IMPACT OF SANCTIONS ON RUSSIA’S ENERGY SECTOR

Bud Coote
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Cover photo credits A worker checks a valve of an oil pipe at the Lukoil company owned Imilorskoye oil field outside the West Siberian city of Kogalym, Russia. 25 January 2016. REUTERS/Sergei Karpukhin.

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When the United States and European Union (EU) imposed sanctions on Russia beginning in March 2014, world oil prices averaged $104 per barrel. The sanctions targeted future rather than current oil production to avoid a global economic downturn caused by a decline in Russian oil production. The sanctions did not target natural gas development and production at all to avoid an energy crisis in Europe triggered by cuts in Russian natural gas availability. Despite the sanctions, Russian oil production has continued to climb robustly and Russian gas supplies to Europe have remained plentiful. In 2016 Russia’s oil production growth was its highest in eleven years and its gas exports to Europe hit record highs in 2016 and 2017.

The sanctions, designed and imposed by the United States and EU, targeted long-term oil projects, in particular those that require the financial, management, and technical skills of international oil companies: offshore oil exploration and development in the north, deepwater oil development, and projects to exploit shale oil deposits. However, while sanctions were intended to delay and hamper Russia’s ability to develop such projects, it can be argued that sanctions did Moscow a favor by delaying projects that are too expensive to undertake in the oil price environment that has persisted since late 2014. Average oil prices plunged below $50 per barrel in January 2015 and dropped to less than $30 per barrel in January 2016, before leveling out to between $40 and $65 over the course of 2017. Indeed, lower oil prices have hurt Russian energy sector revenues much more than sanctions have. However, that is not to say that sanctions have not had an impact. Sanctions have dramatically reduced the equity value of Russian energy firms, made borrowing for energy projects more difficult, and sharply reduced the value of Russia’s currency. Despite these impacts, Russian oil production has increased every year from 2008 through 2016, and may set another record high in 2017 despite Moscow’s commitment to the Organization of the Petroleum Exporting Countries (OPEC) to reduce production.

New US sanctions legislated in August 2017 also are unlikely to significantly affect Russia’s energy sector. The new sanctions differ from earlier ones by addressing the possibility of sanctioning foreign investments in and loans to Russian pipelines, including gas pipelines. However, the US State Department subsequently issued guidance that sanctions apply only to energy pipeline projects initiated on or after August 2, 2017, the date of the act. This seems to exempt Russia’s major pipeline projects, including the controversial Nord Stream 2 gas pipeline.

Russia has also been able to reverse some of the downward momentum in its energy prospects since the initial imposition of sanctions, particularly through projects that could provide Moscow with both political and commercial benefit. Moscow gained some political support and status by engaging with OPEC and agreeing to take measures in support of oil prices, and is also working with Ankara on the TurkStream gas pipeline and partnering with Germany and a number of Western oil and gas companies on the Nord Stream 2 gas pipeline project. Russia’s largest oil producer, the state-owned company Rosneft, has also been able to participate in Venezuela’s oil operations and invest in the Kurdish Region of Iraq.

The political momentum gained from these overtures has contributed to President Vladimir Putin’s domestic public support. As the main driver behind the energy initiatives, Putin has used energy integrally with other economic and political tools to successfully navigate his way through sanctions, despite leading an economy that was already heading into recession when sanctions were first imposed and a country that has since suffered a sharp drop in real wages and living standards.

INTRODUCTION
This report addresses the impact of US and European Union (EU) sanctions on Russia’s energy sector. Moscow’s strategy and actions to deal with energy-related sanctions, and some of the geopolitical and other implications of Russia’s ability to cope with these sanctions. The analysis highlights how Moscow has managed to successfully pursue its energy goals, despite the broader negative impact of sanctions on other areas of the Russian economy.

