

## **Energy Security in Transatlantic Relations**

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A country's economic and social development depends on reliable, sustainable access to energy—at a reasonable cost. Energy security has become a growing preoccupation for all countries, especially those that rely on imports. In addition, no country wants to rely on single sourcing for their oil or gas, meaning that the diversification of supplies is also important. Today, both the US and the EU are paying much closer attention to their energy security.

For the US, which uses over 19 million barrels per day of oil and imports over half of it, its energy security is tied to the stability of Saudi Arabia which is the only country with significant excess oil production capacity that can stabilize the oil markets and ensure that markets, including the US, are adequately supplied. The current turbulence in North Africa and the Arab world has reinforced the importance of Saudi supplies. It has also led to higher world oil prices and higher US gasoline prices, which the US government watches closely since transport fuels are a major part of our oil use and can impact US domestic politics. The US government was particularly attentive to developments at the last OPEC meeting and weighed in with Saudi Arabia about raising production. Oil remains the priority concern for America's energy security.

Because of the large volumes of shale gas resources that have been discovered in the US, natural gas is no longer at the top of our security agenda. Shale gas has catapulted the US ahead of Russia to become the world's foremost natural gas producer. No longer needing to rely on imports of natural gas, the US has freed up Liquefied Natural Gas (LNG) that would have been shipped to our markets for Europe and Asia. It is also looking in the next years to become an LNG exporter.

For Europe, in contrast to the US, energy security questions revolve mostly around natural gas and more specifically, around Russian pipeline gas. The EU-27, which includes Turkey, relies on 3 countries for about 50% of its gas supplies: Russia, Norway, and Algeria. Of this, Russia supplies 25% by pipeline. The dependence on one company, Russia's Gazprom, is growing.

Since March 2011, several events impacted European gas markets and increased dependence on Russia. First, the Japanese nuclear accident took out nearly a quarter of that country's nuclear capacity and increased Japan's reliance on LNG. By July, 38 of Japan's 54 reactors were shut down for inspections or some permanently because of damage due to the earthquake and tsunami. Some LNG supplies that would normally go to Europe have been diverted to Japan, which has led a number of European countries to increase their reliance on Russian pipeline gas. At the same time, Italy lost 8 bcm/y of supplies through the Greenstream pipeline from Libya due to political upheaval and the war. This has led Italy to increase its purchases from Russia. Russian company Gazprom has been the major beneficiary of these unforeseen developments.

Next, Germany announced that it would shutter all of its nuclear plants by 2022 and Italy voted not to restart its nuclear program after witnessing the Japanese experience. What this means is that Europe's reliance on Russian gas will continue to grow. This is positive news for Gazprom but it also means that the EU-27 will focus intensively on finding other suppliers, in addition to

Russia. This is because the EU's energy security goals stress the need for gas supply diversification.

Since Russia and China have so far failed to settle on a gas pricing agreement that would start substantial flows of Russian gas to China by 2015 or 2016, Europe will continue to be central for Gazprom's export plans. The first pipeline to China that has been discussed would run from fields in western Siberia that could also supply Europe. The idea for Russia is to be able to swing its supplies between Europe and China. The strategy has so far been undermined by Chinese unwillingness to meet Russian price demands, which are based on European gas prices indexed to the price of oil. Had the Chinese gas deal been signed in June, Moscow could have sent a strong signal to Europe that it has options. Instead, Russia is now redoubling its efforts to ship more pipeline gas to Europe.

For the foreseeable future, Russia will make its "gas" money in Europe, with Germany remaining one of its key customers. The Russian relationship with German companies BASF/Wintershall and E.ON Ruhrgas will continue to deepen, while after the announced nuclear shutdown, a new partnership is forming between Gazprom and German company RWE. In order to fuel its existing and new power plants, RWE is now in discussions to rely increasingly on Russian gas at advantageous prices. Coincidentally, RWE is a key investor in a rival project to Russian supplies, the Nabucco gas pipeline that would ship Caspian gas to Europe, promoting the diversification of European gas supplies. A partnership with Gazprom would likely remove RWE from projects like Nabucco that compete with Gazprom's plans for Europe. While Nabucco has yet to get off the ground, at the end of 2011, the Nord Stream pipeline that connects Russian gas supplies directly to Germany, bypassing the Baltic Republics, Poland and Central Europe, will start up, providing Russia with a direct gas link into the German market and from there into other markets in northwest Europe. German companies BASF/Wintershall and E.ON Ruhrgas are investors in the Nord Stream project. Current Russian supplies reach Europe through transit countries, Ukraine and Belarus. Nord Stream will also bypass them.

Nord Stream is happening at the same time that US companies are becoming increasingly involved in Central European shale gas developments in Poland, Bulgaria and Romania. The US company presence in these countries focuses US government attention in a part of Europe that has traditionally been a Gazprom stronghold. There is growing collaboration between the US and Central Europe on shale gas development. When President Obama recently visited Poland, he addressed questions related to energy security, well aware of course that US companies were involved in potentially game-changing activities in that country. The Nord Stream pipeline and eventually if shale gas is realized in Poland -- these represent a form of northern corridor European supplies, with one being Russian gas and the other indigenous Polish production that could create new supply options for other Central European countries, as well as the three Baltic countries.

Then there is the question of the southern corridor for non-Russian gas shipments from the Caspian across Turkey to Europe. Gas delivered through the southern corridor would provide new supplies, furthering European energy security goals. This past May, Turkmenistan held its annual gas conference in the Caspian resort city of Avaza. The US State Department's Senior Advisor Dan Stein addressed the event, and discussed US support for the southern corridor. He emphasized US shared interests with Europe, which have led to Washington's involvement in questions related to European energy security. This includes US backing for Caspian gas flows across Turkey to Europe.

In October 2011, Azerbaijan's state oil company SOCAR and its international oil company partners in the offshore Shah Deniz field are expected to decide on a pipeline option to transport southern corridor gas to Turkey and then onward to European markets starting in 2017. Unless the decision is delayed, an agreement for the route of a southern corridor pipeline to Europe is expected to unlock many possibilities for European energy security during this decade, adding new Caspian supply sources into the continent's energy mix.

The US and EU have encouraged Turkmenistan to cooperate with Azerbaijan and sign an Intergovernmental Agreement (IGA) to build a TransCaspian Gas Pipeline (TGP) that could become a part of the new infrastructure envisioned for the southern corridor. The signing of an IGA would eliminate some of the geopolitical insecurity. It could spur private company interest in the TGP and be a catalyst for its financing. The US was involved in a similar effort in the late 1990s and this is a case of history repeating itself, except that now Europe is in greater need of accessing new gas supplies and from as many sources as possible, with Azerbaijan and Turkmenistan seen as logical suppliers.

In summary, given recent developments with a growing need for LNG in Asia (creating competition for LNG supplies between Europe and Asia), the seeming end of the nuclear option for Italy and Germany, coupled with declining domestic gas production in Europe itself and the benefits of gas for meeting the goals of reduced carbon emissions, the southern corridor and shale gas could offer Europe much needed alternatives on top of the growing supplies Europe will receive from Russia. Both alternative options have yet to be realized. While the US and EU are cooperating with a political push to realize some form of a southern corridor pipeline, the US and Central Europe are cooperating on shale gas by trying to transfer lessons learned in the US.