STUDY

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Energy as a tool of foreign policy of authoritarian states, in particular Russia



ABSTRACT

Russia and other energy-rich authoritarian states use their energy exports for economic gains but also as a tool of foreign policy leverage. This study looks at the ways and methods these states have used to exert political pressure through their energy supplies, and what it means for the European Union. Most energy-rich authoritarian states use their energy wealth to ensure regime survival. But, more than others, Russia uses its energy wealth as well to protect and promote its interests in its 'near abroad' and to make its geopolitical influence felt further afield, including in Europe. It uses gas supplies to punish and to reward, affecting both transit states and end-consumers. This study explores how supply disruptions, price discounts or hikes, and alternative transit routes such as Nord Stream 2 and Turkish Stream, are used by Russia to further its foreign policy ambitions, feeding suspicions about its geopolitical motives. The lack of transparency about Russia's energy policy decisions contributes to this. In response, the EU is building an Energy Union based around the Third Energy Package, a more integrated European market and diversified supplies. By investing in new supplies, such as LNG, and completing a liberalised energy market, the EU will be better able to withstand such energy coercion and develop a more effective EU foreign policy.

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1 Executive Summary

This study looks at the use of energy resources to promote foreign policy goals by authoritarian states. Energy assets are strategic goods, whether a country is a democracy or not. This study has been commissioned to examine the behaviour of authoritarian states only.

Energy resources wielded by authoritarian states can act as a shield or a sword. A dependency relationship exists between an energy supplier and its consumers. When the energy supplier is a (quasi)monopolist in a market, this dependency translates into political leverage. This political leverage can be used either to prevent outside interference and ensure regime survival, or as a tool for an assertive foreign policy. By doing so, the authoritarian state can use energy supplies as a means to condition neighbouring countries to behave in a certain way, or to punish them when they do not.

Most energy-rich authoritarian states use their energy resources as a defensive tool of foreign policy. The purpose is to ensure a continuation of the regime; to consolidate power at home, and prevent outside interference. They can do so directly, by developing economic relations with important global actors, usually in the form of pipelines or supply contracts with major international powers. They can also do so indirectly, by using the proceeds of energy sales to build an internal security apparatus, develop military forces, procure state-of-the-art military equipment or provide subsidies and other economic benefits to stave off domestic dissent. This defensive use of energy resources is not necessarily benign, as it can shield the country from outside pressure allowing it to pursue an assertive, and possibly destabilising, foreign policy or continue with repressive policies at home. By purchasing energy supplies from these countries, the European Union contributes to the continuation of such authoritarian regimes.

It is much less common for energy-rich authoritarian states to use their energy resources for offensive purposes. The clearest historical example is the 1973 OPEC oil embargo. More recently, Azerbaijan has built oil and gas pipelines to bypass Armenia, as a result of its conflict over Nagorno-Karabakh, depriving Yerevan of any transit fees. Energy wealth is rarely used for offensive purposes, yet in recent history no other state has used its energy wealth to pursue an offensive agenda, and has been suspected of doing so, as much as Russia.

Russia is the EU's most important external source of natural gas, and it is likely to remain so for some time. It has made an effort to be the cheapest sources of gas for the European market in a bid to defend or increase its market share. Russia's share of the European gas market is expected to rise.

Russia uses its energy wealth for three reasons: to gain economic benefits; to maintain, increase and exert its political influence in its perceived sphere of influence, the so-called near abroad or the 'post-Soviet space'; and, should the need arise, to exert political pressure on end-consumers. Defensively, the energy links it has forged with consumers and transit states make it difficult for the international community to exert more pressure on Moscow. European sanctions on the Russian state in response to its annexation of Crimea and its intervention in Eastern Ukraine exclude Russia's conventional energy sector. Offensively, through state-owned Gazprom and Rosneft, Russia has shown a willingness to abuse its dominant market position in support of foreign policy goals, primarily in its immediate neighbourhood but also further afield.

Natural gas shipped through pipelines lends itself better to be a tool of geopolitical coercion than crude oil supplies. Gazprom's policies are shaped by both commercial considerations as well as Russia's foreign policy objectives. Of course, not every piece of Russia's energy policy is dictated by geopolitical motives, but when it is, it exerts political pressure through the following means:

- Manipulating the pricing policy of energy supplies to third countries
- Controlling energy assets, such as pipelines and gas operators in key countries

- Cutting, or disrupting, gas supplies
- Agreeing restrictive supply contracts
- Developing alternative supply routes to divert gas flows

Gazprom is an expert at couching Moscow's foreign policy agenda in commercial terms. For every instance of energy coercion, Gazprom formulates a commercial or technical justification. But political assessments underpin Russia's decisions when to offer discounts on its energy exports. They usually coincide with Russia's strategic priorities. For instance, Moscow has a history of giving discounts but also taking them away, when political conditions change.

Transit states are expected to behave like clients of Moscow, particularly if they are not a member of the EU or NATO. These states are most vulnerable to energy blackmail. Those governments that remained friendly to Moscow have received gas at discounted prices. Others saw their gas prices rise. For instance, Belarus and Ukraine have long benefited from Russian energy subsidies. But when political tensions with Moscow emerged, Gazprom has raised gas prices, or worse. One of the clearest examples is Gazprom's gas price discount when Ukrainian president Viktor Yanukovych in late 2013 decided to join the Eurasian Economic Union and turned its back on the EU's association agreement. When Ukraine's next president Petro Poroshenko reversed this decision and oriented his country towards the West, Ukraine faced gas price hikes and supply disruptions. It has also brought Gazprom to develop alternative gas supply routes to the European market that would bypass Ukraine. This policy of using energy exports to intimidate or bully is a demonstration of Russian *realpolitik* and reverberates across the European continent.

Russia's development of a diversionary pipeline that bypasses Ukraine fits within this picture. It reduces transit risk and increases its freedom of manoeuvre in its foreign policy. It is to be expected that if Nord Stream 2 is built, gas transit through Ukraine will drop, harming its economy and increasing pressure on Kiev.

Nord Stream 2 is a diversionary and a divisive pipeline. It is not the purpose of this study to pass a judgement on the commercial viability of the pipeline, but given declining rates of European gas consumption, Nord Stream 2's additional capacity of 55 bcm seem to make economic sense if Gazprom does what it has promised to do, namely terminate exports currently flowing through Ukraine. The pipeline is thereby a direct challenge to Europe's foreign policies towards Ukraine. Nord Stream 2 is also a divisive pipeline inside the EU, driving a wedge between those that object to it for geopolitical reasons; and those that support it for economic arguments. This division could have a lasting impact on the EU's ability to forge a common European foreign and energy policy.

In a twist of irony, should Russia decide to terminate all gas transit through Ukraine, it will reduce, not increase, Moscow's influence over Ukraine. Kiev would miss valuable transit fees, but could receive gas through Western European reverse-flow deliveries. Therefore, if Nord Stream 2 is completed, Russia should be expected to maintain some transit through Ukraine, if only to maintain a degree of leverage in its relationship with Kiev.

Turkish Stream would have a similar, but smaller, diversionary effect on gas flows through Ukraine. Its capacity is projected at 32 bcm. The pipeline is, however, a challenge to the commercial viability of the Southern Gas Corridor, a pipeline project that would bring non-Russian gas from the Caspian to the European market.

A further tool Russia has used are restrictive contractual obligations that make it impossible for the purchaser of Russia's gas to re-sell the gas to a third party or to buy the gas through a different pipeline route. These contract terms enable Russia to keep the European market fragmented, allowing Gazprom to offer different prices to different buyers. Such a pricing system invites political bargaining, though the EU has taken steps by starting antitrust investigations to break this system.

Russia also gains geopolitical influence by making investments in the energy sectors of geopolitically relevant countries, such as Venezuela or the Kurdistan Region of Iraq. Moscow is also investing in building energy links to China. If completed, this would reduce Moscow's dependency on the European gas market, opening up the possibility of a more assertive foreign policy approach towards the EU.

Reducing the amount of gas Europe consumes is welcome, but may in the coming two decades not necessarily lead to a reduction in Europe's dependency on Russian gas. Instead, diversification and developing a liberalised and integrated European energy market are the central pillars to deal with both the offensive and defensive use of energy as a foreign policy tool by authoritarian states. By becoming more resilient to possible supply shocks, and preventing energy from becoming a tool of division inside the EU, the EU can pursue a more effective foreign policy to address concerns with energy-rich authoritarian states.

The European Commission should focus on enabling its energy market to work properly. This means enforcing its energy laws, building sufficient gas infrastructure inside the EU to allow gas to flow from West to East and North to South; promoting the availability of alternative sources of gas such as LNG – including from the United States - and from new external suppliers such as Israel, North Africa or Turkmenistan.

Through the Third Energy Package and the EU Energy Union strategy the EU has taken steps to better respond to the various ways and methods that Russia and other authoritarian states may use to exert political pressure. Instead of picking specific suppliers, the EU should continue to build an integrated and liberalised internal energy market where EU members have access to diversified energy supplies. Here are additional steps the EU could take:

- Extend the Third Energy Package to third party pipelines that enter the EU market.
- Support the development of global trade in LNG and develop new ties with LNG suppliers, including the United States.
- Support the EU's strategy for LNG and gas storage, and support, including financially, the construction of new LNG projects.
- Encourage gas reverse flow projects, especially in central and eastern European countries.
- Support the development of the trans-Caspian pipeline and the exploitation of new gas discoveries in the Eastern Mediterranean.
- Intensify the EU's energy diplomacy and broaden it to other EU institutions.
- Improve transparency of the ownership structures of pipelines and gas operators in the EU.
- Assess whether limits can be set on the level of foreign, non-EU ownership of national gas operators and pipelines.
- Support Ukraine to develop its domestic energy resources and to link its energy grid to the EU's.
- Perform a new EU energy stress-test to assess how resilient the EU's internal energy market is to supply disruptions.
- Enable the market, not politicians, to determine who can supply gas into the European Union.
- Expect Russia to continue to remain Europe's main external supplier of natural gas.
- Urge member-states to fully implement the Third Energy Package.

- Strengthen economic cooperation with Norway to make its large oil and gas potential fully available to the European market.
- Continue to work to meet the EU's energy efficiency and energy savings targets and work with member-states to implement them.

2 Introduction

This study has been commissioned to assess the way in which authoritarian energy-exporting countries, in particular Russia, use energy as a means to protect and promote their foreign policy interests. The main questions this study aims to answer are how have Russia and other energy-rich authoritarian states used energy policy to promote their foreign policy agendas and what mitigating steps can the European Union take? As the focus lies on foreign policy and the geopolitical implications of energy exports, this study does not make an exhaustive analysis of energy market dynamics or the commercial considerations underpinning the behaviour of authoritarian energy-exporting countries.

The focus of the study lies on the use of oil and natural gas exports as a tool, not on the policies energy-rich authoritarian states pursue based on the proceeds of oil and natural gas sales. This is an important caveat, as energy-rich authoritarian states have enjoyed a major financial windfall throughout the period of high oil prices, which lasted roughly from 2005 to 2014 (with an important intermezzo during the years of the global financial crisis between 2008-2010). High oil prices have led to an accumulation of wealth in the hands of energy-exporting countries, which has been employed, amongst other things, to pursue specific foreign and security agendas. With greater spending power has come greater foreign policy ambition. High oil prices have emboldened energy-rich authoritarian states, while low oil prices make them vulnerable. Military modernisation programmes, consolidation of domestic assets in the hands of the state and strategic foreign investments are indirectly connected to energy exports and have shaped global geopolitics, but fall outside the scope of this study. Instead, it assesses to what extent energy exports have been used as an instrument of foreign policy by these states; i.e. how is energy used strategically as a tool of their diplomacy.

Given the importance of Russia to the EU's energy consumption, it is particularly relevant to assess how the Russian Federation has used energy exports as a means to pursue foreign policy goals. Gas and oil assets are strategic goods and energy policy decisions do not take place in a geopolitical vacuum. Russia uses its energy wealth to strengthen its regional position, extract political favours from transit countries and exert influence in its 'near abroad'. It also uses it to develop its global influence and prevent others from challenging its strategic interests. But its energy firms also operate in a commercial environment where profit-maximisation plays a leading role. Distinguishing between purely economic motivations, and those that are pursued for political purposes, is difficult. Instead, Russia's external energy policy is a product of both.

Russia's energy wealth is based on its abundant energy resources and its vast system of pipeline networks. This has created a system where third countries have become dependent on Russia for their energy supplies. This energy dependence creates broader economic and political dependencies, and translates into a source of power for Moscow. Member-States in the European Union are, to varying degrees, reliant on Russian natural gas imports. Fifteen EU member-states are dependent on Russia for more than half of their gas supplies. While Russia is a major oil exporting country too, oil is a fungible commodity and traded on the international market. Oil is a key source of Russia's national income, but in a European context it is less attractive as a tool of energy coercion than natural gas: purchasers of natural

¹ See for instance Rem Korteweg, "Beware of cheap oil!", Centre for European Reform, 7 October 2015, http://www.cer.eu/insights/beware-cheap-oil.

² See table 6 below.

gas cannot switch to another supplier in the same way that they might with oil. Russia supplies the European Union with approximately one-third of its externally sourced natural gas. The geopolitics of Russia's pipeline-gas exports is more readily apparent. Even so, Russia offsets the suspicion that geopolitical motives underpin its energy policy decisions through commercial or technical arguments. This creates an aura of uncertainty whenever claims of geopolitical foul play are made. Gazprom and Rosneft have always justified a price hike or price decrease, a disruption of supplies or an asset procurement on commercial or technical grounds. But when commercial or technical reasons are offered, this is no proof that geopolitical considerations played no role. Instead, Russia's plausible deniability to use its energy exports as tools of foreign policy is an element in a broader strategy to confuse and intimidate countries in its 'near abroad' and beyond in order to increase its influence. This lack of transparency about, and trust in, Russia's motives should motivate the EU to reduce its overreliance on Russian hydrocarbons.

In this report, 'Russia' is used to refer to state-owned or state-run energy firms, including Gazprom, a state-controlled company that has a monopoly over gas pipeline exports from Russia and originated as the Soviet Union's ministry of gas industry, and the state-controlled oil firm Rosneft.

The study is based on qualitative desk research and case study analysis; drawing on open-source foreign policy and energy policy analyses from European and American thinktanks and research institutions. First, a comparison will be drawn in the different ways and methods through which different energy-rich authoritarian states have pursued energy as a foreign policy tool. Energy assets are mainly used to protect certain interests, and the use of energy as an offensive tool – to punish or coerce – is relatively rare. One of those countries is Russia. The study looks at Russia in more detail, and assesses the ways and methods Moscow has used to wield foreign policy influence through its energy assets. This includes the prices charged, the disruption of energy supplies, control over foreign energy assets, and through the politics of pipeline routes. The EU's member-states have, to varying degrees, also been subjected to some of these methods. Subsequently, the study looks at the way the EU has responded to Russia's behaviour and promoted its energy security. It closes by drawing conclusions and making a number of recommendations of steps the EU could take.

