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GLOBAL RESEARCH AND ANALYSIS > PROJECT ASIA > CHINA RIM

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LRP's *Project Asia*:

The world's economic "center of gravity" continues to shift from the Atlantic region towards the Pacific region, and the economic prospects of the United States are becoming more intertwined with those of Asia than ever before. The objective of ***Project Asia*** research and analysis from Laguna Research Partners is to provide our research users and consulting clients with proprietary, actionable insights regarding this important shift.

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China Rim Brief

Crude Oil: China Circumventing Malacca, and Kazakhstan Circumventing Russia
August 8, 2006

Laguna Research Partners issued in April 2005 a major new study titled ***Crisis on the China Rim: An Economic, Crude Oil, and Military Analysis***. That 85-page report provided our research users and consulting clients with a radically new context for analyzing the emergence of the Chinese economy, the impact of that emergence on global energy markets, and the implications of China's rise for the People's Liberation Army, the ultimate guarantor of China's energy security.

Our ***China Rim Briefs*** provide updates to our original China Rim thesis.

> "...the "China Rim 14+4" have total proven crude oil reserves of approximately 80.8 billion barrels ...Russia and Kazakhstan, combined, account for an estimated 74.0 billion barrels, or 91.6% of this total ...put another way, the China Rim 14+4, without Russia and Kazakhstan, would have a total population of 1,735,979,250 and total proven crude oil reserves of only 6.8 billion barrels of crude oil ...this equates to per capita reserves of just 3.9 barrels ...in sum, Russia and Kazakhstan are absolutely critical to the economic growth outlook for China and the China Rim"
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> *Crisis on the China Rim:*
> *An Economic, Crude Oil, and Military Analysis*
> Analyst: Kevin B. Skislock
> Laguna Research Partners LLC
> April 14, 2005

On July 12 at 6:45 PM, the first drops of crude oil from the 962.2-kilometer Kazakhstan-China pipeline started to fill a 50,000-cubic meter, or 315,000-barrel, holding tank at Alataw Pass in China's Xinjiang Uygur Autonomous Region. That initial crude oil flow, the first to be measured by a meterage station established by China at the Kazakh-Chinese border, could eventually grow to 10 million tons, or 74.8 million barrels (MMBLS), annually during the pipeline's first phase of operation. The pipeline's annual capacity is expected to leap to 20 million tons, or 149.6 MMBLS, in the second phase of operation starting in 2011.

The geoeconomic implications of the successful launch of the Kazakhstan-China pipeline are, in our view, significant. First, during the pipeline's first phase of operation, crude oil imports from Kazakhstan could satisfy as much as 2.5% to 3.0% of China's annual consumption. Second, the Kazakhstan-China pipeline will boost China's energy security posture by reducing China's dependence on Middle East crude oil and the lawless Malacca Strait trade lane that it must traverse. Third, the pipeline provides Kazakhstan with a major new customer for its considerable oil resources. And, fourth, the pipeline seriously challenges Russia's grip on the flow of Kazakh oil exports.

Here are the details.

- Industry sources estimate that China imported from Kazakhstan 1.3 million tons (9.7 MMBLS) of crude oil via the Alashankoy rail crossing in 2005. Laguna Research Partners conservatively estimates that Chinese imports of Kazakh crude oil will rise to 4.8 million tons (35.9 MMBLS) in 2006, +270.1%, and 8.2 million tons (61.3 MMBLS) in 2007, +70.8%. As stated above, targeted annual volume for the Kazakhstan-China pipeline is 10 million tons (74.8 MMBLS) during first phase of the pipeline's operation. Annual pipeline capacity is expected to jump to 20 million tons (149.6 MMBLS) in 2011.

  China's "apparent consumption" (domestic production plus net imports) of crude oil in 2005 was 309 million tons (2.3 billion barrels). Given that the current state of the Chinese economy's energy efficiency (GDP output per unit of energy input) is abysmal, and that the Chinese government has implemented aggressive programs aimed at boosting that efficiency, Laguna Research Partners estimates that China's annual crude oil consumption growth rate will amount to roughly 85.0% of its annual GDP growth rate. The Chinese government is targeting an annual GDP growth rate in the high single digits, but the actual GDP growth rate has often exceeded the targeted rate and reached low double digits.