Sanctions directed against goods and services for oil production and those restricting new debt for Russian energy companies are only part of the US and EU sanctions regimes. These were applied simultaneously with sanctions on debt and equity on select Russian state-owned enterprises and specially designated individuals and other entities. This paper focuses on the energy aspects of the sanctions.

SECTORAL SANCTIONS ON ENERGY
Under US sanctions US individuals, companies, and other entities, including companies’ foreign branches and persons in the United States, are prohibited from dealing with new debt of more than ninety days’ maturity for sanctioned Russian energy companies. These companies include Russia’s state-owned and largest oil company, Rosneft; Russia’s fourth-largest oil producer, Gazprom Neft; Russia’s government-controlled ocean-going pipe-laying vessel, Transneft; and Russia’s largest independent natural gas producer, OAO Novatek; and subsidiaries owned 50 percent or more by those companies.

US State Department guidance that foreign investment or loans related to pipeline projects involving export pipelines that begin in Russia will not be sanctioned if the projects and agreements were initiated before the August 2017 legislation makes it unlikely that Nord Stream 2 and similar pipeline projects will be sanctioned unless the White House or Congress takes contrary action. Prior to August 2017, contracts to buy the pipe for Nord Stream 2 were signed, a deal for a pipe-laying vessel was concluded, and agreements for loans from five European companies were signed. Activities such as agreements for new loans and investments that take place after the effective date of the new sanctions act would be subject to sanctions, which would cause disruption and costs for new pipeline projects.

New US sanctions on Russia now being implemented by the administration were imposed in August 2017, including sanctions on the energy sector. The sanctions were largely motivated by Congress’s intent to put the sanctions in legislation so that President Donald Trump cannot lift them without congressional consent and also by a consensus in Congress that Russia influenced the US election. Besides tightening earlier sanctions, the new legislation includes sanctions against entities supporting or investing in Russia’s oil and gas pipeline networks, which reflects US opposition to the Nord Stream 2 gas pipeline from Russia through the Baltic Sea to Germany. Germany denounced the imposition of sanctions against this project when prior versions in Congress did not call for cooperation with allies. Some key provisions on pipelines are largely discretionary, which could vastly dilute their application and effect. The legislation related to pipelines such as Nord Stream 2 contains clauses that sanctions are to be imposed unless “the President determines it is not in the national interest of the United States to do so.” The new legislation also provides for mandatory sanctions on foreign, non-US entities investing in some Russian crude oil projects and on foreign financial institutions conducting significant financial transactions with persons placed on the list of Specially Designated Nationals.

US Department of State, “CAATSA/CRIEEA Section 232 Public Guidance.”

6 US Department of State, “CAATSA/CRIEEA Section 232 Public Guidance.”

RUSSIA’S APPROACH TO DEALING WITH SANCTIONS
Since 2014, President Vladimir Putin has taken a multifaceted approach toward sanctions that has mitigated their impact, especially in the energy sector. Putin’s approach has its origins in his experiences dating back to his first term as prime minister, which began in 1998 when oil prices dipped to about $10 per barrel. During this period of low oil prices he witnessed and understood the value of sharply cutting the supply of foreign goods and relying heavily on ruble transactions to reduce costs in the domestic economy, especially in the purchase of equipment and services for oil and gas development.

Putin also learned the economic pain of Russia’s policy of building up strong international financial reserves during periods of high energy prices, which he did in subsequent years when oil prices recovered and soared above $100 per barrel. Other major elements of Putin’s approach include continued efforts to boost natural gas exports to Europe, an increased emphasis on exporting gas to China and elsewhere in Asia, and continued efforts to limit competition in the European gas market from other former Soviet producers, particularly Azerbaijan, Kazakhstan, and Turkmenistan.