3 How authoritarian states use energy as a strategic tool

3.1 Offensive and defensive use of energy

From a foreign policy perspective, states can use energy exports in an offensive and a defensive way. They can be wielded to coerce other governments to do, or prevent them from doing, something. They can be used to build strong economic ties, or to punish. The basis for the offensive or defensive use of energy exports is the dependency relationship that develops between an oil or natural gas producing state and a consuming (and possibly a transit) state. When pipelines are concerned this usually also includes a transit state as an important intermediary. That relationship can then be leveraged to shield the producing state from external political pressure, or act as a sword with which to threaten end-consumers or transit states. A defensive policy may not necessarily be a benign one for other countries. On the contrary, an effective defensive policy, or the perception of one, may also embolden the authoritarian state in question to be more assertive in its foreign policy. This increased willingness to take risk, either diplomatically or militarily, can then precipitate instability of conflict.

Perhaps the clearest, historical example of the use of energy exports as an offensive tool of foreign policy by authoritarian states was the oil embargo of October 1973 initiated by the Organization of the Petroleum Exporting Countries (OPEC). Ten days after the outbreak of the Yom Kippur war, Iran, Iraq, United Arab Emirates, Kuwait, Saudi Arabia and Qatar – all energy-rich authoritarian states – decided to raise oil prices and announced production cuts. OPEC then agreed to use energy exports as a tool against

'unfriendly states', states that supported Israel. Gradually, oil supplies were cut to countries like the United States, the United Kingdom, Canada, Japan and the Netherlands.³ As a result, the global price of oil quadrupled. Though this economic shock pushed the United States to help negotiate a ceasefire, the move ultimately backfired for OPEC. The oil embargo sparked a move towards greater energy efficiency: oil-consuming countries like Japan started to shift away from oil-intensive industries and in the United States demand for larger, less fuel-efficient cars reduced. The crisis fuelled a programme in the US to pursue energy independence and higher oil prices triggered a search for alternative non-OPEC sources of energy supply, including in the North Sea, Alaska and the Caspian basin.

Authoritarian states have also sought to use their energy resources defensively. As insecurity increased in the Middle East in the late 1970's, Saudi Arabia struck an accord with the United States, which became enshrined in the Carter Doctrine. Shortly after the Iranian revolution and the Soviet invasion of Afghanistan in 1980, US president Jimmy Carter gave a speech in which he declared that "any attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States". The Persian Gulf is dotted with energy-rich autocracies, the largest and most important being the Kingdom of Saudi Arabia. A symbiotic relationship emerged between Washington and Riyadh. The United States would guarantee security in the Persian Gulf, amongst other things so oil (and gas) could flow freely; and Saudi Arabia would ensure sufficient supply on the market to avoid economically destabilising price surges. A deep military and economic relationship developed between the two countries. In subsequent regional crises, the US could count on Saudi Arabia to open the spigot to dampen the oil price and Saudi Arabia could count on the US for protection.

The table below (table 1) lists a group of energy-rich authoritarian states, as based on their score on the Freedom House index. The table also presents the percentage of global oil and natural gas reserves that they control as recorded by BP's Statistical Review, and indicates whether a state has used its energy wealth as a defensive or offensive tool of foreign policy.

Energy-rich authoritarian states	2017 Freedom House ranking (0 = worst, 100 = best)	Natural Gas (percentage of global total)	Oil reserves (percentage of global total)	offensive tool of	Use of energy as a defensive tool of foreign policy
Azerbaijan	14	0.6	0.4	Yes	Yes
Iran	17	18	9.3	Yes*	Yes
Kazakhstan	22	0.5	1.8	No	n/a
Libya	13	0.8	2.8	Yes*	Yes
Qatar	26	13	1.5	Yes*	Yes
Russian Federation	20	17.3	6.4	Yes	Yes
Saudi Arabia	10	4.5	15.6	Yes*	Yes
Turkmenistan	3	9.4	n/a	No	Yes
Uzbekistan	3	0.6	n/a	No	n/a
Venezuela	30	3.1	17.6	Yes*	Yes

Table 1: Selected energy-rich authoritarian states.

Data from Freedom House (https://freedomhouse.org/report/freedom-world/freedom-world-2017), BP Statistical Review 2017 (https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review-2017/bp-statistical-review-of-world-energy-2017-full-report.pdf) and author's analysis. (* indicates participation in 1973 oil embargo)

³ Pascal Ditté & Peter Roell, "Past oil price shocks: political background and economic impact. Impact from three cases.", ISPSW Publications, 2006, https://www.files.ethz.ch/isn/20499/rev%200il Price Shocksl.pdf.

The following table (table 2) highlights the country's use of energy as a foreign policy instrument. This is not a comprehensive summary, but serves as an indication how energy-rich authoritarian states have wielded geopolitical influence through their energy assets. The table also includes historical instances, and so the 1973 OPEC oil embargo is mentioned as an instance of the offensive use of energy resources by a number of Arab countries. A brief assessment follows below.

Energy-rich authoritarian states	Use of energy as an offensive tool of foreign policy	Use of energy as a defensive tool of foreign policy	
Azerbaijan	Delay of development trans-Caspian pipeline, gas pipeline bypassing Armenia	gas pipeline to Europe	
Iran	participated in 1973 oil embargo	favourable oil contracts (mainly China)	
Kazakhstan	No	n/a	
Libya participated in 1973 oil embargo		Close ties with European energy firms	
Qatar	participated in 1973 oil embargo	largest LNG supplier globally	
Russian Federation		pipeline interdependency with major European powers, particularly Germany	
Saudi Arabia participated in 1973 oil embargo		largest oil producer in Middle East, close energy ties with major powers	
Turkmenistan	No	gas pipeline to China	
Uzbekistan No n/a		n/a	
Venezuela participated in 1973 oil embargo		oil deals with Russia and China	

Table 2: Examples of offensive & defensive use of energy as a tool of foreign policy

In defensive terms, in its effort to maintain political independence after the collapse of the Soviet Union, Azerbaijan's authoritarian leadership has sought to build energy ties with Europe. It has done so by sponsoring the construction of export pipelines that do not pass through Russia. The BTC (Baku-Tblisi-Ceyhan) oil pipeline runs from Azerbaijan, through Georgia, to the Turkish coast. It became operational in 2006. In terms of natural gas, Azerbaijan has been working together with British Petroleum (BP) and the European Commission to develop a pipeline system that brings Caspian gas to the European market without crossing Russia. The Southern Gas Corridor project will be composed of three separate pipelines: the South Caucasus Pipeline from Azerbaijan and Georgia to Turkey; the Trans-Anatolian Pipeline (TANAP) from the Turkish-Georgian border to Turkish-Greek border; and the Trans-Adriatic Pipeline, from Greece, through Albania, to Italy. The first gas deliveries to Europe are expected in 2020. Azerbaijan promoted the Southern Gas Corridor pipeline, as well as the Baku-Tbilisi-Ceyhan oil pipeline, as a means to deepen economic, but also political, relations between Baku and the European Union and sees it as an essential instrument to maintain its political sovereignty.

Iran has developed close energy relations with China, amongst others, through its oil exports. This has helped shield the country from some of the impact of the tough economic sanctions Western countries agreed in response to its nuclear programme.⁴ This move had both an economic and a political rationale. The proceeds from oil sales to China were very welcome at a time when sanctions were biting, and politically it meant that Iran gained influence over one of the main protagonists in the discussions over the Join Comprehensive Plan of Action, the nuclear deal negotiated by Iran and the US, UK, Russia, China, France, Germany and EU.

⁴ Wayne Ma, "Sanctions Gap Allows China to Import Iranian Oil," *Wall Street Journal*, 21 April 2013, https://www.wsj.com/articles/sanctions-gap-allows-china-to-import-iranian-oil-1377081851.

Libya's relationship with European energy companies goes back several decades. The Italian firm ENI, for instance, started working in Libya in 1959. This continued when Muammar Gaddafi gained power in 1969. This economic relationship has ensured that European countries were unable to effectively pressure the Libyan regime, despite its growing support for terrorism, including the Lockerbie bombing in 1988. It was not until a large-scale popular uprising in 2011 against Gaddafi's rule that NATO and some Arab countries decided to use military forces to stop him.

Qatar is the largest supplier of liquefied natural gas (LNG) in the world. This status has allowed it to develop deep economic and political relations with major LNG consumers, particularly in Asia. This protects the country from international pressure as a result of, for instance, its support for extremist movements⁵. Interestingly, it has not shielded Qatar from a confrontation with countries in the region. In June 2017, Saudi Arabia, the UAE and several other Arab states cut diplomatic ties with Qatar, citing the country's alleged support for terrorism. One reason why Qatar's defensive policy may have been ineffective in that instance, is that it confronted other energy-rich authoritarian states, instead of energy consumers. However, Qatar also supplies the UAE with gas through an undersea pipeline. This may not prevent tensions from rising. But it does reduce the prospect of a large-scale conflagration.

Russia has similarly developed deep economic and political relations with key consuming countries, particularly in Europe. This has prevented European states from supporting stringent sanctions aimed at Russia's energy sector following Russia's annexation of Crimea and its intervention in Eastern Ukraine. Russian energy supplies have become integral to the functioning of European economies, and as long as Russia is deemed a reliable supplier, end-consumers will avoid challenging Moscow too forcefully. Moscow's long-standing ambition to build pipelines to China fits within this overall picture, and is starting to bear fruit.⁶ If Russia completes its new pipeline to China (called 'Power of Siberia'), it will have opened a second major market for its natural gas, giving it greater freedom of manoeuvre in its foreign policy towards Europe.⁷ It would no longer be only dependent on Europe for its gas sales and would allow Russia to pursue a more assertive foreign policy, possibly against European interests. Phrased differently, as long as Russia is dependent on Europe as its primary export market, its ability to use its energy muscle to promote its foreign policy objectives is constrained.

As the Middle East's dominant oil producer, Saudi Arabia has a special status. It has cultivated deep commercial and political ties with the United States and China, offering it diplomatic backing in the international arena, despite human rights abuses or its recent war in Yemen.

In December 2009, Turkmenistan inaugurated its section of the Central Asia-China gas pipeline. The pipeline allows Turkmenistan to export natural gas to China, without crossing over Russian territory. It is an important route for export diversification, particularly since relations between Gazprom and Turkmenistan have deteriorated. Russia stopped importing Turkmen gas in late 2016. Though there are still questions whether a planned expansion of the pipeline to China will go ahead, and energy relations between Turkmenistan and China are fraught, Turkmenistan's link to the Chinese market is key to its economy, and thus its political stability.⁸

⁵ Tom Wilson, "Does Qatar Support Extremism? Yes. And so does Saudi Arabia", New York Times, 10 August 2017.

⁶ "Gazprom, CNPC sign agreement on basic conditions of gas supply from Far East to China", *TASS*, 21 December 2017, http://tass.com/economy/982188; Henry Foy, "Russia's \$55bn pipeline gamble on China's demand for gas", *Financial Times*, 3 April 2018, https://ig.ft.com/gazprom-pipeline-power-of-siberia/.

⁷ Pierre Noël, "The Power of Siberia natural gas project: commercial or political?", IISS, 30 January 2017, https://www.iiss.org/en/politics%20and%20strategy/blogsections/2017-6dda/january-7f20/power-of-siberia-2a1d
https://www.ft.com/content/ee5cf40a-15e5-11e6-9d98-00386a18e39d.

Since this study focuses on energy-rich authoritarian states, energy-poor China does not figure prominently. But, given its vast appetite for energy and its deep pockets, China's energy import policy has become an instrument of its foreign policy. By signing oil and gas purchasing agreements, close to home (e.g. with Turkmenistan) or farther afield (e.g in Latin America or Africa), China is able to bring these countries into the Chinese orbit. As a result, there is a risk that Europe and China will compete more for energy resources, increasing the risk of a possible confrontation. It also has meant that China has backed and financially supports oppressive regimes, such as Sudan, and continues to do so. Finally, China's growing dependence on imported energy means that in the years ahead it will invest more in its military capabilities to secure its imports. China's energy diplomacy in its immediate neighbourhood in Central Asia, including through its Belt & Road Initiative (BRI), could put it on a collision course with Russia which sees Central Asia as part of its own sphere of influence.

Venezuela has well-developed energy relations with Russia and China. Russian and Chinese energy firms have invested in parts of Venezuela's energy infrastructure. Most recently, Rosneft has increased its presence in the country. ¹⁰ For Russia, investments in Venezuela's energy sector serve both a commercial and a geopolitical purpose – besides new business opportunities, Russia is able to expand its influence in Latin America. For Venezuela the deal helps circumvent economic sanctions and offers some financial respite as it tries to cope with a severe economic downturn. For the Bolivarian government in Caracas, these deals are about regime survival.

Nigeria has used its vast energy wealth to develop close ties for defensive purposes with the United States, Russia and China. Last year, Nigeria was the United States' fifth-largest source of imported oil, supplying roughly 10 per cent of imported oil. US companies are also very much involved in Nigerian offshore production. Similarly, Russia wants to be more involved in Nigeria, particularly in its energy sector. Gazprom has announced its interest to become involved in the new Trans-Sahara pipeline that would bring gas from Nigeria to Europe. China is also exploring new trade opportunities with Nigeria, including infrastructure development and oil deals.¹¹

When it comes to the offensive use of the energy, the participation of energy-rich authoritarian states in the 1973 oil embargo is arguably the clearest example of the offensive use of energy supplies to pursue foreign policy objectives. In response to Western support for Israel during the Yom Kippur, OPEC decided to reduce oil supplies.

More recently however, and as mentioned above, Azerbaijan has pursued a policy to remain independent from Russia by building gas links directly to the EU. But there is also an offensive element in its energy policy. It effectively lobbied Western firms to construct oil and gas pipelines from the Caspian basin – both the Baku-Tbilisi-Ceyhan pipeline and the South Caucasus Pipeline — that circumvent Armenia, as a result of its conflict over Nagorno-Karabakh. Similarly, Georgia has benefited from the Azerbaijani-Armenian conflict as these pipelines, crucial to Europe's strategy to diversify away from its dependence on Russian oil and gas – cross Georgian territory, allowing it to accumulate transit fees.

Yet no other energy-rich authoritarian states uses its energy resources and the associated distribution network to exert influence over its immediate neighbourhood as Russia does. Amongst other things, Russia uses price discounts, pipeline routes, supply contracts and ownership structures to flex its energy muscles and at times does not pull punches. President Vladimir Putin clearly understands that Russia's

⁹ James Tan, "With the Grain or Against the Grain? Energy security and Chinese energy security and Chinese Foreign policy in the Hu Jintao era", *Brookings Institution*, https://www.brookings.edu/wp-content/uploads/2016/06/tang2006.pdf.

¹⁰ Clifford Krauss, "Russia Says it will ease Debt Burden on Venezuela", *New York Times*, 8 November 2017, https://www.nytimes.com/2017/11/08/business/energy-environment/russia-venezuela-debt.html.

¹¹ Titus Utibe Monday, Muhammed Salihu, "Crude Oil and the Politics of Nigerian Foreign Policy: Issues and Explanations", Research on Humanities and Social Sciences, Vol.7, No.7, 2017,

energy wealth is a source of international political power, and can help raise Russia's status as a great power. In the following chapter this will be explored in further detail.

3.2 Russia

Russia is an energy superpower. The country has the second-largest proved reserves of natural gas in the world and is also the second-largest producer of natural gas. According to the 2017 BP Statistical Review of World Energy, it has the sixth-largest proved reserves of crude oil, and is its third-largest producer. It hardly uses all of this energy wealth at home; Russia is the world's largest exporter of natural gas and second-largest exporter of crude oil and refined products.

