



307818256/

# Geopolitics of Energy®

Volume 38, Issue 8  
August 2016

## Editorial Committee

Paul Kralovic  
Dinara Millington  
Megan Murphy  
Allan Fogwill

## Advisory Board

Kimble Ainslie  
Yasser Al-Saleh  
Anis Bajrektarevic  
Fred Banks  
Fatih Birol  
John Brunton  
Michael Charokopos  
Zachary Cuyler  
Athanasios Dagoumas  
Alberto Cisneros Lavaller  
Napier Collyns  
Floros Flouros  
Herman Franssen  
Ieda Gomes  
Antoine Halff  
David Howell  
Wenran Jiang  
Larry Kaufmann  
Mikhail Krutikhin  
Vadim Loktionov  
Michael Lynch  
Keun Wook Paik  
Petra Posega  
David Pumphrey  
Adnan Shihab-Eldin  
Paul Sullivan  
Eric Switzer  
Paul Tempest

## Inside this Issue...

**Sino-Russian Oil and Gas Cooperation: Where it Stands and How Far Can it Expand?** Page 2  
*Keun Wook Paik*

The author explores how Russian companies are courting China as a strategy to broaden natural gas markets. Interestingly, Rosneft and Gazprom are competing for the attention of China.

**A Very British Fiasco** Page 11  
*David Howell*

David Howell brings a critical assessment of the United Kingdom's energy and carbon management policies to light. He observes that poor policies will significantly increase energy prices by encouraging investment in expensive programs and projects, and not necessarily deliver the objective of reduced carbon emissions.

OXFORD INSTITUTE  
FOR ENERGY STUDIES

Geopolitics of Energy was founded by the late Melvin A. Conant of Washington, DC in 1979. Since 1993, it has been published under the auspices of the Canadian Energy Research Institute. All views expressed in this journal are those of the individual authors and do not reflect the views of the Canadian Energy Research Institute.

**CERI**   
CANADIAN ENERGY RESEARCH INSTITUTE

## *Sino-Russian Oil and Gas Cooperation: Where it Stands and How Far Can it Expand?*

Professor Keun Wook Paik

Over the last two decades, Sino-Russian oil and gas cooperation has witnessed many ups and downs. While Russia was prioritizing the short term tangible result, China was consistently focused on the long term and fundamental target. Initially Russia did not take China very seriously as China's market was premature to carve out or divert Russia's sizable fossil fuel supplies to the lucrative European market. Even though Russia is placing its highest priority to its pivot to Asia policy, it will take a long time for the actual volume from Asian markets to reach two thirds of European markets. Despite the slow progress of Asian market expansion, there is no doubt Asian markets will play a very important role for Russia's oil and gas exports in the coming decades. China was and is confident that its massive market will offer a real leverage for its negotiations with Russia and is still sticking to its value chain development strategy, as shown very clearly in China's pipeline gas imports from the Central Asian Republics. One thing for certain, oil and gas cooperation between Russia and China was and is being expanded.

Since May 2014, when the breakthrough of the Sino-Russian gas deal was made, the most frequently asked questions the author received are:

- Why is Beijing slow in terms of expanding the crude pipeline between Skovorodino-Daqing?
- Whether or not CNPC will take the 19.5% of Rosneft equity stake?
- How will Russia's India card affect the Sino-Russian oil and gas cooperation?
- Will Gazprom construct the Power of Siberia 1 gas pipeline as scheduled or is a significant delay inevitable?
- Why Beijing did not offer sizable financing for Power of Siberia (POS 1) development?
- Why Beijing threw a life line loan for Novatek's Yamal LNG?
- Why is Gazprom so desperate to accelerate the Altai gas export deal with Beijing, when the progress on the POS 1 construction is so slow?
- What is the position of both Japan and Korea towards Sino-Russian oil and gas cooperation?

A recent and very well researched OIES paper by James Henderson and Tatiana Mitrova explains where Sino-Russia's oil and gas cooperation stands and it also offers some hints on the questions mentioned above.<sup>1</sup> The paper's verdict on the status of energy relations between Russia and China follows:

"... There is no doubt that Russia's pivot to Asia is certainly taking place (the evidence from the oil sector alone is enough evidence of this), we have characterised the developing energy relationship between Russia and China as akin to "playing chess with the Dragon", by which we mean to imply that from a Russian perspective it is playing a complex and high risk game with a powerful adversary. China, with its much larger economy, its financial firepower and the benefit of Russia's weakened geo-political status seems set to control the energy relationship with its northern neighbour. However, Russia is not without strengths of its own and is attempting to exploit them wherever it can. China does need Russian oil, and wants access to the Russian Arctic. Over time (perhaps a decade) it may also come to need Russian gas in great quantities. Nevertheless, with the oil and gas markets becoming more global in nature, it is unlikely that Russia will be able to exploit these opportunities on anything other than competitive terms. The reality is that its assets are, to an extent, stranded in the East with China as their prime market, and as such their output is unlikely to command a

premium price, given China's alternative options. As a result, in order to fully benefit from its energy connection to the East, Russian companies need to create their own diversification options. Rosneft and Novatek have started to do this to a limited extent. It is now time for Gazprom to show the same levels of flexibility, or potentially face significant consequences for its future in the Russian gas sector."

