Arbeitsgruppe Außen- und Sicherheitspolitik | Briefing Papers

»Russlands neue Ambitionen und deren Auswirkungen auf die Transatlantischen Partner«

Paper 3 | Die energiepolitische Perspektive

»Europe's New Energy Options – But Russia Remains Important«

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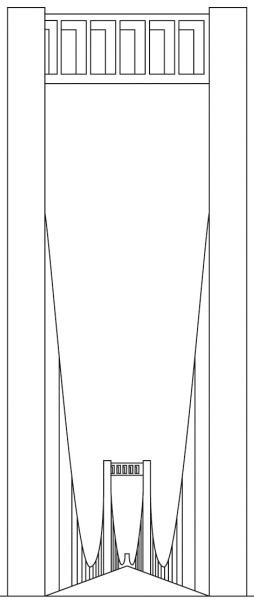

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Content

One hundred years ago, the British Navy converted their ships from coal to oil, aiming at being faster and more economic than the German fleet. Faced with criticism from the opposition that Britain would thereby become dependent on foreign oil exports, the First Admiral of the Navy, Winston Churchill, replied: "Safety and certainty in oil lie in variety and variety alone." With this imperative for variety, the topic of energy security was born.

Today, the Crimean crisis has once again catapulted the topic of energy security back on top of the EU agenda. In light of this, various diversification options that are intended to reduce Europe's dependency on Russian gas are being considered including LNG from the U.S. as well as gas from various sources in the Middle East, Caspian and Mediterranean Region. However, this debate overlooks a significant aspect, namely that all of the discussed gas diversification options will only be available at the earliest at the end of this decade. And, considering diminishing European gas reserves, in 2030 Europe will in all likelihood still need large quantities of Russian gas.

Nevertheless, Europe seems determined to switch gears in order to gradually reduce dependency on Siberian gas. Over the mid to long-term, Europpe has five gas diversification options, which I will briefly discuss below:

U.S. LNG

In the U.S., the shale boom is in full swing and has boosted the country's proved natural gas reserves from 6 trillion cubic meters (tcm) in 2006 to 8,5 tcm today. Production has increased by a third and the country surpassed Russia in 2009 to become the world's top natural gas producer. Because of the surge in shale gas production, U.S. gas prices have fallen by over 50 percent from about 10 USD per million British thermal units (MMBtu) in 2008, to around 4,5 USD per MMBtu today. Gas prices in the EU and Asia, on the other hand, remain strong, creating huge price differences compared to U.S. prices (ca. 12 USD per MMBtu in the EU and ca. 18-19 USD per MMBtu in Asia).

This has prompted a number of U.S.-based producers to seek permission from the Department of Energy to export liquefied natural gas (LNG). Eight non-Free Trade Agreement (FTA) LNG export projects have been approved as of June 2014 and some 30 more are pending, with the Texas LNG LLC Project being the most recent project to be approved. The eight approved non-FTA LNG export capacities so far equate to about 98 billion cubic meters (bcm) per year, which is more than Germany's entire annual gas consumption. Just to put this in perspective: Qatar, the world's largest LNG exporter, currently exports about 105 bcm a year.

The U.S. can become a gas exporter as early as 2016, but gas shipments will very likely go to Asia instead of Europe because of the higher prices there. If U.S. LNG were to make its way to Europe, it would have combined production and transportation costs of around USD 11/ MMBtu (given a current production cost of USD 4,5/ MMBtu and additional transport costs of USD 6/MMBtu). Hence, based on current Henry Hub prices, U.S. LNG would be about as expensive as Russian gas.

For U.S. gas to be commercially viable in Europe, it would have to be sold much cheaper, as Russia can currently undercut U.S. LNG supplies if it needs to and sell its gas for as low as USD 6/MMBtu. Moreover, while the earliest gas exports will not start until around 2016, most will not get started until 2017 through 2019. Hence, the bottom line is that physical supplies of U.S. LNG are not a realistic substitute for Russian gas – at least not over the short-term.

Nevertheless, the impact of U.S. gas exports remains positive for the EU. This is because the gas could displace supplies initially destined for Asia, thus providing the EU with added import options. Moreover, physical gas deliveries to Europe are not always necessary to reassure markets and have positive price impacts. Just U.S. plans to export LNG can send a message of reassurance to Europe and increase its bargaining power vis-a-vis traditional suppliers like Russia or Qatar, thus potentially prompting

them to lower their gas prices or re-structure long-term contracts to be more price competitive.

It is important to note that LNG exports from the U.S. are likely to only initially place downward pressure on gas prices. However, market forces dictate that an eventual re-balancing of prices is likely to take place. Therefore, U.S. LNG exports can ultimately provide major gas importing regions like Europe a window of opportunity to take advantage of the initially lowered gas prices and strengthened bargaining power to negotiate or lock in more favorable conditions with traditional suppliers before prices begin to re-balance.