Russia uses its energy wealth for three reasons: to gain economic benefits; to maintain, increase and exert its political influence in its perceived sphere of influence, the so-called near abroad; and, should the need arise, to exert political pressure on end-consumers.

Its behaviour in European gas markets is shaped by a mix of commercial and political considerations and objectives: Gazprom and Rosneft are neither purely commercial firms nor purely an extension of the Kremlin. But when political and commercial interests intersect, Russia readily uses its energy muscle to exert pressure on transit countries and remind end-consumers of their dependence on Moscow.

Though Russia will never admit when its energy policy decisions are driven by geopolitics, and Gazprom or Rosneft will always put forward a commercial justification for a policy, when considering a number of instances of supply disruption or pricing disputes, a geopolitical pattern emerges. Simply put, the country has shown a willingness to abuse its dominant market position in support of foreign policy goals, primarily in its immediate neighbourhood but also further afield. Three brief examples follow below.

The controversial Nord Stream 2 pipeline, for instance, is promoted by Gazprom and Western energy firms as a purely commercial project to replace the declines in domestic European gas production. Yet governments in Central and Eastern Europe, and perhaps most obviously in Ukraine, see in the pipeline an attempt to increase Russia's political sway over them.

When Russian oil supplies to the Czech Republic fell on 9 July 2008, Moscow insisted that it was due to technical reasons. But many, including in Prague, were convinced it was connected to the recent Czech decision to host America's new anti-missile radar system, which Russia sees as a threat.¹²

Russia's role as a major energy supplier to, or owner of energy assets in, third countries helps shield it from external political pressure. It is no coincidence that, so far, EU member-states have avoided putting economic sanctions on Russia's conventional gas and oil sectors in response to its annexation of Crimea or intervention in eastern Ukraine. In fact, despite difficult political relations as a result of its actions in Ukraine, Russian gas supplies continue, including from new sources. For instance, in December 2017, the United Kingdom purchased a shipment of LNG from Russia's brand new Yamal LNG plant; a project that was affected by Western, though predominantly US, sanctions.¹³

This last example suggests that there are limits to how far European countries are willing to go to address their foreign policy disagreements with Russia. The energy relationship is simply too important. Though Russia has also shown a willingness to remind EU members of this dependency.¹⁴

¹² Andrew Kramer, "Russia: Czech oil supply will be restored", *New York Times*, 22 July 2008, http://query.nytimes.com/gst/fullpage.html?res=9F04E2DC1F39F931A15754C0A96E9C8B63.

¹³ Jilliam Ambrose, "Russia to send first Arctic gas cargo to Britain in the wake of supply crisis," *Daily Telegraph*, 13 December 2017, http://www.telegraph.co.uk/business/2017/12/13/russia-send-first-arctic-gas-cargo-britain-wake-supply-crisis/.

¹⁴ See for instance "Message from the President of Russia to the leaders of several European countries", 10 April 2014, http://en.kremlin.ru/events/president/news/20751.

The roots for Russia's use of energy as a foreign policy trace back to the Soviet period. As part of an effort to build a unified economy and promote unity across the USSR, the Kremlin developed an integrated gas and oil transportation network with the Russian Soviet republic at its middle. Pipelines were built from gas and oil fields in Soviet states like Turkmenistan and Kazakhstan to Russia, from where gas and oil was re-distributed or sold to Europe, the Soviet Union's main energy export market. In return, these Soviet states were provided with subsidised gas. After the collapse of the Soviet Union, Gazprom lost access to the gas and oil fields and the transportation networks in energy-rich former Soviet states. But with alternative supplies absent, former Soviet states that had now grown accustomed to low energy prices became vulnerable to Russian price increases or supply disruptions. Belarus, for instance, is fully dependent on Russia for its natural gas with nearly 70 per cent of Belarus' total energy mix.

A key ingredient in Russia's ability to use its resource abundance as an instrument of foreign policy has been President Vladimir Putin's successful strategy of consolidating Russian energy muscle in the hands of the state. In the early 2000s, shortly after he had come to power, Putin set out to reverse the privatisation of Russian energy assets and turn Gazprom and Rosneft into national champions. For instance, between 2004 and 2007 Yukos, a private Russian energy firm that at one point produced 20 per cent of Russia's oil output, was forcibly carved up and its assets purchased at bargain prices by Rosneft. In 2006 Shell was pushed to sell its majority stake in the Sakhalin-II gas project to Gazprom. The concentration of Russian energy resources in a handful of state-owned enterprises has been a crucial factor in enabling Russian energy export policy to become an extension of Russian foreign policy. Without this renationalisation, Russia's ability to flex its energy muscles would be substantially less.

But these policies are not unique to the presidency of Vladimir Putin. In 1993, for instance, Russia cut gas supplies to Ukraine, ostensibly in order to put pressure on Kiev to return Soviet nuclear missiles to Russia, though Russia claimed it was because of Ukraine's failure to pay for its gas. 17 This occurred regularly in the years immediately following the collapse of the Soviet Union. Nevertheless, the focus of this report lies on more recent examples.

Russia uses the following ways and methods to use energy as a tool of coercion:

- Pricing policy of energy supplies
- Asset control
- Supply cuts
- Contractual restrictions
- Alternative supply routes

The following paragraphs focus on the ways and methods used by Moscow. The table below gives examples where it is probable that Russia used its energy leverage for political purposes. In those instances, the table offers both the economic rationale offered by Russia and the purported geopolitical rationale. Where possible the specific date is mentioned.

¹⁵ Marshall I Goldman, *Petrostate: Putin, Power and the New Russia*, Oxford University Press, 2010, p. 105-123.

¹⁶ Andrew Kramer, "Shell bows to Kremlin pressure on Sakhalin project", *International Herald Tribune*, 11 December 2016, http://www.nytimes.com/2006/12/11/business/worldbusiness/11iht-shell.3864505.html.

¹⁷ Quoted in Robert L. Larsson, *Russia's Energy Policy: Security Dimensions and Russia's Reliability as an Energy Supplier*, FOI - Swedish Defense and Research Agency, Stockholm, March 2006, p. 202.

Date	Country affected	Event	Geopolitical rationale	Economic rationale
1993	Ukraine	25 per cent cut in gas supply	Pressure to send nuclear weapons back to Russia	Non-payments by Kiev
January 2003	Latvia	Cut-off of oil supply to Ventspils export terminal	Effort to gain control of Ventspils Nafta/ Assert control over oil export routes	Tariffs at export terminal considered too high
February 2004	Belarus	100 per cent cut in gas supply for 30 hours	Pressure to get ownership of Beltransgaz	Failure to pay for past gas deliveries
Late 2005	Belarus	Significant gas discount to USD 46.68 per tcm	Carrot to get access to Beltransgaz	undisclosed
January 2006	Ukraine	Gas supply disruption	Punishment of pro- Western Viktor Yuschenko for seeking closer ties to EU & NATO	Outstanding debt and pricing dispute, after gas contract expiration
July 29, 2006	Lithuania	Russia's Transneft stops oil supplies through pipeline feeding Mazeikiu refinery.	Punishment after Mazeikiu Nafta refinery is sold to Polish PKN Orlen	Technical problem
2006	Moldova	Gas price increase	Political signalling in wake of Ukraine crisis	Failure to pay debts
2006	Armenia	Gas price increase	Purchase of Armenia-Iran gas pipeline & foreclose alternative suppliers	Adaptation to market-based pricing
March 2008	Ukraine	Gas supply cut by 25-50%	Return of Yulia Tymoshenko as prime minister in December 2007	Outstanding debt
July 2008	Czech Republic	Oil supply drop	Punishment for signing agreement on US anti- missile radar system	Technical problem
December 2008-January 2009	Ukraine	Gas supply cut	Punishment for President Yuschenko's support for Georgia in 2008 war.	Breakdown of talks over past payments and future pricing
2011	Belarus	Purchase of Beltransgaz	Control over key transit pipelines	Collateral for gas debt
July 2013	Kyrgyzstan	Purchase of Kyrgyzgaz	Consolidate Russia's geopolitical influence in Kyrgyzstan	Cancellation of Kyrgyzgaz' debt
August- December 2013	Armenia	Gas price increase, followed by gas discount	Convince Armenia to join Eurasian Economic Union	undisclosed

September/ October 2014	Poland, Slovakia and Germany	Gas supply drop on Yamal-Europe pipeline & Brotherhood pipeline	Increase pressure in run- up to new EU sanctions	Effort to stop re- export of Russian gas to Ukraine through Poland & Slovakia
November 2015	Ukraine	Gas supply cut	conflict in Ukraine	Failure to pay in advance for next shipment of gas. Reversal of previous discounts
February 2016	Venezuela	Rosneft increases stake in Petromonagas to 40%	Extend Russian influence in South America, and support for anti-US regime.	Access to new oil assets
Late 2016- early 2017	Belarus	Gas price increase	Pressure for Belarus' opening up to EU	undisclosed
2017	Venezuela	Rosneft loans to PDVSA	Increase Russia's foothold in South America	Access to new oil assets
Early 2017	Turkmenis- tan	Block Turkmen exports to Russia	Isolate potential competitor	Disagreement over pricing
2020 (date of expected completion)	Ukraine	Nord Stream 2 & Turkish Stream pipeline	Punishing neighbour that has fallen out of favour & increase pressure on central and eastern Europe	Avoid transit risk

Table 3: Select examples of Russia's use of energy coercion. (Author's compilation based on literature review, see bibliography.)

3.2.1 Pricing policy

After the fall of the Soviet Union, Russia continued to supply former Soviet states with cheap energy. Russia offers beneficial terms on gas and oil deliveries, which allows it to develop a dependency relationship with third countries and increase its market share. Once it has established a dependency relationship, it is able to extract economic or political benefits. A preferred way of doing so is through adjusting pricing of gas contracts. When a country falls out of political favour, gas price discounts are reversed, and vice versa. Moscow reserves the lowest gas rates to the most loyal governments.

This has been most clear with countries in Russia's 'near abroad', such as Ukraine, Belarus, Moldova, Armenia, but also the Baltic states. Moscow claims that these former Soviet states lie within a Russian sphere of influence, and it uses energy supplies to make this influence felt. Russia charges different prices for different countries. Often these differences cannot be explained by simple economic conditions such as distance and volumes alone.

Ukraine

Between 1994 and 2004, Ukraine's president Leonid Kuchma had very close ties with Moscow. It allowed him to attract gas discounts from Gazprom. Throughout his presidency, Russia kept gas prices frozen at

the low level of USD 50 per 1,000 cubic metres. By comparison, in 2001, Russia sold gas to Germany at around USD79 and USD99 per thousand cubic metres, plus USD 27 transportation costs. Moscow demanded not just loyalty, but also some political favours. For instance, Ukraine and Russia agreed a "debt-for-fleet" deal, in which Kiev granted Russia access to the Sevastopol naval base in Crimea in return for the cancellation of USD700 million for past gas deliveries.

In January 2005, following a bitterly contested election, Moscow's preferred candidate, Viktor Yanukovych, lost to the pro-Western Viktor Yuschenko. Subsequently, Kiev and Moscow clashed over several issues, including Russia's naval base in Crimea and Yuschenko's ambition to put Ukraine on a footing to join the EU and NATO. President Putin made clear that Yuschenko could "seek a closer alliance and turn his back on Russia, but he should understand that if he did so, Russia was under no obligation to continue to subsidise its energy exports to Ukraine." ¹⁹

In 2005, the Russian parliament had adopted a resolution that CIS countries, including Ukraine, should pay "European", or market, prices. Gazprom announced a three-fold price increase for Ukraine; at first USD160 per tcm, and later USD230 per tcm. When Ukraine failed to agree to these higher prices, Gazprom cut gas supplies to Ukraine on January 1 2006, at the height of winter. On January 4, after the third day of cuts, a deal was reached and gas supplies started again. If Ukraine had closer political relations with Russia, a lower price could have been agreed, and possibly the cuts could have been prevented. Nevertheless, the cuts did not dissuade Yuschenko from the pro-European path he had embarked on.

In late 2008, another dispute emerged, this time around Ukraine's gas network operator Naftogaz' USD2.4 billion debt to Gazprom. Ukraine's weak and corruption-ridden economy was unable to meet its debt obligations. Tensions between Ukraine and Russia had been brewing as Yuschenko had supported Georgia during its brief war with Russia. Winter seemed the right time to punish the disobedient leadership in Kiev. In December 2008 Gazprom demanded payment. On January 1, 2009 the crisis came to a head; Gazprom reduced gas supplies to Ukraine. In turn, Ukraine took gas from the transit pipeline, causing a drop in gas to several central and eastern European countries. On 7 January 2009 Russia stopped all gas transit through Ukraine to Europe.

But the reverse also happened. In February 2010, Viktor Yanukovych returned as president of Ukraine. In December 2013, Yanukovych rejected an EU trade deal and agreed to join Russia's Eurasian Economic Union instead. In return, he secured a USD 15 billion loan from Russia and Gazprom agreed to lower gas prices for Ukraine, from USD400 per tcm to USD268.50 per tcm.²¹

However, since the Maidan revolution, the annexation of Crimea and the war in Eastern Ukraine, Moscow and Kiev have had continuous disputes over gas supplies. On 28 February 2014 unmarked forces occupied strategic facilities in Crimea. On 7 April 2014, pro-Russian activists declared the People's Republic of Donetsk, sparking the conflict in the Donbass. Amidst the escalating tensions in Eastern Ukraine, on 1 April 2014, Gazprom increased the gas price for Ukraine to USD385.50 per tcm. Two days later, on 3 April, Gazprom further increased the price to USD485 per tcm; substantially higher than average European prices at the time, which were at greater distance from Russia, often downstream the main pipeline system running through Ukraine.²² On 16 June 2014 Gazprom cut gas supplies to Ukraine,

¹⁸ David Tarr, "The Crucial Role for Competition in the Russian Gas Market: Implications for Russia and Europe," International Association for Energy Economics, https://www.iaee.org/en/publications/newsletterdl.aspx?id=116

¹⁹ Marshall I Goldman, Petrostate: Putin, Power and the New Russia, Oxford University Press, 2010, p. 144.

²⁰ Jonathan Stern, "The Russian-Ukrainian gas crisis of January 2006", Oxford Institute for Energy Studies, 16 January 2006, https://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/01/Jan2006-RussiaUkraineGasCrisis-JonathanStern.pdf.

²¹ "Ukraine, a cash-strapped country, needs an outside financial assistance", World Politics Journal, 24 February 2014, https://worldpoliticsjournal.com/ukraine-cash-strapped-country-needs-outside-financial-assistance/.

²² "Russia raises gas prices for Ukraine by 80 per cent", *Reuters*, 3 April 2014, http://www.reuters.com/article/ukraine-crisis-gas/update-3-russia-raises-gas-prices-for-ukraine-by-80-percent-idUSL5N0MV2WL20140403

claiming that Ukraine had an outstanding debt of USD4.5 billion. After that, Gazprom moved to a system of advance payments for Ukraine's gas supplies. Every six months, a new supply contract was negotiated. On 1 July 2015 Gazprom cut gas supplies again, citing a failure to reach an agreement on advance payments of gas. And in November 2015, it did so again.

Gazprom put its decision in commercial terms. According to the firm, the gas price hike took place because two earlier discounts no longer applied. The first concerned a 2010 discount to access the Sevastopol naval base. Moscow reasoned that Sevastopol was now part of Russia and so it need no longer pay for access to the base. The second discount was the one negotiated in December 2013 with President Yanukovych as part of the agreement to join the Eurasian Union. This discount was reversed as Yanukovych had left and been replaced by the pro-Western Petro Poroshenko. In June 2014, Poroshenko signed Ukraine's association agreement with the EU which is incompatible with membership of the Eurasian Union, providing the geopolitical context for Russian gas cuts.

