

# The Development of Arctic Offshore Oil and Gas Resources in Russia: Energy Policy Updates and New Activities by Companies

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*The development of its Arctic offshore oil and gas resources remains one of Russia's strategic priorities, both in terms of ensuring national energy security and cementing its presence in the region. As existing fields in West Siberia mature and become less productive, Russia needs to bring new sources on stream, with these being primarily located in the country's Arctic region, including its continental shelf, even though this presents considerable challenges to the industry. Some steps have already been taken to initiate and encourage this development, such as the process of adoption of a federal law liberalizing continental shelf access for private oil and gas companies and ongoing domestic development of offshore technologies that can be applied in the Arctic. This article analyses Russia's contemporary strategies in the energy sector in terms of future offshore oil and gas development in the Arctic. It provides relevant updates on Arctic offshore oil and gas activities in Russia since 2014, illustrates the challenges Russian companies face in operating in this region, and outlines commercial agreements underlying long-term Arctic offshore interests. This analysis also helps to better understand future risk-sharing strategies for the Russian oil and gas companies in the Arctic that will need to be developed.*

## Introduction

Melting Arctic sea ice presents new opportunities and has opened the Arctic Ocean to shipping as well as to oil and gas exploration for the Arctic states. But even with the considerable reduction in sea ice extent, thickness, and volume in recent decades (AMAP, 2017; IPCC, 2021), there is still large uncertainty associated with offshore oil and gas assessments in the Arctic, where exploration drilling is costly. Nonetheless, resource potential estimates from Arctic state official agencies (USGS, 2008; EIA, 2009; REA, 2019; US National Petroleum Council, 2019) and expert forecasts of future Arctic offshore oil and gas production are available (Lindholt & Glomsrød, 2012, 2018; Bourmistrov et al., 2015; Laverov et al., 2016; Kaminskiy et al., 2020). The U.S. Geological Survey estimated in 2008 that the total amount of undiscovered hydrocarbon resources (oil, natural gas and natural gas liquids) in the Arctic amounts to 413 billion barrels of oil equivalent (bboe), of

which approximately 84% is thought to be in offshore areas (Bird et al., 2008). This estimate has been widely cited by scholars, despite the fact that USGS resource appraisal represents only possible reserves and was based on geological probability rather than on actual offshore drilling data. Lindholt and Glomsrød (2012) considered the oil and gas supplies from six Arctic regions (Alaska, Canada, Norway, Greenland, West Russian Arctic and East Russian Arctic) during 2010–2050 based on the USGS estimates and followed the IEA reference oil price assumption, concluding that the Arctic share of global production will only be 8–10%. In their recent research, they have already adjusted these numbers upward (Lindholt & Glomsrød, 2018). Bourmistrov et al. (2015) considered possible future scenarios for Barents Sea oil and gas development and Norwegian-Russian cooperation therein. Arctic offshore oil and gas production predictions have also been made by Russian researchers for the Pechora Sea (Laverov et al., 2016) and the Kara Sea (Kaminskiy et al., 2020). In the case of the Russian continental shelf, many offshore oil and gas fields in the western part of the Russian Arctic have been known since the 1980s, such as the Prirazlomnoe, the Pomorskoe and the Dolginskoe in the Pechora Sea, the Shtokman, the Ludlovskoe, and the Murmanskoe in the Barents Sea, and the Rusanovskoe and the Leningradskoe in the Kara Sea. However, at present, despite this knowledge, it is difficult to assess the full potentially recoverable oil and gas reserves of the entire Russian Arctic offshore region. Thus, according to recent updates from the US National Petroleum Council (2019), the potential resources of the Arctic Ocean offshore area are estimated at no less than 390 bboe, with the share in the Russian Federation being 60%. Estimates of the recoverable resources of the eastern part of the Russian Arctic are poorer, but this will change as new geological data from these regions are obtained (Zhdaneev et al., 2020).

The development of the Arctic region and, specifically, of oil and gas resources in the region is a significant element of Russia's contemporary policy. Further oil and gas exploration and production, including of the country's Arctic offshore regions, are outlined as a long-term goal in official energy policy documents of the Russian Federation at federal, regional, and industrial levels (Ministry of Natural..., 2018; Ministry of Energy..., 2020), which also address issues of infrastructure renewal and the development of transport routes in the Arctic region. The question now is whether the Russian oil and gas industry and its component companies will succeed in developing the necessary new offshore technologies in the Arctic, or whether overseas companies will continue to play an important role in future developments.

The Arctic continental shelf presents considerable challenges for offshore oil and gas exploration, where those proposing to do so face harsh environmental conditions with extremely low temperatures, icebergs, icing, the lack of infrastructure or advanced technologies and, related to those, the need for considerable investment. A number of analyses of oil and gas company operations on the Arctic shelf have been prepared in recent years, focusing on commercial and legal issues, risks and opportunities as well as on the impacts of western economic sanctions (Henderson & Loe, 2014; Koivurova, 2017; Mitrova et al., 2018; Nikitina, 2018; Shapovalova & Stephen, 2019; Overland & Poussenkova, 2020). Sidortsov (2016, 2017) reviewed Russian policy, specifically the legal and regulatory frameworks, on the access to offshore oil and gas resources and the conditions of their development. Pilyasov (2015, 2020, 2021) comprehensively examined how Russian Arctic resource corporations adapt to the high risks of economic activity in the Arctic and considered the challenges and prospects for Arctic offshore oil and gas development. Thus, it is clear that issues of resources estimation and future production prediction from the Arctic

offshore have been studied by researchers, along with the governance of oil and gas offshore resources and company's operations therein. However, this field is evolving and warrants further research, particularly in Russia.

