


Opinions

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Prospects for Energy Cooperation in Northeast Asia



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Korea relies heavily on fuel imports, with more than 80 percent of the total oil imports coming from the Middle East. This leaves Korea quite vulnerable to the risks associated with geopolitical tensions. Geopolitical risks in Middle East countries and the territorial disputes between China and other countries in the South China Sea, a key energy trade route, are uncontrollable risks to Korea.

While the United States is reducing its dependence on Middle East oil by increasing domestic production of unconventional oil and gas, Korea imports 85 percent of its oil from the Middle East and entirely depends on liquefied natural gas imports, with 54 percent of LNG being supplied by three countries (Qatar, Oman

and Yemen). Heavy reliance on energy import highlights the need for Korea to diversify energy import sources and secure navigational energy import routes.

There is high potential for energy cooperation between Korea and Russia. In October 2013, Korean President Park Geun-hye proposed the 'Eurasia Initiatives', which spells out the idea of connecting both countries as 'one continent' and overcoming the physical and systemic barriers. President Park also emphasized the importance of strengthening the cooperation between the two countries in the areas of logistics and energy network, such as developing Northern Sea Route and constructing gas pipelines through Eurasia. If materialized, it will serve as a good opportunity for Korea to diversify its energy supply sources.

Increasing fuel imports from Russia can help Korea diversify energy supply and lessen Korea's exposure to the geopolitical risks in existing energy exporters. Korea imports only 4.4% and 1.9% of crude oil and natural gas from Russia respectively. Russia, the world's largest depository of natural gas, exports most of its gas to Europe. In 2013, Russia transported 94% of its gas production to Europe and the Commonwealth of Independent States (CIS) through pipelines.¹ In light of increasing production of shale gas and other such unconventional fuels worldwide, not to mention its recent conflicts with Western countries, Russia is expected to diversify the clientele of its energy exports to include East Asian states.

Recent gas deal between Russia and China shows how Russia is willing to expand its presence in East Asia. China and Russia signed a \$400 billion gas trade deal that provides Moscow with a crucial new export market and stronger ties with its eastern neighbor at a time when Europe is trying to reduce its reliance on Russian oil.

China consumes about half of global coal production and depends on coals for 79 percent of its electricity generation.² The smog that swept across Beijing and the central and eastern parts of the country during the recent winter season forces Beijing energy planners to reduce its heavy dependence on coal for power generation. Analysts say the agreement could pave the way for more gas trade deals.³

¹ BP Statistical Review of World Energy 2014.

² World Bank(2014), *World Development Indicators*. (April)

³ Hornby L. and Anderlini J.(2014), "China and Russia sign \$400bn gas deal", *Financial Times*. (May 21)

Gas demand for power generation will grow and more cooperation between East Asian countries and Russia will secure energy and develop Siberia and Far East. On June 2, 2014, the U.S. Environmental Protection Agency (EPA) proposed a plan to cut carbon pollution from power plants. The administration wants to cut carbon dioxide (CO₂) emissions from power station 30 percent by 2030, compared to 2005 levels. This is potentially significant, since electricity generation accounts for about 32 percent of U.S. greenhouse gas (GHG) emissions.⁴

Recent data shows U.S. GHG emissions from 2007 to 2012 fell by 11 percent due to decreased coal consumption, and increased natural gas consumption.⁵ The production of shale gas has led to a drastic fall in the price of natural gas in the United States, thereby inducing a decrease in the consumption of oil and coal. This, in turn, has led to a noticeable growth in the demand for gas. EPA's plan to cut emissions accelerates gas consumption and the development of renewable energy and energy efficiency industries.

Korea will need to change its energy consumption structure in the long run to cope with climate change and the changing dynamics in the international energy market. Cooperation in Northeast Asia will ensure stable and safe energy trade routes and increase investment in conventional energy production in the region. In addition, cooperation in other areas could be expanded to R&D and investment projects for renewable energy sources, such as of solar and hydropower in the region. **KIEP**

⁴ U.S. EIA(2014), "Electric Power Monthly with Data for April 2014". (June)

⁵ U.S. EPA(2014), "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2012". (April 15)