Belarus

Belarus depends on heavily-subsidised Russian oil and gas. In 2015, according to the IMF, energy discounts from Russia amounted to 10 per cent of Belarussian GDP. In 2006 Belarus paid USD46 per tcm for its natural gas, a fraction of European market prices and similar to what Russians pay themselves. The main reason is that President Viktor Lukashenko has been militarily and politically aligned with Moscow, and guarantees the stability of Russia's gas transit towards Europe. The massive Yamal-Europe (33bcm per annum) and Northern Lights (51 bcm per annum) gas pipelines, and the Druzhba oil pipeline (1.3 million barrels per day) run through Belarus.

Though Lukashenko was loyal to Russia, Gazprom was always keen to get control over Belarus' strategically important energy transit infrastructure. In February 2004, gas supplies were cut to Belarus for 30 hours, affecting Poland, Lithuania and Latvia. Moscow claimed it was in response to Minsk's failure to pay for past gas deliveries. Minsk saw it as a bullying tactic to get control of Beltransgaz, Belarus' gaspipeline operator. In late 2005, Moscow tried a different approach and agreed a significant gas discount. Belarus would pay USD46.68 per tcm, the lowest amount paid by any European importer of Russian gas. Arguably, after the stick had failed, Moscow offered a carrot to get access to Beltransgaz. In 2006, the stick returned. Moscow signalled its intent to charge market rates for gas. Besides, according to Gazprom, Belarus had accumulated a USD400 million debt. The company also accused Minsk of siphoning oil from the Druzhba pipeline. In December 2006, Belarus and Russia reached a supply and transit agreement. Gradually, over a five year period, Minsk would start paying an amount closer to the full European gas price. Importantly, Minsk also sold 50 per cent of Beltransgaz to Gazprom. In 2011, this supply and transit agreement was renegotiated amidst a severe currency crisis in Belarus. Minsk sold the remaining stock in Beltransgaz to Gazprom, giving Gazprom full control over Belarus' gas network and transit infrastructure and weakening Belarus' sovereignty.

In 2016, Gazprom announced a gas price hike to USD132 per tcm. Belarus complained. Minsk had joined the Eurasian Economic Union (EEU) in 2014 and it insisted that this meant Belarus would have access to Russian gas and oil at domestic Russian prices. It felt it should pay just USD73 per tcm. To object to the price increase, Minsk unilaterally decided to reduce payments to Gazprom. Russia subsequently said Belarus accumulated a USD726 million debt. In the next round of tit-for-tat steps, the Russian government announced a reduction of oil supplies to Ukraine from 24 to 18 million tonnes per annum. Minsk responded by raising tariffs on the transit of Russian oil. Minsk also considered purchasing Iranian and Azerbaijani oil to make up for the shortfall in Russian supplies. But Russian oil and gas, even at higher prices, are the most price-competitive, and in April 2017, Putin and Lukashenko agreed a deal. Belarus would pay USD130 per tcm for its gas and pay USD700 million in outstanding debt. In return, Russia

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²³ Larsson 2006, p. 223.

would supply 24 million tonnes of oil, as agreed. Lukashenko may have also abandoned plans to pursue alternative imports with Iran or Azerbaijan, further consolidating Minsk's energy dependence on Moscow precisely at a time when Minsk has been trying to rebuild political and economic ties with the West.

The geopolitical context for this latest energy dispute is shaped by Belarus' gradual opening up to the West. The 2014 Crimea crisis accelerated this shift. The Kremlin's doctrine to support Russian-speaking minorities in neighbouring countries made Minsk nervous, sparking concern that the close cultural and linguistic affinity between the two countries could become a pretext for greater Russian involvement in domestic Belarusian affairs. Lukashenko has not recognized Russia's annexation of Crimea, and he did not recognised South Ossetia and Abkhazia as independent republics either. Instead he has presented himself as a neutral mediator between Russia and the West, which resulted in the Minsk accords.

Belarus has been pursuing a foreign policy of balancing relations with the EU and Russia. EU sanctions were lifted in 2016 following peaceful elections and EU member states have been increasing their diplomatic presence in the country. EU citizens can travel to Belarus without a visa if they stay for less than five days. Conversely, tensions between Moscow and Minsk have increased. Lukashenko declined Putin's request to set up a new Russian airbase in Belarus near Borusyk; the Kremlin has reinstated border controls, and Lukashenko refused to show up at an EEU summit in 2017.

Russia aims to keep Belarus in its geopolitical orbit. The energy disputes can be seen as an attempt by Moscow to remind Minsk where its loyalty lies. Similarly, in September 2017 Russia's large Zapad-2017 military exercise took place in Belarus. Officials in Minsk seem to realise that the country is too dependent on Russia for its energy, but sees little alternative. For instance, in its attempt to become more independent from Russian gas supplies, Belarus is constructing a nuclear power plant. However, this plant is Russian-built and will be sourced with Russian nuclear feedstock.

Beyond Ukraine and Belarus, in 2006, Gazprom doubled the price of gas supplies for Armenia and Moldova, albeit for different reasons. In Moldova, Gazprom said Chisinau had failed to meet its payments and so it increased prices. However, it is more probable that this was an attempt to pressure Chisinau over the breakaway republic of Transnistria, which enjoys Russian support and only Russia has recognised, and remind Moldova of its dependence on Russia in the wake of the upheavals taking place in neighbouring Ukraine.²⁴ In the case of Armenia, in 2006 Yerevan agreed to sell a 30-kilometre stretch of pipeline to Gazprom. This would allow Gazprom to market Iranian gas, should conditions permit. More importantly, it would firmly lock Armenia into Russian gas supplies, as Russia now controlled the only alternative routes for gas. Formally, Armenia would pay double the price it did previously, at USD110 per tcm, this was less than half of the European average.²⁵ Though Armenia now gets some of its gas from Iran, Armenia remains heavily dependent on Russia for its natural gas needs: in 2016 it imported 2 bcm from Russia, and 0.5 bcm from Iran.

Russia also repeatedly hoped to use energy pricing to persuade countries to join its Eurasian Economic Union. In 2013, while Yerevan was contemplating joining the Russia-led Eurasian Economic Union (EEU), Gazprom raised gas prices from USD 180 per tcm to USD270 per tcm. Once it had signed the agreement, Gazprom reduced gas prices to USD190 per tcm.²⁶ Gas supplies were used as both a carrot and a stick to bring Armenia into the EEU.

Transit states are expected to behave like clients of Moscow. Those that remained friendly received gas at discounted prices. Others saw their gas prices rise. The Armenian, Belarussian, Moldovan, and Ukrainian

²⁴ Larsson 2006, p. 227.

²⁵ Andrew Kramer, "Resolving a Supply Dispute, Armenia to buy Russian Gas", *New York Times*, 7 April 2006, http://www.nytimes.com/2006/04/07/business/worldbusiness/resolving-a-supply-dispute-armenia-to-buy-russian.html. ²⁶ 'Gazprom cuts wholesale gas price', *Economist Intelligence Unit*, 7 May 2015, http://country.eiu.com/article.aspx?articleid=503145834&Country=Armenia&topic=Economy&subtopic=Fo_7.

cases make clear that bilateral, political negotiations produce gas prices, not transparent market mechanisms. Discounts are part of political negotiations and usually coincide with Russia's strategic priorities. Transnistria, South Ossetia and Abkhazia receive gas very cheaply. So far, Transnistria has not paid for any of its gas deliveries, leaving an unpaid debt. The only question is when Russia will send the bill? Discounts can be given but also taken away at will. But the accumulation of large debts, as a result of discounts, became a source of leverage and petro-carrots turned into petro-sticks.

3.2.2 Supply disruptions

When pricing disputes with Gazprom escalate, they can lead to supply disruptions or even cuts. Supply cuts are the most extreme form of exerting pressure. Though often cloaked in commercial terms, the geopolitical impact of a supply cut is unmistakable and can have long-lasting effects on Russia's image abroad. They often occur at moments when Russia believes its strategic interests are at stake and can be both defensive and offensive in nature. Gas supply cuts have affected Belarus and Ukraine repeatedly, and have been elaborated above. It has become part of Russia's toolbox to influence the behaviour of states in its 'near abroad'. But supply disruptions have also affected EU member-states.

In 2006, Russia stopped sending oil supplies to Lithuania's Mazeikiu refinery.²⁷ Though Moscow cited technical problems, the real reason was most likely the sale of the refinery to a Polish, rather than a Russian, firm. In 2008, oil supplies to the Czech republic fell, arguably in response to Prague's decision to host a US anti-missile radar system. Again, technical problems were cited. In 2014, as the EU contemplated tougher sanctions against Russia, gas supply through the Yamal-Europe pipeline fell by roughly one third. Poland and Germany were affected. Though the reason for the drop in supply has not been made public, it served as a reminder to European consumers that Russia could shut down supplies if it wanted to.²⁸ The problem for Russia is that such disruptions harm its image of being a reliable supplier.

A particular case is the cut in exports between Turkmenistan and Russia. The Central Asia-Center pipeline (CAC) is a Gazprom controlled set of natural gas pipelines that run from Turkmenistan to Russia, crossing Uzbekistan and Kazakhstan. The pipeline was built during the 1960s and 1980s, when the Soviet Union wanted to ship Turkmen gas to Russia and onwards to Europe. The CAC tied Turkmenistan to the Russian market. This dependency on Russia's gas infrastructure gave Moscow substantial leverage over Ashgabat. Turkmenistan holds the fourth largest natural gas reserves in the world, or roughly 10 percent of the global total. In 2003, Russia and Turkmenistan signed a long-term agreement for Russia to import 40 billion cubic metres of natural gas per year. This gas is mostly re-exported to Europe. Russia sought to ensure that no meaningful supply of non-Russian gas over which it has no control could enter the European market. Simultaneously Russia used ownership of the dominant Central Asian gas distribution network to maintain influence over its former Soviet states in Central Asia.

In 2007, Russia imported 42.6 bcm of Turkmen gas through the CAC. In 2009, this had dropped to 11 bcm. In April 2017, Gazprom announced that it would stop importing Turkmen gas entirely, as a result of a pricing dispute. Given the low oil price environment, Russia claimed that it should pay less for the gas it purchased, but Ashgabat refused.²⁹ Turkmenistan had long been frustrated that Gazprom buys most of

²⁷ Agnia Grigas, *The new geopolitics of natural gas*, Harvard University Press, Cambridge, 2017, p.117; Judy Dempsey, "Lithuanians suspect Russia of dirty tricks", *International Herald Tribune*, 7 August 2006, https://www.nytimes.com/2006/08/07/world/europe/07iht-pipeline.2410161.html.

²⁸ Adrian Krajewski & Wiktor Szary, "German and Polish operators report lower supply from Russia", Reuters, 10 September 2014, https://www.reuters.com/article/us-ukraine-crisis-gas-poland/german-and-polish-gas-operators-report-lower-supply-from-russia-idUSKBN0H51OP20140910.

²⁹ Fuad Mukhtarli, "Turkmenistan turns to Europe as Iran, Russia shut off their gas markets", Caspian News, 23 August 2017, https://caspiannews.com/news-detail/turkmenistan-turns-to-europe-as-iran-russia-shut-off-their-gas-markets-2017-8-18-8/.

its gas and sells it to Europe for "more than twice the price Turkmenistan receives." Meanwhile, Ashgabat looked across the Caspian Sea and saw Azerbaijan sell gas at world market prices. An alternative route that would link Turkmenistan across the Caspian and through the Trans-Anatolian and Trans-Adriatic pipeline system to Europe has been on the drawing board for some time. But so far the Trans-Caspian pipeline faces major problems. Environmental and legal concerns put forward by Moscow, among others, have stalled the project. Russia has an interest to avoid the Trans-Caspian pipeline from being built, as it would bring more competition to the European gas market and weaken its political grip influence over Turkmenistan. Instead, Turkmenistan has decided to look East, and developed its energy ties with China. In 2009, 2010, and 2015 three pipelines were opened that run from Turkmenistan to China. Though, Turkmenistan has now replaced dependence on one monopsony (Russia) with another (China).

3.2.3 Asset control

The energy distribution network is the backbone though which Russia can project political influence. Through its ownership of critical supply pipelines, Gazprom is able to influence decision-making in key countries. Often these purchases take the shape of a "debt-for-assets" deal, whereby Russia swaps pipeline infrastructure to cancel debts. Both China and Russia are actively involved with such transactions. In this regard, the European Commission is right to put forward legislation concerning the screening of international investments. Below is a non-exhaustive list of examples of Gazprom assets in Europe.

Name	Share of Gazprom ownership
Nord Stream 1 pipeline, Germany	51 per cent
Blue Stream pipeline, Turkey	50 per cent
Vemex, Czech Republic	50,1 per cent
Beltransgaz, Belarus	100 per cent
EuRoPol Gaz, Poland (Connects to Yamal-Europe pipeline)	48 per cent
Overgas, Bulgaria	50 per cent
Panrusgas, Hungary	50 per cent
Latvijas Gaze, Latvia	34 per cent
EuRoPol Gaz, Poland	48 per cent
Vemex, Slovakia	50,1 per cent
MoldovaGaz, Moldova	50 per cent plus 1 share
Gasum, Finland	25 per cent (shares purchased by Finnish State in 2015)
Wintershall – Gazprom asset swap	50 per cent of WIEE & 100 per cent of Wingas

Table 4: Gazprom ownership of selected European gas transit infrastructure

Source: Franziska Holz, et al, "European Natural Gas Infrastructure: The role of Gazprom in European natural gas supplies", DIW Berlin, 2014.

For Russia, ownership means controlling the pipeline transport infrastructure, the operator as well as the gas that flows through the pipeline. This way Russia can sustain its monopolistic market position and maximise the political influence that a pipeline can offer. Russia's rationale is that this is the only way it

³⁰ John C.K. Daly, "Turkey emerges as mediator in Turkemenistan- Azerbaijan Dispute", *The Jamestown Foundation*, 23 January 2008, https://jamestown.org/program/turkey-emerges-as-mediator-in-turkmenistan-azerbaijan-dispute/.

can secure reliable supply. At times Russia has felt that Ukraine and Belarus have blackmailed Moscow over its energy exports to Europe. Control over the energy infrastructure has therefore become a strategic objective. Russia's pursuit of Beltransgaz gas has been mentioned above. Inside the EU, Gazprom has controlling shares in a number of gas operators and pipelines as outlined in table 4.

Just as it has used its pricing policy as a bargaining tool, Russia has also adjusted the volumes of gas or oil it supplies when it bargains for certain strategic assets. In its effort to gain control over its oil export routes, in January 2003 Russia stopped shipping oil to the Ventspils Nafta port in Latvia. By choking off supplies, Russia hoped to coerce the Latvian government to sell the oil port. In 2006, Swiss-Dutch oil trader Vitol acquired a stake of 34.5 per cent in the port. It has since enlarged its stake to 49.98 per cent.