Surely Russia's pivot to Asia policy is in full swing, but the most important question is whether Sino-Russian oil and gas cooperation will move into the strategic level. No easy answer exists. Last year, my OIES paper which updated my 2012 OUP book<sup>2</sup> had tried to address this difficult question. There are two very important milestone indicators. The first is from the gas sector, that is, the conversion of the Altai MOU into a binding agreement. The second is from the oil sector, that is, the allocation of Rosneft's 20% equity to CNPC or China's investment in Russia's strategic reserves with over 50% ownership. The combination of both deals will be powerful enough to upgrade the Sino-Russian oil and gas cooperation into the strategic level. Strategic cooperation is a term which, for Russians and Chinese, means a partnership which transcends commercial business. It involves not just the sale and purchase of energy, but mutual investment in resources and companies and tailoring projects to the future plans of both parties in the energy sector.<sup>3</sup>

During the last 15 months, was there any significant change that signals the strategic level cooperation between Russia and China's oil and gas cooperation? The short answer is that there was no breakthrough of Altai gas export to China and no CNPC acquisition of Rosneft's 19.5% equity materialised. Nonetheless, there are a number of important initiatives that will broaden the scope and enhance the level of oil and gas cooperation. This paper aims at addressing the key initiatives.

During the recent visit by President Putin to Beijing in late June 2016, President Xi Jinping highlighted that the year 2016 marked the 15th anniversary of the China-Russia treaty of friendship and hoped the two countries might remain "friends forever". President Xi said that "President Putin and I equally agree that when faced with international circumstances that are increasingly complex and changing, we must persist even harder in maintaining the spirit of the Sino-Russian strategic partnership and cooperation".<sup>4</sup>

President Putin said the Russian-Chinese commission on investment cooperation has selected 58 commercial initiatives for implementation (some of them are listed below) which require a total investment of \$50 billion.

- Rosneft and Sinopec have agreed to make a final decision by September regarding the Chinese company participating in the project to develop the Yurubcheno-Tokhomskiye field by acquiring a 49% stake in East Siberian Oil and Gas Company;
- Rosneft and Beijing Enterprises Group (BEG) signed an agreement on cooperation within the framework of Verkhnechonskneftegaz (VCNG). Rosneft had reached agreement with BEG on the principal terms and conditions of the potential sale of a 20% stake in VCNG. The parties expect to sign binding agreements on the matter not later than the fourth quarter of 2016;
- Chinese national chemical corporation ChemChina will acquire 40% of Rosneft's Far East Petrochemical Company (FEPCO) project;
- Rosneft and China's Shandong Kerui Petroleum Equipment signed a memorandum of understanding on strategic partnership in the area of petroleum services;
- Rosneft and China Petrochemical Corporation (Sinopec Group) plan to build a facility to process annually five billion cubic meters of gas and three million tonnes of polymers in Boguchany in East Siberia. The annual capacity of the new complex near the administrative center of Boguchany District will be 5 bcm of gas yielding up to three million tonnes of polymers and petrochemical products primarily for sale on the Russian and Chinese markets. The resource base of the project comprises Rosneft oil and gas fields of Yurubcheno-Takhomskoye cluster in East Siberia; and
- The Russian-Chinese dialogue in the gas sector is encompassing new areas. The cooperation in the area of underground storage and power generation will facilitate the further deepening of

cooperation between the companies and the significant improvement of the environmental situation in China.<sup>5</sup>

It remains to be seen how many initiatives will be converted into meaningful transactions, well beyond the media plays. It is worth pointing out that the boundary of negotiations among the flagship NOCs from Russia and China – like Rosneft-CNPC, Rosneft-SINOPEC, Gazprom-CNPC – is already being redrawn and expanded. The cooperation in upstream, midstream and downstream is being opened to other big state-owned institutions from Russia and China, and the expansion is set to continue.

