The Geopolitics of Russian Energy

Gas, oil and the energy security of tomorrow

Niklas H. Rossbach

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Summary

The risks of freezing in the dead of winter and the global economy crashing both have a lot to do with gas and oil – and with Russia. While its economy is only three times that of Sweden Russia is one of the world's top exporters of both oil and gas. The income from energy exports is crucial for Russia's defence spending and the country's great power role. The exports also underpin Russia's global influence. This underlines that energy has a lot to do with geopolitics. Europe is dependent on Russian gas and fears it will be cut off in a future worst-case scenario. The unexpected increase in US oil production following the shale revolution have brought Russia and Saudi Arabia together and made OPEC revert to its traditional role of increasing the oil price.

However, the end of fossil fuels may be on the horizon, to the distress of all authoritarian energy export dependent countries. Russia has to adapt its energy dependent economy accordingly but has at the same time upset the international rules-based order, with its annexation of Crimea. Now, for example, Russia is deepening its energy axis with China. This report provides a geopolitical analysis of Russian energy.

Keywords: energy, energy security, Europe, gas, GECF, geopolitics, LNG, oil, OPEC, pipelines, NATO, and Russia

Sammanfattning

Att frysa om vintern och se världsekonomin kollapsa är risker som förknippas med gas och olja, och därmed med Ryssland. Medan Rysslands ekonomi endast är tre gånger så stor som Sveriges är Ryssland en av världens ledande exportörer av olja och gas. Inkomsterna från landets energiexport är avgörande för Rysslands försvarsbudget och landets stormaktsroll. Exporten stärker även ryskt inflytande runt om i världen. Med andra ord hänger energifrågor samman med geopolitik. Europa är beroende av rysk gas och fruktar att gasen stängs av i ett värsta falls scenario. Den oväntade ökningen av oljeproduktionen som USA bidragit med efter genombrottet för okonventionell produktion, känd som den amerikanska energirevolutionen, har fört samman Ryssland och Saudiarabien och lett till att OPEC återgått till sin traditionella roll av att pressa upp oljepriset.

Emellertid kanske eran för de fossilbränslena går mot sitt slut vilket påverkar alla auktoritära energiexportberoende länder. Ryssland måste anpassa sin ekonomi men har med sin annektering av Krim samtidigt utmanat den internationella regelbaserade ordningen. På senare tid har Ryssland valt att fördjupa sin energirelation med Kina. Denna rapport erbjuder en geopolitisk analys av rysk energi.

Nyckelord: energi, energisäkerhet, Europa, gas, GECF, geopolitik, LNG, olja, OPEC, gas- och oljeledningar, NATO och Ryssland.

Preface

Russia's state budget needs income from energy. So what do the changes in the international energy landscape mean for Russia – short, medium, and long term?

Niklas Rossbach analyses both energy trends and the role of energy in Russian defence and foreign policy. Furthermore, the geopolitical perspective in this study requires that these two aspects are linked to Russia's relations with different regions of the world.

The report is produced within the framework of the Russia and Eurasia Studies Programme (Russian foreign, Defence and Security Policy) at the Swedish Defence Research Agency (FOI), which provides analyses for the Swedish Ministry of Defence. The programme focuses on research in Russian security studies, including Russia's neighbourhood, military, economic and domestic affairs.

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Gudrun Persson

Head of the Russia and Eurasia Studies Programme

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Abbreviations

BP	British Petroleum
EIA	US Energy Information Administration
EU	the European Union
GECF	Gas Exporting Countries Forum
IEA	International Energy Agency
LNG	Liquefied natural gas
NATO	North Atlantic Treaty Organization
OECD	Organisation for Economic Co-Operation and Development
OPEC	Organization of the Petroleum Exporting Countries
TANAP	the Trans Anatolian Pipeline
TAP	the Trans Adriatic Pipeline

Figures and maps

1 Introduction

Global energy flows and the dominant sources of energy are changing, putting the international order under pressure. This has consequences for energy export dependent countries like Russia. Energy flows will change while states try to safeguard their energy security – i.e. their energy interests – based on political as well as economic considerations. A geopolitical approach to energy makes is possible to analyse what these changing global trends mean for Russia's standing in the world.

1.1 Scope

Russia's recent actions in Europe have challenged the international rules-based order.[1] At the same time, however, Russia has to adapt to changing global energy flows. Ultimately, it is the Russian leadership, under President Vladimir Putin, that must coordinate Russian responses to changing global trends. Since Putin's political career took off in 2000, it has been inextricably linked to the asset that has empowered post-Soviet Russia: energy.

This analysis is about Russia's relations with key regions in the world based on its leading role in global energy affairs, and in relation to major projects such as Nord Stream 2. In this study energy is about oil and gas. Both are essential energy exports for Russia, as well as the key imported energy sources of many countries across the globe. Both are very difficult to quickly replace. This report analyses Russian energy and its relevance to the country's power and influence, primarily from an international perspective. This is because the major changes studied are external to Russia, in terms of both the changing international order and the global energy landscape. However, neither energy nor geopolitics are clear-cut terms.

As a physical resource, energy fits neatly with the prevalent buzzword 'geo-politics', which was originally associated with geography and resources. The usefulness of the term in the public debate rests on it signalling an awareness of the renewed importance of foreign and defence policy. Geopolitics has had a number of meanings since it was coined by the Swedish political scientist Rudolf Kjellén over 100 years ago. The term has been used to highlight the importance to international affairs of geography, the climate and not least natural resources.[2] In

[1] For a full overview of political and military developments in Russia see Persson, Gudrun (ed.), Russian Military Capability in a Ten-Year Perspective – 2016, FOI, FOI-R--4326--SE, December, (2016).

[2] Luard, Evan. Basic Texts in International Relations, The Evolution of Ideas about International Society, Basingstoke, Macmillan, (1992), pp. 225, and 237. One of the best known examples Harold Mackinder's book Democratic Ideals and Reality: A Study in the Politics of Reconstruction

this study, geopolitics is used to underline both the importance of energy security and geography as well as the role of states and the international power amongst states.

Even when energy is a matter for national security it usually remains related to the international economy. Before the end of the post-Cold War era, which began to draw to a close with the economic and financial crisis of 2008, traditional security perspectives were often discounted and in the main seen as separate from decisions regarding the international economy. The market was thought to have trumped traditional power politics. But the market could not solve all international problems, nor did it preclude the rise of state capitalism. As a result of changing global trends, concern about energy security has increased in many countries in recent years.[3] The most disruptive event upsetting calculations about oil and gas dependencies in global energy markets is the American energy boom. It is the unexpected result of a new technology known as hydraulic fracturing, or fracking. This has allowed the United States to produce more oil and gas than had previously been thought possible, reducing – and possibly reversing – the need for the US to import gas and oil. With more gas and oil available, energy prices have been affected and with that the income of energy producers.[4] This has even forced the Organization of the Petroleum Exporting Countries (OPEC) and Russia to collaborate properly for the first time to force up the price of oil. In this report the American energy revolution is the point of departure for examining Russia's continued adaptation to global energy markets and associated security relationships. Since Russia is a major producer and exporter of energy, it is important to understand Russian energy from a geopolitical perspective.

Purpose and questions

The purpose of this study is to analyse Russian energy from a geopolitical perspective. This means looking at both energy trends, referred to below as 'the

from 1919 that espoused the importance of controlling the Eurasian "Heartland". A more recent example is Tim Marshall's Prisoner's of Geography – Ten Maps That Explain Everything About the World from 2015, which, as its title implies, is a work of popular science. Geopolitics is most often associated with a traditional realpolitik, or realist, view of the world.

[3] See Yergin, Daniel. The Quest – Energy Security, and the Remaking of the Modern World, London: Penguin Books, (2012); Steven, David; O'Brien, Emily and Jones, Bruce (eds.). The New Politics of Strategic Resources – Energy and Food Security Challenges in the 21st Century, Washington, D.C., Brookings Institution Press, (2015); and Klare, Michael T. The Race for What's Left – The Global Scramble for the World's Last Resources, New York: Picador, (2013).

[4] See e.g. O'Sullivan, Meghan L. Windfall: How the New Energy Abundance Upends Global Politics and Strengthens America's Power, New York: Simon & Schuster, (2017) and Rossbach, Niklas 'Energy and the Future of US Primacy: The Geostrategic Consequences of the Shale Revolution' in Wigell, Mikael; Scholvin, Sören; and Aaltola, Mika (eds.) Geo-economics and Power Politics in the 21st Century – The Revival of Economic Statecraft, London and New York: Routledge, (2019) (Forthcoming).

changing energy landscape', and the role of energy in Russian defence and foreign policy. A geopolitical perspective also requires that these two aspects are linked to Russia's relations with different regions of the world.

The global energy landscape is changing (such as new energy trade flows in the short term and changes such as which energy sources are dominant in the long term) at the same time, the international rules-based order, (which is often also known as the US-led world order or the liberal order or simply the international order), is being challenged. Russian aggression against Ukraine is one symptom of the changing international order.

The income from oil and gas exports enables Russia to invest in its military forces. Russian energy exports have also been regarded as a tool, for political leverage in their own right in Russia's foreign and defence policy. The main question is: what does this combination of changes in the international order and the energy landscape mean for Russia's power and influence?

In order to answer the main question, the study examines three sets of questions that roughly correspond to each of the following three chapters. Chapter 2 analyses: how is the energy landscape changing? Which countries and organisations are the key actors in oil and natural gas?

Chapter 3 analyses: how does energy relate to Russian power and influence? What is Russia's direction?

Chapter 4 analyses: what is the Russian approach to energy in different regions? This includes Russia's relations with the US and China, international organizations and the European Union, but also associations of energy producers and countries that are essential to the international flow of oil and gas, such as Saudi Arabia.

Timeline

This study is concerned with three time frames: the next five years, the period up until the mid-2020s, and the 2030s and beyond. The short term time frame deals with Russia's role in key regions in next three to five years, given its present role as a major energy exporter. The medium term time frame, the mid-2020s time frame, is concerned with the increased use of renewables, among other trends, which by then will have begun to have a significant impact. The long-term perspective focuses on the 2030s and thereafter. The future holds technological changes that could challenge conventional linear depictions that show a continuing major role for oil and gas for the next decades.[5]

The point is not that there will be a dramatic shift away from oil and gas in the next few years, but that countries dependent on energy exports, such as Russia,

[5] See Helm, Dieter. Burn Out - The Endgame for Fossil Fuels. New Haven and London: Yale University Press, (2017).

face great uncertainty in the long term. They are already aware that demand may change and that low oil and gas prices in 20 years' time could have a huge impact on their economies and that the next ten years could see a great deal of volatility in the energy markets.

The next chapter, chapter 2, discusses the changing energy landscape over all three time horizons. Since, what is expected to happen in the future is also relevant for the present. A well-known example is that predictions about future supply and demand have a huge impact on the decisions made today about investing in new exploration of oil and gas resources. Chapter 3 focuses on the recent past and the present, but also includes Russia's energy plans in the long term. Chapter 4, on geopolitical relationships, is concerned with the short term. Accordingly, this report gradually moves from the long term perspective to the short term perspective.

On the sources

As policy research that seeks to inform, this report combines energy security, which in itself is a 'multidisciplinary topic', with geopolitics.[6] What the study provides is a comprehensive geopolitical analysis of Russian energy as a means of financing Russia's great power ambitions and providing Russia with political leverage. Given the eclectic nature of this kind of policy research, the sources are quite wide-ranging and often by necessity secondary sources. This report relies on academic and popular writings on energy, found in journal articles, think tank reports, foreign policy monthlies and the news media.

The research is also based on the standard sources regarding energy: the International Energy Agency (IEA), the US Energy Information Administration (EIA) and on occasion the overviews published by major energy companies such as British Petroleum (BP).[7] The annual or recurring publications of these standard sources make regular predictions for 10–20 years ahead, and sometimes more. These predictions can change from one year to the next, but that is the nature of the modelling business. The sources often discuss more than one outcome illustrated by a range of scenarios. Since this study combines two major perspectives, the international order and the energy landscape, it is not possible to also provide a complete inventory of the various scenarios, but they do serve as a

[6] See the preface in Luft, Gal and Korin, Anne (eds), Energy Security Challenges for the 21st Century Santa Barbara: Praeger Security International, (2009). Energy security was a new topic in recent editions of the Oxford University Press Contemporary Security Studies. This report is in some aspects effectively a study of political economy as it includes economic aspects and political considerations.

[7] On the EIA see https://www.eia.gov/ and on BP see its Energy outlook, https://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html. Among the other important attempts to collect and make statistics available is the Joint Organisations Data Initiative (JODI), https://www.jodidata.org/, accessed 26 August 2018.

reminder that Russia's future, at least as far as energy is concerned, is not necessarily linear.

Another major source for the study is the information gleaned from interviews with experts, which is contrasted with the standard sources and scenarios based on statistics. The interviews were conducted in the US in order to swiftly tap a large community of experts that combines a knowledge of energy with an understanding of international affairs. Views expressed in Washington do not reflect a single unified American viewpoint. Those interviewed were not of one mind, but held different views, and even disagreed.

The interviews also made it possible to cover quickly different regional aspects of global developments in energy. The aim was to find a balance between different assessments of Russia with regard to both international energy developments and the ways in which Russian energy might be geopolitically important.

It was especially important to talk with the community in Washington as it was among the first to have to reassess its own assumptions in view of the so-called American shale revolution, which began just a few years ago. The American energy revolution represents a rupture in the energy markets, since it has had an impact on both the world oil markets and gas markets globally and forced both importers and exporters to re-examine their assumptions about their roles and relationships. The American energy revolution is a phenomenon with global repercussions, to which no one is immune – least of all major energy exporters such as Russia. Accordingly, the American energy revolution is in many ways always the point of reference, if not always the cause, of many of the geopolitical shifts that have occurred in recent years regarding energy security. The next chapter examines this in more detail.

Limitations to the study

Given Russia's nuclear power capability it could reasonably be argued that the country could use nuclear power as a source of influence abroad.[8] Russia has the ability to manufacture and sell nuclear power plants and nuclear material, but technological exports and nuclear matters are beyond the scope of this study. Nuclear energy is also different from oil and gas, which by themselves are also two different stories.

Oil and gas differ in how they are used and in how they are priced. Essentially, oil is traded globally at a world market price, whereas natural gas is traded on regional markets. This is changing because of the increased trade in gas that is cooled to

[8] Katusa makes the argument that oil, gas and nuclear power are each part of Russia's attempt to gain wider influence globally, using energy as its means of influence. See Katusa, Marin. The Colder War – How the Global Energy Trade Slipped from America's Grasp. Hoboken: John Wiley & sons, (2015).

liquid form and shipped on tankers, i.e. liquefied natural gas (LNG). The price is different depending on the regional set up of gas trade, for example whether LNG or pipeline gas is dominant in the market and how sales of gas are made, on a spot market or on long term contracts. The price of gas was often linked to the oil price for historical reasons, such as to make gas an attractive alternative to oil for heating, and in Asia the link to the oil price is still relevant. However, oil and gas differ in more ways than in how they are traded.

'[O]il is king' in transportation, at least historically. Ten years ago, 95 per cent of oil was used in 'cars, trucks, ships and airplanes'.[9] Although transport systems are changing, oil cannot easily be replaced with another energy source. The internal combustion engine will have an important role to play for the next 15 years, even though change is happening.[10] Gas powered and electric cars will slow the pace of growth of the demand for oil, but not reverse it. Oil will remain important in aviation, shipping and trucks as well as in the petrochemical industry.[11]

Natural gas – here 'gas' for short – differs from oil in that it is often used in different ways: heating, to generate electric power, in fertilizers and even in vehicles. But it is in industry, power and heating that gas is used most. Despite not having an indispensable key role, in the same way as oil, gas is sometimes regarded as a fuel of the future – at least in Asia, where there is a desire to move away from fuels that cause high levels of air pollution. In part, gas is a fuel for the future because it can be used in many different ways but two further factors underline the special role of gas. First, relative to both coal and oil, gas has a lower carbon footprint. Second, there is an increase in the amount of gas being produced.[12] To sum up, gas is a relatively environmentally attractive and plentiful source with many uses and. As the next chapter demonstrates both oil and gas are very important to Russia.

[9] Luft and Korin. *'Energy Security: In the Eyes of the Beholder'*, p. 6.
[10] Yergin. *The Quest*, p. 716. Yergin's prediction in 2012 was that today's cars would remain dominant for 20 years.
[11] IEA. World energy Outlook 2017, power point presentation, (2017), https://www.iea.org/media/publications/weo/WEO2017launchpresentationprint.pdf, accessed 26 August 2018.
[12] Yergin. *The Quest*, pp. 343-344. For usage see also BP, BP energy Outlook, BP energy economics, p. 82.

1.2 The geopolitics of energy

The return of geopolitics: a multipolar world promoted by opponents of the West

Discussions, in the media, about 'the return of geopolitics' can be seen as a short hand for the increased number of serious challenges to the international rules-based order.[13] China and Russia are often identified as the two main challengers to the established international order, which is upheld by the West. China and Russia both desire a multipolar world, established at the expense of the West and its values. According to a leading American commentator, Walter Russell Mead, China and Russia are too weak to directly challenge the international order, and so instead prefer to try to do so indirectly.[14]

It is conceivable that energy relations could provide opportunities for indirect action to bring about the changes to the international order that Russia wants to see. Japan's decision to attack the US at Pearl Harbor during Second World War, as the result of being denied access to oil imports, is often cited as an example, albeit extreme, of a conflict in which energy played an important role.[15] It is important to recognize that the geopolitics of the past might not be the geopolitics of the future. Energy, like information warfare, might be an alternative to military pressure, and even military action, to persuade other countries to acquiesce to desired ends.

One historian has warned against the use of historical analogies in which current trends represent a replay of the Cold War, or of the power politics of the rising and falling powers of the 19th century that led to the First World War.[16] In fact, several experts point to a future where the world loses the established international order without a new order replacing it. Some suggest that a sign of this trend is the

[13] There are many different views on defining geopolitics and how close it should remain to its origins, especially since the concept became such a buzzword. On the changing state of international relations see Joffe, Josef, 'The End of "The End of History" and the Return of Power Politics', in Almquist, Kurt, Linklater, Alexander and Mackenzie, Andrew (eds.). The Return of Geopolitics. Stockholm: Axel and Margaret Ax:son Johnson Foundation, (2016), p. 41. On 'the return of geopolitics' as a 'catchphrase' see McMeekin, Sean. 'Geopolitics and History: framing the debate' in Almquist et al. *The Return of Geopolitics*, p. 23.

[14] See Russell Mead, Walter. 'The of History Ends' in Almquist et al. *The Return of Geopolitics*, pp. 13-14

[15] Jones, Bruce and Steven, David. The Risk Pivot – Great Powers, International Security, and the Energy Revolution, Washington: the Brookings Institution, (2015), p. 37. Of course, the American oil embargo was only one of several causes added on top of already existing strains in the US-Japanese relationship.