In July 2013, Gazprom purchased Kyrgyzgaz, Kyrgyzstan's national gas operator, for the symbolic amount of one US dollar. The company's debts were cancelled as part of the deal.³² The purchase followed a vote by Kyrgyzstan's parliament in June 2013 against extending a US lease for a base in Manas that the United States military used for operations in Afghanistan. Given Kyrgyzstan's small market and the financial woes that Kyrgyzgaz was burdened by, this step does not appear to be informed by the pursuit of economic profit. Instead, it appears motivated by geopolitics. Central Asia is the location of increasing political competition between Russia, China and – to a somewhat lesser degree – the United States. The deal enables Russia to increase it political leverage over Kyrgyzstan and strengthen its position in its traditional backyard.

Another place where Russia has sought to extend its political influence through the purchase of energy assets is Venezuela. Gazprom, Rosneft and the Venezuelan state oil company PDVSA have deep ties that go back to 2005. Venezuela invited Russian firms to operate in the Orinoco river basin, one of the world's largest tar sand deposits. Gazprom has also been involved in a Venezuela-backed project to build a gas pipeline across the South American continent.³³

Since the collapse of the oil price in 2014, Russia has sought to further cement its influence in Venezuela by offering loans to the government in Caracas and purchasing stakes in Venezuelan energy projects. Rosneft has a stake in various oil assets in Venezuela, including extra heavy crude oil fields in the Orinoco basin.³⁴ In 2016, Rosneft took a 49.9 percent stake in Citgo, PDVSA's refining subsidiary in the United States. The Russian energy firm has also made a USD1 billion advance payment to Caracas for Venezuelan crude oil.³⁵ Rosneft now resells 225,000 barrels of Venezuelan crude oil, and is exploring opportunities to increase ownership of other Venezuelan oil resources as well as refinery assets, such as the refinery on Curaçao.³⁶

³¹ Sabrina Tavernise, "Latvia's Oil Routes Dry Up as Russia Alters Flow", *New York Times*, 21 January 2003, http://www.nytimes.com/2003/01/21/business/international-business-latvia-s-oil-routes-dry-up-as-russia-alters-flow.html; "LatRosTrans in jeopardy, Lembergs warns", *The Baltic Times*, 17 April 2003, https://www.baltictimes.com/news/articles/7954/; Valentinas Mite, "Russia: Moscow halts oil exports to Latvia's Ventspils, seeks ownership", *RFERL*, 10 January 2003, https://www.rferl.org/a/1101862.html.

³² Asel Kalyebekova, "Kyrgyzstan: Is Gazprom deal a blessing or curse for Bishkek?", *Eurasianet.org*, 31 July 2013, http://www.eurasianet.org/node/67327.

³³ Gazprom, "Gazprom delegation visits Venezuela", 12 October 2007, http://www.gazprom.com/press/news/2007/october/article63973/.

³⁴ Rosneft, "Rosneft increases stake in Petromonagas JV with PDVSA", 20 February 2016, https://www.rosneft.com/press/releases/item/180807/.

³⁵ Marianna Parraga, "Special Report: Vladimir's Venezuela – Leveraging loans to Caracas, Moscow snaps up oil assets", 11 August 2017, https://www.reuters.com/article/us-venezuela-russia-oil-specialreport/special-report-vladimirs-venezuela-leveraging-loans-to-caracas-moscow-snaps-up-oil-assets-idUSKBN1AR14U.

³⁶ Clifford Krauss, "Russia uses its oil giant, Rosneft, as a foreign policy tool", New York Times, 29 October 2017, https://www.nytimes.com/2017/10/29/business/energy-environment/russia-venezula-oil-rosneft.html.

The deal allows Venezuela to circumvent increasingly tough Western economic sanctions. Economically this deal is a risk for Russia. Rosneft has been searching for new market opportunities and Venezuela has large oil reserves, but its extra heavy crude is expensive and environmentally damaging to extract. With oil prices suppressed, it remains to be seen whether there is a market for large supplies of Venezuelan oil. But politically, the benefits are obvious. It buys Moscow political access in Washington's traditional backyard and is a way for Russia to influence decision-making in OPEC.

Along similar lines, in 2017 Rosneft made investments in the Iraqi Kurdistan'soil sector worth USD3.5 billion. This move supports Moscow's foreign policy agenda and increases Russian influence in the Middle East as well as its ability to have a say over the future of the Levant. It comes on the heels of Russia's military involvement in the Syrian war, where it offered crucial support to president Bashar al-Assad. Russia also has close ties with Iran, which have been nurtured among others through Russia's support for Iran's position during the Iran nuclear talks. Besides, Moscow has productive, though somewhat tense, ties with Turkey. By making investments in Kurdish pipelines, Russia ensures it has political influence over all the relevant regional players.³⁷

3.2.4 Contractual restrictions

According to Gazprom's corporate information, it "exports gas to Central and Western Europe mostly under long-term contracts of up to 25 years, usually based on intergovernmental agreements." Furthermore, most of these contracts have been linked to the oil price.

Gazprom's long-term contracts have often contained take-or-pay clauses, which means that they stipulate a fixed volume of natural gas that must be procured. If less gas is purchased, the purchasing company must pay a fee. This guarantees a stable flow of income for Gazprom, allowing it to obtain credit on international financial markets and creates some predictability for Russia's state finances, but it ties the purchasing country firmly to Russian energy supplies.

A further feature of Russia's long-term gas contracts is the use of destination clauses and specification of delivery points. These clauses refer to contractual obligations that prohibit the purchaser of the gas from re-selling the gas to a third party or to import the gas through a different pipeline route. They enable Russia to keep the European market fragmented, making its pricing strategy more effective; Gazprom can offer different prices to different buyers, irrespective of prevailing market dynamics or economic considerations such as the distance of pipeline supplies. Such a pricing system invites political bargaining. Long-term contracts are still prevalent across many parts of Europe, though many European countries have been able to renegotiate existing contracts to obtain lower prices and remove destination clauses.

The following table stipulates the long-term contracts that Gazprom has signed with Central and Eastern EU member-states. It also highlights, to the extent possible, the volumes of gas involved in the contract. It becomes clear that not all contracts are "twenty-five years" as Gazprom claims, instead in Estonia and Slovenia supply contracts are much shorter. Lithuania has no supply contract with Gazprom at all as a result of a newly built LNG terminal. Instead, it buys Russian gas on short-term contracts.

³⁷ Dmitry Zhdannikov & Vladimir Soldatkin, "Russia's Rosneft to take control of Iraqi Kurdish pipeline amid crisis," *Reuters*, 20 October 2017, https://www.reuters.com/article/us-mideast-crisis-iraq-kurds-rosneft/russias-rosneft-to-take-control-of-iraqi-kurdish-pipeline-amid-crisis-idUSKBN1CP16L.

³⁸ Gazprom marketing in Europe information, taken from <u>www.gazprom.com/about/marketing/europe/</u>.

Country (name of contracting	Year contract expires (year	Volume (bcm/
party)	signed)	annum)
Austria (Econgas, Centrex,	2027 (2006)	4.4
Gazprom Austria) ³⁹		
Bulgaria (Bulgargaz) ⁴⁰	2022 (2012)	2.9
Croatia (PPD) ⁴¹	2027 (2017)	1
Czech Republic (RWE	2035 (2006)	9 (includes transit gas)
transgas) ⁴²		
Estonia (Eesti Gaas) ⁴³	2019 (2016)	0.4
Germany (WINGAS, WIEH)	2031 (2015)	29.2
Germany (Uniper, formerly	2035 (2006)	20
E.ON) ⁴⁴		
Greece (DEPA) ⁴⁵	2026 (2014)	3
Hungary (Panrusgaz) ⁴⁶	2021 (negotiations ongoing)	5.4
Italy (ENI) ⁴⁷	2035 (2006)	22
Latvia (Latvijas Gaze) ⁴⁸	2030 (2009)	1
Lithuania (Lietuvos Energija)	No long-term contract	n/a
Poland (PGNiG) ⁴⁹	2022 (1996)	10.2
Romania (Conef Energy) ⁵⁰	2030 (2007)	2
Slovakia (SPP) ⁵¹ , ⁵²	2028 (2008)	6.5
Slovenia (Geoplin)53	2018 (talks ongoing for	0.52
	contract to 2022)	

Table 5: Gazprom Long-term contracts

3.2.5 Alternative supply routes

 $\underline{https://www.reuters.com/article/latvijas-gaze-restructuring/update-1-latvia-gas-utility-owners-approve-assets-spin-off-\underline{idUSL8N1BE1H0}.$

³⁹ 'Austria', Gazprom Export statistics, http://www.gazpromexport.ru/en/partners/austria

⁴⁰ 'Bulgaria', Gazprom Export statistics, <u>www.gazpromexport.ru/en/partners/bulgaria/</u>

⁴¹ Vedran Pavlic, 'Gazprom signs ten-year gas delivery contract with Croatia', *Total Croatia News*, 18 September 2017, https://www.total-croatia-news.com/business/22102-gazprom-signs-ten-year-gas-sale-contract-with-croatia

^{42 &#}x27;Czech Republic', Gazprom Export statistics, http://www.gazpromexport.ru/en/partners/czech/

⁴³ 'Eesti Gaas, Gazprom sign three-year supply accord', *Baltic Course*,2 March 2016, http://www.baltic-course.com/eng/energy/?doc=117510

⁴⁴ Gazprom, "Gazprom and E.ON prolong the existing contracts and sign contract for gas supply via the NEGP", 29 August 2006, http://www.gazprom.com/press/news/2006/august/article63576/

⁴⁵ 'Greece', Gazprom Export statistics, <u>www.gazpromexport.ru/en/partners/greece/</u>

⁴⁶ Hungarian Ministry of Foreign Affairs and Trade, 'Hungary to conclude another long-term gas supply agreement with Gazprom beyond 2021',4 October 2017, http://www.kormany.hu/en/ministry-of-foreign-affairs-and-trade/news/hungary-to-conclude-another-long-term-gas-supply-agreement-with-gazprom-beyond-2021.

⁴⁹ 'Poland aims to end long-term gas supplies from Russia after 2022', *Reuters*, 1 June 2016, https://uk.reuters.com/article/us-eeurope-summit/poland-aims-to-end-long-term-gas-supplies-from-russia-after-2022-idUKKCN0YM2QJ.

⁵⁰ 'Gazprom, Romania's Conef Energy sign long-term gas deal', *Budapest Business Journal*, 5 April 2007, https://bbj.hu/energy/gazprom-romanias-conef-energy-sign-long-term-gas-deal 25104.

⁵¹ 'Slovakia', Gazprom Export statistics, <u>www.gazpromexport.ru/en/partners/slovakia/</u>.

⁵² Agata Loskot-Strachota, *Gazprom's expansion in the EU: co-operation or domination?*, OSW Centre for Eastern Studies, October 2009, p. 29.

^{53 &#}x27;Slovenia', Gazprom Export statistics, http://www.gazpromexport.ru/en/partners/slovenia/.

Russia's financial position improved greatly in the period before the global financial crisis, and the early 2010s, when oil prices were high. Those financial resources are now, amongst other things, available to invest in alternative pipeline routes. New pipelines, such as Nord Stream 2 and Turkish Stream, offer both commercial and geopolitical opportunities. They can open new markets but also give Russia the opportunity to divert flows; the new route may replace the old one. So, a new pipeline can be both a carrot and a stick. This topic will be explored in the next chapter.

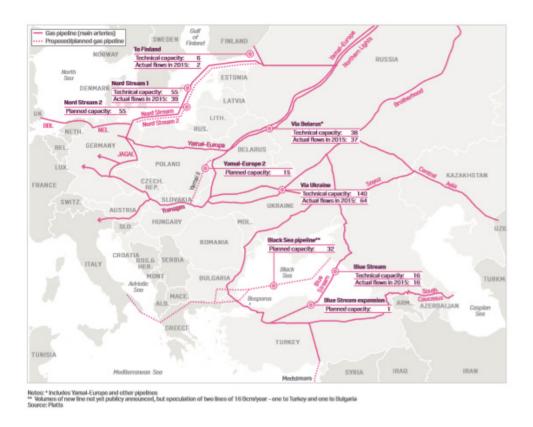


Figure 1: Main Gazprom pipelines and 2015 utilization rates (Map contains trajectory of cancelled South Stream pipeline). Source: Platts

4 Troublesome transit: Nord Stream and Turkish Stream

Russia supplies the European market through three major gas pipeline systems: one runs through Ukraine and Slovakia, the second through Belarus and Poland, and the third runs directly to Russia's largest gas consumer, Germany. Two of the three pipeline systems depend on the cooperation of transit states to function. This interdependency ensures that though Russia can flex its energy muscles from time to time, it cannot afford supply cuts or disruptions to last too long. From Russia's perspective, this dependence on transit states creates a risk for its supply contracts and restricts its freedom of manoeuvre in its foreign policy. Gaining control over the transport infrastructure was one option, but transit-free pipeline capacity would serve Russia's strategic interests better. Amongst other things, it means that Russia would become less dependent on countries in its 'near abroad' for bringing energy to end-consumers in Europe. It creates a new source of leverage: without compromising on the reliability of its supplies, it can divert gas flows away from transit countries with which it has political or economic disagreements. Once these diversionary pipelines are built, all else staying the same, Russia can use its energy leverage over 'difficult' transit states more forcefully.

The multiple gas crises with Ukraine in the late 2000s and early 2010s damaged Gazprom's reputation in Europe. They convinced the company that it should reduce its dependence on Ukraine's transit network. Russia no longer considers Ukraine a reliable transit country. Ukraine's economy has been burdened by mismanagement and corruption, and the siphoning of gas and the use of opaque middlemen has sustained a system of cronyism in Ukraine. But Kiev has also fallen out of favour in Moscow as Ukraine has shifted its political orientation towards the EU. After the Revolution of Dignity in 2014 Alexey Miller, Gazprom's CEO, voiced his intention to seek ways to divert gas flows around Ukraine. Gazprom's deputy CEO, Alexander Medvedev, later repeated in 2015 that Gazprom will stop sending gas to Europe through Ukraine after 2019, "even if the Sun and the Moon change their places." In 2018, Gazprom started formal procedures to terminate the gas transit contract. Two new pipeline projects would enable Gazprom to divert flows around Ukraine.

The first is Nord Stream 2. In 2015, Gazprom announced the construction of a 1200-kilometre long pipeline that will run from the Russian Baltic coast under the Baltic Sea directly to Germany. At 55 bcm, the pipeline will double the capacity of the existing Nord Stream 1 pipeline.

Nord Stream 2's twin, Nord Stream 1, was proposed in 2005 by a consortium composed of Gazprom (51 per cent ownership) and Germany's EON and Wintershall. France's Gaz de France and Dutch Gasunie joined later. The pipeline became operational in 2011 and has a capacity of 55 bcm, able to transport 37 per cent of Russia's exports to Europe, though it rarely has reached full capacity. ⁵⁶ The purpose of the pipeline was to bypass transit states, including inside the EU, and serve the Western European market directly. Not surprisingly, central and eastern European states, particularly Poland, were furious. Not only would the new route compete with the existing Yamal-Europe route and thus imply a loss of transit fees for several central European states, but they worried that the new pipeline would increase Russia's bargaining leverage over countries that were bypassed. One effect of Nord Stream 1 has been that gas supplies through Ukraine's pipelines have been coming down; Ukraine supplied up to 80 per cent of Europe's gas imports from Russia in 2009, in 2015 this dropped to roughly 50 per cent. ⁵⁷ But Nord Stream 1 was not able to divert gas away from Ukraine entirely as its utilization rates were not sufficient.