**Taas-Yuriakh Saga:  
Russia's China vs.  
India Card**

However, the unexpected deal between Rosneft and BGG<sup>6</sup> in June 2016 was a big surprise. Without knowing the background of the Taas-Yuriakh saga in March 2016, it could be seen as one of many deals between the two countries. The deal is very important and the implications are not small. On March 16, 2016, Russia's Rosneft OJSC agreed to sell bigger stakes in its Siberian oil assets to Indian state-run energy companies, including a \$1.28 billion share to a consortium of Indian producers. The group of three Indian companies took a combined 29.9% share in Taas-Yuriakh Neftegazodobycha and a 23.9% stake in Vankorneft.<sup>7</sup> In April 2016, an article gave quite convincing details on Rosneft's negotiations with BGG saying that "According to Russian RBC, Rosneft was yet again trying to undermine Gazprom's gas export monopoly, this time on the eastern front. RBC's sources said that several rounds of negotiations have already passed, with the last one taking place during Rosneft president Igor Sechin's visit to Beijing mid-March 2016".<sup>8</sup> It touches on the sensitive issue of third party access to the POS and the assumption is Rosneft will not give up the attempt to dismantle Gazprom's monopoly on POS. That is, the core of this deal is the access of independent gas producers into the POS pipeline, when Gazprom is determined to sustain a "single export channel". This has been recorded in the protocol of the presidential committee that took place in October 2015.

It is difficult to understand and explain why Rosneft has quickly decided to sell the asset to the Indian consortium rather than the Chinese investor that can offer a huge gas market directly. It is worth noting that BGG as the main supplier of gas to Beijing and Hebei province was at the final stage of its due diligence to buy 20% in the Taas-Yuriakh oil and gas field out of a 29% interest that was set aside for Dubai-based Skyland Petroleum.<sup>9</sup> It is also worth noting that Skyland Petroleum has played a very important role in persuading and convincing BGG to take the 29.9% equity jointly to make sure BGG could access the direct gas supply from east Siberia via the POS gas line. The initiative of taking 29.9% equity by BGG/Skyland Petroleum could give maximum benefit to the gas consumers in northern China as BGG can effectively reduce the import border price based on their equity stake in the target upstream project. In fact, this was the type of equity investment model CNPC had dreamed of achieving with regard to the POS 1 gas line development. While Gazprom has been firmly rejecting the opening of the upstream for CNPC, Rosneft was willing to use the carrot of opening the upstream sector to China's biggest gas consumer.

However, Rosneft's hurried decision to use the India card in March 2016 has caused confusion. It seems that the Indian consortium had assumed Rosneft had already signed a long term gas supply deal with BGG based on the Taas-Yuriakh field, considering that people close to the deal were questioning the wisdom of the Indian deal by mentioning that the Indian consortium had asked about the existence of gas SPAs between Rosneft and BGG right after the deal announcement in mid-March.

Rosneft could have allocated the Verkhne-Chonsokye field (with C1+C2 reserves, 173 mt of oil and condensate and 115 bcm of gas<sup>10</sup>), instead of the Taas-Yuriakh field, which is a part of the Sredne-Botuobinskoye oil, gas and condensate field (with 167 mt of oil and condensate and 181 bcm of gas) to the Indian consortium.<sup>11</sup> It is safe to say that the Indian consortium was forced to take the Taas-Yuriakh field asset first while BGG was finalising the due diligence. Due to the collapse of the Rubles value, Rosneft's top management was under pressure to minimise

the debt scale and the hurried sales of the assets was the priority.<sup>12</sup> This may explain indirectly why the hurried deal with the Indian consortium became the priority. Besides this, Rosneft had to show that Russia's flagship oil firm cannot bank on one partner and should build partnerships with several different players to choose from several options.

In short, Moscow really wanted to show that Russia's pivot to Asia policy is not solely dependant on the China market. That may be the case when it comes to the oil sector business, but for the Indian consortium there was no synergy whatsoever when it comes to the gas sector side of the deal. Rosneft had almost lost the biggest gas consumers in China by prioritising the half-baked deal with the Indian consortium in March 2016. This explains the unexpected Verkhne-Chonskoye deal with BGG announced in June 2016 as Rosneft cannot afford to lose the gas market being offered by BGG. More importantly for the Verkhne-Chonskoye deal with BGG is the fact that the US\$12 billion loan from China's policy banks like China Development Bank and China Exim Bank was made in late April 2016. Moscow had to find an alternative of Taas-Yuriakh for BGG, which was backed by the Beijing authority.

Before moving into the loan for gas issue, it is worth noting that Gazprom's rigid stance towards its upstream opening in east Siberia or west Siberia looks unlikely to change that easily. The breakthrough of overly advertised Altai gas supply (or POS 2) to China may take much more time than Gazprom would like. Interestingly, Russian analysts argued that in consideration of the financial burden of POS line construction, the best course of action for Gazprom right now would be to find the least costly method of backing out of the contract. The second best option would be to invite Chinese contractors to march into East Siberia and build the pipeline at what would likely be much lower costs than the Russian company could offer.<sup>13</sup> The very best solution for Gazprom is to get the loan from Beijing for the POS construction, not the backing out of the contract.

#### China's Loan for Gas Initiative

Since the May 2014 POS 1 gas line deal, the loan for gas for Novatek's Yamal LNG became the most important development for Sino-Russian oil and gas cooperation. To understand what drove Beijing to this loan for gas initiative, we need to look into Beijing's stance towards global climate change, China's gas expansion plan, and the South China Sea boundary dispute and regional multilateral gas cooperation.