[16] McMeekin, Sean. 'Geopolitics and History: framing the debate' in Almquist, Kurt, Linklater, Alexander and Mackenzie, Andrew (eds.). The Return of Geopolitics. Stockholm: Axel and Margaret Ax:son Johnson Foundation, (2016), p. 23.

increasing number of countries adopting a so-called zero-sum approach to foreign policy, where other states must lose so that theirs can win.[17]

Energy is essential to economic growth and hence the ability of emerging powers to rise. As in the past, access to energy supplies can increase or diffuse tensions between emerging powers and established powers. Leading powers such as the US and Russia can view energy security in terms of either rivalry or cooperation, or at least 'regulated competition'.[18]

The cooperative approach relies on an interconnected global economy to mediate problems and assumes that all great powers desire the same thing: a steady and stable stream of energy. Accordingly, all leading powers would want to ensure that market forces play a central role in international affairs. The other approach highlights the risk of rivalry, where energy scarcity results in nationalistic economic policies. Instead of cooperation, countries are assumed to have a narrow definition of self-interest and little interest in safeguarding free trade. Following this kind of reasoning, Russia can be said to be pursuing neo-mercantilist economic policies.[19] Such anti-free market policies fit the zero-sum approach to international politics that Russia favours. However, even when the energy landscape is not shifting and international relations are more stable, complex issues in world politics, such as energy, are not completely subject to the rules of a free market.

The end of the Cold War seemed to offer new opportunities to countries that were resource rich but had previously been sealed off from technological advances in energy production. During the 2000s, this trend of global openness was reversed by international terrorism, resource nationalism and instability in oil exporting countries, among others things.[20] Much of the global gas and oil reserves are in politically unstable countries and regions, such as Venezuela, Nigeria and the Middle East.[21] The rise of state capitalism is also a new trend, but increasing state control over gas and oil companies, pipelines and energy reserves actually goes

[17] See for example: Bremmer, Ian. Every Nation For Itself – Winners and Losers in a G-Zero World. London: Portfolio/Penguin, (2012); Kupchan, Charles A. No One's World – the West, the Rising Rest and the Coming of the Global Turn, Oxford: Oxford University Press, (2012); and Rachman, Gideon, Zero-Sum Future: American Power in an Age of Anxiety, New York: Simon & Schuster, (2012).

[18] Jones and Steven. *The Risk Pivot*, pp. 19 and 121-122.

[19] See Raphael, Sam and Stokes, Doug. 'Energy Security' in Collins, Alan, Contemporary Security Studies, fourth edition, Oxford: Oxford University Press, (2016), pp. 346-347. Not surprisingly, the two views correspond to IR theories of liberalism and realism respectively. Raphael and Stokes also note a third perspective, historical materialism, according to which the control of energy resources is essential to the future of capitalism.

[20] Yergin. *The Quest*, pp. 13, 18 and 267.

[21] BP. BP Statistical Review of World Energy June 2017, (2017). pp. 12 and 26.

back several decades.[22] Some of the largest oil companies in the world are government-controlled, such as Saudi Arabia's Saudi Aramco (Aramco for short), or China's China National Petroleum Company (CNPC).[23]

The established multinational organizations dedicated to energy also emphasize the role of states, and especially those states that are important to the production and consumption of oil. The last era marked by geopolitical turbulence in the energy markets – the oil crisis-ridden 1970s – brought to prominence to two state-led institutions: the oil exporters' Organization of the Petroleum Exporting Countries, (OPEC), founded in 1960, and the response from the importers in the developed world, the International Energy Agency (IEA), which was founded in 1974 based on the Organisation for Economic Co-operation and Development (OECD).

Energy security: different meanings for importers and exporters

A geopolitical perspective underlines the key role states play and the importance of energy to national security. Energy is not only about supply and demand in the market. It is also subject to the policies of states, be it to ensure functioning markets or to maintain control over natural resources. It has always been thus: according to Daniel Yergin, a senior commentator on energy, 'the fundamental need of countries [is] reliable energy with which to power economic growth'.[24]

The Economist has described the 'geopolitics of energy' as 'the impact of energy flows on the power and influence of nations'.[25] While geopolitics has become a current buzzword, it has an old pedigree in international relations. Energy security is also more a matter of the return of a topic – a flash back to the oil crises of the 1970s – rather than something entirely new and original.

The Russian Energy Strategy to 2030 states what is true for many governments: '[e]nergy security is the country's security…from the threats to reliable supply…[t]hese threats are determined by external (geopolitical, macroeconomic, market) factors…'.[26] This is the fear of energy insecurity – that energy supplies

[22] Cronin, Patrick (ed.). Global Strategic Assessment 2009 – America's Security Role in a Changing World, Washington, D.C: National Defense University Press, (2009), p. 71 and Carpenter, J. William, 'The World's Biggest State Owned Oil Companies', Investopedia, 17 December, (2015), https://www.investopedia.com/articles/investing/121715/worlds-biggest-state-owned-oil-companies.asp, accessed 26 August 2018.

[23] Agnihotri, Gaurav. 'A Closer Look At The World's 5 Biggest Oil Companies', Oilprice.com, 21 April, (2015), accessed 26 August 2018 https://oilprice.com/Energy/Crude-Oil/A-Closer-Look-At-The-Worlds-5-Biggest-Oil-Companies.html.

[24] Yergin. *The Quest*, p. 267.

[25] The Economist. 'The new power superpowers', in the Economist, 17 March, (2018).

[26] Institute of Energy Strategy. Energy Strategy of Russia – for the period up to 2030. Moscow, (2010), p. 28.

will become unstable and unpredictable. This concern became more widespread in the 2000s, when the supply of gas and oil seemed to be less stable.[27]

Energy security – somewhat simplified – is the reliable supply of energy to meet a state's current and future demand.[28] However, energy security works differently depending on whether a country is an importer or an exporter. Importing countries want to ensure the stability of supply. Exporting countries such as Russia, and especially those with nationally controlled energy companies, want to ensure that they have a market and a stable income from their energy exports.[29] This concern is also evident in the Russian Energy Strategy to 2030.[30] Energy security for Russia, from the perspective in this study, is primarily about having a market for its oil and gas exports.

Russian energy and political and economic power

In order to interpret Russia's approach to energy it is beneficial to borrow some theoretical insights from political economy, and especially the work of Mikael Wigell. These are partially employed in chapter 4, which discusses Russia's relationship with different regions of the world.[31] Wigell has identified strategies that regional powers might employ. He argues that a state can be either cooperative or competitive. At the same time, a state can also regard economic power as an end in itself or as a means to achieve other non-economic goals. By combining a state's choices, he derives four approaches: (*a*) a state that seeks to be cooperative and increase growth and economic interdependence is liberal, short for liberal-institutionalist; (b) a state that seeks to be cooperative but also desires 'regional leadership' is hegemonic; (c) a state that is competitive but only seeks increased economic power is neo-mercantilist; and (d) a state which is both competitive and

[27] But the actual experience of energy insecurity is more common among countries in the developing world and countries in conflict. Raphael, Sam and Stokes, Doug. 'Energy Security' in Collins, Alan, Contemporary Security Studies, fourth edition, Oxford: Oxford University Press, (2016), pp. 343-344.

[28] Raphael and Stokes. *'Energy Security'*, pp. 343-344.

[29] Rossbach, Niklas H. Amerikanskt energioberoende? – säkerhetspolitiska följder av okonventionell energiutvinning av skiffergas och skifferolja i USA, FOI, FOI-R--3947--SE, October, (2014). See also Luft and Korin, *'Energy Security: In the Eyes of the Beholder'*, pp. 5-6.

[30] Institute of Energy Strategy. Energy Strategy of Russia – for the period up to 2030. Moscow, (2010), pp. 22-23.

[31] The reflections used in this study are simplified and do not do justice to the refined theorizing of the works that inspired them. For a criticism of using geopolitics in analytical framework see Black, Jeremy. 'Rethinking Geopolitics' in Almquist et al. *The Return of Geopolitics*, p. 31. For the use of geopolitics in analytical frameworks see Wigell, Mikael and Vihma, Antto. 'Geopolitics versus geoeconomics: the case of Russia's geostraegy and its effects on the EU', in International Affairs 92:3 (2016), pp. 605-627.

uses economic means to further its "'informal" empire' is neo-imperialist.[32] The framework set out in chapter 4 is partially based on these categories. It assumes that Russia fits with either c) or d). Chapter 3 discusses the role of energy for Russia.

However, it is important to acknowledge that market forces remain very important. The quintessential result of supply and demand, the price, has a huge impact on the choices states make. In fact, when the oil price vacillated between USD 25 and USD 150 per barrel in the 2000s it increased concerns about energy security and the importance of energy to national security in many states.[33] In the US the high price of oil towards the end of the 2000s helped set off the energy revolution that contributed to an already changing global energy landscape, and this is what the next chapter examines.

[32] Wigell's concepts can be employed in this study if regional powers are replaced with rising powers and geoeconomics is assumed to be a blend of energy and geopolitics. Wigell, Mikael. 'Conceptualizing regional powers' geoeconmic strategies: neo-imperialism, neo-mercantilism, hegemony, and liberal institutionalism'. Asia Europe Journal. Volume 14, number 2, June (2016), pp. 135-151.

[33] Cronin. *Global Strategic Assessment 2009*, pp. 69-71.

2 The changing energy landscape

Increased global demand for oil and gas in the years ahead should be good news for Russia. Since the mid-2010s, however, the American shale energy revolution has upset all previous calculations on the future global energy landscape and shaken energy export dependent countries to the core. They now find themselves forced to adapt. In the long run of the next 20 to 30 years, technology trends may spell the end of the role that fossil fuels, especially oil, have played for the past century. This is something that is already haunting energy exporters.

2.1 From the shale revolution to the endgame for fossil fuels

The energy landscape is changing from both a short-term and a long-term perspective. The rapid changes in the present are not due to a revolutionary technological breakthrough capable of supplying the world with free and clean energy. On the contrary, much of the change is dependent on more of the same. This holds true for hydrocarbons, and oil and gas, as well as for renewable energy sources. What is new is the amount of hydrocarbons being produced in unexpected places, and where the use of renewable energy is growing. The energy landscape was expected to change in the 2010s but many of the changes have turned out to be different from what was expected ten years ago.[1] Nonetheless, the changes considered in this study are not chosen on the assumption that global carbon emission goals will be met.

There are three main reasons why the energy landscape is changing in the time frames chosen for the analysis in this study: (a) the American shale energy revolution (now); (b) the increase in the demand for energy from a rising Asia (now and in the long term); and (c) changes in the types of energy sources, while gas and oil remain important energy sources in the medium to long term.

The energy revolution that has already taken place

First, there has already been one energy revolution in recent years: the American shale revolution. Until recently, the US expected its energy imports to increase. In the 2000s, influential thinkers in Washington warned of the consequences for national security due to the US's energy dependency, meaning the country's imports of oil and gas. Some analysts argued that this was a consequence of not fully integrating energy policy into American foreign policy. As a result, the US

[1] Cronin. *Global Strategic Assessment 2009*, pp. 69-70 and 80.

had become dependent on 'undemocratic, unstable, and repressive governments' for its energy imports.[2] As recently as 2006, the Council on Foreign Relations, an influential think tank, was warning of the ability of Iran and Venezuela, as oil rich countries, to 'carry out foreign policies that are hostile to the United States'.[3]

Shortly afterwards, at the time of the financial and economic crisis of 2008, the American energy revolution had already begun. A few small energy companies combined well-known techniques and new methods in a process known as hydraulic fracturing, or fracking.[4] This vastly increased the amount of oil and gas that could be produced and resulted in a windfall of unconventionally produced gas and oil, so-called shale gas and tight oil, or shale oil. The new shale production reduced the need for imports.[5] Now, even at low prices, the US will be 'the biggest oil and gas producer' globally.[6] Shale oil and gas is more expensive to produce than conventional oil and gas, and hence requires a higher market price to make it economic to produce. Nor should the American windfall in resource terms be confused with the country consuming less. The US remains one of the largest consumers of oil and gas.

This turnaround for American oil and gas production was a seismic shock big enough to alter the global energy landscape. The immediate consequence of the shale revolution was a shift in the global energy trade, as many of those that relied on the US to be a reliable customer of gas and oil had to find other markets.[7] Eventually, the revolution even enabled the Obama administration to lift the American restrictions on crude oil exports, which had been in place since the 1970s when successive oil crises made oil a national security concern.[8] This underlines the fact that energy has never been entirely a market issue, even for the US, which is generally assumed to be the leading exponent of safeguarding capitalism.

The shale revolution means that there is at least the prospect of a global abundance of oil and gas. This undermines the warning that the world is running out of oil, or the so-called peak-oil argument. With more oil available, the oil price initially fell

[2] Kalicki, Jan H. and Goldwyn, David L. Introduction and Conclusion in Kalicki, Jan H. and Goldwyn, David L. (eds.). Energy and Security – Toward a New Foreign Policy Strategy, Washington D.C., Woodrow Wilson Centre Press and Baltimore, Johns Hopkins University Press, (2005), pp. 2-6 and 562.

[3] Bernell, David and Simon, Christopher A. The Energy Security Dilemma – U.S. Policy and Practise, New York and London, Routledge, (2016), p. 164.

[4] See Gold, Russell, The Boom: How Fracking Ignited the American Energy Revolution and Changed the World, New York: Simon & Schuster, (2015). Fracking is a combination of two techniques, horizontal drilling – an old technique – and a method of breaking up the bedrock to catch carbon, using water and chemicals, a method that is still improving.

[5] See Gold. *The Boom*, and O'Sullivan, Meghan L., *Windfall*.

[6] OECD/IEA, World Energy Outlook 2017 – Executive Summary, (2017), p. 1.

[7] See Rossbach. *Amerikanskt*.

[8] See Rossbach. *'Energy and the Future of US Primacy:*.

in the mid-2010s. As chapter 4 shows, oil producers such as Russia eventually adapted by cutting production, and the oil price increased.

American gas imports fell quickly after the shale revolution, but it is the future potential of major American LNG exports that has affected global markets more than its actual exports. However, more will be needed than political will to promote American LNG exports. Crucial is also for the gas to have a market, willing to pay the higher price of American gas, and to have the facilities required for LNG trade. The latter takes time. Hence, the gas market remains volatile.[9] In the medium term, up to the early to mid-2020s, this could benefit low cost producers such as Russia, which produce conventional oil and gas, which is much less costly than shale production.

The initial fall in the oil price, around 2014, following the shale revolution, spelled trouble for countries relying on oil exports, including leading exporters such as Russia and Saudi Arabia, as well as Venezuela. The British academic Dieter Helm argues that shale is especially problematic for authoritarian regimes. A low oil price undermined the Soviet Union in the 1980s and increased economic woes for Russia in the late 1990s.[10] At the same time, however, lower energy prices could drive competition out of the market and benefit low-cost producers such as Russia. Nonetheless, even if it is possible to rely on low-cost production to ensure an income, this might not be enough to support a country's great power role.

In time the ability to produce tight oil and shale gas may spread globally, as there is shale in many locations around the world, not least China and Russia. But the US has a unique combination of geological circumstances, laws, finance and technological know-how.[11] These might be difficult for other countries to emulate, and market conditions might not favour shale production in all places.

The rise of Asia from a short- and long-term perspective

The second reason why the energy landscape is changing is the rise of Asia, (here meaning the increased economic and political importance of Asia, and especially its great powers, relative to the rest of the world). This shift, of course, has an energy dimension. The rise of Asia includes the increasing global importance of China, and its role as the main competitor, or rival, to the US. Access to cheap energy has been essential to both China's and India's economic growth. In the case of China, economic growth helps to sustain the legitimacy of the country's regime.

[9] Grigas, Agnia. The New Geopolitics of Natural Gas, Cambridge: Harvard University Press, (2017), pp. 76, and 89-94.
[10] Helm. *Burn Out*, pp. 5-6.
[11] See Rossbach. 'Energy and the Future of US Primacy: The Geostrategic Consequences of the Shale Revolution'.

Both countries are rising great powers and aware of their dependence on imported oil and gas.[12] Some have called the energy insecurity of China and India, the 'Chindia challenge'.[13] Japan has been aware of its critical dependence on a variety of imported energy resources for over a century. It was the first country in the Far East to seek great power status. After the Second World War, this attempt was replaced by efforts to achieve economic ascendency.[14] Accordingly, all the preeminent powers in Asia are conscious of their energy insecurity. Of course, Russia too, is a Pacific power and well aware that the Asia-Pacific is the centre of gravity in geopolitical terms.

Asian apprehension about the availability of energy imports grew in the first decade of the 21st century. In recent years, the energy security situation has improved, if only temporarily, due to increased supplies of oil and gas – in part as a result of the American energy revolution, but also because of the return of Iran (at least temporarily) as well as Iraq as oil exporters. However, regional nationalism and competition in Asia may eventually reassert itself.[15] This could happen in the medium term if countries want to safe guard their energy security at a time of volatile energy prices.

According to the IEA, the overall Asian appetite for energy will not diminish in the long term. By 2040, Asia is expected to account for 70 per cent of global oil and gas imports.[16] Chinese and Indian demand for energy is estimated to make up about half of global energy demand, according to estimates by BP.[17] According to the IEA's main scenario (the New Policies Scenario) both China and India will lead the growth in demand for gas imports while India's demand growth for oil will, within ten years, surpass China.[18] As of 2017–18, China surpassed the US as the top global oil importer.[19] Although, according to the IEA, it is not until the

[12] Jones and Steven. *The Risk Pivot: Great Powers, International Security, and the Energy Revolution*, pp. 20–21.
[13] Raphael and Stokes. 'Energy Security', in *Contemporary Security Studies*, p. 345, quoting Michael Klare.
[14] Duffield, John S. *Fuels Paradise: Seeking Energy Security in Europe, Japan, and the United States* (Baltimore: Johns Hopkins University Press, 2015), p. 195.
[15] Herberg, Mikkal E. and Gillispie, Clara. 'Introduction', in *Asia's Energy Security: Amid Global Market Change* National Bureau of Asian Research, no. 63 (December 2016), pp. v–vi.
[16] IEA, A World in Transformation: World Energy Outlook, 2017, 14 November 2017, https://www.iea.org/newsroom/news/2017/november/a-world-in-transformation-world-energy-outlook-2017.html, accessed 26 August 2018.
[17] BP, BP Energy Outlook, BP energy economics, p. 7.
[18] IEA, World Energy Outlook, 2017, 2017, http://www.iea.org/weo2017/, accessed 26 August 2018. The New Policies Scenario is here treated as the IEA's main scenario, since the IEA has chosen to present most of its key findings on that scenario.
[19] There are different estimates about when this shift took place. Paraskova, Tsvetana' 'China's Becomes World's Next Top Oil Importer', Oilprice.com, 6 February 2017, accessed 26 August 2018, https://oilprice.com/Energy/Crude-Oil/Chinas-Becomes-Worlds-Next-Top-Oil-Importer.html.

mid-2030s that China is expected to actually consume more oil than the US.[20] In 2018 China might also replace Japan as the leading global gas importer.[21] At least one analyst argues that the way the energy landscape changes will have a huge impact on whether China will upset the existing balance of power or choose to continue to participate in the existing international rules-based order.[22] In a sense, China is central to the global direction in energy – whether there will be rivalry or cooperation. The extreme version would be a replay of the Second World War situation involving Japan, mentioned in chapter 1.[23]

In 2017 China became the second most important destination for American crude oil exports. Thus far, increased American energy production seems to have mitigated tensions.[24] However, China is still dependent on oil transportation through the Malacca Straits and vulnerable to its imports being cut off in the event of a Sino-American conflict.[25]

The endgame for continued use of oil and gas: the long-term perspective

The third reason why the energy landscape is changing is technological. This is the most difficult to make predictions about. Cleaner energy, improved energy efficiency and increased electrification will have a huge impact on the energy landscape, but oil and gas will remain key energy sources. Renewables currently make up about 4 per cent of primary energy (sources not yet converted for use, such as coal). According to estimates by BP, in 20 years they will make up 14 per cent.[26] However, this estimate would not meet the goals for carbon emissions, something which in turn could necessitate policy changes in the medium term, well before the 2030s.