It is not the purpose of this study to make a judgement on the commercial and economic viability of Nord Stream 2. But there are reasons to ask questions, as the economic basis for Nord Stream 2 seems questionable. Nord Stream 1 has been able to achieve higher rates of utilization than several years ago, but this higher rates hardly warrant a doubling of its capacity, as Nord Stream 2 would. In 2015, Nord Stream 1 shipped 39 bcm, out of a technical capacity of 55 bcm. Domestic production in the EU is expected to decline and relatively more gas will be imported from abroad. But total gas demand in the EU will also probably fall as a result of efficiency measures and measures to meet climate targets: in 2005, EU gas demand for 2030 was projected at 788 bcm; in 2015 EU gas demand for 2030 was estimated at just 526bcm. Nord Stream 2's additional capacity of 55 bcm seems unlikely to be used, unless Gazprom diverts most of its exports through Ukraine to Nord Stream 2. Gazprom and its partners argue that the upkeep and maintenance of the pipeline network through Ukraine are prohibitively expensive, and that

⁵⁴ Alexander Medvedev, "Statements at Press Conference: Gas Export and Enhancing Reliability of Gas Supply to Europe", 9 June 2015, http://www.gazprom.com/f/posts/14/618809/transcript-press-conference-2015-06-09-en.pdf

⁵⁵ Tom Marcez-Manser, Aura Sabadus, "Gazprom starts official gas transit termination procedure with Ukraine", ICIS, 5 March 2018, https://www.icis.com/resources/news/2018/03/05/10199516/gazprom-starts-official-gas-transit-termination-procedure-with-ukraine/?redirect=english.

⁵⁶ Grigas, p. 109.

⁵⁷ "Platt's guide to Nord Stream 1 and 2 gasline projects", Platt's, September 2016,

 $[\]underline{https://www.platts.com/IM.Platts.Content/InsightAnalysis/IndustrySolutionPapers/SR-Europe-natgas-NordStream-0416.pdf}.$

⁵⁸ Matteo Villa, "Higher than you think: myths and realities of Nord Stream's utilization rates", ISPI, 17 April 2016,

http://www.ispionline.it/it/pubblicazione/higher-you-think-myths-and-reality-nord-streams-utilization-rates-17577.

⁵⁹ "Platt's guide to Nord Stream 1 and 2 gasline projects", Platt's, September 2016,

https://www.platts.com/IM.Platts.Content/InsightAnalysis/IndustrySolutionPapers/SR-Europe-natgas-NordStream-0416.pdf.

it makes more economic sense to construct a new pipeline straight to Russia's main purchasers of gas in Western Europe.

Nord Stream 2's construction should therefore be viewed in the context of a concomitant closing down of gas transit through Ukraine. This would make Nord Stream 2 economically viable. Essentially it would be a diversionary pipeline: it does not diversify routes -- Nord Stream 1 already exists -- or bring new sources of gas online. Instead it will allow Russia to put pressure on Ukraine, Belarus and central and eastern European countries, without jeopardising Russia's supplies to its main European gas consumer Germany. Also, at full capacity, the Nord Stream 1 and 2 pipeline systems together could carry 110 BCM, or more than 70 per cent of Russia's exports to Europe. This would turn Nord Stream into a new gas supply chokepoint for Europe, which is undesirable from an EU energy security perspective. Ukraine would lose approximately USD 2 billion per year in transit income, dealing its fragile economy a blow, and undermine the EU's policy towards the beleaguered country. Furthermore, European approval for the construction of Nord Stream 2 would reward Russia at Ukraine's expense at a time when the EU is trying to do the reverse, namely put pressure on Russia in response to its behaviour in Ukraine and support Kiev.⁶⁰

By shutting off gas flows through Ukraine, Russia may hope to critically weaken the Ukrainian economy. But Ukraine would unlikely be left in the cold as it would still have access to reverse flow supplies from central and Western Europe, possibly even through the Nord Stream 2 pipeline itself. By terminating gas transit through Ukraine, Russia would ultimately weaken its leverage over Kiev. It is a stick that can only be used once, and such a step would cement Ukraine's orientation towards the West. The main question is whether Europe's energy infrastructure is sufficiently integrated that it will be able to continue to supply Ukraine without any disruption and the loss of transit income does not cause the Ukrainian economy to crumble. Another scenario is that Russia deliberately constructs overcapacity so that it can use the option of diverting gas supplies through Nord Stream 2 instead of pipelines in Ukraine as leverage to squeeze the government in Kiev. But if Nord Stream 2 is only a hedge, than the commercial rationale for it becomes questionable.

Other countries besides Ukraine might be affected by the new pipeline as well. Russia still relies on Belarussian transit infrastructure to sell its oil and gas. The question is, however, how long this situation will last once Nord Stream 2 is completed. If Nord Stream 2 makes it possible to bypass Ukraine, the same holds true for Russia's ability to bypass Belarus. Moscow could use the pipeline as a threat to extract new concessions from Belarus – for instance with regards to a Russian airbase on Belarussian territory or Russian purchase of Belarussian refineries. For Belarus, the construction of the Nord Stream 2 pipeline should be an additional incentive to pursue structural economic reforms and wean itself from its energy dependence on Russia.

Inside the EU, Nord Stream 2's construction means Western Europe gets access to competitively priced gas without the added difficulties of having to deal with Ukrainian-Russian tensions, but central and eastern European member-states may become more vulnerable to Russian foreign policy influence as Moscow no would no longer need to rely on them to bring Russian gas to Western Europe. Besides, central and eastern EU member-states are more sensitive to what happens in Ukraine than Western European states. Thus, Nord Stream 2 is driving a wedge through the European Union between those that object to it for geopolitical reasons; and those that support it for economic arguments. The pipeline could then serve a broader Russian strategic objective, namely to foment division inside the EU and prevent the development of a common European foreign and energy policy.

⁶⁰ European Political Strategy Centre, "Nord Stream 2 – Divide et Impera again? Avoiding a Zero-sum game", European Commission, 2017, p.9.

South Stream & Turkish Stream

The second diversionary pipeline is South Stream, which changed to Turkish Stream in December 2014. In an effort to undermine Azerbaijan and the EU's Southern Gas Corridor initiative to develop a gas pipeline to Europe that circumvents Russia, Moscow proposed an alternative pipeline to source South-Eastern Europe, and would also bypass Ukraine. In 2006 Gazprom and Italy's ENI established a joint venture to build a pipeline called South Stream. It would run from Russia across the Black Sea to Bulgaria and onwards to Serbia, Hungary and Austria, with a total capacity of 63 bcm. In comparison, the Southern Gas Corridor (SGC) will transport 16 bcm of natural gas from Azerbaijani gasfields: 6 bcm is available for the Turkish market, and 10 bcm will continue to south-eastern Europe and Italy. With its current volumes, the SGC would not present a challenge to Russia's position in south-eastern gas markets, but the SGC could eventually double in capacity or more when new gas from Azerbaijan's Shah Deniz field comes online or if Turkmenistan can be connected to the pipeline system across the Caspian.

South stream was expected to cement Gazprom's influence over south-eastern European gas deliveries. Several south-eastern European member-states, such as Bulgaria and Greece, are heavily dependent on Russian supplies. In 2014 the European Commission challenged South Stream on the basis of the EU's Third Energy Package legislation and threatened legal action against Bulgaria. It led to the cancellation of the project. The Commission accused South Stream of violating EU law regarding the access of competitors to the pipeline. After the cancellation, Gazprom quickly unveiled an alternative route. The new pipeline, Turkish Stream, would bring 31.5 bcm from Russia across the Black Sea and make landfall in Turkey instead of Bulgaria. Bulgaria currently imports all its gas from Russia, through Ukraine's transit pipelines. If Turkish Stream is built and transit through Ukraine stops, Bulgaria will have to import all its gas through Turkey. Given current tensions between the EU and Turkey, this could present Sofia with some difficulties.

The fate of Turkish Stream was thrown off balance when relations between Turkey and Russia deteriorated after Turkey shot down a Russian fighter jet on 24 November 2015 in the Turkish-Syrian border area. Construction of the pipeline was put on hold as Turkish-Russian relations soured. But relations improved again, particularly after Turkey's President Erdogan felt snubbed by Europe and the United States after the failed coup in Turkey on 15 July 2016. This led to a normalisation of relations between Ankara and Moscow and in October 2016, President Putin and Erdogan signed an agreement to build Turkish Stream. The first shipment of gas is expected in 2020.

It remains to be seen whether both pipelines will be built. Turkish Stream has already stalled once, and relations between Turkey and Russia are unpredictable. The Nord Stream 2 pipeline faces strong resistance from central and eastern European member-states, but also from Denmark and Sweden, and EU Council President Donald Tusk has spoken out against it.⁶³ Nevertheless, the German government insists that the pipeline is a commercial project among commercial entities, and therefore European governments should not block it. Under current energy regulations, the Commission has no grounds to block it. But the European Commission has spoken out against the pipeline in its current form and asked for an amendment to the EU's Gas Directive so that gas pipelines from third countries - such as Nord

⁶¹ Andrew Rettman, "Bulgaria freezes work on South Stream pipeline", *EU Observer*, 9 June 2014, https://euobserver.com/foreign/124527.

⁶² Grigas, p. 113.

⁶³ Gabriela Baczynska, "EU's Tusk criticises Nord Stream 2 as Brussels readies for Russia talks," *Reuters*, 8 June 2017, https://www.reuters.com/article/us-eu-nordstream2-tusk/eus-tusk-criticises-nord-stream-2-as-brussels-readies-for-russia-talks-idUSKBN18Z2OH.

Stream 2 – would be covered by EU energy law.⁶⁴ Besides, in the summer of 2017, the United States adopted a bill which enables the US president to put economic sanctions on Western companies that are involved with Nord Stream 2. It remains to be seen whether the pipeline will be built.

5 Measures taken by the EU: necessary but not sufficient

In 2016 the European Union consumed 428 bcm of natural gas. That year, according to the European Commission, 69 per cent of Europe's natural gas needs came from abroad, and 37 per cent of that natural gas comes from Russia. More of the EU's natural gas consumption is coming from external sources. As domestic European production declines, it is to be expected that the EU will become increasingly dependent on external energy imports. This means that even without the construction of pipelines like Nord Stream 2, dependency on foreign producers is likely to increase. The decision in March 2018 by the government of the Netherlands to stop production in the Slochteren gas field by 2030 is a case in point. Though the Netherlands will consume less gas, as a result of efficiency and climate measures, most of the gas it uses will come from abroad. Since the Slochteren field is one of the largest European on-shore producing assets, its closure will impact EU-wide import dependency. The chart below illustrates the four most important natural gas sources for the European Union since 1995. Though Norway has become an increasingly important supplier to the EU, Russia has been and still is the primary external source for the EU as a whole.

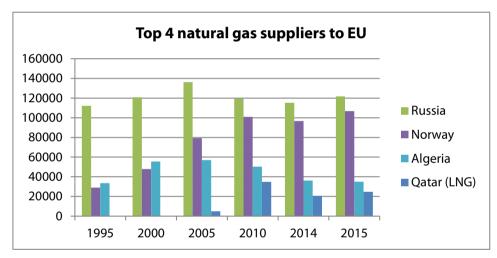


Figure 2: Top 4 natural gas suppliers to the EU 1995-2015

Source: European Commission, 'EU Energy in figures', Statistical Pocketbook 2017

One-third of Russia's natural gas production, roughly 190 bcm is exported. Almost all of which, some 87 per cent in 2016, goes to Europe. In addition, Russia shipped 266.7 million tonnes of crude oil and oil products to Europe in 2016. Europe is Russia's most important market, and Russia is Europe's primary energy source. In 2015, 37 per cent of the EU's natural gas imports, and 29 per cent of its crude oil imports, came from Russia.

⁶⁴ European Commission, "Questions and Answers on the Commission proposal to amend the Gas Directive (2009/73/EC)", 8 November 2017, http://europa.eu/rapid/press-release MEMO-17-4422 en.htm.

⁶⁵ European Commission, 'EU Energy in figures', Statistical Pocketbook 2017, https://ec.europa.eu/energy/sites/ener/files/documents/pocketbook_energy_2017_web.pdf.

It is clear that energy ties between Europe and Russia are deep, and some European states are heavily dependent on Russian energy – particularly natural gas – supplies. This creates a dependency relationship that is vulnerable to political bargaining. Though it has also created mutual interdependence, as Russia is equally reliant on continued demand for its gas in Europe for its treasury. But because EU member-states do not purchase gas from Russia collectively, and have different degrees of dependence on Russian gas, Moscow is able to use its energy muscle to intimidate some -- particularly smaller and eastern -- European states.

The table below illustrates the varying degrees to which European countries are dependent on Russian gas imports. Fifteen EU member-states are dependent on Russia for more than half of their gas supplies. But to make an accurate assessment of European dependence on Russian gas, the share of gas in the total energy mix should also be taken in to consideration. Though natural gas may play a limited role in most European states, it is often an important source for the production of heat and electricity. A disruption in natural gas supplies could thus directly impact European citizens, particularly if it comes during the winter. On the face of it, this underlines Europe's vulnerability to political leverage.

	Imports from Russia 2016 (bcm), excludes transit	Consumption of Natural gas 2016 (bcm)	Share of Russian imports in 2016 natural gas consumption (red = more than 50 %)	Share of natural gas of total primary energy mix (red = more than 50 %)
Austria	5.6	8.7	64	22
Belarus	16.6	17	98	64
Belgium	5.4	15.4	35	23
Bulgaria	3.2	3	106 (includes re-export)	15
Denmark	1.8	3.2	56	17
Croatia	0.6 (data from 2015)	1.7 (data from 2015)	59	19
Czech Republic	4.2	7.8	54	18
Estonia	0.4	0.5 (data from 2015)	80	7
Finland	2.3	2.0	115 (includes re-export)	6
France	10.5	42.6	25	16
Germany	46	80.5	57	22
Greece	2.5	2.8	89	10
Hungary	5.1	8.9	57	37
Italy	22.7	64.5	35	38
Latvia	1	1.3 (data from 2015)	79	36
Lithuania	1	1.8	55	25
Netherlands	14.7	33.6	44	35
Poland	10.2	17.3	59	16
Romania	1.5	10.6	14	29
Slovakia	3.6	4.4	81	25
Slovenia	0.52	0.70	75	12 (data from 2015)
Turkey	23.2	42.1	55	27

Table 6: EU gas dependence on Russia

Source: BP Statistical Review of World Energy 2017, IEA statistics, Gazprom Export delivery statistics

Currently, rather than pursuing high profit margins, Gazprom appears intent on pursuing a policy to increase its market share in Europe. Amid growing competition from alternative gas suppliers such as US LNG, Gazprom would be smart to do so. In turn, this leads to lower prices for European end-consumers, which is good news for European economies and citizens. But it means Russia's share of the European market is expected to remain around 40 per cent for the coming years. ⁶⁶ This will sustain the dependency relationship, and thus also the geopolitical levers, unless the EU makes itself more resilient.