#### Fossil Fuel's Phase-Out?

In early June 2015, the Group of Seven industrial powers agreed the world should phase out fossil fuel emissions this century, in a move hailed as a historic decision in the fight against climate change.<sup>14</sup> In the same month, China made very clear that it would aim to cut its greenhouse gas emissions per unit of gross domestic product by 60-65% from 2005 levels under a plan submitted to the United Nations ahead of crucial climate change talks in Paris in December 2015. China plans to increase its installed capacity of wind power to 200 gigawatts (GW) and solar power to around 100 GW, up from 95.81 GW and 28 GW as of 2015, respectively. It will also increase its use of natural gas which is expected to make up more than 10% of its primary energy consumption by 2020, while it would increase the share of non-fossil fuels as part of its primary energy consumption to about 20% by 2030.<sup>15</sup>

These announcements were clearly supporting the binding commitment to tackle the global climate change issue during the 2015 Paris conference. The Paris agreement confirmed the target of keeping the rise in temperature below 2°C. It therefore asked all countries to review these contributions every five years from 2020; they will not be able to lower their targets and are encouraged, on the contrary, to raise them. As a way of saving the momentum, in 2016 the G7 meeting in Japan set a deadline for ending most fossil fuel subsidies, pledging to end government support for coal, oil and gas by the end of 2025.<sup>16</sup>

A big question is how effective it will be without Asia's big coal consumers' commitment to the drastic reduction of their coal use. BP Energy Outlook 2016 predicted that by 2035 China will still consume 50% of global coal demand.<sup>17</sup> A drastic step, rather than the business as usual step, should be taken to reduce China's dependence on coal, and the most ideal solution is maximization of gas use by China.

During the BP Statistical Review of World Energy 2016 announcement in June 2016, BP's Group chief economist Spencer Dale said that the path of renewable energy in the base case of the Energy Outlook implies a quicker pace of penetration than any other fuel source in modern history. But even in that case, renewable energies within primary energy barely reach 8% in 20 years' time. The simple message from history is that it takes a long time – numbering several decades – for new energies to gain a substantial foothold within global energy.<sup>18</sup> It is warning that without a drastic reduction of dependence on coal by Asian countries, in particular China and India, any initiative by OECD countries for the fossil fuel phase out will have very limited impact.

#### China's 13th FYP and the Role of Gas

In early March 2016, China announced that a total energy consumption cap of 5 billion tonnes of coal equivalent comes after the success of the 12th Five-Year Plan from an energy perspective, in which energy and carbon targets were met and surpassed. Between 2011 and the end of 2015, energy intensity (i.e., energy consumption per unit of GDP) fell by 18.2 percent and carbon intensity declined 20 percent. These declines are due in large part to the drop in coal consumption: down 3.7 percent in 2015, following a 2.9 percent decrease in 2014. The slowed consumption suggests that achieving a 5 billion metric tonnes energy cap may not be challenging.<sup>19</sup> It is a clear reflection of complacency among the Chinese energy planners, and it was a big disappointment that there was no sign that Beijing energy planners were taking steps to strengthen the importance of natural gas in China's energy mix.

In an article placed on Trusted Sources website, Stephen O'Sullivan correctly pointed out that gas prices need to fall further to improve Asia's environment.<sup>20</sup> The point was that one of the key routes to improving Asia's physical environment is the replacement of coal in power generation by natural gas....Price alone is unlikely to persuade energy users to switch to a more environmentally friendly fuel like gas... As in Japan and Korea, China plans to introduce a carbon trading system in 2017, although there is no clear view on what the price is likely to be... The most promising solution to achieve governments' aim of fuel switching and environmental improvement is the introduction of an effective carbon pricing mechanism, which raises the price of coal sufficiently to allow gas to be competitive in the power generation market. Politically and technically, however, this could be a complex and lengthy challenge across Asia.

There are many factors that will shape China's energy future but this author sees two factors that are fundamentally important. The first is the drastic reduction of coal share in China's energy balance well below 50% by 2030, and the second is a rapid expansion of natural gas use with China's bold initiative for the conversion of LNG as a global commodity. At present, however, China is pursuing a kind of status-quo approach for fossil fuel industry's phase-out. If China takes a bold and innovative step to maximize the diversification of global LNG supplies, a big change of global LNG supply pattern will be possible, even though China alone cannot introduce the major change. The revolutionary change can be materialized only when the three main gas importers of Northeast Asia – like Japan, Korea and China – agree to cooperate for the new model of global LNG supplies.