[20] OECD/IEA. *World Energy Outlook 2017 – Executive Summary*, p. 4.
[21] CNBC. 'China set to top Japan as world's biggest natural gas importer', 3 January, (2018), accessed 26 August 2018, https://www.cnbc.com/2018/01/03/china-set-to-top-japan-as-worlds-biggest-natural-gas-importer.html.
[22] O'Sullivan, Meghan. Asia: A Geopolitical Beneficiary of the New Energy Environment, in in 'Asia's Energy Security – Amid Global Market Change' The National Bureau of Asian Research, number 63, December, (2016), p. 20.
[23] For an overview of the risks of a war between China and the US, see Coker, Christopher. The Improbable War – China, the United States & the Logic of Great Power Conflict. Oxford. Oxford University Press, (2015).
[24] Actually the most important overseas destination. Hamilton, Mason, 'US crude oil exports increased and reached more destinations in 2017', EIA online, 15 March, (2018), https://www.eia.gov/todayinenergy/detail.php?id=35352, accessed 22 May, (2018).
[25] See for example Rossbach. *Amerikanskt energioberoende?*
[26] BP. BP Energy Outlook – Country and regional insights – Global. (2018), https://www.bp.com/en/global/corporate/energy-economics/energy-outlook/country-and-regional-insights.html, accessed 27 August 2018.

China might implement its own 'energy revolution'. According to the IEA, it could lead by example when it comes to making the transition to a low-carbon future. There are, however, a number of different possible outcomes. The country's efforts to reduce pollution go hand in hand with the country's ambition to move away from manufacturing to a services-based economy. China's regulation has improved energy efficiency, which will help to gradually replace petrol-fuelled vehicles with electric cars. For many countries, solar power is attractive not because it is environmentally friendly but because it is cheap. China, India and the US are leading the trend for increased use of solar power, a source that is likely to become the primary low-carbon energy source. Europe is leading the way in wind power.[27]

However, both the demand for gas and oil will grow in the decades ahead, according to the IEA World energy Outlook. Gas might could arguably be seen as a preferable alternative to oil and coal use.[28] Gas results in less air pollution, which is a consideration in parts of Asia, not least China. From the predictions by the IEA and the EIA, it seems that the Middle East, China and the US could provide most of the increased gas production. In the case of China and the US this is likely to be mainly the result of shale gas production. 'Russia and the Caspian' is also expected to produce more by 2040. Today Russia and the Caspian represents a large amount of the gas produced. According to one long-term forecast, by 2040 the total amount exported by the US, Canada and the Middle East will be roughly equivalent to Russian and Caspian energy exports, even though that too is expected to increase. The main importers of gas are projected to be Europe and Asia.[29]

What is perhaps most essential with regard to gas from a geopolitical perspective is the shift that will take place in the gas trade from being mostly about gas traded through pipelines to being mostly about gas that is shipped as LNG. This shift will take place in the next few years, when LNG volumes will surpass gas in inter-regional pipelines.[30] But the emergence of spot markets is going slowly. Nevertheless, an increasing amount of gas available globally will shape markets and have an impact on the pricing of all gas, including gas delivered through pipelines.

Even though gas is set to replace coal as the second largest energy source by the mid-2020s, oil could still remain the top global energy source in the decades ahead, according to BP. The same forecast suggests that most of the demand for liquid fuels will come from emerging economies. Over the coming decades the main

[27] OECD/IEA. *World Energy Outlook 2017 – Executive Summary*, pp. 2 and 3-4, and IEA, World energy Outlook 2017, power point presentation, (2017), accessed 26 August 2018.
[28] OECD/IEA, *World Energy Outlook 2017 – Executive Summary*, pp. 2 and 8.
[29] EIA. International Energy Outlook 2017, US Energy Information Administration, September 14, (2017), pp. 50, 54 and 60, and IEA. *World energy Outlook 2017, power point presentation*.
[30] BP. *BP energy Outlook, BP energy economics*, p. 81.

producers are expected to be the Middle East, Russia but also the US.[31] After the mid-2020s, the Middle East is expected to be especially important for meeting market demand. Until the mid-2020s, however, the US will provide the bulk of the increase in the global oil supply.[32] Nonetheless, despite falling American imports the US will only become a net exporter of crude oil towards the end of the 2020s – and the world will be dependent on Saudi Arabia for emergencies when spare production capacity is needed. The consumption of oil will increase in the Middle East, but Asia will dominate the demand for crude oil imports. Nothing signals the rise in Asian demand more than the estimate that in the next few years, exports from the Middle East might not be able to cover the demand from Asia for crude oil.[33]

If the conventional predictions hold true the demand for Russia's primary exports gas and oil will remain high. This is most likely true for the next few years, with which this study is concerned. This is good news for Russia, which is dependent on its energy exports, as the next chapter demonstrates.

However, the end of fossil fuel dominance might be nearer than generally expected. The British economist Dieter Helm makes the argument that the future is electric. Electricity will replace liquid fuel. The generation of electricity may be based on yet to be invented technologies. Electricity can of course be generated by burning oil, gas or coal, or using water or nuclear power as well as solar and wind power. He acknowledges that his views fly in the face of the IEA, but he argues that the continued use of fossil fuels might not be the wave of the future.[34]

In the medium term, there is likely to be a great deal of volatility in the energy markets as a result of the changing energy landscape. A key risk is if less demand results in a low oil price. This would shake the economies of energy export dependent countries, such as Venezuela. Should they collapse and their oil fail to reach the market, there might be a corresponding spike in the oil price. Such developments would contribute to volatility in the oil price.

Robert Manning, an analyst who focuses on global trends, argues that the coming technological changes will be huge in the next 20-30 years. However, solar and wind already have already gained ground. If batteries were improved, it would mean better energy storage, something that would accelerate the shift to a post

[31] BP. *BP energy Outlook, BP energy economics*, pp. 70-71 and BP. *BP Energy Outlook – Country and regional insights – Global*.
[32] OECD/IEA. World Energy Outlook 2017 – Executive Summary, (2017), accessed 26 August 2018, pp. 4 and 5.
[33] IEA (Adapted from Tae-Yoon, Kim/World energy Outlook 2017), WEO Analysis: A sea change in the global oil trade, 23 February, (2018), https://www.iea.org/newsroom/news/2018/february/weo-analysis-a-sea-change-in-the-global-oil-trade.html, accessed 26 August 2018.
[34] See Helm. *Burn Out*, especially pp, 5-7.

petroleum future. The changes will happen in bursts and it will not be a linear change.[35] It is possible that renewables will change the behaviour of customers, which will be a problem for fossil fuel production companies. To some extent, it might turn out that the consumer is king, as energy companies, for the first time, have to figure out the incentives of customers which would be a big change for the energy markets.

Russia is a low-cost producer. From a medium-term perspective, up to the mid-2020s, Russia might even benefit from the volatility in the gas price if the gas market is tight. In the long run, however, the trends in the energy markets are unfavourable to Russia, with the potential for more producers of gas and a diminished role for oil. Some energy producers, such as Saudi Arabia, are already adapting their economies.

If the dominance of fossil fuels is soon to be a thing of the past the losers in the long run will be the companies and countries that are unable to adapt from being dependent on reserves of fossil fuels. These changes matter since energy transitions, such as to coal during the industrial revolution and the introduction of oil in the early 20th century, have 'changed the world', as one academic put it.[36] However, even if there is new technology, an energy transition takes time. Despite technological progress, patterns of energy consumption change only slowly since changes to the production and use of energy are so costly. Power plants and cars, for example, last a long time.[37] What changes more quickly are the key actors in the energy industry, and this is the topic for the next section.

2.2 Key actors

Who matters in oil and gas is not simply a reflection of who has the assets, the energy resources, and who has not. When there is an increase in demand and a risk of an 'energy gap' between that demand and available supplies, it is imperative to understand who the key actors are.[38] These range from companies to governments, but states are especially important as they set the frameworks, such as laws and regulations, and often, as in the case of Russia, have a great deal of control over the energy sector.

The key actors change over time. During the 1973 oil crisis, it turned out that the long-ignored state-led oil cartel, OPEC, became the key player. In regard to states, the key actors fall into three basic categories: producers, importers and, to some

[35] Interview with Robert Manning, (2018).
[36] The Economist. 'The new power superpowers', in the Economist, 17 March, (2018). The quoted academic is David Criekemans from the University of Antwerp.
[37] Yergin. *The Quest*, p. 722.
[38] Raphael and Stokes. *'Energy Security'*, p. 345.

extent, transit countries.[39] The focus below is mainly on producers, but is not the case that all the producers are in the developing world. For example, both the US and Norway produce fossil fuels. They are among the wealthiest countries in the world and members of the OECD. Russia was en route to becoming a member when plans for membership were put on hold following its annexation of Crimea and aggression against Ukraine.[40]

The IEA

A key role of the OECD's multilateral effort on energy, the IEA, is to coordinate the use of oil reserves in case of an international crisis.[41] OECD members' oil consumption is likely to decrease in the coming decades.[42] A potential drawback for the IEA's future global relevance is that only OECD members can join. Neither China nor India is a member.[43]

OPEC

What makes OPEC important is that its members possess more than 80 per cent of global oil reserves, of which more than 65 per cent are in the Middle East.[44] The OPEC members also hold short of half the global gas reserves. OPEC produces more than 40 per cent of global crude oil production and about 20 per cent of global natural gas production.[45]

The oil cartel can also help to stave off oil crises as well as create them. By the 2000s the organization had moved a long way from the confrontational attitude it displayed in the 1970s.[46] That OPEC had long since ceased to be the crisis generator of the 1970s was evident only a few years ago, when its relevance was being questioned.[47] At the time, the energy experts Gal Luft and Anne Korin

[39] Luft and Korin. *'Energy Security: In the Eyes of the Beholder'*, pp. 8-13.
[40] OECD. Members and Partners, http://www.oecd.org/about/membersandpartners/, accessed 5 april 2018, and DW. 'OECD suspends Russia accession talks while Moscow vows 'symmetrical' sanctions', http://www.dw.com/en/oecd-suspends-russia-accession-talks-while-moscow-vows-symmetrical-sanctions/a-17494773, 13 March, (2014), accessed 5 April 2018.
[41] Yergin. *The Quest*, pp. 272-274.
[42] Raphael and Stokes. *'Energy Security'*, p. 345.
[43] Luft and Korin. *'Energy Security: In the Eyes of the Beholder'*, p. 12.
[44] This is according to the organization. OPEC. OPEC share of world oil reserves 2016, http://www.opec.org/opec_web/en/data_graphs/330.htm, accessed 5 april 2018.
[45] Statista - the Statistics Portal. OPEC - Statistics & Facts, https://www.statista.com/topics/1830/opec/, accessed 5 April 2018.
[46] Yergin. *The Quest*, pp. 275-277. The organisation has fourteen members, located, in the Middle East, South America and Africa. Neither Russia nor the Soviet Union have been members.
[47] See Rossbach. *Amerikanskt* and Korin, Anne and Luft, Gal. Petropoly – the Collapse of America's Energy Security Paradigm, [Booklet], the United States, (2012).

warned that OPEC might again become geopolitically problematic and not only look after the economic interests of its members.

They pointed to the kind of rulers who have governed various OPEC members in the past, such as Libya's Gaddafi and Iraq's Saddam Hussein, and the risk that the organization might act as an 'arsonist' rather than as the firefighter that the organization claims to be. They also pointed out that OPEC's conventional oil reserves will last longer than those of non-members such as Russia. This could mean that the organization's importance will grow, at least relative to Russia, rather than diminish. All this of course depends on the future of oil as an energy source.[48]

One of the things that has mostly concerned OPEC in recent years is how it should respond to the shale revolution, which has increased global oil production. In 2017, OPEC's strategy from 2014 of pursuing 'a market share strategy' came to an end.[49] This meant that its attempts to force shale oil out of the market had failed.

Instead, there was as an OPEC plus deal aimed to limit production and increase the oil price, and hence the income of oil producers. This 'plus' demonstrated that OPEC is not as powerful as it was in the past, as 11 non-members were part of the agreement to cut production. The result was a price increase.[50] The deal also required Russia's participation. From 2016 to 2017 the average price increased, which benefitted Russia. That Iran, Saudi Arabia and Russia could cooperate underlines the shock of the shale revolution to the major traditional producers. How long the OPEC plus deal – or some constellation of it – can survive is unclear, especially if Saudi Arabia and Russia find themselves at odds with Iran, as Iran accuses them of sending more oil to the market than agreed.[51] There has also been speculation that Saudi Arabia and Russia plan to establish a 'Super-OPEC', which would institutionalize Saudi-Russian collaboration on oil output. In the long, run such an endeavour might not prove compatible with OPEC.[52] However, a Super-OPEC would be the ultimate version of a traditional response to the changed global oil market following the American energy revolution.

[48] Korin and Luft. *Petropoly*, pp. 40, 42-43, and 46.
[49] IEA, 'Executive Summary', *Oil 2017: Analysis and Forecasts to 2022* (Market Report Series, 2017), accessed 26 August 2018.
[50] Ibid.
[51] Blas, Javier and Farchy, Jack. 'OPEC Plus or OPEC Minus? Rosneft Points to Oil Cartel in Flux', Bloomberg Online, 7 August 2018, https://www.bloomberg.com/news/articles/2018-08-07/opec-plus-or-opec-minus-rosneft-points-to-oil-cartel-in-flux, accessed 26 August 2018.
[52] Kennedy, Will, Mazneva, Elena and Madhi, Wael. 'Russia-Saudi Plans for Super-OPEC Could Reshape Global Order'. Bloomberg Online, 22 June 2018, https://www.bloomberg.com/news/articles/2018-06-22/russia-saudi-plans-for-super-opec-could-reshape-global-oil-order, accessed 26 August 2018.

The GECF, the 'gas OPEC'

There is no organization of equivalent weight in the gas markets to play the role that OPEC plays in the world oil market. There is, however, a burgeoning Gas Exporting Countries Forum (GECF). It was initiated in 2001 in Iran but given a more formal role in 2008, in Moscow, when it became an international organization. It has 12 members (Norway is an observer) and claims to cover 67 per cent of global reserves of natural gas.[53] A critical challenge for the GECF is whether it can control gas production in the same way as OPEC can control oil production. In the GECF Russia might continue to have a leading and even a driving role, and could have an important role in gas in the future, just as it has had an important role in the OPEC plus agreement.

There are several obstacles to GECF emerging as an important player in the gas market. First, there would have to be a global gas market, at least in LNG. Second, it would also require a substantial spot-market. A lot of LNG contracts are still long term agreements. Third, the GECF and OPEC have overlapping memberships, which could make coordination more difficult. However, OPEC also languished in obscurity for many years before it became of pivotal importance in the 1970s.[54]

The importance of reserves

Reserves are a significant factor that suggest which countries are on their way up and which are on their way down in tomorrow's energy landscape, although this also depends on other factors such as pricing. The political and economic influence of producing countries is not necessarily proportional to the amount of natural resources they have. The influence is often less and sometimes perhaps more than the assets suggests, perhaps more in the case of Russia, and perhaps less in the case of Venezuela. Nonetheless, reserves are necessary for countries that aim to remain producers in the medium to long term.

Figure 2.1 shows the top ten countries when it comes to oil reserves: Venezuela, Saudi Arabia, Canada, Iran, Iraq, Kuwait, the United Arab Emirates, Russia, Libya and Nigeria.[55] Russia's proven oil reserves are somewhat less impressive than those of Saudi Arabia: Russia's amount to an estimated 80 billion barrels while Saudi Arabia has about 266 billion barrels.[56]

[53] GECF. 'About' and 'GECF country list', https://www.gecf.org/, accessed 6 April 2018.
[54] Yergin. *The Quest*, p. 272.
[55] EIA. 'Crude Oil Proved Reserves - 2017' and 'Proved Reserves of Natural Gas - 2017', https://www.eia.gov/beta/international/, accessed, 5 April 2018.
[56] EIA. Russia, 31 October, (2017), https://www.eia.gov/beta/international/analysis.php?iso=RUS, accessed 10 April, (2018), and EIA, Energy Statistics – Beta,

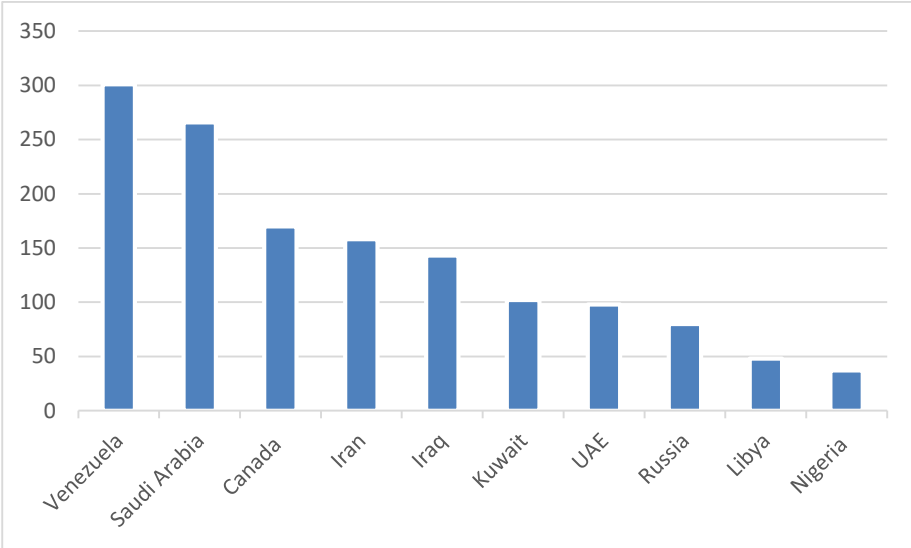

Figure 2.1. Reserves of crude oil, proved 2017: top ten countries in Billions of Barrels, source: U.S. Energy Information Administration (2017).[57]

The top ten countries when it comes to gas reserves are Russia, Iran, Qatar, the United States, Saudi Arabia, Turkmenistan, the United Arab Emirates, Venezuela, Nigeria and China.[58]

In fact Russia has the 'largest gas reserves in the world', comparable to a quarter of the proven reserves globally, according to the EIA, and shown in figure 2.2 below. Most of these reserves are to be found in West Siberia.[59] According to Russian definitions over 80 per cent of the gas is produced in the Arctic region. The Artic is also expected to hold vast resources, including offshore gas and oil, many of which have not yet been confirmed, i.e. they are 'unproven'.[60] Having reserves is one thing but being able to extract them is another. This depends on several factors, most notably technology and investment, since initiating new production is costly.

https://www.eia.gov/beta/international/data/browser/#/?pa=0000000000000000000008&c=0000000000000000000000000000000000000005&ct=0&tl_id=5-A&vs=INTL.57-6-RUS-BB.A~~INTL.57-6-SAU-BB.A&cy=2017&vo=0&v=C, accessed, 23 May, 2018.

[57] Source EIA, EIA, 'Crude Oil Proved Reserves - 2017', EIA https://www.eia.gov/beta/international/, accessed 5 April 2018.

[58] EIA. 'Proved Reserves of Natural Gas - 2017', https://www.eia.gov/beta/international/, accessed, 5 April 2018.

[59] EIA. *Russia*.

[60] The data is from 2015, but note that definitions of Russia's Artic Region vary. Simola, Heli and Solenko, Laura. Overview of Russia's oil and gas sector, Bank of Finland, Institute of Economies in *Transition*, BOFIT Policy Brief 2017 no. 5, (2017), pp. 28-29.

