th>period</th>
<th>estimated value</th>
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</thead>
<tbody>
<tr>
<td>Rosneft-CNPC*</td>
<td>15 million</td>
<td>2011</td>
<td>20 years</td>
<td>US$ 100 billion</td>
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<td>(oil delivered via the ESPO**) pipeline)</td>
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<tr>
<td>Rosneft-CNPC</td>
<td>9 million</td>
<td>following the refinery's construction</td>
<td>unknown</td>
<td>unknown</td>
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<td>(oil for the Tianjin refinery)</td>
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<tr>
<td>Rosneft-CNPC</td>
<td>7 million</td>
<td>2014</td>
<td>unknown</td>
<td>unknown</td>
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<tr>
<td>(oil delivered via Kazakhstan)</td>
<td></td>
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<tr>
<td>Rosneft-CNPC</td>
<td>15 million</td>
<td>by 2018</td>
<td>25 years</td>
<td>US$ 270 billion</td>
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<td>(oil to be delivered via a new spur of the ESPO?)</td>
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<tr>
<td>Rosneft-Sinopec</td>
<td>10 million</td>
<td>2014 (contract under negotiation)</td>
<td>10 years</td>
<td>US$ 80 billion</td>
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<td>(oil delivered from the ESPO)</td>
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<tr>
<td>Total</td>
<td>56 million</td>
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</table>
On May 21, 2014, the Russia-China Eastern Route Gas Pipeline Purchase and Sale Contract was signed by China National Petroleum Corporation (CNPC) and Russia's Gazprom.

Under the contract Russia will export 38 billion cubic meters of gas to China every year for a 30-year period starting from 2018. The gas will come from the Kovykta and Chayanda gas fields in Eastern Siberia and will be piped to Northeast China, then to the Beijing-Tianjin-Hebei metropolitan area, and on to the Yangtze River Delta in the East.

The Russian part of the Eastern Route China-Russia Natural Gas Pipeline is officially dubbed "Power of Siberia".

On November 10, 2014, Gazprom and CNPC signed a framework agreement on Russian natural gas supplies to China via the Western Route.
On September 1, 2015, construction of the pipeline started in the Eastern Siberian city Yakutsk.

On June 29, 2015, construction of China-Russia Natural Gas Pipeline started in China.
Maintaining oil production above 10 MBD is becoming a key challenge (James Henderson OIES Report Dec. 2014).

- Natural Gas 600 BCM production – 200 BCM exports
- Russian oil production relies on EOR (Enhanced Oil Recovery) (TNK-BP)
- Russia has the largest shale oil resources in the world
- Bazhenov tight oil will be delayed due to hold on foreign partnership
- Shell, Exxon, Statoil, Total and BP have all formed JVs, now on hold
- Russian service companies cannot offer adequate equipment
- 95% of horizontal wells drilled by international service companies
- The Asia pivot triggered a move to LNG, but this now reverted to a pipeline export strategy (Henderson 2014)
Line A of the Central Asia–China Gas Pipeline put into operation in December 2009.
Line B of the Central Asia–China Gas Pipeline put into operation in October 2010.
Line C of the Central Asia–China Gas Pipeline put into operation on May 31, 2014.
its route is basically identical to lines A and B, length is 1830 km, diameter is 1219 mm, and capacity is 25 billion cubic meters per year.
By the time all the above pipelines are put into operation, the gas supply capacity of the Northwest gas import gateway will reach 115 billion cubic meters per year.
Russia-Korea Energy Relations

- Korea needs to establish short-mid term energy security plans where the followings are present:
  - North American shale gas revolution
  - Japan’s Fukushima crisis
  - Breakthrough in China-Russia gas contract
  - Russian rapid development of far-east

- When China-Russian energy cooperation and Japan-Russian energy cooperation is in friction: fits the Korean interest the most.
- Japan-Russian energy cooperation back in harmony.
- When China-Russian energy cooperation is in harmony, China becomes the transit nation of Russian energy. This makes Korea to be dependent on China for energy.

Source: YP News
Pipeline Issues

- Meeting of Russian President and Korean President on September 8th was thought to mark as an accelerator to South-North-Russian pipeline initiative.
- However, the two Presidents did not give out any significant outcome.
- Currently, MOU that states 7.5 million tons will be imported from Russia from 2015 exists only.
- The clause that gas price is cheaper means that import through pipeline is 1/3 cheaper logistically compared to LNG. This does not necessarily mean gas import is cheaper accordingly.
- Korean Government stance: “Principle of importing gas securely and cheaply”
President Park Keun-Hye: Eurasia Initiative.

- After reopening of Khasan-Rajin Railway, Korean steel maker POSCO, Hyundai Asan, Korail wanted to utilize it to import Russian coal from Rajin to Pohang.
- It induced Rason Kontrance to export Russian coal to Korean peninsula.
Japan’s LNG and Oil Imports from Russia
(Source: JOGMEC)