#### The Need to Move from Loan for Coal to Loan for Gas

According to a recent GEGI study, Chinese development banks have provided upwards of US\$28 billion in financing for global coal projects – projects that accentuate climate change and social risks. Using conservative estimates of the climate and local health costs of coal plant emissions, the study authors calculate that the yearly social cost of Chinese overseas coal-fired power plants amounts to US\$29.7 billion. Assuming a power plant lifetime of 30 years, total social cost could range from US\$117 billion to \$892 billion.<sup>21</sup> It confirms that China's energy loans are highly concentrated in fossil fuel extraction and power generation, especially coal.

In the same month, a study by CIERP under the Fletcher School, Tufts University elaborated that between 2001 and 2016, Chinese financial institutions supported the construction of more than fifty coal-fired power plants abroad. A majority of these power plants (58%) used sub-

critical coal technology, which is the most energy inefficient form of a coal-fired power plant, and therefore the type that is most carbon intensive, and almost all of the rest were super-critical plants, which are approximately twelve percent more efficient than sub-critical plants. On an annual basis, this fleet of more than fifty coal-fired power plants is estimated to release 594 million tonnes (mt) of CO<sub>2</sub>, which is equivalent to 11% of total US emissions in 2015 and 6% of total Chinese emissions in 2014 (latest year available). Taken together, China's policy banks (like China Development Bank and China Export and Import Bank) financed overseas coal plants that would become the eighth largest emitter of carbon dioxide emissions, more on an annual basis than Canada, Brazil, Saudi Arabia, or the United Kingdom. If a 30-year lifetime of these plants is assumed, these plants will cumulatively emit 17,828 mt CO<sub>2</sub>, equal to more than triple total US emissions in 2015, 1.5 times Chinese emissions in 2014, or slightly more than US and Chinese emissions combined on an annual basis.<sup>22</sup>

If part of this financing is allocated for the loan for gas, its impact for China's gas supplies will not be small. Interestingly when the above study was published, China already made the decision to make the loan for gas for the Yamal LNG project in late April, and in May China decided to finance 85 percent of Pakistan LNG terminal and pipeline projects. The deal was signed between Pakistan's Inter-State Gas System (ISGS) and CNPC. China Petroleum Pipeline Bureau (CPP) will construct the pipeline and will also build an LNG terminal at Gwadar. The project cost is approximately US\$2.0 billion.<sup>23</sup>

#### A Bold Loan for Gas Initiative for Yamal LNG

On April 29, 2016 in Beijing, Yamal LNG signed credit agreements with Export-Import Bank of China (China Exim Bank) and China Development Bank in the amount of 9.3 billion euros and 9.8 billion yuan for 15 years. The firm said in a statement that the interest rates for the credit lines are EURIBOR 6M +3.3% per annum for the period of construction and 3.55% after the full commissioning of Yamal LNG, and SHIBOR 6M +3.3% and 3.55% per annum, respectively. Earlier in the framework of raising project financing, 150 billion rubles were received on a return basis from Russia's National Welfare Fund (NWF), and an agreement was signed with Sberbank and Gazprombank about the provision of a credit line in the amount of 3.6 billion euro for 15 years. Yamal LNG CEO Yevgeny Kot said: "The project is being implemented in accordance with the confirmed schedule, the first train of the LNG plant is 65% ready, and we are in the most intense stage of construction and installation work. The signing of the agreements with the Chinese banks is allowing us to implement the project without raising additional funds from shareholders".<sup>24</sup>

During the June 2016 Saint Petersburg Economic Forum, Novatek boss Mikhelson confirmed that the partners in the Yamal LNG project – Total, CNPC and Silk Fund – showed interest in the development of the projected Arctic LNG. Mikhelson added a technological concept for the project is due to be completed in the course of 2016. This will include LNG output capacity, licenses and equipment. Mikhelson elaborated the capacity of the projected plant could be six million tons of LNG per year. The first production phase project could be launched in the year 2022, followed by a second and third phase in 2024 and 2025, respectively. Novatek said that while the production from Yamal LNG is based on long-term supply contracts with customers, the gas from the Arctic LNG will be sold on the spot market. The Arctic LNG plant will be based on resources from the Gydan Peninsula and the Salmanovskoye and Geofizicheskoye fields, both located on the eastern bank of the Ob Bay.<sup>25</sup>

If the loan for gas is applied to Arctic LNG development, there will be a good chance for other frontier gas development projects with the Chinese equity investment being the beneficiary of the switch from loan for coal to loan for gas. A good potential example will be Mozambique gas in east Africa.

