



Gas Security in the Pipeline —Expectations and Realities¹

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The cooperation between Norway and Poland in the energy sector has recently taken very tangible shape. In 2016, Poland decided to launch the Northern Gate project—a set of gas interconnections aiming to link the Polish gas market with gas deposits on the Norwegian Continental Shelf. With that decision, Poland wants to diversify away from Russia to mitigate energy security and political risks connected with the high level of dependence on one supplier. But in terms of Polish-Norwegian cooperation, the question of security of gas supply that Poland wants to address is accompanied by the question of the security of gas demand, a key concern for gas producers such as Norway. Hence, cooperation in the gas sector examined from those two perspectives may actually bring benefits for both countries and promises of win-win cooperation.

EU Setting the Scene for Diversification

At present, 69% of the natural gas consumed in the EU must be imported. Yet, gas import dependence is to increase to 86% in 2050 as the gap between consumption and declining internal production is widening. Hence, the EU must address the question of from where to import additional volumes of gas. In 2015, two external suppliers—Russia and Norway—accounted for 74.8% of those imports.² But a quick glance at the list of main suppliers of gas to the bloc³ reveals that with the main exception of Norway, this list is “populated” by actors who do not necessarily share EU norms and values.⁴ Russia is the most important supplier of gas to the

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² Eurostat, *EU imports of energy products—recent developments*, April 2017, http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_imports_of_energy_products_-_recent_developments#Main_suppliers_of_natural_gas_and_petroleum_oils_to_the_EU.

³ Besides Norway and Russia, these are: Algeria, Qatar, Libya, and Nigeria.

⁴ For a comparison of the EU’s energy relations with Norway and Russia, including the topic of shared values and regulations, see: A. Gawlikowska-Fyk, Z. Nowak, L. Puka, *The EU Gas Game: Time to Redefine the Rules? Case Studies of Russia and Norway and Lessons for the EU. Norway and Poland*, PISM Report, August 2015, www.pism.pl/publications/PISM-Report_The-EU-Gas_Game-Time-to-redefine-the-rules-Case-studies-of-Russia-and-Norway-and-lessons-for-the-EU-Norway-and-Poland.

EU, but also the most important challenge for the EU's energy policy in particular and foreign and security policy in general terms. Russia's actions in Ukraine have broken basic legal and political principles that have formed the foundations of the peaceful development of Europe since the end of the Cold War. Consequently, Europe's trust in Russia as a strategic partner has greatly diminished.⁵ This has had a huge impact on the EU's thinking on energy security,⁶ with this question on the top of the European energy agenda.

At the same time, considering the overdependence of Central Europe on Russia, the issue of diversification is at the core of the EU debate. The need to address questions related to security of supply was also one of the key factors behind the recent establishment of the Energy Union, a new institutional framework that is to make EU energy policy more coherent and effective. At the same time, the necessity to lessen the gas dependence on Russia highlights the importance of Norway—the second biggest gas exporter economically integrated with the EU.⁷ Here, it should be underlined that although Norway is not a full-fledged member of the EU, the energy policy of the country is carried out within the EU institutional and regulatory framework because Norway is part of the European Economic Area (EEA) structures and plays by the rules set by the EU.⁸

What Can Norway Do and How Will It Be Able to Diversify Its Gas Markets?

Norway, which over the past two decades has gained the position of a strategic and stable supplier of gas to the EU, may help the bloc and its Member States address some of the security of supply-related concerns. Norway is interested in retaining or even strengthening its position on the EU gas market because of the increasing role of gas in the country's energy exports. In 2002, revenues generated by gas exports from Norway represented only 24% of those from petroleum exports, but this share has recently increased to more than 60%. Norwegian experts see, however, stagnating demand for gas in Europe, especially in the power-generation sector, and the possible impact of the implementation of EU climate policy as it pertains to fossil fuels in the EU energy mix as the main challenges to the role of gas. According to the EU's own estimates, by 2050, the share of gas in the EU energy mix will be slightly higher than in 2015,⁹ but some other studies argue that demand for gas by European members of the Organisation for Economic Cooperation and Development (OECD) area will be lower in two specific analysed years, 2020 and 2040, than in 2013. This may indeed cause some problems for current and future gas suppliers to Europe.¹⁰ Today, almost 100% of Norway's export of gas reaches the EU market and the country is highly dependent on revenues coming from this sector and trade.¹¹ Of that, 42.3% of gas exported through the well-developed pipeline system reaches the EU market in Germany—but some of this gas is shipped further down the line through German pipelines to other customers; 24.5% is exported directly to the UK; 15.1% to France; 12.3% to Belgium; 0.4% to Denmark; and the rest, 5.3%, is marketed as LNG. Between 2000 and 2015, Norway's export of gas and oil generated on average €54 billion (NOK 510 billion) in revenue per year, or €870 billion (NOK 8.164 trillion) in total, and represented on average 47% of the country's export revenues. This clearly illustrates that Norway has a very

