

Russia as an Energy Power between Europe, the Middle East, and Asia

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In May 2009, Russia's National Security Strategy discussed energy for the first time, outlining the country's opportunities and challenges in the international energy market within the framework of broader security issues. Russia's opportunities include further development of sales to the European market, opening the Asian market, and using the profits from energy sales to develop a more diversified domestic economy, one that is no longer heavily dependent upon the sale of fossil fuels. The challenges for Russia include potential natural gas sales from the Middle East that could reduce Russia's market share in Europe, China's growing influence, and the potential for reduced European demand due to unconventional sources of fossil fuels and new energy efficiency and alternative energy technologies. In this environment, Russia must make a number of strategic investments simply to maintain its current position in the world energy system.

Russian Energy and Europe

While Russia and Europe are undeniably interdependent, both sides seek to take maximum advantage of the situation in pursuit of their interests. Russia wants to have as much control over European supplies as possible. It is the European Union's third largest trade partner and its most important energy supplier. Russian oil and natural gas deliveries account for more than 25 percent of European consumption. In turn, these sales make up nearly half of Russia's government revenue and 60 percent of its exports. European companies are also key investors in Russian energy production.

Due to Russian gas cutoffs in the winters of 2006 and 2009, Europeans have serious concerns about Russia's reliability as an energy supplier. European observers also worry that Russia is not investing enough in new production capacity to meet future international energy demands. While Europe will continue to consume large amounts of Russian oil and natural gas in the foreseeable future, its overall demand for energy has recently been in decline, a trend that was evident even before the onset of the global financial crisis; between 2006 and 2008, the EU's primary energy consumption dropped 2.5 percent. Since the 2009 gas conflict between Russia and Ukraine, Russia has lost at least a third of its usual market in Europe as the EU has expanded its gas purchases from other sources, including Norway, Qatar, Trinidad, Northern Africa, and Kuwait.

Looking ahead to 2030, the U.S. Energy Information Administration projections for overall European energy consumption indicate the slowest growth rate of any region in the world, with average annual expansion of 0.5 percent. Petroleum consumption is expected to decline, while natural gas consumption is expected to grow modestly. As Europe's indigenous gas production declines, its dependence on imports is expected to increase.

Accordingly, Europe is seeking to improve its energy security vis-à-vis Russia and other potentially hostile energy exporters by increasing energy efficiency, investing heavily in alternative energy technologies, and adding greater diversity to its supplies of oil and natural gas. In 2007, the EU committed itself to cutting 20 percent of its energy consumption compared to projections for 2020 and increasing the share of renewable energy in overall consumption from the current 7 percent to 20 percent. However, it is far from certain that Europe will be able to achieve its ambitious goals. Improving energy efficiency is the quickest way to reduce energy demand, but this requires up-front investments that consumers often do not want to make. Germany's widely-discussed feed-in tariffs, which guarantee a minimum price for alternative energy generators, have made the country a leader in the use of solar power, but the cost of this measure has been too prohibitive for wider use in places like Spain, where consumers are more interested in keeping energy prices low.

One possible way for Europe to increase the diversity of its fossil fuel supplies is through greater use of liquefied natural gas (LNG). The 2006 Russian gas crisis greatly accelerated the construction of LNG facilities in Europe. While the LNG market is growing, it is far from reaching its potential. Among the key factors that limit market expansion are the lack of standardized liquefaction and regasification infrastructure, a lack of price transparency, and the absence of a commodity exchange and a global information platform (both are in development). In 2009, Europe will be able to import approximately a quarter of its annual gas demand in the form of LNG. By 2011, LNG import capacity could amount to almost 40 percent of annual demand, according to Rice University's Baker Institute for Public Policy. Additionally, the development of drilling technology is making available increased supplies of non-conventional gas in Europe. Such new sources of gas could help Europe diversify away from Russia.

Any attempt by Russia to take short-term advantage of its current position as a key energy supplier to Europe will only accelerate European efforts to find other sources of energy. This could deprive Russia of its markets in the long term if Europe is able to

take advantage of the larger global context to reduce its need for Russian resources. Russia's recent actions in the energy market have greatly undermined its ability to ensure that Europeans will continue to buy Russian energy in the future.

The Middle East

The Middle East has enormous potential to supply Europe with additional natural gas and is, therefore, a threat to Russia's current dominant position. Although the Organization of the Petroleum Exporting Countries (OPEC) severely limited oil supplies in the 1973 energy crisis, and the 1979 Iranian revolution also caused a shortfall, the Middle East has generally been a reliable energy supplier to the West. Accordingly, Europe is examining ways to buy more natural gas from the region.

Natural gas supplies from Iraq, for example, could dramatically affect the nature of European supplies. However, it remains extremely difficult to predict how events will unfold and whether Iraq will be able to deliver substantial quantities of gas to Europe.

Iran, too, presents many opportunities, though the challenges are equally daunting. One of the easiest ways to engage Iran in the future is to offer the incentive of expanded gas sales to Europe. While such sales do not make sense as Iran continues to pursue nuclear weapons and sponsor terrorism, the arrival of a new regime capable of responsibly handling the development of nuclear weapons, while also disavowing terrorist links, could make such sales possible. The opportunity for gas sales to Europe could be a key incentive for Iran to alter its behavior. If Iran expands its gas sales to Europe, it could severely damage its current relationship with Russia.