Energy disputes between Russia and transit states, which at times have also caused disruptions further downstream in EU countries, have damaged Russia's image as a reliable supplier. In response to the Ukraine gas crisis in the late 2000s, the EU started to take energy security more seriously. The monopolistic position of Gazprom became a key concern. Many of the EU's efforts have been directed at making the energy market function better by promoting liberalisation and enforcing EU energy law, thereby making energy imports less susceptible to foreign policy bargaining. The thinking behind this is that energy is a commodity that should be traded 'normally' in a liberalised and integrated European market. The EU's role thereby is to set, and enforce, regulations for suppliers and remove obstacles for the adequate functioning of the market. The most powerful instrument in responding to Gazprom's energy coercion is arguably its enforcement of its internal energy market regulations.

Here, the Third Energy Package of 2009 is key. It stipulates that companies operating in the EU must unbundle natural gas transit and distribution networks; that competing energy suppliers should have access to pipelines, so-called third-party access; that a transparent tariff system should apply for transmission pipelines; that EU countries should diversify sources of gas supply; and that European gas grids should be connected. Particularly the concept of unbundling is important to prevent Gazprom from using its energy supplies in pursuit of political objectives. Gazprom supplies gas to EU member-states but also owns the pipelines that transport the gas. The idea behind 'unbundling' is that a company that operates the distribution network as well as controls the supply of energy resources will favour its own affiliates, thereby closing the distribution network to potential competitors and sustaining its monopolistic position.⁶⁷ Enforcing third energy package has been, at times, an effective tool to reduce Gazprom's influence. Unbundling has a direct effect on Gazprom's operations in Europe and was, for instance, the reason why South Stream was challenged by the Commission.

Unbundling and third-party access has reduced Gazprom's ability to use its control of producing and distribution assets as tools of political coercion. Though more still needs to be done. One of the downsides of unbundling is that it has led to the creation of middlemen that sell the gas. Some of these middlemen are still controlled by Gazprom, but now with opaque ownership structures.⁶⁸ Transparency remains an issue of concern.

The Third Energy Package is also the main tool through which the EU hopes to bring Nord Stream 2 to heel, as witnessed by the European Commission's request in November 2017 to adjust the EU Gas directive of the Third Energy Package to also cover gas pipelines entering the EU market.⁶⁹

Additionally, the European Commission has used competition law against Gazprom, accusing the firm of overcharging central and eastern EU member-states. In 2012 it opened antitrust procedures against

⁶⁶ Elena Mazneva, Anna Shiryaevskaya, 'Putin's Russia seen dominating European gas for two decades', *Bloomberg*, 1 March 2017, https://www.bloomberg.com/news/articles/2017-03-01/putin-s-russia-seen-dominating-european-energy-for-two-decades/; Henry Foy, "Russia's gas exports to Europe rise to record high", *Financial Times*, 3 January 2018, https://www.ft.com/content/7b86f4be-f08e-11e7-b220-857e26d1aca4.

⁶⁷ Grigas, p. 155.

⁶⁸ Grigas, p. 157.

⁶⁹ European Commission, "Questions and Answers on the Commission proposal to amend the Gas Directive (2009/73/EC)", 8 November 2017, http://europa.eu/rapid/press-release MEMO-17-4422 en.htm.

Gazprom and in 2015 the Commission charged Gazprom with setting unfair prices, seeking to split the European gas markets through the use of destination clauses, and preventing the diversification of supply by making gas supplies conditional upon specific commitments to gas pipeline infrastructure projects such as South Stream. By 2017, Gazprom appeared ready to settle and concede the European Commission's main points. It would thereby avoid a fine. Gazprom would drop destination clauses and allow quicker price reviews in its longer-term contracts. In October 2017, however, the Commission said it still wants more concessions from Gazprom. The steps it has taken, however, weaken Russia's ability to use energy exports to exert political pressure in Europe. The removal of destination clauses would also make it possible for EU states to re-sell their gas, making predatory pricing by Gazprom more difficult. Nevertheless, this is unlikely to ease most concerns. For instance, Estonia has been given the commitment by Gazprom that it can renegotiate the price with any new long-term contract. But as a small market, its bargaining power vis-à-vis Russia will remain limited unless it is backed up by other initiatives.

Launched in 2015, the EU Energy Union is the next step in the development of Europe's internal energy market. It aims to further diversify energy sources and strengthen European energy security, amongst others by giving the Commission new powers. As part of the Energy Union, on 5 April 2017 the European Commission was given the mandate to check *ex ante* whether energy deals agreed by EU member-states with non-EU third countries meet EU law. This is a welcome step to improve transparency in the European energy market. However, since Nord Stream 2 is not the result of an intergovernmental agreement but based on a deal among private companies, it would not be covered by this new provision of *ex ante* compliance.

In order to promote the liberalisation of the energy market, the EU supports the diversification of energy sources, particularly for those countries that are dependent on single-source suppliers like Russia. A key element of this is the connection of gas grids across the EU, through the construction of a system of interconnectors and reverse-flow pipelines. This has an important energy security dimension, as ideally this would allow natural gas to be shipped from different parts of the European Union to where it is needed so that supply can meet demand irrespective of where the gas enters the EU. This would make the EU resilient in the face of supply disruptions.

As such, the EU has agreed 173 projects of common interest, which advance the integration of the EU's gas and electricity markets. These projects are eligible for funding from the EUR 30 billion Connecting Europe Facility. Among them are numerous small pipeline connections inside the EU that can bring new gas to regions that are dependent on a single source, as well as pipelines to bring new gas to the EU such as the Eastmed pipeline that could unlock gas from Cypriot or Israeli waters; the Southern Gas Corridor

⁷⁰ Alan Riley, "Commission v Gazprom: The antitrust clash of the decade?", CEPS Policy Brief no. 285, 31 October 2012, https://www.ceps.eu/system/files/PB%20No%20285%20AR%20Commission%20v%20Gazprom_0.pdf.

⁷¹ Rochelle Toplensky & Henry Foy, "Gazprom reaches draft antitrust deal with EU", *Financial Times*, 13 March 2017, https://www.ft.com/content/575f8d2e-07f2-11e7-ac5a-903b21361b43.

⁷² Vladimir Soldatkin, Foo Yun Chee, "EU wants Russia's Gazprom to sweeten antitrust concessions", *Reuters*, 13 October 2017, https://www.reuters.com/article/us-russia-gazprom-eu-competition/eu-says-wants-russias-gazprom-to-sweeten-antitrust-concessions-idUSKBN1CI1WC.

⁷³ European Commission, "Antitrust: Commission invites comments on Gazprom commitments concerning Central and Eastern European gas markets - Benefits for the Estonian gas market", 13 March 2017, https://europa.eu/rapid/press-release_MEMO-17-553 en.pdf

⁷⁴ European Commission, "Proposal for a decision of the European Parliament and of the Council on establishing an information exchange mechanism with regard to intergovernmental agreements and non-binding instruments between Member States and third countries in the field of energy and repealing Decision No 994/2012/EU", Brussels, 16 February 2016.

⁷⁵ European Commission, "Project of Common Interest", https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest.

and the Trans-Caspian pipeline; LNG regasification terminals in Krk, Swinoujscie and Northern Greece; and Baltic Pipe which can bring gas from Norway and Denmark to Central and Eastern Europe.

Reverse-flow pipelines have been key ingredients to make the EU more resilient in response to possible gas supply disruptions. There is now reverse flow infrastructure to Slovakia, Poland, Romania, Hungary, the Czech Republic and Ukraine. Total reverse flow capacity in central and eastern Europe is 147 bcm per year, which is roughly three-quarters the amount the EU imports from Russia annually. This allows natural gas to flow from West to East and from North to South. So far, Ukraine has been one of the main beneficiaries of these reverse flow pipelines. It has helped Ukraine become less vulnerable to Russia's gas disruptions, and Ukraine now hardly purchases gas directly from Gazprom. With total proven reserves of roughly 600 bcm, Kiev is also exploring increased domestic production, primarily from its shale deposits.

The reverse flows have increased flexibility in gas supplies across central Europe. This is important in the context of Nord Stream 2, as central European states are concerned that they could be subject to Russian energy coercion once the diversionary pipeline is built. Besides reverse-flow pipelines, increasingly the purchase of LNG is viewed through a geopolitical, not just a commercial, lense to increase energy security.⁷⁸

Poland and Croatia have set their sights on developing LNG import terminals. The terminal at Swinoujscie in Poland and Krk in Croatia are both EU projects of common interest. The Polish terminal's capacity is expected to be expanded from 5bcm per annum to 7.5 bcm per annum in 2018. The Krk terminal will import a maximum of 2bcm per year and is expected to be finished in 2019.⁷⁹ While the capacities involved are not enough to end dependence on Russian gas, they are important steps towards diversification. Similarly, Ukraine is working with Poland and Lithuania to discuss how it can access LNG.⁸⁰

Such LNG terminals also increase a country's bargaining power towards Russia. In the Baltic states, Lithuania has taken steps to reduce its dependence on Russian gas. Lithuania has invested in a new LNG regasification terminal in Klaipeda which allows it to import alternative supplies of gas.⁸¹ The terminal has a capacity of 2-4 bcm, which is sufficient to meet all of Lithuania's gas needs and explains why the floating LNG terminal is called the 'Independence'. In 2014, even before the completion of the Klaipeda terminal the Lithuanian government was able to extract lower prices from Gazprom for its gas. Lithuania currently still mostly imports Russian gas, but prices are lower, and there is now a clear alternative in the event of a supply disruption.⁸²

As part of its 2015 Energy Union strategy, the EU has published an LNG strategy which would give a boost to the development of sufficient LNG infrastructure across the EU, including gas storage facilities. In

⁷⁶ Colin Harrison and Zuzana Princova, 'A quiet gas revolution in Central and Eastern Europe', *Energypost.eu*, 29 October 2015, http://energypost.eu/quiet-revolution-central-eastern-european-gas-market/.

⁷⁷ Carol J. Williams, 'Ukraine-Slovakia gas deal is first step out of dependence on Russia', *Los Angeles Times*, 28 April 2014, www.latimes.com/world/worldnow/la-fg-wn-ukraine-russia-slovakia-gas-deal-20140428-story.html.

⁷⁸ David Sheppard, 'Lithuania becomes first ex-Soviet state to buy US natural gas', *Financial Times*, 21 August 2017, https://www.ft.com/content/33113758-8680-11e7-8bb1-5ba57d47eff7.

⁷⁹ "Croatia floating LNG terminal taking a year longer to finish", *Reuters*, 25 January 2017, https://www.reuters.com/article/us-croatia-lng/croatia-floating-lng-terminal-taking-a-year-longer-to-finish-idUSKBN159120.

⁸⁰ Natilya Katser-Buchkovska, "Ukraine makes strides towards energy independence", *Financial Times*, 20 December 2017, https://www.ft.com/content/3f82b6ec-e4ae-11e7-97e2-916d4fbac0da.

⁸¹ James Kanter, "Lithuania offers example of how to break Russia's grip on energy", *New York Times*, 27 October 2014, https://www.nytimes.com/2014/10/28/business/energy-environment/lithuania-offers-example-of-how-to-break-russias-grip-on-energy.html.

⁸² Kjetil Malkenes Hovland, "Gas Terminal plans helped Lithuania negotiate lower price from Gazprom", *Wall Street Journal*, 28 May 2014, https://www.wsj.com/articles/gas-terminal-plans-helped-lithuania-negotiate-lower-price-from-gazprom-1401188154.

the coming decade, the global availability of LNG will likely increase, mainly in response to the shale gas boom in the United States.⁸³ Today, LNG is still a fraction of Europe's supplies: only 51.8 bcm out of 350 bcm of imports. 84 More LNG in the European market would do three things. First of all it would offer an alternative, diversified supply of gas. Secondly, the more LNG is consumed, the less pipeline gas would be needed. This would start to change the dependency relationship between consumer and supplier states (and transit state). From a foreign policy perspective this would spell good news for the EU. Thirdly, more LNG in the global market would increase liquidity, making it possible to link different regional gas markets together. This would allow the development of a true international spot market for gas, similar to the one for oil. The result would be a reduction of the influence of pipeline-gas on international gas prices, making gas prices more responsive to supply and demand. A deeper LNG market would also reduce a country's dependence on single suppliers, as there would be other sellers around. However, it remains to be seen how quickly the global LNG market will develop.

LNG regasification terminals are expensive, and shipping LNG also comes at a premium as the natural gas must be kept chilled to temperatures at which it becomes liquid and reduces in volume. One of the main questions will be whether LNG can compete with Russian pipeline-gas on price? Nord Stream 2 should also be viewed in this light. That pipeline is designed to make large amounts of cheap Russian gas available in Western Europe, where there is also ample LNG import capacity. It could then compete directly with alternative LNG supplies.

As a result of the global fall in oil prices, gas prices in Europe dropped from USD403 per tcm in 2012, to USD238 per tcm in 2015.85 Lower gas prices are good news for European customers. But Russian gas is likely to remain price-competitive. If Europe's gas consumption continues to fall, and if Gazprom's prices do too, than much, if not all, of Europe's gas demand could be met through the Nord Stream system.

The EU's effort to diversify supplies includes the development of energy links to third countries and developing new sources of gas. As part of its Energy Union strategy, the EU has decided to invest more in energy diplomacy. On 20 July 2015, the Foreign Affairs Council adopted the EU Energy Diplomacy Action Plan. It includes four priorities: facilitate regular strategic discussions in the Foreign Affairs Council on major energy issues; establish energy dialogues with important producing and transit states; reach common EU positions in multilateral institutions and strengthen existing multilateral energy institutions; and strengthen the EU's ability to speak with one voice on external energy issues. 86 The importance of energy diplomacy aligns with the EU's ambition to develop new sources of supply. LNG has been discussed above, though it is important to note that LNG suppliers are not traditional gas producers with which the EU will have longstanding energy ties. Important LNG suppliers are countries like Qatar, Trinidad and Tobago, Indonesia, Malaysia, and Australia. In its diplomacy with these countries, the EU has not traditionally emphasised energy relations. The renewed emphasis on energy diplomacy should correct this.

Aside from LNG, the EU supports the development of conventional, non-Russian sources of gas. The offshore gas resources in the Eastern Mediterranean could be one such area. So far, gas has been found in Israeli and Cypriot waters. On 5 December 2017, Cyprus, Israel, Greece and Italy signed a memorandum of

⁸³ IEA, "IEA sees global gas demand in 2022 as US drives market information.", https://www.iea.org/newsroom/news/2017/july/iea-sees-global-gas-demand-rising-to-2022-as-us-drives-markettransformation.html.

⁸⁴ D. Bochkarv, "Gazprom plays ball: the depoliticization of the European gas market", Energypost.eu, 25 January 2017, http://energypost.eu/depoliticization-european-gas-market/

⁸⁵ Grigas, p.130.

⁸⁶ General Secretariat of the Council, "Council conclusions on Energy Diplomacy", Brussels, 20 July 2015, http://data.consilium.europa.eu/doc/document/ST-10995-2015-INIT/en/pdf.

understanding to explore the construction of a pipeline to bring some of this gas to the European market. The so-called EastMed pipeline is also an EU project of common interest. ⁸⁷ Its actual construction, however, depends on the interest of private companies and remains to be seen. The Southern Gas Corridor, and its extension with a Trans-Caspian Pipeline in order to unlock Turkmen gas supplies without a transit through Russia, is another ambition. Though it has not received much attention lately. The EU should increase its energy dialogue with relevant countries along the Southern Gas Corridor, in particular Turkey.

An additional element that would help shield EU member-states from supply disruptions is the EU's agreement in 2017 on a solidarity mechanism. 88 As part of its Energy Union strategy, EU states have set up a procedure through which they are committed to come to each other's aid in the event of a debilitating gas cut.