Many LNG producers and developers are paying attention to the LNG supply glut projected to last until the early 2020s. In a paper presented at the LNG 18 conference, the authors argue that substantial amounts of LNG supply will reach the market by 2020 that may well exceed Asia's appetite for LNG, which had relied mostly on increasing demand from China, India and Southeast Asia, presenting uncertainties in terms of growth due to price sensitivity. The flexibility of some new supplies, notably from the United States, means that many companies may be left with large amounts of surplus LNG.<sup>26</sup>

What drove Beijing to take such a bold initiative for loan for gas, despite the above mentioned LNG supply glut projection? First, One Belt One Road (OBOR) is a key area where China needs Russia's cooperation. Beijing had to offer a life line for Yamal LNG to make sure China's OBOR initiative will be fully and effectively supported by Russia. When Asia became a battle ground between the US pivot to Asia and Russia's pivot to Asia, and US LNG supply to Asia became a reality in 2016, Beijing had to support the timely start of Yamal LNG supply from 2017. Provision of sizable financing was what Russia was praying for.

Secondly, from Russia's perspective, strengthening energy ties with China and India would serve Putin's geopolitical interests further, while also stealing market share from the Saudis and the US. From Beijing's view point – as pointed out by Mark McNamee, Central and Eastern Europe analyst at Frontier Strategy Group – of far more importance is the political support Russia offers, regarding foreign policy matters at the United Nations, Group of 20 and other venues ... China, naturally, is happy to have a useful ally as it seeks to reform the existing US-led order to attain its geopolitical goals.<sup>27</sup>

It is worth noting that on July 12, 2016, the Permanent Court of Arbitration in The Hague (PCA) ruled in the Philippines' favor in a maritime dispute with China concerning the South China Sea. Beijing questioned the Court's jurisdiction over the case and stated it would not accept nor participate in the arbitration. In turn, the PCA, citing the United Nations Convention on the Law of the Sea (UNCLOS), asserted that China, an UNCLOS signatory, is bound by its ruling. Chinese officials' reactions to the ruling by PCA on the South China Sea could have wide-ranging implications for China's Silk Road, the economic initiative China considers to be a top national priority.<sup>28</sup> China will seek implicit support from Russia. In particular, as the intensified situation of the South China Sea's territorial dispute cannot be ruled out, Beijing leadership is chasing the alternative oil and gas supply routes to diversify the oil and gas supply route via the Arctic Sea Lane. Beijing's solid stance towards the POS gas line development can be explained by Beijing's serious interest in diversifying the supply routes.

Thirdly, China is sharing the view that cooperation among Asian gas consumers is necessary, if the common goal is to reduce the imported LNG price burden and to diversify the supply routes. Asia's gas consumers do not wish to take expensive LNG, even if the only alternative is 'dirty' coal. This is why the three main gas importers aim at forming an alliance which could play a pivotal role in lowering the development cost of new LNG supply sources by introducing a new financing format based on the sovereign funds' provision. If the global LNG supply volumes are balanced by the market and controlled due to the delay of the new supply projects, Asian gas consumers will have no leverage whatsoever against the controlled global supply volume. Japan learned of the excessive financial burden from the expensive LNG in the wake of the 2011 Fukushima disaster.

It was no surprise when Japan's JERA Co. said in late February 2016 that it is in talks with other LNG companies to create an alliance of buyers that account for more than one third of global trade. Hiroki Sato, vice president of the fuel department of JERA – a joint venture between Tokyo Electric Power Co. and Chubu Electric Power Co. – said that "JERA is seeking to cooperate with Kogas and CNOOC on LNG procurement and investment...The deal will benefit smaller companies outside the group as lower prices would be passed on to other buyers. The



alliance members would also be able to swap or trade cargoes among themselves to help balance supply between their operations".<sup>29</sup>

JERA's initiative will be very effective, if it is combined with China's bold step to introduce the real leverage to influence global LNG supply options. Generally speaking, there will be a rapid slow-down of greenfield LNG project development if the return rate of investment for the new gas supply development is not attractive enough and the oil price is not high enough. This will be a recipe for the typical repeat of boom and bust cycle. Assuming the depressed oil price is maintained, it is a golden opportunity to take the initiative to diversify the LNG supply hubs, based on Asian consumers' sovereign funds financing for the development of new LNG supply hubs. That is, the question of how to make natural gas become more widely traded and consumed lies in the balancing act between the interest of producers and consumers.

India recently urged the cooperation of gas consumers in Asia. On June 14, Dharmendra Pradhan, Indian minister of petroleum and natural gas said that "For the next two to three decades, gas is going to be a major part of the energy basket for Asian energy consumers. We want to bring together the countries and form a network which can together source reasonable, rational and affordable LNG, adding that talks with Japan and South Korea have begun and China may also come onboard as a partner". India's state-owned GAIL Ltd. is spearheading the talks, which follow a similar attempt in 2013, on India's behalf.<sup>30</sup> This announcement made by India rather than China was a pleasant surprise, but was a kind of indirect confirmation that the environment to form Asia's Gas Consumers Alliance (AGCA) ripens.