  Combining the figures above, China's crude oil imports from Kazakhstan amounted to approximately 0.4% of China's apparent consumption in 2005. Our projections of Chinese GDP growth and Kazakhstan-China pipeline oil flux during the 2006 through 2001 timeframe indicate that the share of Chinese consumption satisfied by Kazakhstan supplies during phase one of the new pipeline's operation could peak at 2.5% to 3.0% in 2008.

- It is also notable that, as indicated in a recent LRP *China Rim Brief*, China's National Energy Office expects that the first four locations comprising "phase one" of China's strategic petroleum reserve (SPR) will be completed during 2006. These first four locations are expected to have a total storage capacity of 10 million to 12 million tons (74.8 MMBLS to 89.8 MMBLS), roughly equivalent to the estimated annual capacity of the Kazakhstan-China pipeline during the 2006 through 2011 phase of pipeline operation.

  During the second and third phases of China's SPR build-out, reserve capacity is to be increased to the 28-million ton (209.4-million barrel) level as currently planned.

- China imports an estimated 41.0% to 44.0% of its crude oil needs. (As indicated in our *China Rim Brief* dated July 25, 2006, we estimate that China's crude oil import rate was 43.4% during H1:06.) More than half of China's crude oil imports are currently sourced from the Middle East, exposing China to that region's volatile geopolitics as well as to the lawless Malacca Strait chokepoint that most Middle East oil en route to China must navigate. The Kazakhstan-China pipeline's theoretical phase-one capacity of 10 million tons (74.8 MMBLS) annually amounts to 7.9% of China's crude oil net imports of 127 million tons (950.0 MMBLS) in 2005.

- Laguna Research Partners estimates that Kazakhstan produced 63.3 million tons (473.5 MMBLS) of crude oil in 2005. We also estimate that Kazakhstan consumes roughly 25.0% of its production domestically, and exports the remaining 75.0%. The Kazakh government currently aims to increase the country's crude oil production to 170 million tons (1.3 billion barrels) in 2015, implying compound annual growth of 10.4% during the 2006 through 2015 period. (Reported figures indicate that Kazakhstan's crude oil production grew at a 15.0% compound annual rate during the 1999 through 2004 timeframe.) This production goal is one of the key factors leading us to believe that our projections for Kazakh crude oil exports to China are conservative.

  Until early 2006, Kazakhstan shipped nearly all of its crude oil exports 1) ***northward*** via the Russian pipeline and rail distribution system, 2) ***westward*** via the Caspian Pipeline Consortium (CPC) Project and trans-Caspian

Sea barges to Azerbaijan, and 3) ***southward*** in resource swaps with Iran. The Kazakhstan-China pipeline provides Kazakhstan with critical ***eastward*** access to a huge potential crude oil customer, China.

- Through the end of 2001, prior to the completion of CPC, Kazakhstan shipped nearly all of its crude oil exports via the northward Russian route. CPC, jointly developed by the governments of Kazakhstan, Oman, and Russia, and a consortium of oil production majors, entered service on November 27, 2001, and provided Kazakhstan with its first significant oil export route that was not under total Russian control. The Kazakhstan-China pipeline provides Kazakhstan not only with a major new customer to the east, but also with a high-volume export route having no Russian involvement.

  The commencement of crude oil flow through the Kazakhstan-China pipeline is particularly critical to Kazakhstan given that CPC is the only pipeline in Russia not controlled outright by Russian oil giant Transneft (www.transneft.ru). As expertly documented by Strategic Forecasting, Inc. (www.stratfor.com), the Russian tax authorities have recently frozen the bank accounts of CPC, and have presented CPC with a Transneft "tax claim" amounting to US$174.7 million.

Clients of Laguna Research Partners are invited to contact our firm for additional details.

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