Finally, instead of replacing one source of natural gas with another, an alternative and sustainable way to increase energy security is by consuming less hydrocarbons. As a result of the imperative to reduce CO2 emissions, the EU is taking efficiency measures and investing in renewable sources of energy. This is bringing down demand for coal. Natural gas, however, is considered the cleanest hydrocarbon as it produces less CO2 than oil or coal when burnt. Gas is seen as a 'bridging' fuel towards a low-carbon economy. In the medium term, it is to be expected that global gas demand will increase as developed and developing economies shift from goal to gas to get a grip on CO2 emissions. For Europe it means that general energy demand may fall but Europe's total gas demand will fall less quickly. As mentioned above, Russia is competing for market share by reducing prices. Given these price dynamics, as European gas demand falls, the result could well be that the share of Russian gas in Europe's overall energy mix rises. The EU should thus better prepare for a future where Russian gas continues to play a significant role.

6 Conclusions

From this study it becomes clear that Gazprom's policies are shaped by both commercial considerations, and, at times, as well by Russia's foreign policy objectives. Of course, not every piece of Russia's energy policy is driven by a geopolitical motivation, but when it is, it exerts political pressure through the following means:

- Manipulating the pricing policy of energy supplies to third countries
- Controlling energy assets, such as pipelines and gas operators in key countries
- Cutting, or disrupting, gas supplies
- Agreeing restrictive supply contracts
- Developing alternative supply routes to divert gas flows

Gazprom plays the role of both monopsony and monopoly, which enables it to abuse its market power. By building dependency relations and keeping markets fragmented, Russia has been able to pursue monopolistic practices on the European continent. The EU's antitrust investigations are an important instrument to break this system. Similarly, as the case of Turkmenistan makes clear, Russia has tried to

⁸⁷ "Cyprus, Greece, Italy and Israel back natgas pipeline to Europe", *Cyprus Mail*, 5 December 2017, http://cyprus-mail.com/2017/12/05/cyprus-greece-italy-israel-back-natgas-pipeline-europe/.

⁸⁸ Official Journal of the European Union, "Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010", 28 October 2017.

keep other suppliers isolated or act as the single buyer of its gas, enabling it to influence the politics of countries in its neighbourhood.

Furthermore, *Realpolitik* plays a role in Russia's decisions when to offer discounts on its energy exports. Moscow has a history of giving discounts but also taking them away, depending on political conditions. Ukraine has borne the brunt of this policy in the late 2000s and early 2010s. Russia similarly uses outstanding debt, sometimes accumulated during Soviet times, as leverage over transit countries in its 'near abroad'. Payment of these debts can be demanded at a moment's notice, triggering a crisis at the highest level of politics. Petro-carrots are then turned into petro-sticks, and commercial transactions become politicised.

The case of Nord Stream 2 shows that Russia's decision to develop a diversionary pipeline to bypass what it perceives as troublesome transit states threatens to undermine EU foreign policy objectives. Once diversionary pipelines are built, Russia can be expected to use its energy leverage over 'difficult' transit states more forcefully.

The role of Russia in European energy markets should be expected to grow. Russia supplies the European Union with 37 per cent of its imported natural gas. As European domestic production declines – for instance, due to a decision to reduce the production of natural gas in the Netherlands – the share of imported natural gas will likely increase. Given Russia's ability to compete on price against alternative suppliers, the share of Russian gas in Europe's energy mix will likely increase too.

Russia sends 87 per cent of its natural gas exports to the EU, creating a system of mutual dependence. As long as Russia is dependent on Europe as its primary export market, its ability to use its energy muscle to promote its foreign policy objectives will remain constrained. But this could change. Russia's use of energy blackmail as a tool in Europe will increase as Russia diversifies its markets, primarily by developing its energy ties to China. So the EU should prepare for a future where Russian gas continues to play a significant role in its internal energy market and where Russia may be more inclined to wield energy as a foreign policy tool.

In response, the European Commission should focus on letting the internal energy market work properly. The availability of alternative supplies, and the ability to bring them from A to B across the EU, is the best insurance against energy bullying by Russia or any other state. This means enforcing European energy laws, building sufficient gas infrastructure and storage inside the EU to allow gas to flow from West to East and North to South; promoting the availability of alternative sources of gas such as LNG as well as from new external suppliers; and promoting transparency on contracts.

A collective European bargaining position vis-à-vis Gazprom would help the EU to break the tendency of Gazprom to 'divide and rule' in the European energy market. The European Commission, for instance, could negotiate contracts with third countries on behalf of EU member-states. However, such a centralisation would run counter to the principle of a liberalised energy market, in which member-states are free to decide on their energy mix and different suppliers can compete with each other. So if it happens, collective bargaining will only occur on a voluntary basis. But the fact that individual states strike individual agreements with Gazprom means that Russia will continue to have an opportunity to use its gas sales as a tool of political bargaining. Instead, through rigorous enforcement of the Third Energy Package rules including on third-party pipelines, the removal of destination clauses and the availability of alternative sources, the EU can push back against Russia's ability to use energy imports as tools of its foreign policy.

Based on the Third Energy Package and initiatives of the EU Energy Union strategy the EU is better able to respond to the various ways and methods that Russia uses to exert political pressure. The following table shows the methods Russia uses to exert political pressure, and the steps that the EU has been taking in

response. Most EU measures are directed at making EU energy market dynamics function better and breaking Gazprom's (quasi)monopoly position.

Ways and Methods used by Russia	Policy response from European Union
Pricing policies to exert foreign policy pressure	Removal of destination clauses; unbundling; interconnection & reverse flows; transparency of contracts; diversification of sources; standardisation of hub/market-based pricing formulas
Contractual restrictions that keep the EU energy market fragmented	Prohibition on destination clauses on antitrust grounds; diversification of supplies, support (including financial) for interconnection & reverse flows to provide alternative sources of supply
Control of assets that enable Russia to pursue monopolistic practices	Unbundling and greater transparency on ownership structures; investment screening mechanisms
Transit routes that can divert flows for political purposes	Reverse-flow pipelines; diversification of supply; unbundling of third-party pipelines
Supply cuts	interconnection & reverse-flows; diversification of sources including LNG; gas solidarity mechanism.

7 Recommendations

From this study a number of recommendations for the EU and its institutions follow:

- Continue to invest in energy security and developing EU resilience to supply shocks. The EU's best response to the geopolitical challenge posed by authoritarian states wielding energy 'shields and swords', is a liberalised and integrated energy market. If energy-rich authoritarian states are no longer able to exert political pressure on the EU or its member-states through the use of their energy supplies, then the EU will itself be able to pursue a more effective foreign policy. The key to doing so lies in developing an integrated and liberalised internal energy market where EU members have access to diversified energy supplies.
- Extend the Third Energy Package to third-party pipelines that enter the EU market. Nord Stream 2 is undesirable but it may still be built. If so, it should be covered by Third Energy Package regulations including third-party access, transparent tariffs and unbundling.
- Support the development of global trade in LNG. Greater liquidity will help the development of an LNG
 international spot market, which could reduce the importance of long-term gas contracts. More
 liquidity could also reduce LNG prices, making it more competitive versus pipeline-gas.
- Intensify the EU's energy diplomacy with new energy suppliers. The most important global suppliers of LNG are countries with which EU diplomacy has not necessarily prioritised discussions on energy, including Australia, Argentina, Qatar, or Indonesia. The renewed emphasis on energy diplomacy should correct this. EU energy diplomacy should also focus on building closer ties with important transit states, such as Belarus, Ukraine and Turkey, in order to develop a common understanding of the challenge overreliance on Russian energy imports could pose. A more active energy diplomacy should also emphasise ties with other major consumers, such as China. Energy issues should become an integral

- element of EU foreign policy, so as to better grasp how economic and geopolitical developments related to energy interact.
- Broaden EU energy diplomacy to other EU institutions. The EU's energy diplomacy action plan focuses
 on the Foreign Affairs Council. But the European Parliament should equally have regular discussions on
 major energy issues.
- Improve transparency of the ownership structures of pipelines and gas operators in the EU. Transparency will not reduce the control of energy-rich authoritarian states over European energy assets. So additionally, the European Commission should assess levels of foreign, non-EU ownership of national gas operators, pipelines and other gas facilities (such as Gas storages) and, if necessary, introduce investment screening mechanisms to limit involvement by unwanted parties.
- Support Ukraine. The EU should help Ukraine develop its domestic resources and link its energy grid to new EU supply corridors, such as the LNG terminals in the Baltic region, to limit its vulnerability on gas markets.
- Perform a new EU energy stress-test. The European Commission performed the last stress test in 2014.
 Since then, market dynamics have changed and new projects have been realised, such as the Swinoujscie LNG terminal. An update is required to assess vulnerabilities in coping with gas disruptions.
- Support the EU's strategy for LNG and gas storage, as it will contribute to ending overdependence on individual external gas suppliers. In particular, the intra-European accessibility of gas storage is one of the key tools to implement the principle of energy solidarity during gas shortages and supply disruptions.
- Continue to support, also financially (through the Connecting Europe Facility budget) interconnection
 projects, reverse-flow pipelines and LNG regasification projects to deepen and further integrate the
 European energy market and make diversified sources of natural gas available. The availability of
 alternative supplies is the most important insurance against becoming the victim of energy coercion.
- Support the development of the trans-Caspian pipeline. A direct, non-Russian link to Turkmenistan
 would improve Europe's energy security and reduce Turkmenistan's over-reliance on the Chinese
 market.
- Support, including financially, the construction of new LNG projects (e.g. the North-South corridor) and define them as projects of common interest. Similarly, the EU should support new LNG opportunities from the US.
- Welcome US supplies of LNG, but do not pick suppliers. US LNG supplies are a welcome source of
 diversified gas and the United States has promoted its LNG supplies to various European states,
 including Poland. But US supplies should be framed within the context of further liberalisation of the
 European energy market. Market dynamics, not politics, should prevail to decide who supplies EU
 member-states.
- Support the exploitation of new gas discoveries in the Eastern Mediterranean. This region could become a vibrant centre for transporting gas into Europe.
- Encourage gas reverse-flow projects, especially in central and eastern European countries.
- Strengthen economic cooperation with Norway to make its large oil and gas potential fully available to the European market.
- Expect Russia to continue to remain Europe's main external supplier of natural gas. In a liberalised energy market, as a result of Gazprom's ability to compete on price, and as a result of a declining

demand in gas, Russia's share of European gas imports will increase. However, the Commission should use its tools (such as the antitrust investigations) to force Gazprom to cease its malpractices and act according to EU rules and in favour of the interests of EU consumers and increased competitiveness on the EU market.

- Urge member-states to fully implement the Third Energy Package.
- Highlight the importance of EU energy efficiency and energy savings targets as laid down in the 2030 climate and energy framework and urge member-states to implement them.

Acronyms

- BCM bilion cubic metres
- BP British Petroleum
- CEE Central & Eastern Europe
- LNG Liquid Natural Gas
- m3 cubic metre
- OPEC Organisation of Petroleum Exporting Countries
- SGC -Southern Gas Corridor
- TAP Transadriatic Pipeline
- TANAP Trans-Anatolian Pipeline
- TBC Tblisi-Baku-Cayhan (pipeline)
- tcm thousand cubic metres

Bibliography

Ünal Çeviköz, "Could Turkey become a new energy trade hub in south east Europe?", Turkish Policy Quarterly, 23 September 2016.

Gabriel Collins, "Russia's use of the "energy weapon" in Europe", Issue Brief, Baker Institute for Public Policy, 18 July 2017.

Charles Ellinas, "Rapid Developments in East Med Gas", Turkish Policy Quarterly, 23 September 2016.

European Political Strategy Centre, "Nord Stream 2 – Divide et Impera again? Avoiding a Zero-sum game", European Commission, 2017, https://ec.europa.eu/epsc/sites/epsc – nord stream – divide et impera again.pdf.

Severin Fischer, 'Nord Stream 2: Trust in Europe', CSS Policy Perspectives, 4/4, March 2016.

Severin Fischer, 'Lost in Regulation: the EU and Nord Stream 2', CSS Policy Perspectives, vol. 5/5, November 2017.

General Secretariat of the Council, "Council conclusions on Energy Diplomacy", Brussels, 20 July 2015, http://data.consilium.europa.eu/doc/document/ST-10995-2015-INIT/en/pdf.

Marco Giuli, 'Turkish Stream back on the agenda?', European Policy Centre, 1 September 2016.

Marcin Goclowski & Roberta Rampton, "UPDATE 1 – Poland expects long term deal for US LNG supplies", *Reuters*, 6 July 2017, https://www.reuters.com/article/usa-trump-poland-lng/update-1-poland-expects-long-term-deal-for-u-s-lng-supplies-idUSL8N1JX1X7.

Marshall I Goldman, Petrostate: Putin, Power and the New Russia, Oxford University Press, 2010

Georgi Gotev, 'EU leaders to clash over Nord Stream 2 at summit', Euractiv, 4 December 2015.

Agnia Grigas, The new geopolitics of natural gas, Harvard University Press, Cambridge, 2017.

Annika Hedberg, 'Nord Stream 2- yes or no? Political decision of a political Commission', EPC, 14 June 2016.

IEA, 'IEA sees global gas demand rising to 2022 as US drives market transformation',

IEA, 'Global Shifts in the Energy System', World Energy Outlook 2017, 14 November 2017.

Michael Klare, 'Russia and Georgia: all about oil', Foreign Policy in Focus, August 13, 2008.

Rem Korteweg, "Nord Stream 2 will divide the EU, but new US sanctions will do more harm", *Euractiv*, 26 July 2017, https://www.euractiv.com/section/energy/opinion/nord-stream-2-will-divide-the-eu-but-new-us-sanctions-will-do-more-harm/.

Robert L. Larsson, *Russia's Energy Policy: Security Dimensions and Russia's Reliability as an Energy Supplier*, FOI - Swedish Defense and Research Agency, Stockholm, March 2006.

Agata Loskot-Strachota, *Gazprom's expansion in the EU: co-operation or domination?*, OSW Centre for Eastern Studies, Warsaw, October 2009.

Agata Loskot-Strachota, 'The case against Nord Stream 2', Energypost, 23 November 2015.

Andrew Monaghan, 'Russian Oil and EU Energy Security', Russian Series 05/65, Conflict Studies Research Centre, November 2005.

Randall Newnham, "Pipeline Politics: Russian energy sanctions and the 2010 Ukrainian elections", Journal of Eurasian Studies, volume 4, issue 2, July 2013, p. 115-122.

Randall Newnham, "Oil, carrots, and sticks: Russia's energy resources as a foreign policy tool", Journal of Eurasian Studies, volume 2, issue 2, July 2012, p. 134-143.

Official Journal of the European Union, "Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010", 28 October 2017.

Alan Riley, 'Global Gas Liquidity undermines the argument for Nord Stream 2', The Institute for Statecraft, 9 May 2017.

David Shepard and Henry Foy, 'US and Russia step up fight to supply Europe's gas', *Financial Times*, 3 August 2017

Fred Weir, "Belarus cuts off Russian oil to Europe", CS Monitor, 9 January 2007.

Szymon Zareba, 'The Gas Directive and its application to EU-Third Country pipelines', Energypost, 16 November 2017.

Ilya Zaslavskiy, 'The Kremlin's Gas Games in Europe', Issue Brief, Atlantic Council, May 2017.

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