As Putin took over the premiership of Russia in August 1998, the Russian economy defaulted that same month during a severe slump in oil prices, underscoring to Putin the value of building up financial reserves when times are good. Between 1998 and 1999, Russia’s international reserves were only about $12 billion. Putin has built up its reserves to $100 billion by 2004 and to a peak of nearly $600 billion in 2008. As oil prices decreased in recent years, the value of these financial reserves fell from about $500 billion in early 2014 by about $410 billion by July 2015. However, the high starting point meant that Russia still had about $360 billion, about thirty times the amount of foreign currency reserves held by the central bank in 1998 and 1999 when Putin took over the premiership.

Russia’s large buildup in financial reserves in the years leading up to 2014 enabled Moscow to limit the impact of sanctions by buttressing the financial stability of its banks and providing funds to help offset the large debts of state-owned companies. Russia also used its financial reserves to support investment, including in the energy sector. State-owned Rosneft has particularly benefited from these funds, as it had incurred considerable debt by buying assets formerly owned by Yukos and other entities in previous years.

At the same time, Moscow allowed the ruble to drop sharply to discourage imports and lower the costs of domestic consumption. This has worked particularly well in the energy sector, where domestic suppliers of equipment and services have been able to replace imported goods and services at lower costs. Many foreign suppliers of goods and services are also required to accept rubles as payment in the energy sector, which lowers costs for Russian companies. Moscow has also strengthened its energy sector activities by lowering taxes on oil production operations and oil export duties in recent years.8

Russia is continuing its efforts to increase natural gas sales to Europe, including by using tactics that divide Europe.

Russia has been able to rebuild its international financial reserves since 2015 as higher global prices for energy and other extractive industry exports brought an influx of dollars, combined with increases in interest rates used to curb inflation and help stabilize the ruble. Moscow also instituted measures to prompt Russian companies to sell some of their dollars abroad and buy rubles at home.9 According to Russia’s central bank, reserves have subsequently risen to $431 billion in November 2017.10

Russia is continuing its efforts to increase natural gas sales to Europe and increase its market access, including by using tactics that divide Europe. Europe, including Turkey, is Russia’s largest market by

far, buying about 180 billion cubic meters (bcm) of Russian gas in 2016 and even more in 2017. Germany and Turkey are Gazprom’s largest customers. The Nord Stream 2 gas pipeline is one such divisive project, which applies to Germany and some other northern European countries, but is strongly opposed by Eastern and Central European countries that view it as a threat to EU gas supply diversity and security. These Eastern and Central European countries are also concerned that the project will enable Russia’s state-owned gas company Gazprom to control the use of European pipelines needed to distribute gas from Nord Stream 2, such as the OPAL and EUGAL Pipelines. In addition, Nord Stream 2 will substantially reduce the volume of Russian gas transiting through Ukraine, depriving Ukraine of a key source of revenue.

Russia and Germany still face some relatively new, and potentially significant, energy policy issues. In November 2017 the European Commission proposed to amend its gas directive to the EU Third Energy Package to apply common EU gas rules to import pipelines. The proposal needs approval by the European Parliament and Council before it becomes law. A new Danish law may have implications to Russian gas access to Danish waters and German political turmoil could also have an impact.

Russia appears to have managed to negotiate its way through a major EU antitrust case against Gazprom with little damage. The settlement is not final, but major issues like overcharging and anti-competitive practices by Gazprom seem headed toward favorable outcomes for the company, compared with punishments for monopolistic behavior in other business areas by non-Russian firms. This is despite huge disparities in gas prices Gazprom charged to European customers as recently as 2015 and large costs to buyers incurred by Eastern and Central European countries that see Russian energy sector—the target of some sanctions—is doing well.

The dynamics of Russian oil production operations also work favorably. Both the value of the ruble and tax rates, including the mineral extraction tax and the export duty, fluctuate in concert with oil prices, helping to keep the economics of oil investment and production relatively stable. According to analysis by the Financial Times, the return on investment to Russian companies for monopoly behavior by standard individual vertical wells in West Siberia is similar to or higher than the return before the 2014-15 price plunge.12

The cost of energy production in Russia is also typically fairly low. This is especially the case with the value of the ruble falling far below the pre-sanctions level. Companies operating in Russia are able to sell oil in dollars and pay for drilling and other production operations with rubles, allowing them to reduce costs and increase investment to boost output.

