DPRK Energy and Energy-Related Trade with China

Trends Since 2005

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DPRK Energy Experts Working Group Meeting
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Today’s Presentation

• Notable Findings
• Questions Concerning Energy Trade
• Data Sources
• Energy and Fuel Trade
• Related Goods and Mode of Transport
• Trends and Implications
Notable findings

• In 2007, energy and fuels accounted for 29% of official DPRK imports from the PRC, and 29% of exports by value.

• Whereas the DPRK is a net importer of PRC crude oil and oil products, it has been a net exporter of electricity and coal to China since 2002.

• North Korean coal has been sold to China for a price per ton that was 8% lower than the average Chinese import price for coal in 2007; likewise, electricity was sold for an average 50% less per kWh than average PRC electricity imports in 2007.

• However, Chinese coal was sold to the DPRK for 44% more than average Chinese coal export prices, and crude oil and oil products were sold for 28% and 7% premiums, respectively, in 2007.

• The DPRK continues to import a high proportion of energy and energy-intensive products, and export natural-resource and labor-intensive products.
This presentation will address five questions on DPRK energy trade with China

- What is the value and quantity of energy and fuels trade between North Korea and China?
- How does each country price energy and fuels exports relative to other trading partners?
- What is the natural resource and labor-intensiveness of DPRK-PRC trade?
- How are goods moving between China and North Korea?
- What do trade data indicate about national policy and the domestic energy situation?
Direct DPRK data are elusive

North Korean trade data are covered in the UN International Commodity Trade Database and on a fairly detailed level in Chinese Customs Statistics Yearbooks. In order to examine the relationship between the DPRK and the PRC, this presentation reviews data compiled by the China Customs Bureau. Trade value data are in current dollars according to current official exchange rates.
North Korea is a growing net importer of Chinese goods and fuels by total value.
Energy and fuels has been a consistent portion of DPRK-PRC trade.
In 2007, energy and fuels was the single largest official DPRK-PRC trade category.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Value (million $)</th>
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<th>Value (million $)</th>
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<tbody>
<tr>
<td>DPRK Imports</td>
<td>DPRK Exports</td>
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<tr>
<td>1  Energy &amp; Fuels</td>
<td>402</td>
<td>Energy &amp; Fuels</td>
<td>170</td>
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<td>2  Machinery</td>
<td>104</td>
<td>Ores, Slag, Ash</td>
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<td>3  Electrical Machinery</td>
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<td>Woven Apparel</td>
<td>60</td>
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<td>4  Plastic</td>
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<td>Iron &amp; Steel</td>
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<td>5  Vehicles (Not Railway)</td>
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<td>Fish &amp; Seafood</td>
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<td>6  Manmade Filament, Fabric</td>
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<td>Wood</td>
<td>20</td>
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<td>7  Meat</td>
<td>42</td>
<td>Aluminum</td>
<td>14</td>
</tr>
<tr>
<td>8  Iron &amp; Steel</td>
<td>37</td>
<td>Zinc &amp; Articles Thereof</td>
<td>10</td>
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<tr>
<td>9  Cereals</td>
<td>37</td>
<td>Special Other</td>
<td>10</td>
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<tr>
<td>10 Prepared Meat, Fish, etc.</td>
<td>36</td>
<td>Electrical Machinery</td>
<td>8</td>
</tr>
<tr>
<td>Aggregate Imports</td>
<td>1,392</td>
<td>Aggregate Exports</td>
<td>582</td>
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Crude imports were overshadowed by more than 3.7 million tons of coal exports.
But crude oil is more valuable…
...and North Korea’s sporadic oil imports have continued unabated.
On the other hand, coal exports surged with prices, while imports have diminished.
Sporadic exports of DPRK electricity have grown more sustained.
North Korean exports of electricity and coal have grown at “friendship prices”
But Chinese coal and oil product have been sold at top dollar.
Chinese crude oil exports to the DPRK are also priced above average…
...though the North Korea received a 35% discount on 2007 Chinese coke prices.
Transportation equipment moves on a one-way street between the PRC and the DPRK.
Most North Korean imports from China are transported by road...
..except for energy & fuels, which move primarily by other and water.
Since 2005, DPRK exports have been less labor-intensive & imports are less energy-intensive.
North Korea’s apparent trade deficit with China has continued to grow.
These ‘mirror statistics’ have implications for DPRK energy and bilateral relations

- DPRK-PRC trade deficit surged to its highest point in 2007 ($811 million), while in 2006 the value of the energy-trade deficit rose to its highest point ($245 million).
- Inelasticity of DPRK crude oil import demand to rising PRC prices may indicate low discretionary usage.
- Expanding coal and electricity exports may reflect surplus capacity, or desperation for hard currency
- Asymmetrical energy export pricing suggests an unbalanced alliance
- Increasing energy-embodied imports may reflect undeveloped industry-integrated energy capacity (e.g., steel or aluminum production capacity)
Thank you!

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