In short, the introduction of a loan for gas option by Beijing authorities can cover the issues of reducing China's coal dependence, diversifying the gas supply routes, and promoting cooperation among gas consumers in Asia simultaneously. In this context, the level of importance by Beijing to apply a loan for gas option in Sino-Russia's energy cooperation should not be under-estimated. Still, Sino-Russian oil and gas cooperation has not reached the strategic level of cooperation as CNPC's acquisition of Rosneft's 19.5 percent equity has not materialized and CNPC's compromise with Gazprom for the Altai gas (or POS 2) supply to China is not made, but the provision of a US\$12 billion loan for the Yamal LNG development has opened a new chapter of the cooperation pattern between Russia and China. The impacts of this loan for gas initiative will be getting bigger once the duplication of this initiative is made for other frontier gas developments. Time will tell how far it can go.

### **About the Author**

Prof. Keun Wook Paik is Senior Research Fellow, OIES and Associate Fellow, Chatham House

#### **Endnotes**

<sup>1</sup>James Henderson and Tatiana Mitrova, "Energy Relations between Russia and China : Playing Chess with the Dragon", OIES Paper, WPM 67, August 2016. <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2016/08/Energy-Relations-between-Russia-and-China-Playing-Chess-with-the-Dragon-WPM-67.pdf>

<sup>2</sup>Keun Wook Paik, Sino-Russian Oil and Gas Cooperation : The Reality and Implications (Oxford : Oxford University Press, 2012).

<sup>3</sup>Keun-Wook Paik, "Sino-Russian Gas and Oil Cooperation : Entering a New Era of Strategic Partnership?", OIES Paper, WPM 59, April 2015. <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2015/04/WPM-59.pdf>

<sup>4</sup><https://www.theguardian.com/world/2016/jun/26/friends-forever-xi-talks-up-chinas-ties-with-russia-during-putin-trade-trip>

<sup>5</sup>Interfax Russia & CIS Oil and Gas Weekly, June 23-20, 2016, pp. 4-8 ; Dina Khrennikova, Elena Mazneva and Stephen Bierman, "Rosneft's Sechin Says China Ties Boosted With New Deals, Routes", Bloomberg, June 26, 2016. <http://www.bloomberg.com/news/articles/2016-06-26/rosneft-s-sechin-says-china-ties-boosted-with-new-deals-routes> ; <https://www.rosneft.com/press/releases/item/182765/> ; <https://www.rosneft.com/press/releases/item/182761/> ; <https://www.rosneft.com/press/releases/item/182759/> ; <https://www.rosneft.com/press/releases/item/182753/> ; <https://www.rosneft.com/press/releases/item/182749/>.

<sup>6</sup>Chen Aizhu, "Beijing Gas Starts importing spot LNG from French utility", Reuters, September 23, 2015. <http://af.reuters.com/article/commoditiesNews/idAFL4N11S2AQ20150923> ; <http://interfaxenergy.com/gasdaily/article/20773/beijing-gas-group-targets-20-bcm-y-to-beijing-by-2020> ; <http://www.bigas.com/GroupView.aspx> (in

Chinese)

<sup>7</sup>“Rosneft sells 29.9% of Taas-Yuryakh to consortium of Indian cos”, Interfax Russia & CIS Oil and Gas Weekly, March 10-16, 2016, pp. 19-20.

<sup>8</sup><http://www.economiccalendar.com/2016/04/07/rosneft-tries-to-break-gazproms-monopoly-using-china/>

<sup>9</sup>Nelli Sharushkina, Nadezhda Sladkova, and Michael Ritche, “China’s Interest in Rosneft Stake Dented by Indian Deals”, Nefte Compass, April 28, 2016.

<sup>10</sup><https://www.rosneft.com/press/releases/item/182759/>

<sup>11</sup>Interfax Russia & CIS Oil and Gas Weekly, March 10-16, 2016, pp. 19-20.

<sup>12</sup><http://www.reuters.com/article/russia-rosneft-results-idUSL8N13K1E120151125>

<sup>13</sup>Alex Fak and Valery Nesterov, “Russian Oil and Gas – Trimming the Belly Fat”, Sberbank CIB Investment Research, February 2016, quoted in Tatiana Mitrova, “Shifting Political Economy of Russian Oil and Gas”, CSIS Energy and National Security programme, March 2016, p. 44.

<sup>14</sup>Piilita Clark and Stefan Wagstyl, “G7 leaders agree to phase out fossil fuels”, Financial Times, June 8, 2015. <http://www.ft.com/cms/s/0/ec2c365a-0ddf-11e5-aa7b-00144feabdc0.html#axzz4B6DRCwSV>

<sup>15</sup>Jennifer Duggan, “China makes carbon pledge ahead of Paris climate change summit”, The Guardian, June 30 2015. <https://www.theguardian.com/environment/2015/jun/30/china-carbon-emissions-2030-premier-li-keqiang-un-paris-climate-change-summit>

<sup>16</sup><https://climatechange.theneweconomy.com/2016/05/31/g7-leaders-declaration-addresses-paris-agreement/> ; <http://www.japan.go.jp/g7/summit/agenda/>