22 Ibid.
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These two companies account for 10 percent and 4 percent, respectively, of the Russian market.\textsuperscript{22} The technology accessible through oilfield services firms to some extent undercuts the impact of sanctions that target the availability of advanced new technology to Russia. Both Schlumberger and Halliburton have reputations as being among the best oilfield services firms to tackle difficult, challenging, and high-risk oil and gas development projects and having the best technology and techniques to extract the most oil and gas. Both companies have tens of thousands of patents to help accomplish this. Both are also among the most adept at tackling difficult political and logistic obstacles to operations.\textsuperscript{23}

Despite being a world leader in oilfield operations, Schlumberger does not own any oilfields or gasfields. It does have the technical capabilities to operate in deepwater development projects, arctic projects, shale oil and gas projects, and other unconventional projects, and frequently is in demand to provide such services to both international oil companies and national oil companies.\textsuperscript{24} The major international oil companies involved in such projects primarily bring strong management skills and financial strength to the table, while most of the advanced technical knowledge and applications are embodied in the oilfield services companies.

Russia also has many of its own highly capable oilfield services companies. The largest are Surgutneftegaz, Eurasia Drilling Company, Rosneft, Tagras, and Argos, which combined hold a 30 percent share in the Russian market.\textsuperscript{25} Russian companies are well versed in the complexities of advanced operations like directional drilling and hydraulic fracturing, which have driven the US shale oil and gas revolutions. Russian companies have also been using these techniques for decades to boost conventional oil and gas recovery. These techniques are still driving Russian oil production growth, primarily through application to smaller and narrower pockets of oil deposits and to formations with tighter reservoirs and lower permeability, or heavier and more viscous oil.\textsuperscript{26} Besides giving Russia access to hard-to-develop deposits, these and other techniques also help Russia raise its oil productivity for individual wells. A 12 percent increase in expenditures on well workovers in 2016 points to stronger attention to well productivity.\textsuperscript{27}

Schlumberger and Russia’s Eurasia Drilling Company, a firm that operates over 650 onshore and offshore rigs, including four of the five rigs operating in the Russian sector of the Caspian Sea, have had a strategic alliance since 2011.\textsuperscript{28} Schlumberger recently tried to buy a majority share in Eurasia Drilling, but has not acquired the needed approvals from either Russian or US authorities.\textsuperscript{29}

Major Oilfield Services Players in Russia

Oilfield services and equipment companies have played a major role in providing the technology and operations needed to enable Russia to boost oil production. Russia accounts for about 17 percent of the world’s oilfield market, about $25 billion annually. Among the key players are two major international companies, Schlumberger and Halliburton, world leaders in advanced oilfield techniques and technology. These two companies account for 10 percent and 4 percent, respectively, of the Russian market.\textsuperscript{30}

Regionealy, Russia has managed to triple its drilling footage in East Siberia in recent years despite sanctions.\textsuperscript{31} Schlumberger does not own any oilfields or gasfields. It does have the technical capabilities to operate in deepwater development projects, arctic projects, shale oil and gas projects, and other unconventional projects, and frequently is in demand to provide such services to both international oil companies and national oil companies.\textsuperscript{32} The major international oil companies involved in such projects primarily bring strong management skills and financial strength to the table, while most of the advanced technical knowledge and applications are embodied in the oilfield services companies.