Azeri gas via the Trans Adriatic Pipeline (TAP)

Azerbaijan has proven reserves of approximately 0,9 – 2,55 tcm and stands to play an increasingly important role as a gas supplier for the EU in the coming years. Most of the activity regarding future supplies for Europe is concentrated around the Shah Deniz II gas field, from which gas is due to be shipped to Europe via Turkey and the Trans-Adriatic Pipeline (TAP).

The approval of TAP by the Shah Deniz consortium in June 2013 marked an important milestone for EU energy security by paving the way for a "Southern Gas Corridor", essentially opening a gateway between major consumer markets in Europe and suppliers in the Caspian Region and, potentially, the Middle East. The Final Investment Decision (FID) for TAP was made in late 2013 and construction is expected to begin in 2015 with the pipeline spanning across the territories of Greece, Albania and the Adriatic Sea to Italy. Initially, TAP is expected to deliver 10 bcm of gas annually via Turkey to European markets by 2019, with the possibility to expand its transport capacity to 20 bcm should additional supplies become available. The amount of additional gas supplies from this field does not only hinge on investments, but also on the availability and/or the procurement of offshore drilling platforms, which are needed to expand production.

While the initial amounts of gas that will be delivered to Europe constitute less than five percent of Europe's annual gas consumption, the delivery of the gas via Southeastern Europe stands to make a particularly strong contribution to the gasification of the traditionally undersupplied Balkans. For instance, TAP can provide Bulgaria with a new source of gas through existing and planned infrastructure or the Western Balkans via the planned Ionian Adriatic Pipeline (IAP) and various interconnectors.

Eastern Mediterranean gas

Substantial gas finds estimated at 1,1 tcm have also been made in the Eastern Mediterranean Sea off the coast of Israel and Cyprus. A solution that would make the most economic and political sense for all parties involved would be to build a pipeline from the Israeli Leviathan field, via Cyprus where it would take additional gas to Turkey. A twin pipeline with an annual capacity of 16 bcm would cost about USD 2,5 billion according to a study from Turcas. The pipeline would start in the Israeli Leviathan field, traverse 470 km through the Mediterranean Sea, and come ashore in southern Turkey, where natural gas is sorely needed. Moreover, Eastern Mediterranean gas deliveries to Turkey could also stand to benefit the EU. This is because the gas could be fed into TAP, thus diversifying the source of European gas supplies further.

However, the geopolitical situation in the region will undoubtedly complicate the exploitation of these resources. Nevertheless, there is hope that the economic benefits of energy cooperation may override political differences given historical precedence. The "Gas for Pipes" deal between Germany and the Soviet Union in the 1970s could be a good example of potential cooperation. Despite the Cold War, Moscow and Bonn managed to establish a reliable energy partnership. The confidence-building measures and common interests that were required for successful collaboration in the energy sector eventually helped pave the way for German and European reunification. A similar scenario could be conceivable for the countries in the Eastern Mediterranean region.

Gas from Iraqi Kurdistan

Significant gas resources, estimated to range from 2,8 – 5,7 tcm, have also been found in Iraqi Kurdistan. The most conservative estimate is enough to meet the EU's entire annual demand for roughly half a decade. Given the region's close geographical proximity to Turkey, it is conceivable that Kurdish gas could eventually find its way to Europe in the future.

In late 2013, Iraqi Kurdistan finalized a package of deals with Ankara to build oil and gas pipelines to transport the region's hydrocarbons to international markets. Included in this package of deals is a new agreement between the Turkish Energy Company (TEC) and the KRG which may lead to the construction of a new gas pipeline – with the first flow of gas targeted for early 2017 once domestic demand has been met. The KRG's priority is to sate domestic gas demand first, with gas to power expected to lead the way. However, over the longer term, the KRG has reiterated its focus to export piped gas, first to Turkey because its gas fields are strategically placed to compete in the Turkish market, and then on to Europe via Turkey's domestic gas infrastructure and TAP.

Yet, there are significant political and security hurdles that have to be overcome before Kurdish gas can start flowing to Turkish and EU markets without alienating the central Iraqi government in Baghdad. The lack of a Hydrocarbon Law and differences over oil and gas revenue sharing are still major outstanding issues. This dispute has recently escalated due to the Kurdish Regional Government (KRG) selling four tankers of oil delivered from its recently constructed, independent oil pipeline to the Turkish port of Ceyhan. The KRG's pipeline is currently pumping around 120.000 barrels of oil per day (bpd) to Ceyhan and the region's Minister of Natural Resources Ashti Hawrami is aiming to export 400.000 bpd by year-end. Baghdad, in retaliation, has withheld funds from the KRG, thus forcing it to borrow several billion dollars against future oil sales.

The deteriorating security situation in war-torn Iraq coupled with the recent cut-off of funds by the central government has prompted the KRG to seek greater financial independence by pushing ahead with energy exports and the development of its energy sector. Given Baghdad's relatively weakened position due to militant ISIS insurgents, current developments may likely accelerate the pace and quantity of both oil and gas exports from the Kurdistan Region to Turkish and European markets – with or without the approval of the central government.