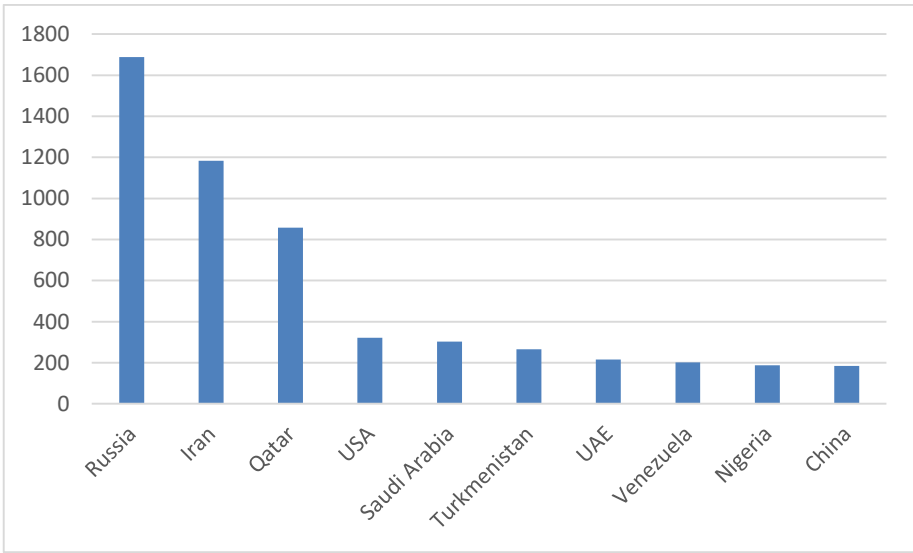

Figure 2.2. Reserves of natural gas proved 2017: top ten countries, in Trillion Cubic Feet, source: U.S. Energy Information Administration (2017).[61]

What gives Russia such importance today is that it is a leading exporter, unlike the US. Estimates from 2015 suggest that Russia's crude oil exports amounted to 11 per cent of total global exports, surpassed only by Saudi Arabia which had a share of 17 per cent.[62] In 2015, Russia also ranked as the top natural gas exporter, followed by Qatar and Norway.[63] Because of this Russia is among the movers and shakers in the energy landscape.

2.3 In conclusion

The energy landscape is changing and in the long run, to the 2030s, this is bad news for oil and gas export dependent countries such as Russia as the demand for oil could fall considerably. The demand for gas might remain high, but there will be many more producers. In the medium term, changing global flows and new choices on energy consumption could cause a great deal of turbulence, which

[61] Source EIA, EIA, 'Proved Reserves of Natural Gas, 2017', https://www.eia.gov/beta/international/ and EIA https://www.eia.gov/beta/international/, accessed 5 April 2018.
[62] Anthony, Craig. 'World's Top 10 Oil Exporters', Investopedia, 23 August, (2016), https://www.investopedia.com/articles/company-insights/082316/worlds-top-10-oil-exporters.asp, accessed, 6 April, 2018.
[63] CIA. World Fact Book, Country Comparison :: Natural Gas – Exports, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2251rank.html, accessed 6 April, 2018.

might benefit low cost producers such as Russia. This volatility might stem from some exporting countries being unable to export due to internal social strife or sanctions.

In the short term, a period of volatility in the energy markets might help OPEC to sustain a high oil price, but it now needs the help of non-member that are also major exporters such as Russia. While Russia can help to influence global markets in the short term, agreements can turn out to be difficult to hold on to when the participants have diverging geopolitical interests.

Energy contributed to the rise of Russia after the break-up of the Soviet Union. Chapter 3 looks at Russia's ability and willingness to remain relevant in the new energy landscape.

3 Russian oil and gas: the keys to success

The Russian economy relies on the energy sector. Since Vladimir Putin first became president, he has been highly dependent on energy exports to boost his status and Russia's role. Oil exports are the key to Russia's wealth, while gas exports and control over pipelines are important to Russia's influence abroad. The Russian leadership wants to sustain Russia's international role, but it is unlikely to be able to modernize the economy, even if it is a strategic aim. The economy's heavy reliance on oil and gas to finance the state budget, and boost Russia's international role, make the effects of the sanctions and the changing energy landscape crucial. This chapter briefly examines Russia's recent past, present and Russia's strategy for the 2030s.

3.1 Russia's role is intertwined with energy

There are sharply contrasting views about Russia's international importance in terms of the geopolitics of energy security. Bruce Jones and David Steven, two American foreign policy experts on geopolitical change and energy, cast Russia in a supporting role. According to them 'Russia looks less like a rising power than a richer version of Pakistan with more nuclear weapons', and its only global relevance is as an energy supplier.[1] Although perhaps an outlier, their views are a reminder that Russia is not always regarded as a behemoth from a global perspective. At the opposite end of the spectrum, the view of Russia is no less extreme. Marin Katusa, a Canadian energy market analyst, argues that control over energy resources is pivotal to Putin's restoration of Russia as a great power in a changing world.[2]

The role of energy has been linked to Russia's might and influence (and to that of the Soviet Union) for a long time. Energy is essential for the Russian state budget. In 2016, revenues from oil and gas accounted for 36 per cent of the revenue in for the state budget.[3] The ability of energy to boost Russian power rests primarily on two things: oil as a key source of income and Russia's influence in the gas markets and control over gas pipelines. In the coming years, Russia might also become a major exporter of LNG.

Being a resource-rich country carries risks. For example, oil reserves can turn out to be a 'resource curse', which arrests economic development if all economic

[1] Jones and Steven. *The Risk Pivot*, p. 92.
[2] See Katusa. *The Colder War*.
[3] EIA. *Russia*.

activity is about receiving a share of the wealth generated by energy exports. The term petrostate is often used to describe a nation with an economy that suffers in this way.[4]

Over the years, Russia has been labelled both a petrostate and an energy superpower.[5] For example, Russia's agreement to the OPEC plus deal led one commentator to argue that 'Russia is now a petrostate', because Russia was seeking to control the oil price.[6] But this perhaps more resembles the ambition of a so-called energy superpower. Energy superpowers are expected to have the ability to convert energy into political and economic influence. Saudi Arabia has been seen as an energy superpower in recent decades in the sense of being a swing producer. Saudi Arabia has a direct impact on the international energy market by turning its oil tap on or off. The term is loaded and Putin has rejected the term 'energy superpower', because of the terminology's Cold War connotations.[7] Nevertheless, Russia is highly relevant to the working of the global oil and gas markets.

After Putin came to power in 1999, first as Prime Minister and shortly thereafter as President, he moved to reassert the state's influence over the economy's 'commanding heights' and wrest control of the country's energy wealth from independent-minded oligarchs. He was fortunate that Russia at the time was beginning to recover from its economic crisis of 1998. Putin knew that in the long run, an overreliance on energy might hamper the country's long-term economic prospects, and that it needed to develop other parts of the economy. But he had also mulled over the idea of re-establishing Russia's global position using its energy resources.[8]

By the 2010s it seemed that Putin believed that he had restored Russia after the effects of the 1990s and brought it new eminence. Energy remains critical to control of the state as well as Putin's view of the state and his own role.[9] For Russia as is the case in the rest of the world, oil and gas are two different stories.

[4] Yergin. *The Quest*, p. 110. Economists refer to this as 'rent seeking behaviour'.
[5] See for example Goldman, Marshall I. Petrostate – Putin, Power, and the New Russia, Oxford: Oxford University Press, (2008).
[6] Interview with Ed Chow, (2018).
[7] Yergin. *The Quest*, p. 41.
[8] Goldman. *Petrostate*, pp. 96-98, 104 and 133. A lot has been made of Vladimir Putin's 1997 dissertation as an influence on his policies, which in turn was partly lifted from a 1970s American work on strategic planning. 'Commanding heights' is a Leninist reference, but also the title of a book by the energy specialist Daniel Yergin. For a Swedish overview of Russian energy and state power see Larsson, Robert L. Rysk Energimakt – Korruption och säkerhetsfixering i nationens namn, Ersatz, (2010).
[9] Interview with Eugene Rumer, (2018).

3.2 Russian oil, gas and pipelines

Oil is the key to Russia's energy wealth – and indirectly to the financing of its defence spending.[10] As figure 3.1. shows, Russian GDP growth fluctuates with changes in the oil price. Changes in the oil price have a significant impact on Russia's economic growth, perhaps more so than the actual oil price. For example, an increase in the oil price encourages investment in Russia. However, even if the price increases it might not be possible, or economically viable, for Russia to increase oil production.[11]

In 2017, oil and gas revenues as a share of total revenues of the Russian state budget had recovered somewhat to about 40 per cent, but in 2014 the revenues amounted to 50 per cent.[12] Oil export dependent countries that rely on conventional oil production are usually able to extract oil relatively cheaply. Even so, they often need the oil price to be quite high in order to cover government expenditure. In the case of Russia, this level seems to be around USD 55 per barrel of crude oil.[13] Apparently, the government is now careful and plans on the assumption of an oil price of USD 40 per barrel, at least for the next few years.[14] The Russian government benefits from taxing the energy sector. It also collects significant dividends from those oil and gas companies where the state is a shareholder.[15]

[10] But reduced income from oil does not necessarily translate into cuts in defence expenditure. See Oxenstierna, Susanne. '5. Russian Military Expenditure', in Persson, Gudrun (ed.). Russian Military Capability in a Ten-Year Perspective – 2016, FOI, December, (2016), pp. 133-134.

[11] See Garrison, Ashleigh and Song, Kelly. Russia's Achilles heel: Putin still falling short on master plan for aging oil economy, CNBC online, 19 July, (2018), https://www.cnbc.com/2018/07/19/checkmate-putin-falling-short-on-master-plan-for-aging-oil-economy.html, accessed 12 September, 2018.

[12] Ministry of Finance of the Russian Federation, Brief information on execution of the federal budget, 7 May 2018, http://old.minfin.ru/en/statistics/fedbud/execute/?id_4=25609, accessed 29 May, 2018.
and Simola and Solenko. *Overview of Russia's oil and gas sector*, p. 31.

[13] The estimate used the Brent oil price indicator. The Moscow Times, 'Russia inc goes into profit as the budget breakeven price for oil falls to $53', 26, January, (2018), https://themoscowtimes.com/articles/russia-inc-goes-into-profit-as-the-budget-breakeven-price-for-oil-falls-to-53-60302, accessed 10 April, (2018).

[14] Tanas, Olga. ' Russia Sticks to Conservative $40 Oil Forecast for 2018 Budget', in Bloomberg Markets, 29 June, (2017), https://www.bloomberg.com/news/articles/2017-06-29/russia-sticks-to-conservative-40-oil-forecast-for-2018-budget, accessed 10 April, 2018.

[15] EIA. *Russia*.

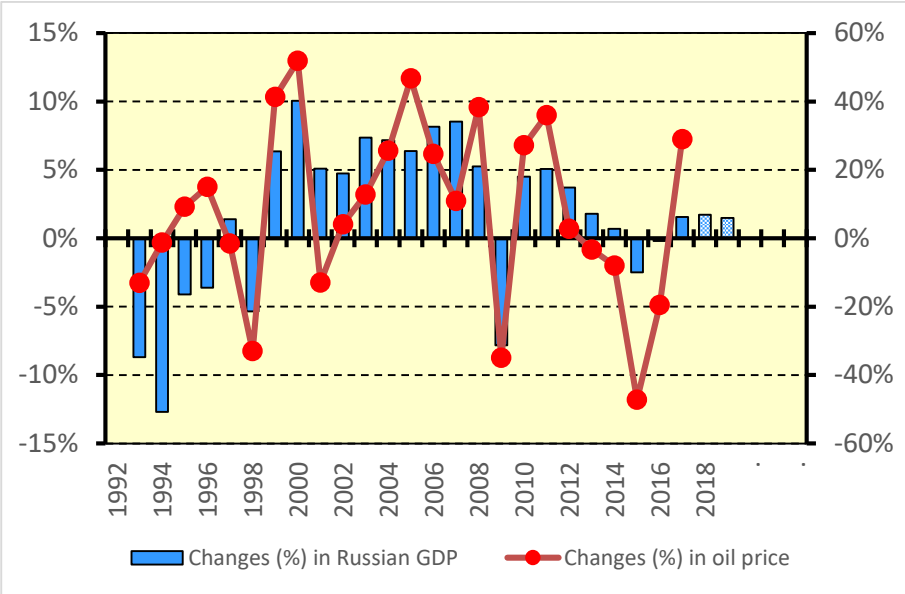

Figure 3.1. Russian GDP in relation to changes in the oil price.[16]

By the end of the 2000s, Putin had managed to halt foreign commercial interests holding a controlling stake in Russian energy, and ensured that the state remained the arbiter of Russian energy security. This was done without an all-out nationalization of the oil industry, but the process was perhaps a harbinger of things to come. The way that Russia acted against business in the 2000s, reflected the lack of the rule of law. According to the eminent expert on Russian energy, Marshall I. Goldman, Russian companies had 'no hesitation in launching campaigns of harassment' against foreign companies.[17] This was eerily similar to later Russian behaviour against other states, such as Georgia and Ukraine. Just as Russia then flaunted the rule of law in dealing with Western companies, Russia now ignores the laws that underpin the international rules-based order with its illegal annexation of Crimea.

[16] Design by Bengt-Göran Bergtrand, FOI. Sources IMF World Economic Outlook, April, (2018) and British Petroleum oil data, https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-stats-review-2018-oil.pdf.

[17] Goldman. *Petrostate*, pp. 130 and 135.

Russian energy companies

Under Putin the once minor oil company, Rosneft, has grown to dominate Russian oil production. Estimates suggest that it is now produces two fifths of all Russian production. This fits the logic of a state-controlled business. It has the sheen of a commercial company, but the company can do the state's bidding.[18] However, there are a lot of commercial issues that have to be taken into account, like international expansion and taxation. The main Russian gas company is Gazprom, which exemplifies Putin's vision of so-called national champions that, if need be, put the interests of the government above commercial requirements to make a profit. Goldman has gone so far as to suggest that 'it is hard to tell where Putin begins and Gazprom ends'. In the past, Putin has boasted about Gazprom being comparable to the world's biggest companies. In 2006 that meant Exxon-Mobile and General Electric.[19] On the Forbes 2018 list of leading corporations, however, Gazprom had slipped to number 17.[20] There are several Russian oil companies and a few large dominant ones, apart from Rosneft there is Lukoil, Surgutneftgas and GazpromNeft (not to be confused with the gasproducer Gazprom).[21]

If oil is the key to wealth, which indirectly helps to finance defence expenditures, gas is the key to political leverage. Gazprom, in which the state has a controlling share, owes its central role to being the main gas producer as well as controlling nearly all of Russia's gas pipelines. Its role is perhaps unsurprising, since it is the post-Soviet incarnation of what was once the Soviet Ministry of the Gas Industry.[22] While less dominant than it was a few years ago, it still produced two-thirds of Russia's gas in 2015.[23]

The control of natural gas pipelines is also very important for Russian influence. As noted above, there are two ways to transport gas: in pipelines and as LNG. Russia's views on its pipelines have led to legal and diplomatic disputes with its main customers, tensions with other former-Soviet republics, which must still use Russia's infrastructure, and conflicts with transit countries. This is all part of pipeline politics, where, according to the Russia expert Hanna Smith, political considerations 'sometimes overrule economic benefits'.[24] Nevertheless, Gazprom

[18] Katusa. *The Colder War*, p. 101.
[19] Goldman. *Petrostate*, pp. 99 and 143.
[20] Forbes. 'The World Top 25 Companies', (2018), https://www.forbes.com/pictures/edjl45efeik/icbc/#72f2ae44430f, accessed 11 April, 2018.
[21] IEA. Russia 2014, Paris: OECD/IEA, (2014), pp. 138-140.
[22] Yergin. *The Quest*, p. 338 and EIA, Russia, 31 October, (2017), accessed 10 April, (2010). The pipeline system in the West is known as the Unified Gas Supply, the UGS, and is controlled by Gazprom.
[23] Simola and Solenko. *Overview of Russia's oil and gas sector*, p. 12.
[24] Smith, Hanna. 'Politicizing energy security – Russia and the European Union', in Oxenstierna, Susanne and Tynkkynen, Veli-Pekka (eds.). Russian Energy and Security up to 2030. London and New York: Routledge, (2014), p. 78.

has also had the ability to adapt both to new political and market circumstances. For example, it has adapted to the EU's new legislation and regulation.[25]

The importance of pipelines

In the 2000s Russia was aiming for strategic control over energy infrastructure in Eurasia and Europe.[26] Pipelines are essential to Russia (see map 3.1) and it has worked to enhance its role in exports to Europe. This could also be seen as thwarting projects that would reduce its role in exports to Europe. As both a transit country and an importer of Russian gas, Ukraine brought pipeline politics to the fore in 2006 when it tried to align with the West instead of Russia. This led to a Russian-Ukrainian dispute over gas pricing and unpaid debts, in which Russia referred to its action in cutting off gas supplies as helping Ukraine to 'adapt to the market'.[27] Ukraine's leverage at the time was that Russia needed it for its exports to Europe, since about 80 per cent of Russia's exports to Europe went through pipelines in Ukraine. As a consequence 'pipeline politics…was elevated to the geopolitical level'.[28]

According to the Russian Energy Strategy to 2030, from 2009, Russia's aim has been to increase its exports to Asia and export directly to customers, thereby avoiding the problems associated with transit countries such as Ukraine.[29] When the Nord Stream pipeline opened in 2012, Ukraine became less important as a transit route.[30] Russia has a number of gas export projects planned, including an additional pipeline in the Baltic, Nord Stream 2. However, the intention may not be to complete all of them, at least according to one Finnish analysis.[31] Chapter 4 delves further into Nord Stream 2 and its consequences for transatlantic relations.

Russia has also needed to factor in new gas fields being developed in other countries. Eventually, Russia has adapted to the rise of LNG and become an LNG producer in the making. Already in 2009 Russia began LNG production in Sakhalin on the Pacific coast, as a result of cooperation with the British-Dutch company Shell and the Japanese companies Mitsui and Mitsubishi.[32]

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[25] For an overview of Gazprom's relations with Europe, see Vavilov, Andrey and Trofimov, Georgy. 'European Challenges: Competitive Pressure, Gas-Market Liberalization, and the crisis of Long-Term Contracting', in Vavilov, Andrey. Gazprom – An Energy Giant and Its Challenges in Europe, New York: Palgrave, (2015).

[26] Cohen, Ariel. 'Russia: The Flawed Energy Superpower', in Luft, Gal and Korin, Anne (eds.). Energy Security Challenges for the 21st Century, Santa Barbara: Praeger Security International, (2009), p. 93.

[27] Goldman. *Petrostate*, p. 145.

[28] Yergin. *The Quest*, p. 341.

[29] Simola and Solenko. *Overview of Russia's oil and gas sector*, p. 18.

[30] Ibid, p. 17.

[31] Ibid, p. 18.

[32] Ibid, pp. 13 and 18.

Map 3.1 Major Russian pipelines and installations. [33]

In 2018, Russia opened a new LNG export facility, Yamal, also primarily intended for exports to Asia. The project has succeeded despite the American sanctions on Russia. Yamal was developed by the Russian company Novatek, but also relied on the commitment of China's China National Petroleum Corporation and China's Silk Road Fund, as well as the French energy company, Total.[34] This means, according to one analysis, that Russian LNG could amount to as much as 8 per cent of global LNG production capacity, based on 2015 figures.[35] Furthermore, Gazprom, for example, has plans for an LNG terminal in the Baltic together with Shell by the first half of the 2020s.[36] There is a risk that Russia might invest too much in LNG, but there are perhaps always such risks in a cyclical industry. However, Russian production is also dependent on Russia's access to the two things that result in production, technology and investment.