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\textsuperscript{23} Ibid.
\textsuperscript{24} Deloitte. 2015 Russian Oilfield Services Market: Current State and Trends.
\textsuperscript{26} Deloitte. 2015 Russian Oilfield Services Market: Current State and Trends.
\textsuperscript{27} Henry Foy, “Schlumberger Snaps Up 51% Stake in Russia’s Eurasia Drilling,” Financial Times, July 21, 2017, https://www.ft.com/content/ c3c2aeb1-9b71-4b9a-b0b8-7a6919537b85.
\textsuperscript{30} Deloitte, 2015 Russian Oilfield Services Market: Current State and Trends.
RUSSIA'S IMPRESSIVE GROWTH IN OIL PRODUCTION

Russia's ability to increase oil output in the past eight consecutive years despite sanctions and lower oil prices is impressive. Russian production has grown from 9.95 million barrels per day (b/d) to 11.23 million b/d over that period, a total increase of nearly 13 percent and an annual average growth of about 160,000 b/d per year (see Figure 1). Since sanctions were introduced in 2014, Russian oil output has grown by an average of about 150,000 b/d. Russia’s oil production growth was particularly strong in 2016, growing by nearly 250,000 b/d and accounting for more than half of world oil production growth that year. Oil production is likely to match or exceed 2016 levels in 2017 despite Russia’s deal with the Organization of the Petrolem Exporting Countries (OPEC) to curb production.

Of course, sanctions were not originally intended to impact Russia’s oil output. Rather, they were intended to hinder future production of higher-cost oil resources, including those in arctic, deepwater, and shale deposits. Some of those activities may have been delayed or suspended even without sanctions because of their high costs and the sharp drop in oil prices beginning in 2014. These concessions had been made by ExxonMobil’s Sakhalin-1 joint venture with Rosneft, Shell’s Sakhalin-2 joint venture with Gazprom, and Statoil’s joint project to drill exploration wells in the Sea of Okhotsk, have continued, as they are operations either onshore or in offshore waters less than five hundred feet deep, and thus allowed by sanctions legislation.

Russia has also been able to proceed with several large projects without the help of major international companies. These include the massive Bovanenkovo gas field in the Yamal Peninsula and the Power of Siberia gas pipeline from East Siberia to Asia. These have proceeded despite sanctions that have made foreign borrowing difficult for major Russian energy companies and interrupted some projects by the major international companies. In addition to ExxonMobil’s setbacks, Shell has neither been able to explore a deeper field offshore Sakhalin Island for possible gas or oil production nor been able to begin exploitation of shale deposits in West Siberia because of sanctions.

ENERGY SUCCESS FUELS GEOPOLITICAL MOMENTUM

Russia has managed a number of small to medium-sized successes in recent years that add up to a boost in political momentum for the country and for President Putin. These successes foremost include dealing with sanctions, raising oil production for the past eight years, and gas exports in 2016 as an average of 333 billion cubic meters, making progress on the Nord Stream 2 and TurkStream gas pipelines to Europe, and apparently negotiating a favorable deal with the EU on antitrust charges against Gazprom, though it is not yet final.

To understand the role played by energy successes in Russia’s reversal in geopolitical momentum, it helps to look back a few years to when Russia’s energy sector fortunes looked much bleaker. Leading up to the conflict in Ukraine and for a while after the European Union (backed by the United States) made considerable strides in improving natural gas supply security by implementing its Third Energy Package laws and regulations and working to integrate the national gas networks in Central and Southern Europe. European countries from the Baltics and Poland south to the Balkan states and Greece were previously almost totally dependent on Russian gas, and almost no infrastructure existed to link Central and Southern Europe with Western Europe. Russia itself provided the primary motivation for the EU's progress. Russian cutoffs of gas flows to Ukraine in 2006 and 2009 and wide disparities in prices Gazprom charged European countries for gas were primary drivers for the EU’s efforts to improve gas security. Russia’s takeover of Crimea and support to the conflict in Eastern Ukraine reinforced European efforts to strengthen its energy security.