⁵ J.M. Godzimirski, "Russia–EU Energy Relations: From Complementarity to Distrust?," in: J.M. Godzimirski (ed.), *EU Leadership in Energy and Environmental Governance? Global and Local Challenges and Responses*, Palgrave Macmillan, 2015, pp. 89–112.

⁶ J.M. Godzimirski, "European Energy Security in the Wake of the Russian–Ukrainian Crisis," *PISM Strategic File*, no. 27 (63), December 2014, www.pism.pl/files/?id_plik=18874.

⁷ L. Puka, "The Paradox of a Stable Supplier: Norway in the European Union's Gas Strategy," *PISM Bulletin*, no. 122 (717), 13 October 2014.

⁸ For more on that, see: *UD, Utenfor og Innenfor: Norges avtaler med EU* [Outside and Inside: Norway's Agreements with the EU], NOU 2012:2, Departementenes servicesenter, Informasjonsforvaltning, Oslo, 2012, www.regjeringen.no/pages/36797426/PDFS/NOU201220120002000DDDPDFS.pdf.

⁹ European Commission, *EU Reference Scenario 2016. Energy, Transport and GHG Emissions. Trends to 2050*, 2016, https://ec.europa.eu/energy/sites/ener/files/documents/ref2016_report_final-web.pdf.

¹⁰ Statoil, "Energy Perspectives. Long-Term Macro and Market Outlook," 2016, www.statoil.com/content/dam/statoil/documents/energy-perspectives/energy-perspectives-2016.pdf.

¹¹ J.M. Godzimirski, "The Norwegian Energy Security Debate," in: E. Moe, P. Midford (eds.), *Common Challenges, National Responses: The Political Economy of Renewable Energy and Energy Security in Japan, China and Northern Europe*, Palgrave Macmillan, 2014, pp. 116–136.

strong economic incentive to remain one of the key external energy suppliers to the EU. This is also an indication of Norway's interest in other opportunities in the EU market, namely in Central Europe.

The most important feature in the context of Norway's energy cooperation with the EU is that Norway has been a member of the EEA since 1994 and has been following almost all the rules, including those on energy, set by the EU.¹² Additionally, Norway has followed the policy of setting aside most of its revenues in the Norwegian Pensions Fund Global, which has made the country an important capital player in Europe and globally.¹³ Norway is also an ally through NATO of all its major energy customers in Europe. This "adds" value to relations with Norway in a situation when energy and gas dependence on Russia are viewed not only as an energy security challenge but also increasingly as a "hard" security issue. In addition, Norway's energy system has some specific features that make it a highly attractive energy partner to an EU focused on the development of a greener economy. The country has a unique energy mix dominated by hydropower, which, when used as electricity storage, can help stabilise power grids in Europe while its gas supplies serve several purposes. On the one hand, these supplies can help the EU stabilise its energy market in more general terms,¹⁴ but, on the other hand, they can reduce the dependency of some European gas customers most exposed to Russian gas supplies, which are bound with a relatively high level of political risk. Generally, the EU and Norway have a common interest in maintaining stable trade and see, therefore, their energy cooperation as a win-win situation.¹⁵

However, the EU exerts twofold pressure on Norway. First, it develops rules influencing policies in the sphere of liberalisation, competition, and climate that Norway must follow as the member of the EEA framework. Second, the EU aims to become a low-carbon economy, and this may create the risk of shrinking demand for Norwegian gas. Hence, Norway must find how to best adapt to the changing EU regulatory framework and market conditions and how to make its fossil fuels relevant when they are increasingly viewed rather as a challenge than a long-term solution to the EU's energy problem.