[33] Design by Per Wikström, FOI.
[34] Mikulska, Anna. 'Russia starts LNG exports from Yamal – what it means for Europe', energypostweekly, 22 January, (2018), accessed, 12 April, 2018, http://energypost.eu/russia-starts-lng-exports-from-yamal-what-it-means-for-europe/.
[35] Simola and Solenko. *Overview of Russia's oil and gas sector*, p. 13.
[36] Ibid, p. 18.

The importance of technology

Russia has been an important exporter of oil since the era of oil began over 100 years ago. Russia's (and the Soviet Union's) continued relevance in the global oil market has always depended in part on the country finding new oil fields to exploit. The need to keep up with technological developments has been a recurring problem for its oil industry, to enable increased oil extraction from existing fields. Oil was the hard currency of the Soviet Union and the country's fortune's waxed and waned with the oil price. A low price led to economic problems, and vice versa, both before and after the break-up of the Soviet Union.[37] What Russia needs, in terms of oil, is access to modern technology to ensure that it can exploit its resources at a low cost and maintain the flow of oil revenues to the state coffers.

The need for modern technology has involved modern Russia in continual on-off relationships with Western energy companies. Post-Soviet Russia did not want to give up control of its resources in exchange for technology. Putin came to personify the struggle to reassert the state's control over the energy sector. This eventually led to disputes between the owners of the most high-profile private sector-state enterprise joint effort, TNK-BP.[38] Shell and French Total also suffered from heavy-handed Russian tactics after initiating cooperation with Russian companies in the 2000s.[39] Nonetheless, private sector companies still believe that they can profit from working in Russia.

The old logic keeps reasserting itself. In order to sustain its oil production, the country needs new technology.[40] At least before the annexation of Crimea, Russia was able to tempt Western companies with the potential of its vast energy resources to enter into new cooperative efforts, including on exploration in the Arctic and shale production.[41] In 2016, BP held almost one-fifth of the shares in the leading Russian oil company, Rosneft.[42] Foreign companies are of course tempted by the profits that can be made in Russia. Even so, the Russian government remains firmly in control of any venture.[43]

[37] Goldman. *Petrostate*, pp. 21, 22, 27, 32 and 43.
[38] Yergin. *The Quest*, pp. 34 and 38.
[39] Goldman. *Petrostate*, pp. 130 and 135.
[40] IEA. *Russia 2014*, p. 125.
[41] EIA. *Russia*.
[42] BP. The energy giant, why Russia matters, 1 Juni, (2017), https://www.bp.com/en/global/corporate/bp-magazine/locations/the-energy-giant-why-russia-matters-for-oil-and-gas.html, accessed 10 April, 2018.
[43] EIA. *Russia*.

The logic of the energy business in Russia

Russian companies have to take into consideration other vested interests than shareholders. One such challenge is economic sanctions. The sanctions imposed following Russia's aggression against Ukraine are a bigger problem than a lack of up-to-date technology. The sanctions effectively limit the financing of the energy sector and take aim at the oil sector.[44] They prevent deep sea drilling, artic offshore exploration, tight oil development and effectively also investment. New shale and Arctic offshore projects take between five and ten years to develop, so the sanctions will not have an immediate effect on Russian production.[45] It is possible that Russia will just use less efficient technology or develop domestic technological capabilities to make Russia self-sufficient.

3.3 Energy as a tool

Energy is part of the toolbox

According to Eugene Rumer, energy is part of the toolbox, which pays for the military and helps building relations with the Gulf and keep relations with Europe.[46] There is a whole range of foreign policy tools associated with energy. It can be about pricing policies, for example by means of '"divide and rule"' among clients, or economic and political manipulation, this is sometimes possible due to unsettled debts and disputes over agreements.[47] In short, energy offers Russia a whole host of opportunities of means to influence other states, some of which might go beyond commercial rivalry. Based on a study of Soviet gas exports, one specialist argues that it is 'politically motivated supply disruptions' of natural gas that is most often associated with a so-called Russian energy weapon. On those occasions it is used as an instrument for foreign policy, comparable to OPEC's '"oil weapon"', and not as a tool of defence policy, according to the specialist.[48]

In regard to oil the assumption has always been that there is no Russian oil weapon in regard to Europe, since halting oil exports to Europe would only harm the Russian economy. Oil is a fungible commodity, and relatively easy to replace.

[44] Coote, Bud. Impact of Sanctions on Russia's Energy Sector, The Atlantic Council, March, (2018), pp. 2 and 10. For an overview of the EU and US sanctions see Oxenstierna, Susanne. 'The Western sanctions against Russia. How do they work?', forthcoming in Rosefielde (ed.), Putin's Russia: Economic, Political and Military Foundations, World Scientific, (2018).
[45] EIA. *Russia*.
[46] Interview with Eugene Rumer, (2018).
[47] Smith. *'Politicizing energy security*, pp. 85 and 91.
[48] Högselius, Per. Red Gas – Russia and the Origins of European Energy Dependence. New York: Palgrave Macmillan, (2013), pp. 1 and 7.

However, it can take time – and prove costly, if the oil price rises significantly at the same time since there will be less oil in the market.

Russia's energy policy has been used to ward off what its leadership sees as economic threats, which is perhaps commercially sensible, but also threats that are more geopolitical and concerns Russia's influence, such as alternative pipeline routes that might compete with Russia's pipelines and reduce its influence.[49] Nevertheless, the use of an actual energy weapon of turning off the gas tap has perhaps been the least used among them.

However, Goldman pointed out that despite Russian claims to be a reliable supplier to Europe, the Soviet Union did on a few occasions halt energy supplies, including oil, to customers where their foreign policies conflicted with Moscow's. These customers were mostly in Eastern Europe or the Eastern bloc. In the 2000s, Russia has disrupted supplies to Belarus, Georgia, Moldova and Ukraine.[50] However, another expert on Russian energy, James Henderson, notes that all these countries except Georgia had financial obligations to Russia, and that Russia has not taken action against solvent European countries. Goldman argued that in some ways Russia in the 2000s was more powerful vis-à-vis Europe than the Soviet Union was in the Cold War, since there is no European equivalent to deter Russia – there is no mutual assured destruction to counter the energy weapon.[51] That said, it is possible to argue that there is, since Russia would not receive the income it needs from its exports.

There are diverging views about the use of energy as a tool: whether it is to some extent a tool of Russia's foreign policy, or whether it is an instrument of defence and security policy. Daniel Moran and James A. Russell have studied the militarization of energy and the use of energy resources as 'tools of strategic coercion', and the use of an energy weapon instead of military force.[52] However, energy, like information warfare, might also be part of so-called asymmetrical warfare. In both cases such actions would seem to go beyond Russia's official foreign energy policy.

It is also important for Russia to have the ability to adapt to new conditions in the energy markets. This is something that in the future could allow Russia to exploit the changes made by the EU to the European gas market. One of the more intriguing recent developments is the decision by the St Petersburg Mercantile

[49] Larsson, Robert, L. Russia's Energy Policy: Security Dimensions and Russia's Reliability as an Energy Supplier, Scientific Report FOI, FOI-R--1934--SE, (2006), pp. 291-292.
[50] Goldman. *Petrostate*, pp. 15 and 49.
[51] Ibid, pp. 15 and 49.
[52] Moran. Daniel and Russell, James A. 'Introduction: the militarization of energy security', in Moran, Daniel and Russell, James A., (Eds.). Energy Security and Global Politics – *The Militarization of Resource Management*, London and New York: Routledge, (2009), p. 3.

Exchange (SPIMEX) to establish a gas exchange. This means that even if Russia does not move away from energy export dependence, its energy trade will increasingly be based on a market price.[53] However, it might prove difficult for Russia to establish a financial centre of international importance, given doubts about the rule of law in the country.

It is important to underline that today's Russia is not the Soviet Union and should not be expected to behave in the same way. While the profits from energy exports are of vital concern to Russia's leadership, modern Russia could behave differently from the Soviet Union in using energy as a tool, even if it is only to safeguard Russian interests. So far, however, with regard to the energy sector, Russia seems better able to adapt to a changing energy landscape than the Soviet Union was.

3.4 What Russia's leaders want

Recognizing the limits of an energy export dependent economy

The dilemma Russia faces is that while energy has been a source of strength for Russia, its reliance on fossil fuels will eventually make the Russian economy outdated. It is not only the resource curse that prevents modernization. The lack of modernization could also be a result of limited political will and institutional failure. The Russian leadership is aware that society will suffer from backsliding if the economy fails to modernize. There is even a risk that Russia could end up in a neocolonial relationship with China, in which Russia provides China with raw materials.[54]

Already when Putin first came to power, he knew that, in the long run, an over-reliance on energy might hamper the country's long-term economic prospects, and thus it needed to develop other parts of the economy.[55] Time and again, however, Putin has reaped success by betting on energy.[56] The Russian government wants to have its cake and eat it. Russia has sought to limit the influence of private sector

[53] See Henderson, James; Mitrova, Tatiana; Heather, Patrick; Orlova, Ekaterina and Sergeeva, Zlata. The SPIMEX Gas Exchange: Russian Gas Trading Possibilities, The Oxford Institute of energy Studies OIES paper: NG 126, January, (2018).

[54] Blank, Stephen. 'Russian Writers on the Decline of Russia in the Far East and the Rise of China', the Jamestown Foundation, 13 September, (2016).

[55] Goldman. *Petrostate*, pp. 96-98, 104 and 133. A lot has been made of Vladimir Putin's 1997 dissertation as an influence on his policies, which in turn had been partly lifted from a 1970s American work on strategic planning. 'Commanding heights' is a Lenin reference, but it is also the title of a book by the energy specialist Daniel Yergin.

[56] See Goldman. *Petrostate*.

and commercial interests in favour of the state, while recognizing the need to work with commercial companies.[57]

The Russian government has recognized the need for change in Russia's economy. In 2012 Putin acknowledged the limits of the '"the raw materials-based economy"'. Instead he said he favoured reindustrialization, but that has not lead to change.[58] There are several reasons for this, some of which are beyond the scope of this study. Manning argues that the Russian leadership cannot restructure the economy because it would risk losing its grip on power. Modernization of the economy could lead to the rise of entrepreneurs, who might finance his opponents.[59] If the elite allowed a modernisation of the economy, this would dilute its share of the economy and undercut its political power. Then there is the element of greed. Putin and his elite have a personal stake in Russia's energy, since it is linked to their personal wealth. Their interests lie in maintaining the current set-up, and this comes at the expense of modernizing Russia, its energy sector, and the ability to sustain Russia as a great power.[60] A high oil price helps the elite stave off the need to liberalize the economy.

A new energy strategy

Before and after the economic and financial crisis, the Russian leadership had to strike a difficult balance between the need to adapt to the market and the need to strengthen state control. The Russian Energy Strategy to 2030, published in 2009, recognized the 'rising politicization' of international energy issues and addressed the need for 'full-scale integration into the world energy market'.[61] Russia has sought to become integrated into the global economy and is continually adapting to market forces, but the need for control has always had the upper hand. In Russia, authoritarianism trumps the market.

Another indication of Russia's energy policy dilemmas is the delay in producing a new Energy Strategy to 2035. In the draft of the new strategy, geopolitical challenges seem once again to have become more important than market prices, according to one analyst. Perhaps this is because prices are regarded as cyclical, while the geopolitical problems of Russia's energy security are regarded as structural. The analyst underlines that Moscow believes that the US and Nato are

[57] Ibid, p. 98.
[58] Baev, Pavel K. 'Russia Gambles on Resource Scarcity: Energy Intrigues in a Time of Political Crisis', in Steven et al., *The New Politics of Strategic Resources*, pp. 247 and 256-257.
[59] Interview with Robert Manning, (2018).
[60] Baev. *'Russia Gambles on Resource Scarcity:*, pp. 247 and 256-256.
[61] Energy Strategy, p. 55.

trying to limit the Russia's access to markets in the West, including Japan, and that Russia regards this as the West's '"energy weapon"'.[62]

Both energy strategies, for 2030 and the draft of the 2035 strategy, highlight that what happens in the rest of the world has a huge impact on Russian energy security and the country's standing. The Russian government wants an equation where economic possibilities are in balance with control. Saudi Arabia has seen which way the wind is blowing for fossil fuels in the long run and embarked on a transition of its economy away from energy dependence, but such a changes risks fuelling societal tension.[63] The risks involved could be called the Shah's disease, after the way in which the Shah of Iran's swift modernization of Iran in the 1970s was dependent on calculations that were undermined by turbulent energy markets and tensions between different groups in society, most notably the monarchy and religious leaders.

Russia's future strength depends on the time horizon

In the near future, Russia seems intent on doubling down on energy. Russia's goals seems to be to: (*a*) maintain the price of commodities; (*b*) protect its market share in Europe and Asia; and (*c*) find financing from non-Western sources, in the hope that this will make Russia a regionally important actor and increase Russia's global role.[64] This could also assist its pursuit of a multipolar world.

In the medium term, Russia may draw strength from being a low-cost producer and benefit greatly from volatility in the energy markets as the energy landscape shifts, even if Russia does not modernize its economy. However, Russia's plans have to be contrasted with actual events. The aim in the Energy Strategy to 2020, published in 2003, was to reduce state control, but that is not what happened. The expectations in the Energy Strategy to 2030, published in 2009, were undermined by the global financial and economic crisis.[65] The draft of the Energy Strategy to 2035 shows that Russia's strategic aim is to maintain its leading role in energy exports. Standing in the way are, among other things, sanctions and the increase

[62] Mehdiyeva, Nazrin. When Sanctions Bite: Global Export Leadership in a Competitive World and Russia's Energy Strategy to 2035, Russian Studies, Nato Defense College, 01/17 – January, (2017), pp. 2 and 4.
[63] See Coates Ulrichsen, Kristian. 'Resource Security in Saudi Arabia: Domestic Challenges and Global Implications', in Steven et al., *The New Politics of Strategic Resources*, pp. 168-183 and Helm. *Burn Out*, pp. 10-11.
[64] See Mammadov, Rauf. 'Russia in the Middle East: Energy Forever?'. The Jamestown Foundation, 8 March, (2018), and interview with Rauf Mammadov, (2018).
[65] Baev. *'Russia Gambles' on Resource Scarcity:*, p. 247.

in the number of energy exporters.[66] Most likely new plans will also suffer from factors Russia at best can influence but not control.

In the long run, Russia' role as a great power might suffer a similar fate to that of the Soviet Union, which was undermined by a low oil price in the 1980s. Furthermore, Russia could face an energy security paradox of increasing its exports but earning less in return.[67]

3.5 In conclusion

Whether Russia has an energy weapon is debated but the real issue is that Russia's great power role is intertwined with its role as a major oil and gas exporter. Oil is the key to wealth that underwrites the country's defence expenditures. Gas helps endow Russia with political leverage. That Russia should modernize and become less dependent on its energy exports is what the Russian leadership has said in recent years, but it is not what is happening. In the near future, Russia seems likely to double down on its global energy role. It tries to adapt to the changing energy landscape without changing its role. This involves an adaptation to market demands, due to the new regulations in the European gas market, but also a willingness to work with OPEC, in its traditional capacity, to bolster the oil price. In the long run, into the 2030s, Russia risks facing the same challenge as the Soviet Union did in the 1980s – that low energy prices cannot sustain the country's great power ambitions. Then the country might face an energy security paradox of having to increase its exports while earning less and less from them. Russia's role may also play out differently in different parts of the globe, as is discussed in the next chapter.

[66] Mehdiyeva. *When Sanctions Bite*, p. 8.
[67] The term energy security paradox is based on the work Korin and Luft. *Petropoly*, p. 16.

4 Regional geopolitics and energy

The impact of a simultaneously changing energy landscape and international order plays out differently around the world. In order to safeguard its global energy role and pursue its aims, Russia has chosen to adopt different approaches suited to different parts of the world. This chapter looks at where commercial and political considerations dominate and the consequences this might have for Russian influence and the energy security of others. The focus of the chapter is mainly on the short term.

4.1 Russia's regional behaviour

In order to use energy to sustain its great power role Russia needs to have the necessary energy reserves, which it does. However, as discussed above, energy production also requires investment and access to technology. The Russian leadership also has the will and ability to control the Russian energy sector. Russian energy companies must weigh both political and commercial considerations. The extent to which companies are used as instruments of Russian influence depends on whether they are national champions and on their proximity to the Russian leadership.

If Russia's geopolitical ambitions are to undermine the US's leading role and bring about a multipolar world not based on the West's international rules-based order, as discussed in chapter 1, energy could become a tool of foreign or security policy. However, the amount of political leverage energy, (or energy related policies), can provide differs between regions.

Russia's impact in each region depends on a number of factors, but two key factors are its intentions and its relevance to a particular region's energy security. This is illustrated in the matrix in Figure 4.1, which presents a visual comparison of Russia's behaviour in each region.

Russia's intentions / Regional energy security	Geopolitical power is the priority	Economic power is the priority
Russia is important	Neo-imperialist approach –strong conditions	Neo-mercantilist approach –strong conditions
Russia is not important	Neo-imperialist approach – weak conditions	Neo-mercantilist approach – weak conditions

Figure 4.1. Russian regional impact in terms of geopolitics of energy.

Based on the theory discussed in chapter 1, Russia's economic policies can be regarded as neo-mercantilist if Russia is assumed to be a state which is competitive but only seeks increased economic power. This would amount to an economic reflection of Russia's zero-sum view of global politics.

If Russia also uses economic means to further its '"informal" empire' – comparable to what Dmitri Medvedev has called privileged interests (or sphere of influence) – its behaviour can be said to be neo-imperialist.[1] This means that it is not only neo-mercantilist, but adds a political agenda to its economic policy. Thus, when geopolitical aims are the priority Russia can be said to be pursuing a neo-imperialist policy.[2] When geopolitical power is a priority, energy becomes a tool of political leverage. When economic power is the priority, gains from energy exports are Russia's priority. Even then, income from exports can still be funnelled into defence spending. Of course, in reality, things are not necessarily as neat as the matrix suggests, but the figure above helps to make distinctions between Russia's behaviour in various parts of the world.

Russian energy exports are more important to some parts of the world than others. This is the case even if the Russian export is a global commodity, such as oil, since a trade agreement might be dependent on specific infrastructure, such as a pipeline. The Russian role in each region can be treated as based on strong or weak

[1] See Wigell. *'Conceptualizing regional powers'*, pp. 135-151.
[2] Wigell's work was an important inspiration for this model. What sets neo-imperialism apart from neo-mercantilism is the desire to use economic means – here energy relations – to 'create an "informal" empire in [Russia's] neighbourhood', by 'shaping the regional economic structure'. Wigell. p. 142. For early signs of neo-mercantilism see Larsson, Robert. Rysk Energimakt – Korruption och säkerhetsfixering i nationens namn. Sverige: Ersatz, (2010), pp. 176-177.

conditions, depending on whether Russia is essential to the energy security of that region. This judgement is not based on a weighted statistical estimate.

As shown below, Russia might pursue a neo-imperialist approach from a weak position and still be successful. However, in each instance, the Russian approach involves both risks and opportunities. For example, if Russia's priority is to gain economic power, (meaning increase its income), at the same time as Russian energy exports are important to a region's energy security, the outcome could be deepened economic interdependence, which could eventually help to improve the relationship between Russia and the specific region. In such circumstances Russia might eventually have to abandon its neo-mercantilist approach.

Of course, some of the interactions with great powers, such as the US, and other major energy exporters, such as Saudi Arabia, are global and beyond the scope of any one region, but this is highlighted in each case.