Iranian gas on the horizon

While the dispute between the KRG and Iraq have escalated in recent weeks, political tensions between world powers and Iran - the world's largest reserve holder of natural gas - seem to be easing. In January 2014, it was confirmed that Iran had fulfilled its side of an interim nuclear agreement it made with the P5+1 in Geneva to halt its most sensitive uranium enrichment operations. In return, the country has won some relief from economic sanctions, allowing it to access USD 4,2 billion in oil revenues frozen in foreign accounts as well as resume trade in petrochemicals, gold and other precious metals.

This has raised optimism on all sides that a permanent solution can be found to the nuclear dispute. Iran has already started wooing potential foreign investors. President Hassan Rouhani, the first Iranian leader to visit Davos for the World Economic Forum in over a decade, told attending oil and gas executives that his country is planning on offering new and improved contracts by September 2014 to attract energy-sector investors.

According to BP's most recent reserve estimates, Iran holds the world's largest natural gas reserves, estimated at around 33,6 tcm. However, its gas infrastructure is outdated and inefficient and its domestic consumption is the third highest in the world, having increased by some 90 percent since 2003 due to massive government subsidies. Moreover, despite huge reserves, the country is actually a net importer of natural gas and flares about 11 bcm of gas annually.

The country did have plans to develop and modernize its gas sector. These included exploring new fields and developing current ones as well as completing additional phases of the giant South Pars gas field in the Persian Gulf, which, combined with Qatar's shared North Dome field, is the world's largest gas field. However, none of these plans have come to fruition due to the absence of international energy companies and technological capacity.

The potential return of foreign energy companies – should a comprehensive nuclear deal be reached – could spark an energy revival by boosting production and enhancing efficiency. Iran currently exports some 10 bcm of gas annually to Turkey via existing pipelines. If production output increases, then it is conceivable that Iranian gas could eventually find its way to European markets via Turkey's gas infrastructure.

Russia remains a key gas supplier to Europe, but the EU is undertaking measures

Ultimately, while Europe will have increasing options to reduce gas dependency on Russia to a certain extent over the medium to longer-term, at the core, its dependency will persist for many years to come.

In the meantime, Europe can – and is – undertaking additional measures, with the strong support of the European Commission and its Energy Commissioner Günther Oettinger, to lessen its import dependency and dampen the impact of a potential gas cut-off. These include exploiting indigenous energy resources such as shale gas, developing/expanding strategic gas reserve mechanisms, constructing additional LNG re-gasification terminals, signing new/additional delivery contracts with additional suppliers, and developing/expanding the EU internal energy market (reverse flow capability, elimination of EU energy islands, etc.) Whether these measures are viable wholly depends on existing realities in each individual Member State, but they certainly deserve careful consideration without outright dismissal.

Moreover, on the positive side, Russia also needs energy security – for Moscow, this does not mean security of supply but security of demand. Russia delivers 70 percent of its gas to Europe and needs this secure market for balancing its budget. Therefore, to a certain extent, Russia is just as dependent on Europe as vice versa.

Over decades, this mutual dependency has proven to be a stabilising factor in foreign and security policy. We need to prevent a situation from emerging that puts an end to a reliable 50-year energy partnership between the EU and Russia.

The diversification strategy of the EU makes a lot of sense – both economically and politically. But it should be conducted thoughtfully, without populist snapshots and fully aware of Russia's significance for businesses and consumers in Europe.

About the Author

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Prof. Dr. Friedbert Pflüger (born 1955 in Hannover), is Director of the European Centre for Energy and Resource Security (EUCERS) at King's College London and Senior Fellow of the Atlantic Council of the U.S. He is Managing Director of Pflüger International Consulting GmbH in Berlin, Senior Advisor of Roland Berger Strategy Consultants and Member of the Supervisory Board of Alstom Power GmbH. Since 2009 Pflüger is hosting the monthly "Energy Talks at the Reichstag". He is Member of the Trilateral US-Europe-Turkey Task Force of the Institute for Strategic Dialogue (ISD), Member of the Resilien-Tech Working Group of the German National Academy of Science and Engineering (ACATECH) and Director of the Strategic Metal Working Group of Atlantik Brücke.

Pflüger studied political science, economics and public and constitutional law in Göttingen, Bonn and Harvard. After his studies, Pflüger became one of the closest associates of German President Richard von Weizsäcker while working as his speech writer and press secretary from 1981-1989. In 1990, he was elected as a member of the German Parliament, a position in which he remained until 2006. From 1998 to 2002, he was chairman of the Bundestag's EU-Committee. From 2002 to 2005, he served as a foreign policy spokesman of the CDU/CSU Parliamentary Group. Moreover, he served as Deputy Defence Minister in the first Merkel Government.

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