EU enforcement of its Third Energy Package was largely responsible for the failure of Russia’s South Stream Pipeline under the Black Sea to Bulgaria bypassing Ukraine. Russia cancelled the South Stream project in 2014 after the EU insisted that Gazprom’s transit contracts with EU members would have to be renegotiated and approved by the EU. In November 2015, Russia suspended Turkish Stream because Turkey shut down a Russian pipe returning from an attack in Syria through Turkish air space. Around this time, the Nord Stream 2 project had no apparent momentum, as some of those activities may have been delayed or suspended even without sanctions because of their high costs and the sharp drop in oil prices beginning in 2014. Had these projects continued, they may have proved unprofitable in a low-price environment.

Figure 1: Russia’s Annual Oil Production 2008–16 (thousands of barrels per day). Source: BP, BP Statistical Review of World Energy June 2017.

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Figure 1: Russia’s Annual Oil Production 2008–16 (thousands of barrels per day). Source: BP, BP Statistical Review of World Energy June 2017.

Russian fortunes in the energy sector have experienced a turnaround, which in turn has reinforced the country’s political ambitions. Despite still lacking a large gas deal with China, Russia is building the Power of Siberia Pipeline to Asia. Volumes to China will be relatively small, at least initially, and prices have not been resolved, but work continues. More broadly, Russia’s overall trade with China increased by 22 percent in the first nine months of 2017, according to the Moscow Times.

Russia’s concern about access and growth of gas sales to Europe has eased considerably with the progress of its new gas export pipelines and apparently a very favorable deal in the EU’s antitrust case against Gazprom, at least on the major issues, which mainly require Gazprom to adhere to EU laws and regulations already imposed. This includes in particular elimination of a contract clause prohibiting the re-export of Gazprom gas.

These developments open the way for Russia to sell more gas to Europe in the future. Already in 2016 and 2017, Russian gas exports to Europe, including Turkey, have jumped to record highs of over 180 bcm. Gazprom has claimed it has another 100 bcm per year of excess gas that it plans to export to Europe, and Rosneft recently announced plans to fund a 30-bcm gas pipeline from Kurdistan to Turkey.

On a grander scale, Russia has gained stature and standing from its ability to deal with sanctions, attract investment from abroad, and engage major companies in partnering on projects both inside and outside of Russia. Investments by Russian energy companies have experienced a turnaround, which in turn has reinforced the country’s political ambitions.

US and EU sanctions have complicated and diminished Russian efforts to attract investment and borrow money abroad, but Moscow has proven capable of dealing with sanctions and keeping oil production on an upward path. New US sanctions legislated in August 2017 are unlikely to significantly impact Russia’s energy sector. In particular, recent guidance issued by the US State Department on the Countering America’s Adversaries Through Sanctions Act appears to have given the Nord Stream 2 Pipeline project a green light to proceed as these sanctions apply only to investments or loan agreements to energy export pipeline projects initiated on or after August 2, 2017, the date of the act. The guidance also exempts Russia’s other two major gas pipelines, TurkStream and the Power of Siberia.

The new sanctions are also unlikely to keep Russian oil production from continuing to rise. Despite Moscow’s pledges to OPEC to reduce its oil production in 2017, Russia has not made its cut. In fact, International Energy Agency calculations of Russian oil production over the final months of 2017 predict that production in 2017 will match or exceed that in 2016. This could extend Russia’s string of oil output growth to nine years.

Moreover, in the energy sector, US and EU sanctions favor Russia by interrupting high-cost, long-term energy projects that are not currently economically viable, including oil developments in the Arctic, deep offshore projects, and shale oil exploitation. Only new sanctions that target current oil and gas production and exports could reverse Russia’s upward trend in production over the next few years.

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ABOUT THE AUTHOR

BUD COOTE

Bud Coote is a nonresident senior fellow with the Atlantic Council. He previously spent 43 years with the Central Intelligence Agency where he helped establish and build the CIA’s energy program beginning in the 1970s. He retired in 2014 as the agency’s lead international energy analyst and a key adviser to senior US policy officials.