4.2 The US and the Americas

Reduced American energy imports from Russia

US-Russian relations have been deteriorating for some time and the energy relationship has changed to the advantage of the US. A decade ago, crude oil exports from Russia to the US were increasing notably.[3] This is no longer the case. Accordingly, Russia has little direct leverage on the US based on Russian energy exports. The American policy at the time was to ensure the flow of energy from Russia and the Caspian to the world market.[4] The overall American energy policy was to safeguard energy flows to ensure a stable price that benefited the global economy and hence the US. When this interfered with Russian control over pipelines, this riled Moscow. However, the real rupture in US-Russian energy relations – the shale revolution – had a commercial origin and was not the result of foreign policy. The increase in American energy production changed global energy flows.

One inadvertent consequence of Russia's adaptation to the new energy landscape is that in early 2018, despite the sanctions, Russian gas was exported to the US through an intermediary.[5] The imports were not a reflection of a lack of American

[3] EIA. US imports from Russia of crude oil, Petroleum & other Liquids, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrim_nus-nrs_1&f=a, accessed, 25 April, 2018.
[4] See Nanay, Julia. 'Russia and the Caspian Region', in Kalicki, *Energy and Security*, pp. 127-128.
[5] Verdonck, Rob and Shiryaevskaya, Anna. 'Why the US Is Buying Natural Gas From Russia', in Bloomberg online, 19 January, (2018), https://www.bloomberg.com/news/articles/2018-01-19/how-the-u-s-almost-bought-russian-natural-gas-quicktake-q-a, accessed 25 April 2018.

gas, but demonstrate the complexity of keeping track of shifting trade patterns. In the emerging energy landscape, both the US and Russia are exporters of oil and gas. The US may become a competitor of Russia in markets that Russia wants to favour: Europe and Asia. In fact, 20 per cent of the recently allowed American crude oil exports went to China in 2017.[6]

Russian neo-imperialism in the Western Hemisphere

Russia is trying to expand its influence in the Western Hemisphere at the expense of the USA. It is a low-cost venture and Russia's position in the region is weak compared with the US and China. However, Russia can fan the flames of frustration with the US through its activities in Latin America.[7] For example, Rosneft is active in Venezuela because Russia wants to needle the US (and its Monroe doctrine) and meddle in the US's 'backyard', since, according to Russia, this is what the US does in what Russia sees as its backyard of the Caucasus and Central Asia.[8]

The US has supported the development of the EU's so-called Southern Gas Corridor, which circumvents Russia and seeks to link European pipelines to other energy sources in the East.[9] For a number of years, Russia has tried to gain traction for its concept of a 'privileged sphere of interests' in parts of the former Soviet Union.[10] Russia is wary of Western military influence in the Caspian, which is reportedly important to Russia's core defence strategy, the so-called bastion strategy, and its ability to launch cruise missiles. Kazakhstan and Azerbaijan have cooperated with both Turkey and the US to bolster their capabilities. This cooperation is almost certainly galling to Moscow as Kazakhstan is an ally of Russia in the Collective Security Treaty Organization.[11]

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[6] EIA, U.S. crude oil exports increased and reached more destinations in 2017, EIA online, 15 March, (2018), https://www.eia.gov/todayinenergy/detail.php?id=35352, accessed 4 May, 2018.

[7] See Gurganus, Julia. *Russia: playing a* Geopolitical game in Latin America, Carnegie Endowment for International Peace, May, (2018).

[8] Interview with Eugene Rumer, (2018).

[9] Tsereteli, Mamuka. The Southern Energy Corridor: A Strategic Priority for the US?, CACI online, 27 April, (2015), , accessed 26 April, 2018, https://cacianalyst.org/publications/analytical-articles/item/13218-the-southern-energy-corridor-a-strategic-priority-for-the-us?.html, and BP, The Baku-Tbilisi-Ceyhan pipeline, BP online, https://www.bp.com/en_az/caspian/operationsprojects/pipelines/BTC.html, https://www.bp.com/en_az/caspian/operationsprojects/pipelines/BTC.html, accessed, 26 April, 2018.

[10] Lo, Bobo. Medvedev and the new European security architecture, Centre for European Reform Policy Brief, July, (2009), p. 3.

[11] Aliyev, Nurlan. 'Russian Military Presence in Caspian Sea: Protection of National Interests or Military Muscle Flexing?', in Eurasia Daily Monitor Volume: 14 Issue: 141 online, 2 November, (2017), https://jamestown.org/program/russian-military-presence-in-caspian-sea-protection-of-

When Venezuela effectively pawned its holdings in a sizeable company with refinery facilities in the US in return for economic aid from Russia, this awakened American fears.[12] This demonstrates American concerns about potential Russian influence, even if this Russian influence in the Americas is in not comparable to US influence in Europe.

The Russian approach in the Americas can be said to have a strong element of neo-imperialism, even if it is only seeking to irritate the US. In this case neo-imperialism does not refer to the kind of neo-imperialist approach that Russia has applied to its near abroad, but is perhaps more similar to the kind of support the Soviet Union displayed with regard to Cuba throughout the Cold War.

However, the trajectory of Russian energy to become ever more important to the US has been broken by the shale revolution. Consequently, the Russian approach can be said to be a combination of giving the region geopolitical priority but without being important to the regions energy security. That means that Russian neo-imperialism in the region risks heightening tensions between the US and Russia.

Oil and the dollar

There is also a non-geographic element to Russia's attempts to frustrate American influence globally. The energy analyst, Marin Katusa, argues that Putin's Russia intends to use its leverage in energy against the US indirectly via the currency, by undermining the status of the dollar as the top international reserve currency.[13] He argues that the dollar is effectively a petrodollar, based on longstanding mutual support between the US and Saudi Arabia, whereby the latter is protected in return for trading its oil in dollars and investing its gains in US bonds.[14] There have been a number of conspiracy theories about an oil-dollar linkage, such as that the US invaded Iraq in part to prevent Saddam Hussein from selling oil in euros. That said, wars are not necessarily beneficial to the dollar. Many investors do not make a

national-interests-or-military-muscle-flexing/, accessed 4 May, 2018, and Gurbanov, Ilgar. 'Difficult Geopolitics of the Caspian Complicate Potential Energy Projects', in Eurasia Daily Monitor Volume: 15 Issue: 18 online, 6 February (2018), 2018 https://jamestown.org/program/difficult-geopolitics-caspian-complicate-potential-energy-projects/, accessed 4 May.

[12] It led to an initiative by American investors to strike a deal where they held the American asset instead of Rosneft. Ulmer, Alexandra. 'Exclusive: U.S. investors seek to acquire Russia's Rosneft lien in Citgo', Reuters online, 26 February, (2018), https://www.reuters.com/article/us-usa-oil-citgo-exclusive/exclusive-u-s-investors-seek-to-acquire-russias-rosneft-lien-in-citgo-idUSKCN1GA2J4m, accessed 4 May, 2018.

[13] Katusa. *The Colder War*, p. 38.

[14] Ibid, p. 53.

political choice to hold dollars. Nevertheless, it is the case that the dollar's status is under pressure.[15]

Possessing the top international reserve currency allows the US to borrow much more easily and to defer repayment, or as some would have it to live beyond its means. Russia has tried to chip away at the dollar's status and attempted to launch an alternative to the international banking transfer system known as SWIFT (for the Society for Worldwide Interbank Financial Tele-communications). The Russian planned alternative is known as Double Eagle and would allow oil to be traded in gold.[16] It is likely to be a long time before the importance of the dollar and US dominance of the international financial system wane. A more immediate geopolitical battleground for both the US and Russia is the Middle East.

4.3 The Middle East: Russia is back

It is about Russia's great power role

The Middle East is full of solutions for several of Russia's energy-related problems: how to skirt sanctions and get away with it; how to maintain Russian influence in the European gas market; and how to push up the oil price. Russia is important to the regional energy security not because of its energy exports to the region, but as a result of agreements on energy infrastructure and pricing. However, Russian interest in the region is primarily economic, albeit disruptive. Russia's overarching goal in the region is most likely to assert its role as a key actor.

Russia needs to work with and in the Middle East if it is to have an energy-related impact on Europe and the US, since the region holds half of the world's gas and oil reserves.[17] Since the 2000s, Russia has stepped up its efforts to regain some of the influence the Soviet Union lost in the Middle East after the end of the Cold War and the break-up of the Soviet Union. In terms of developing and deepening ties with the region, across a range of issues from defence to energy it is the Gulf countries that have gained Russia's attention. There have been a number of high-

[15] Helleiner, Eric and Kirshner, Jonathan. 'The Future of the Dollar – Whither the Key Currency' and Kirshner, Jonathan. 'After the (Relative) Fall – Dollar Diminution and the Consequences for American Power', in Helleiner, Eric and Kirshner, Jonathan (eds.). The Future of the Dollar, Ithaca and London: Cornell University Press, (2009), pp. 4-5 and 202-204. . The dollar is the basis of the post Second World War economic order, and a more multipolar monetary system could lead to a replay of the interwar years international economic tension that preceded the Second World War. This worries some experts while others believe a multipolar currency system might actually be the cure.

[16] Katusa. *The Colder War*, *pp.* 199-200 and 205.

[17] Mammadov. *Russia in the Middle East: Energy Forever?*

level visits to Moscow from the Gulf states, notably Saudi Arabia and Qatar. Putin has also travelled to the Gulf, something that Soviet leaders did not do during the Cold War.[18]

Some experts believe that Russia's support for the Assad regime in Syria, while unwelcome in Riyadh, has nonetheless increased respect for Russia among the Gulf countries. Neither Russia helping to construct an Iranian nuclear power plant, nor its 2015 plans to sell a missile air-defence system to Iran, nor Western sanctions against Russia seems to have prevented several Gulf states from deepening their relations with Moscow.[19] As in Latin America, the low-key approach, something which Russia favours, seems to have been successful.[20]

Pipeline politics in the Middle East

Russia is involved in a number of energy infrastructure projects in the Middle East. When it comes to pipelines at least one analyst believes that it is possible that Russia will employ disruptive tactics. Russia works in three stages to get the outcome it desires: 1) it tries to block a pipeline 2) if that does not work it will try and co-opt the situation 3) and if that does not work it build an alternative.

It might be worth noting the existence of a Russian conspiracy theory about the Syrian civil war. According to the theory the US caused the civil war after Bashar al-Assad rejected the idea of a Qatari pipeline through Syria, which the USA supported.[21] If nothing else, this says something about how at least some Russians believe that other great powers, such as the US, engage in disruptive operations. Overall, Russia can expect that chaos in the Middle East will boost Russia's role, or at least energy prices.

Given Russia's current involvement in the Middle East, it seems that it is at stage 2 and 3 of its approach to pipelines. In the 2010s, Russia was involved in a number

[18] Yetiv, Steve and Oskarsson, Katerina. Challenged Hegemony – The United States, China, and Russia in the Persian Gulf, Stanford: Stanford University Press, (2018), pp. 103-104, 110-111 and 113-114. Note that Russian arms sales to the region have proven a double-edged sword since before the end of the Cold war. The side not buying is alienated from Moscow negating any overall increase in Russian influence in the region following from arms sales to a country in the region.

[19] Yetiv and Oskarsson. *Challenged Hegemony*, pp. 103-104, 110-111 and 113-114. Note that Russian arms sales to the region have proven a double edged since before the end of the Cold war. The side not buying is alienated from Moscow negating any overall increase in Russian influence in the region following from arms sales to a country in the region.

[20] Kessler, Oren and Zilberman, Boris. 'Russia's Charm Offensive in North Africa', Foreign Affairs online, 2 April, (2017), https://www.foreignaffairs.com/articles/north-africa/2017-04-03/russia-s-charm-offensive-north-africa, accessed 7 May, 2017.

[21] See Coote, Bud. The Caspian Sea and Southern Gas Corridor – A view from Russia, The Atlantic Council, Global Energy Center, Report, April, (2017), p. 24.

of energy projects in the Middle East. The Russia-Iran relationship has had its ups and downs but in 2013 Russian companies were invited to help produce Iranian gas and oil.

Lukoil has also been heavily involved in developing Iraq's West Qurna-2 oil field, perhaps one of the largest oil fields in the world that has not yet been fully developed. According to one estimate, this involved sending thousands of Russians to work in Iraq. In 2012, GazpromNeft took an interest in Kurdish oil production in Iraq, although these direct Kurdish-Russian dealings raised Baghdad's ire.[22] By 2017 Rosneft had strengthened the Russian presence in Iraq by assisting Iraqi Kurdistan with its oil pipeline infrastructure. Kurdistan is planning to repay Rosneft in oil, which the company plans to refine in its German refineries.[23] Russia has also tried to play off different sides in the region, including Saudi Arabia, when it comes to nuclear power.[24]

These energy relationships have sometimes run at cross purposes with some of Russia's military engagements in Syria, but Russia's larger scheme is almost certainly to bolster its role in the region by becoming an energy partner. For example, Russia needs a new pipeline to Turkey, Turk Stream, to circumvent Ukraine. This will actually consist of two pipelines: one for Turkey, which is already complete; and a second for exports to Europe, from which exports are due to begin in 2019.[25] Even though the countries are on opposite sides in the Syrian conflict, the project is still going ahead.

If the Syrian conflict is resolved in favour of Assad, Russia can be expected to capitalize on its support for Assad by influencing pipelines criss-crossing Syria. Syria has a potential as a transit country situated between the energy wealth of the Gulf and Europe. Russia is already engaged in plans for offshore drilling along the Syrian coast.[26]

It might also be about the Mediterranean and Europe

Brenda Shaffer, a leading energy expert, argues that Russia's involvement in Syria is not about the Middle East primarily at all but also about Russian influence in the eastern Mediterranean, and Russian influence with Greece, Turkey and Cyprus.[27] The eastern Mediterranean is important to Russia in many ways: for its military presence in the Mediterranean, mainly naval; for Russia to have a presence

[22] Yetiv and Oskarsson. *Challenged Hegemony*, pp. 121-123.
[23] Mammadov. *Russia in the Middle East: Energy Forever?*
[24] Yetiv and Oskarsson. *Challenged Hegemony*, pp. 121-123.
[25] TASS, Construction of first line of Turkish Stream pipeline to be completed in May — Gazprom CEO, TASS online, 3 April, (2018), accessed 29 May, 2018, http://tass.com/economy/997533.
[26] Mammadov. *Russia in the Middle East: Energy Forever?*
[27] Interview with Brenda Shaffer, (2018).

in a part of the Mediterranean where new gas fields are being developed, offshore in Israel and Egypt; and for it to be able to influence the European Southern Gas Corridor to the Caucasus and Central Asia, as well as energy exports to Europe from the Middle East.[28]

Russia is probably seeking to undermine the EU's diversification. In the Middle East, unlike in Central Asia or Europe, Russia has tried to work with established competitors. This has meant supporting an Egyptian gas hub.[29] Involvement in Egypt also makes commercial sense since Egypt has an untapped giant gas field.[30]

Iran is also a potential future competitor as a gas supplier to Europe, but the main competitors are Algeria and Qatar. The latter is the biggest producer of LNG and when the shale gas revolution led to Qatar losing the US market, it found new opportunities in Europe. This was a development that the EU welcomed, given its interest in diversification.[31] Both Rosneft and Gazprom have a foothold in Algeria. Qatar is also a key actor there, which could get in the way of Russia increasing its influence in the country. Unlike Qatar, however, Russia has traditional means of influence at its disposal, such as arms sales – selling submarines to Algeria, which could favour Russian influence in Algeria.[32] Presumably, Russia has the wherewithal not only to make energy a tool of foreign policy but also to make other elements of its foreign dealings a tool of its aims in foreign energy policy.

[28] See Nopens, Patrick. Geopolitical Shifts in the Eastern Mediterranean, Egmont Security Policy Brief No. 43, February, (2013).
[29] Mammadov. *Russia in the Middle East: Energy Forever?*
[30] El Wardany, Salma. 'Why One Giant Gas Field Is a Big Deal for Egypt', Bloomberg online, 19 December, (2017), https://www.bloomberg.com/news/articles/2017-12-19/why-one-giant-gas-field-is-a-big-deal-for-egypt-quicktake-q-a, accessed 20 august, 2018.
[31] Yetiv and Oskarsson. *Challenged Hegemony*, pp. 125-127 and 129.
[32] Kessler. *'Russia's Charm Offensive in North Africa'*.

On the US presence in the region

The Russian approach in the Middle East is not primarily about neo-imperialism, but this does not exclude the possibility that Russia's interests in the Middle East are about being able to pursue neo-imperialist policies elsewhere, such as in Europe. The energy expert Rauf Mammadov suggests that Russia is also pursuing a policy of 'divide and conquer' with regard to the US and its Arab allies, and this too is of course the traditional approach of empires.[33]

Russia's interest in the region is not about edging the US out of the Gulf, which was the classic American fear during the Cold War. Primarily, Russia's interest in the region is economic. To some extent, the American presence in the Gulf helps Russian efforts to forge economic ties with region, since the US underpins essential regional stability. However, Chinese and American economic relations are more important to the region than trade ties with Russia.[34]

Russian energy relations in the region may amount to 'a form of soft balancing against the United States'.[35] The US has a number of reasons for maintaining its geopolitical control of the Gulf. These are most clearly expressed in the so-called Carter doctrine of 1980, named after President Jimmy Carter. This identifies the Gulf as a '"vital interest"' of the US that it is prepared to protect by military force. Maintaining the free flow of oil from the Gulf remains one of the key reasons for the US presence there, but this is not because of any American dependence on Gulf oil. Instead, the free flow of oil from the Gulf helps safeguard a reasonable price of oil in the global market, which is beneficial to the world economy. This benefits the US which has a vested interest in global growth.[36]

At least this has been the traditional approach until now. US interest in the Middle East has have been somewhat reduced as a result of the fact that the US has been less worried about oil imports in the past five years. The US sees itself – rightly or wrongly – as a sort of swing producer of oil, and expects that its shale production will ensure a reasonable oil price. However, the flow of oil from the Gulf remains important because of its impact on the world price. There is American concern about Russia being able to boost its role on the back of chaos in the Middle East, but Russia also needs to work with Middle East countries on issues that go beyond the region. For Russia, building financial relations with the Gulf is a way of circumventing Western sanctions.[37] It was Qatar's sovereign wealth fund and the

[33] Mammadov. *Russia in the Middle East: Energy Forever?*
[34] Yetiv and Oskarsson. *Challenged Hegemony*, pp. 115-116 and 119. See also Kozhanov, Nikolay. Russian Policy Across the Middle East – Motivations and Methods Russia and Eurasia Programme, Chatham House Research Paper, February, (2018).
[35] Ibid, pp. 125-127 and 129.
[36] See Rossbach. *'Energy and the Future of US Primacy*.
[37] Yetiv and Oskarsson. *Challenged Hegemony*, pp. 115-116 and 119.

Anglo-Swiss commodities trader Glencore that first invested in Russian energy after the sanctions began by buying one-fifth of Rosneft.[38] The important thing about the deal with Qatar was that it showed that Russia could attract investment despite the sanctions.

Beyond the region: OPEC

The deepened cooperation between Russia and Saudi Arabia in 2017 homed in on the oil price. Despite all their differences, such as over Syria and cooperation with Iran, and being competing leading global oil producers, the two countries have decided to cooperate on what is most important to them – the oil price. The American shale energy revolution put more oil on the global market, which in turn led to a downward pressure on the world oil price. Both Saudi Arabia and Russia rely on their income from oil. It proved necessary to cooperate to push up the oil price through production cuts. Rauf Mammadov goes so far as to claim that this has effectively made Saudi Arabia dependent on Russian energy diplomacy and its will to agree on production cuts.[39] In a sense, Putin is the power behind the Saudi throne, which limits Saudi Arabia's position as a swing producer, or 'energy superpower'.