While there has been considerable work done on the utility of economic sanctions, less research exists on the efficacy of positive inducements, making it unclear how successful offers of gas sales to Europe could be in changing Iranian behavior. Nevertheless, Iranian leaders have indicated that gas is a key element of any potential deal.

A more realistic source of LNG for Europe, in the short term, is Qatar. This country has the third largest reserves of natural gas in the world (after Russia and Iran) and has been investing heavily in export facilities. While much of Qatar's LNG exports now go to Asia, it will greatly expand its export capacity in the next few years.

Asia

Russia wants to maintain control over the flow of energy from Central Asia, keeping prices as low as possible, while also becoming a major supplier to East Asian consumers such as China, Japan, and South Korea. The Europeans and Americans, however, have long supported the proposed Nabucco pipeline through Turkey as a way of transporting gas from the Caucasus, Central Asia, and potentially the Middle East to Europe without crossing Russian territory. The central problem is that there is no guaranteed source of gas for the pipeline. Azerbaijan may not have enough reserves available, while Turkmenistan may or may not be willing to provide gas, depending on the whims of its unpredictable leadership. Major questions also remain about potential deals in Iraq, Iran, and other Middle Eastern states.

Russia's ability to control Central Asian energy flows is slipping. Before the financial crisis began, Russia needed to import natural gas from Turkmenistan to meet its export and domestic needs. While in the past Russia had been able to purchase Central Asian gas for prices much lower than those paid by European consumers, more recently it has had to pay "European prices" to keep the Central Asian exporters focused on working with Russia. Before the oil price collapse, Russia signed an agreement with Turkmenistan to provide gas at a high price. However, given the broader drop in demand for its natural gas, Russia broke its import agreements with Turkmenistan in April 2009 as it no longer needed external supplies to meet the newly decreased levels of demand. The cutoff affected 84 percent of Turkmenistan's exports, roughly half of its \$30 billion GDP. As Turkmenistan seeks to renegotiate its relationship with Russia, it will likely develop stronger ties with China and the West in an effort to counterbalance Moscow.

Even as it negotiates supplies with Central Asian states, Russia hopes to expand its energy exports to East Asia. Russia is not merely interested in becoming a raw material exporter for China's booming economy; Moscow sees energy sales as a way to stimulate development in East Siberia and the Far East, regions that are economically underdeveloped and only tenuously connected economically to European Russia. To date, the actual energy reserves in these regions are unmeasured. The Asian market is attractive as a source of alternative customers, but one in which most of the gains will only be realized in the future. Russia currently exports 3 percent of its oil to Asia, but expects this figure to rise significantly in the next few years. Difficulties with developing markets in Asia include a failure to agree upon a mutually acceptable price for natural gas supplies to China, where the government holds prices to a fraction of what Russia obtains for gas sales in Europe.

The global financial crisis has both slowed Russia's plans in Asia and provided them additional support. In particular, Russia was struggling to build the Chinese link of the East Siberia-Pacific Ocean oil pipeline. In February 2009, the Chinese offered a \$10 billion loan to Russia's oil pipeline monopoly Transneft and a \$15 billion loan to the state-owned oil company Rosneft to facilitate construction. Until the financial crisis, Russia had categorically rejected Chinese involvement in the development of its eastern energy resources.

Ultimately, Russia does not want to become overly dependent on China and, therefore, seeks to extend its energy partnerships to Japan, South Korea, and the United States. At the moment, however, China's access to enormous cash reserves means that it has considerable leverage in its relationship with Russia.

Moving Forward

While Russia has extensive natural resource deposits, it has not been able to leverage these resources into a resilient economy that can thrive with little connection to volatile commodity prices. Currently, the Russian stock market fluctuates in close correlation with the price of oil. To best exploit its position, Russia must work to maximize its sales of fossil fuels while simultaneously developing other parts of its economy.

Russia can better utilize its fossil fuel resources by spurring greater energy efficiency

among domestic users and making strategic investments to ensure its position as an energy supplier amidst the evolving situations in Europe, the Middle East, and Asia. Russia is one of the most energy inefficient countries in the world, and its ability to export oil and gas is increasingly constrained by domestic demand. By making strategic investments in greater efficiency and new production capacity to compete with other producers, Russia could extend the benefits it receives from its fossil fuels.

Used wisely, these resources could help develop new technologies that will make the economy more sustainable moving forward. Greater cooperation between Russia and the West on issues of energy efficiency and the development of non-fossil fuel energy sources could help solve the problem. Such cooperation should consist of:

- Technology and expertise exchanges among scientists, engineers, energy policymakers, and entrepreneurs working on energy efficiency and alternative energy products;
- An effort by the United States and Europe to make energy efficiency and new sources of energy a key element in their relations with Russia;
- New plans among Western governments and foundations to work with official and nongovernmental Russian organizations to develop and deploy new energy technologies in Russia.

None of these efforts will have a quick payoff. However, they will provide real substance for the broader efforts to define Russia's place in the emerging global economy. By developing cooperation in areas of mutual benefit, they could help improve overall political relations between Russia and the West.

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