As for Norway's aims of diversification, the country embarked on a cautious policy and extended its gas supplies to Central and Eastern Europe as early as 1996, when it took from Gazprom about 30% of the Czech gas market. Over the past couple of years, Norway has started supplying gas to Lithuania and Ukraine, and is now conducting serious talks on gas supplies to Poland and via Poland to other regional customers in Central and Eastern Europe. What may, however, pose a long-term challenge to Norway's continued role as an even more important external supplier of gas to the EU is the expected stabilisation and then fall in gas production caused by the depletion of the Norwegian gas fields. According to Norwegian own estimates, the production of gas is about to plateau and may start declining in the next decade¹⁶ right when the EU will need more gas from external suppliers to compensate for falling domestic production.¹⁷ It is therefore important to be aware of the uncertainty in the long term of the Norwegian gas resource when political relations with Russia are still strongly influenced by what is read by many as Russia's revisionist policy. This question is especially vital to those energy importers, including Poland, who today are strongly dependent on supplies from Russia. Their plans for the diversification of energy supplies should therefore be based on a multi-variant scenarios approach in which additional gas supplies from Norway are only one of the possible energy mix features.

¹² L. Puka, O.G. Austvik, A. Gawlikowska-Fyk, "Norwegian Energy Policy in the Changing EU Environment: What Poland Can Learn for Developing Its Shale Gas Industry," *PISM Strategic File*, no. 4 (67), March 2015, www.pism.pl/files/?id_plik=19359.

¹³ U. Sverdrup, "Oljefondet og Utenrikspolitikken: Gorillaen i rommet" [Pensions Fund Global and foreign policy. Gorilla in the room], *Internasjonal Politikk*, vol. 74, no. 1, 2016, pp. 1–11.

¹⁴ See, for instance, a short study on how the EU could get rid of the gas dependence on Russia and what role Norway could play in this process: M. Peruzzi, E. Dale, G. Zachmann, "Can Europe Survive without Russian Gas?," 2014, www.bruegel.org/nc/blog/detail/article/1283-can-europe-survive-without-russian-gas.

¹⁵ *Ibidem*.

¹⁶ OED, "Export of Oil and Gas," *Norsk Petroleum*, 2016, www.norskpetroleum.no/en/production-and-exports/exports-of-oil-and-gas/. See especially this graph showing how the Norwegian expert community sees the future of Norwegian gas production: www.norskpetroleum.no/wp-content/uploads/41-Gassprognose-16012017-E.png.

¹⁷ See: European Commission, *EU Reference Scenario 2016*, *op. cit.*

What Can and Should Poland Do to Diversify Its Energy Supplies?

Poland is the seventh biggest gas consumer in the European Union with yearly consumption of 16.5 bcm (2015). While being the greatest consumer of gas in Central and Eastern Europe, Poland's consumption is much smaller than the top EU gas users: Germany (80 bcm), United Kingdom (72 bcm), and Italy (66 bcm).¹⁸ Gas is used by industry (50%), for residential purposes (36%), and in energy production (11%) and transport (3%).¹⁹ Less than one third of the gas comes from internal production while the rest is imported mainly from Russia. The long-term contract between Polish incumbent gas supplier, Polskie Górnictwo Naftowe i Gazownictwo (PGNiG), and Russian gas exporter OAO Gazprom/OOO "Gazprom export," signed in 1996, includes yearly gas deliveries of up to 10.2 bcm. Overall, gas accounts for 16% of final energy consumption in Poland but only for 3% of electricity generation.