The OPEC plus agreement between OPEC and non-OPEC producers to put a cap on oil production was extended into 2018 in December 2017. Together, Russian and Saudi Arabian production amounts to about 25 per cent of global output.[40] It seems that Russian efforts helped to bring Iran into the fold. The question, according to James Henderson and Ahmed Mehdi, is: how long will Russia be able to maintain its regional diplomacy, balancing the countries of the Middle East?[41] Or perhaps there will be an attempt to establish a Super-OPEC in the near future. As part of its transition to a post-oil economy, Saudi Arabia have had plans to privatize Aramco, a move that would benefit from a higher oil price.[42]

The Saudi Crown Prince has spoken of extending the OPEC plus deal for 10–20 years. Russia is more hesitant about the deal, and probably sees no need to prolong or repeat the deal if the price is above USD 70. Russian company profits are actually down because of taxes on companies, as it was the Russian government

[38] Mammadov. *Russia in the Middle East: Energy Forever?*
[39] Ibid.
[40] Lawler, Alex; El Gamal, Rania and Nasralla, Shadia. 'OPEC, Russia agree oil cut extension to end of 2018', Reuters online, 30 November, (2017), https://www.reuters.com/article/us-opec-meeting/opec-russia-agree-oil-cut-extension-to-end-of-2018-idUSKBN1DU0WW , accessed 8 May, 2018.
[41] Henderson, James and Mehdi, Ahmed. 'Russia's Middle East Energy Diplomacy', Snapshot in Foreign Affairs online, 20 June, (2017), https://www.foreignaffairs.com/articles/middle-east/2017-06-20/russias-middle-east-energy-diplomacy, accessed 23 April, 2018.
[42] Lawler, et al. *'OPEC, Russia…'*

which made the deal not the companies.[43] This is the kind of reasoning that is to be expected from state capitalism. If Saudi Arabia perseveres it will have to sacrifice more of its market share, as it will be forced to ensure that reductions take place. If more oil comes to the world market, Saudi Arabia will have to cut even more if it wants to maintain the oil price. In the end, Saudi-Russian cooperation also depends on the US. It has allowed some room for Riyadh to work with Moscow, but in terms of security Saudi Arabia remains dependent on the US. This means that, in this case, politics will most likely trump economic interests. Whether the same is true of US energy relations with the EU is discussed in the next section.

4.4 Europe: the market

Russian-European economic interdependence

Russian neo-imperialism is most often associated with Russian behaviour in Europe, such as the pricing and transit disputes with Ukraine. The origins of the fear of Europe being held hostage by a Russia prepared to turn off the gas tap for political reasons date back to when Europe first explored the possibilities of importing gas from the Soviet Union.[44] These concerns were especially strident during the final phase of the Cold War in the 1980s, when the Reagan administration voiced concerns about a growing European dependence on Soviet gas.[45] Following Russian energy disputes with Ukraine in 2006 and 2009, and the Russian aggression against Ukraine, such concerns have resurfaced in the US and Europe.

The high level of energy imports from Russia has led to a high degree of Russian-European economic interdependence. Russian gas is important enough not to be part of the 2014 sanctions regime against Russia. However, it is possible to interpret this interdependence as a basis for both cooperation and conflict. About two-thirds of Russian gas exports to Europe are for EU member states.[46] Given the importance of the EU market to Russia, it is perhaps not surprising that Russia has sought to preserve it. Some experts on Russian energy, such as Jonathan Stern, believe that the European gas market is the important ‘geopolitical element’ of Russia’s energy relations with Europe. The energy relationship bolsters Russia’s standing globally and is the most important link to Europe in economic terms.

[43] Interview with Rauf Mammadov, (2018).
[44] See Högselius. *Red Gas*.
[45] Goldman. *Petrostate*, p. 48.
[46] EIA. *Russia*, 31 October, pp. 20-21. For an overview of Russian-European relations before the increased East-West tension see Larsson, Robert L. Tacking Dependency: The EU and its Energy Security Challenges, FOI, FOI-R--2311--SE, October, (2007).

According to Stern, this is much more important than any energy weapon, since the use of such a weapon would 'impose serious economic and political damage on Russia'.[47] Russia's aggression against Ukraine rekindled European fears about energy security at same time as the American shale revolution got under way.

The EU's changing energy policies require adaptation

However, the 2009 Ukrainian-Russian energy conflict provided a crucial impulse for the EU's Regulation on Gas Security, which strengthened the gas infrastructure within the EU. This included making way for new LNG terminals to provide alternative import locations to Russian pipeline gas. This came on top of the EU's Third Energy Package, already under way, which sought to liberalize the EU market along British lines. The package aimed to separate the distribution, production and transportation of gas. This has created problems for Gazprom, which relies on long-term contracts and has been involved in the construction of new pipelines.[48]

An Energy Union was proposed in 2015, reflecting the EU's inclination to apply its standard solution to all problems – deeper integration. It is possible that such a union could increase consumer leverage, since the EU would act and speak with a single voice. National interests in energy would be subsumed into an EU interest. However, one side-effect might be higher gas prices.[49] Higher prices for gas in Europe might conceivably make LNG from, for example, the US more competitive. However, the price of non-Russian gas might be a lot higher. In the early 2020s, Russian contracts containing a 'take-or-pay' clause that effectively guarantees Russia gas export income will end. At that point there could be more gas globally and an even more developed LNG market globally. However, this depends on new projects being developed and the destination of the additional LNG. In the future the gas market could in fact be tight, which in the medium term would benefit Russia.

The EU is not keen to pay more than it has to. In addition, Russian exports to Europe increased in 2016 and 2017.[50] In the near future, the EU might have to compete with Asia for LNG, given the increasing demand in Asia. The EU needs Russian gas, even if some member states need it more than others. The EU imports

[47] Stern, Jonathan. 'The Impact of European Regulation and Policy', in Henderson, James and Pirani, Simon (eds.), The Russian Gas Matrix – How Markets are Driving *Change* (Oxford: Oxford University Press and the Oxford Institute for Energy Studies, (2014), p. 101.
[48] Stern. *'The Impact of European Regulation and Policy'*, pp. 83-85 and 91-92.
[49] Grigas. *The New Geopolitics of Natural Gas*, pp. 162-165.
[50] Coote. *Impact of Sanctions on Russia's Energy Sector*, p. 1.

about 70 per cent of its natural gas needs.[51] In 2016, Russia provided the EU with about 40 per cent of its imported natural gas. Norway added another 25 per cent, Algeria about 12 per cent (and Qatar a little over 5 per cent).[52] The EU wants to diversify and has sought a fourth major supplier. [53] In order to preserve its share of the EU market, Russia has worked to prevent the EU from establishing alternative pipelines routes.

Pipelines

The EU has pursued the Southern Gas Corridor, which means finding a pipeline systems that can circumvent Russia. This has involved a number of suggested pipeline routes. Russia successfully chipped away at the first attempt: the Nabucco pipeline. The ambitious import capacity of that pipeline was not matched by European political will. Its successor projects are less ambitious.[54] The pipeline projects that are in the making are the Trans Adriatic Pipeline, (TAP), which will run from Italy, and connect with the Trans Anatolian Pipeline, (TANAP).[55] Russia's means of preventing, or at least delaying, European alternatives have included its own alternative South Stream, which was later replaced with pipelines to Turkey such as Turk Stream – a project that depends on the state of Russian-Turkish relations. Turkey is Russia's second largest gas importer. Since Turkey is a regional power, the project inevitably has a geopolitical dimension.[56]

New pipelines are not enough. The EU will also have to find an alternative source at the other end of the pipelines in the East. The Southern Gas Corridor now extends to the Shah Deniz field in Azerbaijan. The last stretch of the corridor depends on the South Caucasus Pipeline, where Lukoil has an interest but so do energy companies from Turkey, Malaysia and Iran, as well as BP. Iran has the capacity to be a genuine competitor to Russia for gas exports to the EU via pipelines.[57] However, this would require Iran to overcome a number of hurdles, and choose to export via pipelines not yet built instead of focusing on LNG

[51] The European Commission. European Energy Strategy, https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/energy-security-strategy, accessed 11 May, 2018.
[52] Eurostat. Shedding light on energy in the EU A guided tour of energy statistics, Eurostat online, 2018 edition, http://ec.europa.eu/eurostat/cache/infographs/energy/index.html, accessed 9 May, 2018.
[53] Sal-Carranza, Angel and Vandendriessche, Marie. 'Geopolitics and pipelines for the EU and its neighbors', in Steven et al.. *The New Politics of Strategic Resources*, p. 127.
[54] Grigas. *The New Geopolitics of Natural Gas*, pp. 160-161.
[55] Sal-Carranza, Angel and Vandendriessche, Marie. 'Geopolitics and pipelines for the EU and its neighbors', in Steven et al., *The New Politics of Strategic Resources*, p. 127.
[56] Grigas. *The New Geopolitics of Natural Gas*, pp. 112-114 and EIA, Country Analysis Brief: Russia, 31 October, (2017), p. 21.
[57] Grigas. *The New Geopolitics of Natural Gas*, p. 165, and 209-210.

exports. If the present political dilemmas continue, primarily between Iran and the US concerning the Iran nuclear deal, European imports from Iran would be even more problematic for transatlantic relations than Russian gas. From the perspective of the potential for increased energy security, it is understandable why the EU is less keen than the US on abandoning the Iran nuclear deal.

Turkmenistan, located just beyond the Caspian Sea, could be a source of gas imports for the EU. Russia is trying to thwart the extension of the EU's Southern Gas Corridor to Turkmenistan. Russia might even try to resume imports of gas from Turkmenistan in order to influence it. However, the project would involve a pipeline under the Caspian sea, which would be difficult due to legal disputes over borders in the sea. Russia also wants Turk Stream (a complement to the already existing Bluestream pipeline to Turkey) to make a trans-Caspian pipeline redundant. However, all these efforts might prove unnecessary as Turkmenistan already has a major customer: China.[58]

In the future, the Southern Gas Corridor could be expanded but there might also be much more gas available globally.[59] For the present, the Russian push to expand Nord Stream is another means by which Russia is attempting to maintain its market share. Nord Stream 2 would double the capacity of Nord Stream and, like Nord Stream 1, make landfall in Germany. European gas production is expected to decline over the next 20 years by as much as 50 per cent. Nord Stream 2 would put Russia in a favourable position in terms of replacing the decreased European gas production.[60] There are five European companies associated with the Nord Stream 2 project: the German BASF and Uniper, the French Engie, the Austrian OMW and the Anglo-Dutch Royal Dutch Shell.[61] However, European views on the project are divided. In addition, climate change might lead Europe to reduce its fossil fuel consumption in the future with the help of renewables, as noted in chapter 1.

[58] Gurbanov, Ilgar. 'Difficult Geopolitics of the Caspian Complicate Potential Energy Projects', in Eurasia Daily Monitor Volume: 15 Issue: 18 online, 6 February (2018), https://jamestown.org/program/difficult-geopolitics-caspian-complicate-potential-energy-projects/, , accessed 4 May, 2018.

[59] Grigas. *The New Geopolitics of Natural Gas*, pp. 210-211. For a background about Nord Stream 1 see Larsson, Robert L. Nord Stream, Sweden and Baltic Security, FOI, FOI-R--2251--SE, March, (2007).

[60] Saravalle, Edoardo. 'Russia's pipeline power', Politico online – Geopolitics online, 21 June, (2017), https://www.politico.eu/article/opinion-russias-pipeline-power/, accessed 14 September, 2018.

[61] Buckley, Neil. 'Russia plays geopolitical Gazprom game', in FT online, 28 September, (2018), https://www.ft.com/content/1bb6bd4a-84c8-11e6-a29c-6e7d9515ad15, accessed, 11 May, 2018.

Nord Stream 2

Nord Stream 2 faces many obstacles, the origins of which are both economic and political. Some countries have protested the Nord Stream pipelines because they lose transit fees from Russian gas transiting through pipelines in their countries.[62] Nord Stream 2 could be stopped due to regulatory shortcomings or concerns linked to market liberalization, given that all the gas in the pipeline originates in Russia. However, Russia could make a point on market liberalization and demand third party access to the TAP section of the Southern Gas Corridor.[63] National concerns are just one aspect. There are two major geopolitical considerations regarding Nord Stream 2, both of which could well be the real reasons behind some of the legal battles. The first is the fear in at least some parts of Europe of dependence on Russia.

Whatever is made of the so-called Russian energy weapon, the EU has taken it seriously in so far as that it has published its Energy Security Strategy, in 2014. This has involved two stress tests for European energy security, both pertaining to Russia. One scenario was a disruption of Russian gas supplies through Ukraine. The other involved Russia halting all gas supplies to the EU. If all EU member states cooperated, the EU could manage a disruption of six months.[64] However, in view of the internal political strife following the problems with in the eurozone during the economic and financial crisis, such a level of cooperation might be regarded as optimistic.

An increased dependence on Russian gas might lead Russia to use the energy weapon against Germany in order to bend German policies in favour of Moscow's outlook on the world. The energy weapon would either be about increased prices, which would be a weak tool in a liberalized market, or a reduction in exports. A deepened European dependency on Russian gas might also work to undermine the EU sanctions against Russia.[65] This could eventually result in a Europe that is more amenable to accepting Russian alterations to the European security architecture, beginning with accepting Russia's annexation of Crimea.

The second geopolitical reason that makes Nord Stream 2 problematic is that it drives a wedge into the Atlantic alliance. The transatlantic relationship is suffering from a number of disagreements, most notably over trade, the environment and

[62] For recent and older apprehensions see Francis, Diane. Why Nord Stream 2 Isn't Just an Ordinary Pipeline, the Atlantic Council online, March 20, (2018), http://www.atlanticcouncil.org/blogs/ukrainealert/why-nord-stream-2-isn-t-just-an-ordinary-pipeline, accessed, 13 September, 2018 and Hotten, Russell. 'What's in the pipeline for Nord Stream?', the telegraph online, 21 February, (2008), accessed, 13 September, 2018.

[63] Interview with Brenda Shaffer, (2018).

[64] The European Commission, European Energy Strategy, https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/energy-security-strategy, accessed 11 May 2018.

[65] See Saravalle. 'Russia's pipeline power'.

Iran. If the US pursues tougher sanctions against Russia, which would strike at Russia's energy exports to Europe, this could exacerbate already problematic relations with parts of Europe.

One issue for Europe might be that the US's energy security has improved thanks to the shale revolution. Russia's energy security, in terms of exports, is also looking positive at the moment, with increased gas exports to Europe and a higher oil price. Europe will benefit from the increase in global gas production, at least as a leverage in negotiations over future pipeline gas contracts with Russia, but its energy security has not increased to the same extent as US energy security has. This could contribute to increased tension in the transatlantic alliance, especially if the US wants the EU to pay more in order to increase its energy security by buying more expensive American LNG.

Germany and geopolitics are at the heart of Nord Stream 2. The German willingness to go ahead complicates US-German relations. The US finds Germany lacking in understanding of worsened Russian-American relations, which affects US-German relations.[66] The US is of course concerned that energy would be one way among many ways, such as political and military pressure, in which Russia could influence Europe. That said, some analysts are fairly sanguine about the possibilities of using energy to pressure Europe, given how much Russia needs its European market.[67] It is possible to imagine a scenario in which Russia was willing to use the energy weapon even if it inflicted economic harm on itself, but such a scenario would probably involve bigger stakes than issues linked to the energy markets.

Another outcome for transatlantic relations with regard to Russian energy depends on whether Russia's need to modernize will result in a bargain with the EU at some point in the long term future. It is one possibility among many that the US will inadvertently push Europe in that direction. If Russia recognizes its Eurasian Economic Union as a failure, cooperation with the EU would perhaps be of interest, but a great number of political and security problems in European-Russian relations would have to be overcome first.

Russia is not the Soviet Union

The US position on European dependence on Russian gas dates back to the 1980s.[68] However, the challenges might be even greater today than they were in the past. Today's Russia is not the Soviet Union, something which the countries of the former-Soviet Union have already found out. In some respects, Russia is

[66] Interview with Bruce Jones, (2018).
[67] Larrabee, Stephen F.; Pezard, Stephanie; Radin, Andrew; Chandler, Nathan; Crane, Keith and Szayna, Thomas S. Russia and the West After the Ukrainain Crisis. RAND, (2018), pp. xii-xiii .
[68] Interview with Dov Zakheim, (2018).

taking greater risks in Europe than the Soviet Union was ever prepared to do during the Cold War. It is trying to change the map of Europe even at the cost of upsetting the international rules-based order. In addition, given that energy is an integral part of its foreign policy toolbox, it is clear that Russian policy towards the whole of Europe could become neo-imperialist, even if such an approach has thus far only been displayed in Eastern Europe. Nevertheless, present day Russia has also adapted to the changes, imposed by new regulations, in its most important gas market, the EU.

More than neo-imperialist policies, the problem for EU-Russian relations is Russia's desire for control. In its efforts to safeguard its future as an energy exporter to Europe, it might use means that could undermine the trust it needs in order to maintain its role as a key supplier of gas to the EU. This is problematic for Russia since a pivot to China as an alternative market would be near impossible and fraught with dangers – for Russia, as the next section explains.

4.5 China and Asia

The Russian pivot to Asia

Pivoting to Asia seemed to be Russia's preferred option after the Ukraine crisis in 2014 and the increased tensions between the West and Russia that followed. This at least was one of the most prevalent interpretations of relations after 2014. Some suggested that turning to Asia was a means of putting pressure on Europe.[69] However, the rise of Asia puts pressure on Russia.

According to Erica S. Downs at the CNA Corporation, Russia is in the process of accepting its junior position in relation to China. For the moment at least, Russia seems to adapt to China's might. Moscow probably was not thrilled that China launched its ambitious infrastructure project the Belt and Road Initiative, at a time when the oil price was low and Russia was under Western sanctions.[70] The project is supposed to transform the global flow of goods from the Pacific through the Indian Ocean and through Central Asia to the West.[71] In Central Asia there already is a division of labour between China and Russia. Where Russia provides military

[69] See the perspectives highlighted in Skalamera, Morena and Goldthau, Andreas, 'Russia: Playing Hardball or Bidding Farewell to Europe? Debunking the Myth of Eurasia's New Geopolitics of Gas', Harvard Kennedy School, Belfer Center for Science and International Affairs, *Discussion Paper 2016-3* (June 2016).

[70] Interview with Erica S. Downs, (2018).

[71] Herberg, Mikkal E. 'Introduction', in Downs, Erica S. et al., *Asia's Energy Security and China's Belt and Road Initiative*, National Bureau of Asian Research, *NBR Special Report* no. 68 (November 2017).

stability and China helps with economic development.[72] Nonetheless, tension between China and Russia could increase in the future.

In the past, China and Russia competed for influence in Turkmenistan. Then, all of a sudden, Russian interest melted away, most likely due to a decline in European gas demand, so that Russia did not need the additional gas from Turkmenistan. If China's economic footprint in Central Asia becomes too big it may be seen as a problem for Russia if it leads to Chinese efforts to play a political or security role in the region. For the moment, the Russian approach seems to be 'if you can't beat them, join them'. Russia supports the Belt and Road initiative as a vehicle to secure more Chinese capital. Apparently, Russia too wants something out of the project.[73] Accordingly, at present, Sino-Russian strategic relations are deepening.

China and Russia have many common interests, including both geopolitical and energy interests. Chief among these is a desire to counterbalance the US, which they regard as a threat to their interests. In fact, their energy relationship goes a long way back. Currently Russia is one of the biggest exporters of oil to China.[74] Nevertheless, the relationship has taken a long time to develop and their interdependence is probably similar to Russia's relations with Europe in so far as Russia wants a high price for its energy exports, while China wants to pay a low price.