<sup>17</sup><http://www.bp.com/content/dam/bp/pdf/energy-economics/energy-outlook-2016/bp-energy-outlook-2016.pdf>

<sup>18</sup><http://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-spencer-dale-presentation.pdf>

<sup>19</sup><https://www.chinafile.com/reporting-opinion/environment/how-chinas-13th-five-year-plan-addresses-energy-and-environment>

<sup>20</sup><http://www.trustedsources.co.uk/blogs/energy/gas-prices-need-to-fall-further-to-improve-asia-s-environment>

<sup>21</sup>Kevin P. Gallagher, Rohini Kamal, and Yongzhong Wang, “Fueling Growth and Financing Risk : The benefits and risks of China’s development finance in the global energy sector”, GEGI (Global Economic Governance Initiative) Working paper 002, 05/2016. [http://www.bu.edu/pardeeschool/files/2016/05/Fueling-Growth.FINAL\\_version.pdf](http://www.bu.edu/pardeeschool/files/2016/05/Fueling-Growth.FINAL_version.pdf)

<sup>22</sup>Kelly Sims Gallagher, “The Carbon Consequences of China’s Overseas Investments in Coal”, CIERP (The Center for International Environment & Resource Policy), May 2016. [http://fletcher.tufts.edu/~media/Fletcher/Microsites/CIERP/Publications/2016/CIERPpb\\_ChinaCoal\\_HiRes.pdf](http://fletcher.tufts.edu/~media/Fletcher/Microsites/CIERP/Publications/2016/CIERPpb_ChinaCoal_HiRes.pdf) ; Sabina Snell, “China’s Development Finance : Outbound, Inbound, and Future Trends in Financial Statecraft”, US-China Economic and Security Review Commission’s Staff Research Report. December 16, 2015.

<sup>23</sup><http://www.naturalgasasia.com/china-offers-to-fully-finance-pakistan-lng-terminal-pipeline-projects-18500>

<sup>24</sup>Russia & CIS Oil and Gas Weekly April 28 – May 4, 2016, p. 9 ; Russia & CIS Oil and Gas Weekly, April 28 – May 4, 2016, p. 9 ; Neil Buckley, “Sino-Russian gas deal : smoke without fire”, Financial Times, May 11, 2016. <http://www.ft.com/cms/s/0/eea4f2ec-16c0-11e6-b197-a4af20d5575e.html#> ; James Marson, “Russian Natural-Gas Project Gets Funding from China : Move is a hard-fought victory over western sanctions”, Wall Street Journal, April 29, 2016. <http://www.wsj.com/articles/russian-natural-gas-project-gets-funding-from-china-1461934776>

<sup>25</sup>Atle Staalesen, “Big interest in new Arctic LNG – Novatek”, The Barents Observer, June 20, 2016. <http://thebarentsobserver.com/2016/06/big-interest-new-arctic-lng-novatek>

<sup>26</sup>Anne-Sophie Corbeau and David Ledesma presented a paper titled “LNG Markets in Transition : The Great Reconfiguration”, at LNG 18 Conference held in Perth during April 11-15, 2016.

<sup>27</sup>Nyshka Chandran, “Putin turns to Xi as Russian economy stumbles on sanctions, oil price drop”, CNBC, June 22, 2016. <http://www.cnbc.com/2016/06/22/putin-turns-to-xi-as-russian-economy-stumbles-on-sanctions-oil-price-drop.html>

<sup>28</sup>Christine Guluzian, “Does the South China Sea Spell Trouble for Beijing’s New Silk Road?”, National Interest, August 16, 2016. <http://nationalinterest.org/feature/does-the-south-china-sea-spell-trouble-beijings-new-silk-17376> ; David Tweed, “Xi’s Neighborhood Diplomacy Runs Aground in South China Sea”, Bloomberg, July 14, 2016. <http://www.bloomberg.com/news/articles/2016-07-14/xi-s-neighborhood-diplomacy-runs-aground-in-south-china-sea> ;

Feng Zhang, “Beijing’s Master Plan for the South China Sea”, Foreign Policy, June 23, 2015. <http://foreignpolicy.com/2015/06/23/south-china-sea-beijing-retreat-new-strategy/>

<sup>29</sup>JERA has said the combined Tokyo Electric and Chubu Electric purchases would be about 40 mt a year of LNG. Kogas imported 31.4 mt in 2015 and CNOOC imported 14.1 mt in 2014, according to the companies. <http://www.bloomberg.com/news/articles/2016-02-25/biggest-lng-buyers-seek-alliance-to-boost-bargaining-power>

<sup>30</sup>Promit Mukherjee, “India seeks better LNG deal by teaming up with South Korea and Japan”, Reuters, June 15, 2016. <http://www.reuters.com/article/india-energy-idUSL4N196406>