Yet, energy security, and security of supply in the gas sector in particular, has always been a top concern of Poland's energy policy. To address this problem, Poland has embarked on a policy of the diversification of gas supplies and transport routes. Only since 2011, Poland has the capability to receive gas from EU countries via interconnectors with the Czech Republic (0.5 bcm import capacity) and with Germany in Łańcut (1.5 bcm). In 2015, the country imported 1.2 bcm from that direction. The major game-changer in importing non-Russian gas is the LNG terminal in Świnoujście, operational since late 2015. The terminal has been up and running, with more than a third of its receiving capacity (5 bcm) utilised. Gas is delivered under a long-term contract with Qatar (until 2035) or bought on the spot market. The first technical cargo of gas to Świnoujście came from Norway, which later also sent smaller volumes, and in June 2017, Poland received the first supply of LNG from the U.S. As competition among LNG exporters interested in entering the Polish market intensifies, that may improve the country's negotiating position in its dealings with both current and future suppliers of this fuel.

At the same time, Poland, along with its neighbours, mainly within the framework of EU projects of common interest, is planning the construction of new gas interconnectors with the Czech Republic and Slovakia (both scheduled for 2019), Lithuania (2021) and—as part of the Northern Gate—with Denmark (2022). A new gas pipeline to Ukraine is also under consideration. As the region has distinct potential for investments in gas infrastructure, the Three Seas Initiative launched in 2016 by the presidents of Croatia and Poland, and embracing 12 countries, may help address investment and diversification needs.²⁰

Although Poland has already achieved some of its gas diversification goals, the idea to build a gas interconnector between Poland and Norway is expected to bring further and unconditional opportunities to strengthen the former's resilience to economic and political external pressure from a dominant supplier. Hence, the concept of the Northern Gate (also known as Baltic Pipe)—a gas pipeline to Denmark, extension of the Danish internal grid, and another pipeline from Denmark to Norway—is currently at the centre of Polish-Norwegian cooperation. As the whole project is designed to bring in 10 bcm of Norwegian gas, it is expected to serve other markets in Central and Eastern Europe. It means that Northern Gate should also bring marketing opportunities for Norwegian gas beyond Poland.

Why Northern Gate?

The rationale behind the project is both infrastructural and market related. The new gas pipeline would give Poland stability and firmer control of energy supplies (while the LNG terminal gives above all flexibility in terms of gas quantities, prices, and origins). New supplies of gas would allow incentivised market development in Poland and create opportunities to open new trading opportunities in the region.

¹⁸ See: Eurogas, "Gas demand in the EU rises for the first time in four years," 30 June 2016, www.eurogas.org/uploads/media/Eurogas_Press_Release_-_Gas_demand_in_EU_rises_for_the_first_time_in_four_years_according_to_new_Eurogas_data_01.pdf.

¹⁹ Główny Urząd Statystyczny, *Zużycie paliw i nośników energii w 2016 r.*, Warszawa, 2017.

²⁰ B. Bielińczuk, "Three Seas Initiative: Benefits for Regional Gas Markets and the EU," *PISM Bulletin*, no. 63 (1003), 30 June 2017.

The idea to connect the Polish gas grid indirectly—via Denmark—to the gas deposits in Norway has been part of Polish energy policy for many years. There were two attempts at the project, first in 2001 and again in 2006. They did not materialise for various political and economic reasons. Currently, the situation in the Polish gas sector is ripe for discussing the project seriously. There are three main reasons for that: Poland is genuinely interested in diversifying away from Russian gas; Poland is present on the Norwegian Continental Shelf and the country might become a gateway for supplying gas farther to the south and/or east.

As for limiting dependence on Russian gas, this is an indisputable priority of Poland's energy strategy. The Yamal contract with Gazprom will expire in December 2022, but the decision whether to extend it must be taken by 2019. The current government is clear-cut about the contract's destiny—it will not be prolonged. The announcement should be interpreted against the backdrop of wider changes in the European gas market such as the growing role of gas hubs, hence shorter trading and spot supply availability or changes regarding gas prices (oil-indexed pricing losing share to the advantage of gas-on-gas pricing). This is not in line with the old-fashioned and inflexible provisions in the contract between PGNiG and Gazprom, which the European Commission found to be an abuse of position on the latter's side. Hence, the timing of the Northern Gate project is highly coordinated to the termination of the long-term contract for Russian supplies. In that context, the Norwegian gas supplied to Poland via the planned Northern Gate is meant to substitute for eastern gas and supplement supplies via the LNG terminal.