Russia has even replaced its new partner in energy, Saudi Arabia, as the main supplier of oil to China.[75] This is something that in the long run could sour the Russian-Saudi Arabian relationship – especially if Saudi Arabia has to sacrifice more market shares in Asia in order keep the OPEC plus agreement going (see the section on OPEC in chapter 2). Even though China suffers from energy insecurity, Russia is for now, and in regard to energy especially, the junior partner in the relationship. Russia cannot compete with China and needs good relations with a rising China.

One aim of the Russian Energy Strategy to 2020 has been to increase exports to Asia.[76] However, Russia is already partially locked in as a supplier of oil, but also in the overall energy relationship with China. Part of the oil that flows through the East Siberia Pacific Ocean pipeline in eastern Russia goes to China, and most of the oil that reaches the Pacific coast port of Kozmino also goes to China. If China would not buy this Russian oil, it would be a problem for Russia. China, like the EU, is also concerned with diversification.[77] It does not want to become too

[72] Interview with Erica S. Downs, (2018).
[73] Ibid.
[74] Medeiros, Evan S. and Chase, Michael S. *Chinese Perspectives on the Sino-Russian Relationship*, National Bureau of Asian Research, *NBR Special Report* no. 66 (July 2017), pp. 4, 5, 9.
[75] Interview with Erica S. Downs, (2018).
[76] Simola and Solenko, 'Overview of Russia's oil and gas sector', p. 18.
[77] Interview with Erica S. Downs, (2018).

dependent on Russia, or anyone else for that matter, for its oil and gas imports. In China's case this is clearly a geopolitical consideration.

Most likely Russia sees China as a source for investment. Russia had expected China to ease the pain of Western sanctions more than it has. Something that underscores the nature of the relationship. Russia wants to increase its gas exports to the Asian gas market and Russia's new LNG plant in Yamal opens up other opportunities in Asia.[78] This is not surprising, perhaps, since the LNG exports from Yamal is the result of Chinese investments.[79]

American LNG to China probably cannot compete with Russian and Turkmenistan gas on price. Perhaps American LNG exports to China demonstrate that the geopolitical risks are limited. However, most likely China would not accept any substantial dependency on American LNG. In 2017, Australia was China's largest supplier of LNG and Turkmenistan was China's largest supplier of gas.[80] These are just two obstacles that stand in the way of Russia building China up as an alternative customer to Europe.

China vs. Europe

Since the there is no linkage between the Russian pipelines in the West and in the East, Russia cannot make China compete with Europe for the same gas exports. The gas produced for Europe in western Russia might be costly to transport eastwards, because of the longer distance. Also, Russia might not get a favourable deal with China. But it depends on what China wants. For Russia, according to Erica Downs, being an energy appendage to China might prove worse than being export dependent on the EU. China is primarily interested in buying energy and other natural resources from Russia.[81] That is not a solid foundation for the modernization the Russian economy needs. Nevertheless, having two important markets increases Russia's energy security as an exporter.

China has the upper hand in the relationship and has been able to dictate prices in the new deals.[82] The geopolitical problems Russia caused in Europe in 2014 pushed Russia to pursue a gas deal with China. However, just as Europe worries about Russia playing China off against Europe, China is probably also well aware

[78] Ibid.
[79] Mikulska, Anna. 'Russia starts LNG exports from Yamal: what it means for Europe', energypostweekly, 22 January 2018, http://energypost.eu/russia-starts-lng-exports-from-yamal-what-it-means-for-europe/, accessed 12 April 2018.
[80] Interview with Erica S. Downs, (2018).
[81] Ibid.
[82] Henderson, James and Mitrova, Tatiana. The Political and Commercial Dynamics of Russia's Gas Export Strategy, Oxford: Oxford Institute for Energy Studies, September, (2015), pp. 19, 20 and 21.

of the potential danger of connecting Russia's eastern and western pipeline systems. In any case, China has made the most the eastern pipeline project, of two projects, in eastern Russia its priority. The Altai pipeline – which would connect the gas sources in western Russia, now used to supply Europe, to the western China – is not a priority for China. However, the Altai pipeline may be completed at some point in the future. China's priority is the Power of Siberia pipeline, which delivers gas from eastern Russia to eastern China, and it is expected to be delivering gas to China by 2019.[83]

Aside from China, there are other customers in Asia, such as Japan, but building pipelines to Japan would put Russia in the same geopolitical situation as it is in Europe – supplying an ally of the US.[84] A regional deal on North Korea that stabilized the security situation on the Korean peninsula would change not only the geopolitics of the Far East but also regional energy security dynamics. For example, it could make North Korea a transit country in terms of electricity from Russia to South Korea.[85]

Russia seems to have accepted that at best it can only give priority to economic relations in Asia. Russia will not be able to play a neo-imperialist power game there: that is China's prerogative. Furthermore, Russia, at least in relation to China, will not be able to become more important than China allows. Consequently, Russia will not be able to balance the EU and China. Instead, Russia will have to focus on retaining both markets.

4.6 In conclusion

There is no one-size-fits-all approach in Russian energy relations with the various regions of the world. The US is no longer faced with growing dependence on Russian energy exports. Yet, Russia still manages to needle the US in the Western Hemisphere by involving itself in Venezuela, which does not serve any of its short-term economic interests. Instead, this can be best be described as successful neo-imperialism from a weak position.

The opposite is true of Russian involvement in the Middle East. Russia needs good relations with the Gulf countries to get access to their investment in order to circumvent Western sanctions. This does not prevent Russia from meddling in other parts Middle East in ways that involve pipeline politics and efforts to sustain global energy prices. In the worst case, Russia could contribute to chaos in the region in the hope of preventing competition from energy exporters there and thus push up energy prices. This would prevent the demise of Russia's global role in

[83] Grigas. *The New Geopolitics of Natural Gas*, pp. 258-261
[84] Ibid, p. 262.
[85] Interview with Robert Manning, (2018).

energy and stave off the long-term consequences of the changing energy landscape.

There are limits to what Russia can do. It cannot, for instance, play China off against Europe. Russia needs both markets and in any case China would not allow Russia to do so. Russia is clearly in a junior position in the Sino-Russian energy relationship. With regard to Europe, Russia has adapted to European regulations. Russia benefits from a European unwillingness to pay more for its gas imports, i.e. pay more for its energy security. Even if Europe would be prepared to buy more expensive gas, such as the American LNG, Russia would be able to compete, since it can sell its gas at a lower price. All-out neo-imperial activities might then not be the best way to ensure that Russia maintains its European customers, but Russia's behaviour depends on economic interests being stronger than its willingness to challenge the international rules-based order.

5 Conclusions

Returning to the questions posed at the outset (highlighted below), the chapters above offer the answers set out below as well as some cause for concern at the end of the conclusion. The answers are based on a synthesis of the chapters rather than each respective chapter. They also relate to the timelines introduced in the introduction: the short term of three to five years; the medium term, to the 2020s; and the long-term of the 2030s and beyond.

What does the combination of simultaneous changes in the international order and the energy landscape mean for Russia's power and influence?

It means that Russia belongs to group of countries that wants to overturn the international rules-based order and replace it with a multipolar world built on the interests of authoritarian countries, such as China and Russia itself, rather than the values of the West. At the same time, however, as Russia challenges the global order its primary source of strength, the energy sector, risks waning, which in the long run risks undermining its great power status.

How is the energy landscape changing?

The global energy landscape is undergoing enormous change, which will have consequences for all energy export dependent countries, and Russia is no exception. The pattern of global energy flows is changing because the US has unexpectedly moved from increased energy dependence to become an exporter of oil and gas. At the same time, a rising Asia means increased energy consumption in Asia. In the short to medium term, the demand for oil and gas is increasing, but the competition from renewables will increase in the medium term, around the mid-2020s.

As the energy landscape begins to change there will be a great deal of turbulence in the energy markets. This will mean fluctuating prices for oil and gas. Some producers might go to the wall and drop out of the oil market, which could in each instance result in a corresponding price spike. Such spikes in the price could be the result of energy export dependent countries facing the same kind of societal collapse as Venezuela. However, there is no risk of peak oil, and in the long run demand for oil might diminish significantly.

Gas will be seen as a preferable alternative to oil and coal since it is regarded as less environmentally harmful. There will be plenty of potential exporters of gas to rising Asia. In the short to medium term the market share of the global LNG trade is likely to increase, meaning that there will be more gas transported in tankers relative to the amount of gas exported through pipelines. This could provide the basis for a global gas market more similar to the world oil market.

Which countries and organizations are the major actors in oil and natural gas?

The oil cartel OPEC has reverted to its classic response. Its initial strategy following the American shale energy revolution, (which resulted in increased oil and gas production), was for its members to defend their market shares. They attempted to crowd out American shale energy production, which is more expensive than conventional oil and gas production, by maintaining production and flooding the market. This failed when American shale production proved resilient.

Then, in late 2016, OPEC together with other key oil producers, with the OPEC plus deal, agreed to curb production and force the oil price up. This succeeded and proved that authoritarian countries with divergent foreign and defence policies can agree to safeguard their incomes, providing that they are energy export dependent countries, as Russia and Saudi Arabia.

Neither OPEC nor Saudi Arabia are as powerful as they were in the past. Saudi Arabia needs Russia in order for the OPEC plus agreement to work. In fact, speculation in the media suggests that there are ideas about formalizing Russia's involvement in production decisions. This would make Russia more of a strategic actor with regard to the oil price, rather than the tactical operator that Russia has been in the past. The result could be a Super-OPEC, which would be the ultimate version of a traditional response by producers to the increased energy security of consumers, and especially the US, following the American energy revolution.

It is worth noting that Russia needs the Gulf countries in order to circumvent the West's sanctions and attract investment in the Russian energy sector. However, Russia might be willing to abandon the OPEC plus agreement earlier than Saudi Arabia. Russia might also be able to live with a lower oil price than Saudi Arabia, which needs a high oil price, since its government expenditures are considerable and depend on the income from oil.

There is no gas OPEC but there is the relatively new Gas Exporting Countries Forum (GECF), in which Russia has a leading role. It is also backed by Iran. If the GECF surprises the world by proving to have a key role in a globalized LNG market, then Russia might play an important role in the gas sector in the future, similar to that of Saudi Arabia in OPEC. OPEC also languished in obscurity for many years before it took on a leading role in the oil crisis-ridden 1970s. Russia will have to balance its relationships with Saudi Arabia and Iran. Furthermore, if organizational interests, in OPEC and GECF, collide in the future, Russia might have to choose to align with one or the other. Russia might also have to choose whether to promote its role as a gas exporter or its role as a major oil producer.

How does energy relate to Russian power and influence?

In this study, energy is about oil and gas. Nonetheless, it is worth noting that Russia also has an important international role in nuclear power. It is, for example, able to build nuclear power plants in other countries. Oil provides essential revenues for the Russian state budget, which in turn makes it possible for Russia to sustain the defence spending of a great power, including on nuclear arms. Gas is also important and may play a role by providing political leverage, at least potentially in parts of its major export market in Europe.

Control over the energy sector has been tied to the rise of Putin and the current Russian leadership since 2000. In the long run Russia faces an energy security paradox similar to that of the Soviet Union in the 1980s, when the oil price fell. If there is less demand for oil and more competition in gas, Russia may have to export more but might end up earning less. Precise computations might be required on a range of scenarios concerning Russia's long-term future energy revenues, detailing for how long oil and gas revenues will be able to support Russia's great power status.

In the short to medium term, Russia has the advantage, in a world of turbulent energy prices, of being a low-cost producer. This could help Russia preserve or even strengthen its role in the next few years, as both a key actor in the energy market and a geopolitically relevant great power. Russia can learn from its Soviet past by choosing to be active in a number of ways to try to push the decline in resource prices into the future – as it has done by working with OPEC.

What is Russia's direction?

Russia is well aware of its need to modernize but due to institutional problems and a lack of political will it has not done so. However, the priorities of the Russian leadership are to remain in power, to control the energy sector and to keep the energy sector central to the economy. For the leadership, reducing the importance to Russia of gas and oil means risking a reduction in their control of the commanding heights of the Russian economy and eventually their grip on power. Modernization also risking the rise of entrepreneurs, who, based on past experience, have a tendency to fund opponents of the regime.

For Russia, there would be other risks in following Saudi Arabia and try to transition away from an energy export dependent economy. There is the risk of what might be called the Shah's disease – the belief that an authoritarian regime can control modernization when it cannot control external market forces that could play havoc with the energy revenues needed to finance modernization. The promise of modernization might also unleash unexpected societal tensions that would be difficult to handle in an economic downturn.

Russia does not seem intent on tackling the future by modernizing its economy. Instead, in terms of exports it will double down on what it does best – remain a low cost producer. However, Russia is adapting to the changing energy landscape.

Russia has become an LNG exporter and may even harbour plans to make St Petersburg a financial centre in terms of the regional gas trade with Europe. This would be extremely difficult to establish given the problems with the rule of law in Russia. If Russia succeeds this would be an ironic twist. It could turn the EU's efforts at market liberalization into something Russia could exploit. However, such a Russian financial centre might also be a way of deepening EU-Russian economic interdependence and thus reducing the risk of conflict, but this would require huge changes in domestic Russian politics.

What is the Russian approach in different regions, regarding energy?

There is no one-size-fits-all Russian approach to energy in all regions of the world. Energy can be a tool for Russian foreign policy but sometimes it is just a source of income. In theory at least, there is such a thing as a Russian energy weapon. Russia could turn off its gas exports to Europe, but that would result in Russia losing its income, and wreck its most important geopolitical link to Europe. It is perhaps not even a source of mutual assured destruction, since the EU believes that it can handle a shortfall in imports of Russian energy that lasts for several months. Yet, Russia could still be prepared to use its role as a major exporter to Europe as a means of political leverage. However, there seem to be limits to the EU's ambition to diversify that are related to the cost of alternative gas imports, i.e. related to pricing, but not to Russia. While Europe wants to diversify its energy imports, it has proved unwilling to pay more for its energy security, for example by planning to import large quantities of more expensive American LNG.

The expansion of the Nord Stream gas pipeline in the Baltic, to Nord Stream 2, risks driving a wedge in the Atlantic alliance. The US is echoing apprehensions from the 1980s that Europe risks making itself vulnerable to Russian political pressure, but this rhetoric can be a means of frightening European countries into importing expensive American LNG. Nonetheless, there are geopolitical concerns. If Germany and other parts of Europe become increasingly dependent on Russian gas, and prove too accommodating towards Russia, this could contribute to changed perceptions about Russia. It could even help Russia pave the way for recognition of its annexation of Crimea, which would mean a de facto acceptance of a fundamentally altered European security architecture. This in turn might set the scene for even greater changes, and even a splintering of the West and an acceptance of a multilateral global order – and not one based on the West's rules-based order.

Worsened transatlantic relations could undermine the sanctions regime that makes Russia's energy production, especially of oil, more difficult. The US wants tougher sanctions than Europe and if the US applies its sanctions with limited multilateral

coordination and little concern for the EU's gas dependency on Russia it might eventually work in favour of Russia breaking the Western sanctions. Russia has already evaded the sanctions by working with China and the Middle East as investors.

However, Russia has slowly adapted to the changing energy landscape and market requirements. It has not behaved in an all-out neo-imperialist manner towards the whole of Europe, but adapted to the EU's legislation and regulations. Nevertheless, there is a fear in parts of Europe that the behaviour Russia has displayed towards parts of the former Eastern bloc is a way of doing things that will eventually affect Western Europe if it grows more dependent on Russian energy. Yet, Russia has not been able to play Europe off against China.

China is also an important market for Russian gas and oil, but China is at least as careful as Europe and has not wanted to become too reliant on any one exporter to China. In addition, the gas pipeline systems of eastern and western Russia are not connected. China has so far proved unwilling to finance a Russian expansion of the pipelines that would result in China competing with Europe for gas from the same fields through a unified Russian pipelines system. Russia seems to have accepted its junior relationship in the partnership with China for now, at least as far as energy is concerned, despite China's ambition to expand parts of its Belt and Road Initiative of new global highroads through Russia's backyard, Central Asia. Russia probably wants to benefit from China's expansive economic policies, but in Russia's future worst case scenario it is reduced to a Chinese raw materials colony.

If Russia cannot be an equal of China, it has at least been able to rely on energy relations when re-establishing its great power role in the Middle East. There, Russia has had to strike a balance between three ways of conduct itself: cooperation and rivalry, and in the extreme case even chaos. First, Russia needs investments from the Gulf in its own domestic energy production. Second, Russia's so-called pipeline politics, of seeking to gain an advantage, control or influence over pipelines, seems to have spread to the Middle East. Russian companies have stakes in pipeline construction and energy exploration in the region. However, the Russian agenda might also include preventing European diversification efforts to expand gas imports from the region, thereby reducing its imports of Russian gas. Third, chaos in the Middle East benefits Russia by contributing to high oil and gas prices. For Russia to fan the flames in the Middle East for such purposes, however, would be a high risk option. In fact, Russia has for the first time has said that it will cooperate with OPEC and also followed through.

Where Russia's neo-imperial ambitions have been most successful, in terms of energy politics, is in the Western Hemisphere. In Venezuela, Russia is using energy as part of its foreign policy. The involvement of state-controlled Russian oil companies in Venezuela does not, at least for the moment, make commercial

sense, but it is as a way for Russia to needle the US. Russia's approach is low-cost in terms of funds and high-yield in political terms. For Russia, this is a way of demonstrating to the US how it regards the US working with countries that Russia believes are in its sphere of influence, in the Caucasus and Central Asia. Russia might see its behaviour in Latin America as distinct from its energy relationship with the EU. Nevertheless, European countries could be worried by the Russian behaviour there.

A cause for concern

It might seem tempting to sit back and wait for Russia to face the Soviet experience of seeing its power and influence ebb away with an increasingly lower oil price and a greater degree of gas market competition. This might well be the outcome for Russia in the long term if present trends continue. But in the short term Russia is already trying to shore up its position in the global energy landscape. Russia could continue to push the problem of a falling oil price further into the future, as it has done by working with OPEC. Russia has also expanded its LNG capacity, which shows that Russia is adapting to a more global gas market.

Income from energy are of primary interest to the Russian leadership and needed for the state budget. For as long as economic interests trump geopolitical adventurism, Russia will continue to be one of those authoritarian regimes that the West can do business with or at least deal with. The danger will be if this logic is turned completely on its head in the medium term. The regime needs external enemies. This has been demonstrated by its aggression against Georgia and Ukraine. This kind of adventurism could have an even more direct impact on the West if commercial interests no longer are the top priority for Russia's leadership. Then, for example, Russia might use some kind of energy coercion to sway Europe politically.

In short, a combination of simultaneous changes in the international order and the energy landscape means that Russia is doubling down on what it knows best – energy production– in order to further its great powers ambitions, or at least to shore up its position as a great power for another decade.

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The risks of freezing in the dead of winter and the global economy crashing both have a lot to do with energy – and with Russia, since it is one of the world's top exporters of both oil and gas. For example, Europe is dependent on Russian gas. The income from energy exports is crucial for Russia's defence spending and global influence. The American shale revolution has unexpectedly increased US oil and gas production and upset the calculations of other producers, such as Saudi Arabia. Even more distressing, for all authoritarian energy export dependent countries, is that the key role of fossil fuels may be coming to an end. Russia may try to curb the central role of energy in its economy, but, at the same time, it has opted to challenge the international rules-based order. This report provides an analysis of the geopolitics of Russian energy against the background of changing international power politics and challenges for energy security.

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