Polish energy companies are already on the Norwegian Continental Shelf (NCS), with PGNiG starting activity there in 2007. The company acquired shares in the Skarv field (production started in 2013), and in 2014, increased its presence by taking over shares in four other fields. Currently, PGNiG has 17 exploration licenses and plans to further increase its Norwegian assets. This situation has three consequences when it comes to Polish-Norwegian cooperation. First, the idea this time to build an interconnection between the Norwegian Continental Shelf and Poland means a connection to Norwegian assets owned by, among others, the Polish companies PGNiG and Lotos. Second, those companies have gained a good track record of cooperation with their Norwegian counterparts (Norway has strict rules for awarding licenses and controlling licensees). Third, PGNiG's role and significance on the NCS is to increase because of its plans to more than double its assets and documented reserves abroad, mainly in Norway. The business plan presented by the company aims to increase production in Norway to 2.5 bcm per year. The importance of Polish companies operating on the NCS also will increase because of structural changes on the NCS, such as the ongoing withdrawal of some major European and American companies that see new opportunities elsewhere and the emergence of new, smaller actors on the NCS that see the Norwegian assets and regulatory framework as still attractive.

Finally, the idea to open up the Northern Corridor is as much about Poland as about regional cooperation. Having learnt the lessons of the gas crises of 2006 and 2009, Poland gradually, yet consequently has pursued its policy of diversification and thus ensuring alternative supplies throughout the region. Having opened first interconnectors with EU countries, further plans are even more ambitious—Poland's import capacity will almost double (once Baltic Pipe is in place) and export capacity also will be enhanced significantly in the southern and eastern directions. The planned construction of interconnectors and reverse capacity is intended to make the whole internal EU gas market more flexible and responsive to future energy crises. Similar developments have been pursued in Central Europe, the Baltic States, and in Ukraine. This will bring new trading and transit opportunities within the region. Physical integration via the North-South Gas Corridor²¹ has become a flagship project both for the EU and for the states that decided to strengthen regional cooperation through the Three Seas Initiative. The EC forecasts that gas demand in those countries will increase by 14% from 2015 to 2030, with the biggest growth in Poland, Slovenia, Latvia, and Austria.²² The increased capacity will meet the rising needs of the region.

²¹ See: J. Ćwiek-Karpowicz, D. Kałan (eds.), *North-South Gas Corridor. Geopolitical Breakthrough in Central Europe*, PISM Report, December 2013, www.pism.pl/publications/PISM-reports/North-South-Gas-Corridor-Geopolitical-Breakthrough-in-Central-Europe.

²² B. Bieliszczuk, *op. cit.*

Conclusions

Norway remains an important political and energy partner of the EU. It has been building this position for years and shares basic values with its European partners. It does not treat the gas trade as a potential political pressure instrument against the EU and is therefore a predictable partner. This is particularly important for countries aiming to replace supplies from Russia, namely Poland and other countries in the region.

Poland's experiences with Russia—reinforced by its actions in Ukraine and some other countries—show that the link between supplier and buyer can be constant rough-and-tumble rather than ordinary business. Yet, in the case of the relations between Poland and Norway, there is potential for genuinely win-win cooperation. As noted above, Norway has already entered the Polish market and its interest in maintaining or even strengthening its position as a gas supplier to the EU means the Northern Gate project seems to meet the purely economic goals of Norway. Poland and other Central European markets, with infrastructure soon in place and potential for growth in gas consumption, need to increase their security of supply, which Norway can deliver, increasing at the same time its own security of demand. In many aspects, gas from Norway is regarded as a European asset—geographical proximity allows for direct deliveries and its membership of the single market translates into playing by the same, EU rules.

Since 2008, the Baltic Pipe—now part of the broader Northern Gate project—has been discussed within the framework of the Baltic Energy Market Interconnection Plan, set up by the European Commission and aiming to eliminate energy islands within the Baltic Sea region. Baltic Pipe has since ranked very high on the list of projects due to its potential impact on energy security. The completion of Baltic Pipe and the Northern Gate project is supported by an EU that sees it as an important step in building a more flexible internal European and regional gas market.

Since both potential partners—Poland and Norway—are looking for alternatives in security of supply for one and security of demand for the other, the potential for the convergence of economic interests is apparent here.

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