The primary objective of this article is to provide an overview of future offshore oil and gas strategies and developments in the Russian Arctic by describing current and planned offshore oil and gas industrial activities. The article also explores how the Russian government perceives the role of Arctic offshore hydrocarbons in the contemporary energy industry and near future national strategy, particularly in the context of the currently limited access to leading technologies. First, Russia's updated energy and related industrial strategies are considered in terms of Arctic offshore oil and development. Oil and gas activities on the Russian Arctic shelf after 2014 are considered, as well as ongoing domestic development of offshore technologies that can be applied in the Arctic Ocean. Then, the contemporary adoption of a federal law liberalizing continental shelf access for private oil and gas companies as well as for foreign partners in the Russian Arctic is analyzed. In view of the large Arctic hydrocarbon resource potential, evolving energy strategies and continuing development of offshore technologies in the country, the components of the Russian energy industry will need to further transform their strategies, increasing focus on the environmental risks of future activities and recognizing the key role of international cooperation in the global oil and gas industry.

### **Framing of Arctic offshore oil and gas development in contemporary strategies**

The newly approved *Energy Strategy of the Russian Federation until 2035* outlines the further development of the Russian energy sector: on the one hand, to support the social and economic development of the country and guarantee energy affordability for domestic consumers and, on the other hand, to strengthen and maintain the position of the Russian Federation in global energy markets until at least 2035 (Ministry of Energy..., 2020). Additionally, the strategy of states that accelerated development of the most efficient reserves and reduced investment in oil and gas exploration in some regions in the world will create the preconditions for crude oil supply to decrease globally after 2020, which will require extensive investment in offshore and other expensive projects, and may lead to the beginning of a new price rise cycle. In a recent interview, Russian Minister of Energy Nikolai Shulginov clearly outlined that Russia cannot ignore the energy transition and global energy sector transformations, but at the same time emphasized that it is inappropriate to consider abandoning oil exports: "There is no need to rush parting with hydrocarbons, it is necessary to develop renewable energy sources along with traditional energy resources" (Shulginov, 2021). In terms of oil, according to expert estimates after 2025-2030, Russian oil companies will increasingly struggle to maintain the current level of oil production, primarily due to decreases in reserve quality (Mitrova, 2019). Future Russian oil production could be supported by in-depth development of existing conventional oil fields using intensification methods (Mitrova, 2019), development of non-conventional reserves or the development of Arctic offshore fields (Morgunova, 2020). Furthermore, Arctic offshore development has itself been emphasized as a strategic national goal for the approaching decades. According to the 2035 Strategy:

the development of the hydrocarbon resource potential of the Arctic continental shelf and Russian northern territories is the most significant geopolitical and technological challenge

for the Russian petroleum industry. An adequate response to this challenge is to ensure sufficient production of oil and gas resources in the country over the time prospect of 2035, compensating for the inevitable decline in their production from old fields (Ministry of Energy..., 2020).

Among the main features of the Russian energy policy documents, for example in the *Strategy for the Development of the Mineral and Raw Materials Base of the Russian Federation until 2035* it is emphasized that the global fossil fuel balance will gradually change, the share of oil use will gradually decrease, and the share of natural gas will grow. Russia assumes that oil will remain as a dominant fuel in the medium term and might continue to be so in the long term. However, natural gas has more advantages in the long term, as a relatively cleaner-burning fossil fuel. In general, the strategy concludes that the demand for energy sources in the world economy in absolute terms will increase, although some energy resources may be less in demand due to the emergence of new materials and technologies (Ministry of Natural Resources..., 2018).

Separately, the significance of maritime logistics along the Western Europe-East Asia route through the Northern Sea Route (NSR) is increasing. According to the draft of the new *Transport Strategy of the Russian Federation for the period up to 2035*, the volume of freight traffic along the NSR will increase up to 80 million tonnes in 2024, 100 million tonnes in 2030, and up to 120 million tonnes by 2035 (Ministry of Transportation..., 2020: 15). In common with the above-mentioned strategies, this implies that Russia will promote future Arctic natural resource development and production facility construction along the country's northern coastline, which will create further traffic using the NSR. Furthermore, the development of the NSR is providing Russia with an opportunity to diversify its energy policy by linking Russian Arctic hydrocarbon production directly with Asian markets. Recent examples, such as the Christophe de Margerie LNG tanker record-early voyage across the NSR in May 2020, confirm that the sea ice reduction along the Russian Arctic coast opens new opportunities for further development of the region (Sovcomflot, 2020). It is important to note that in late 2019, the Government signed an order approving *The Infrastructure Development Plan for the Northern Sea Route until 2035* (The Russian Government, 2019). The plan was formed based on the forecast of all existing and prospective cargo flows, which includes freight of natural resources projects implemented by oil and gas companies such as Gazprom Neft, Rosneft, Novatek and others. The emergence of a plan for the development of the NSR infrastructure can be considered a big step forward since this is the first official document that determines the development of the largest sea transportation route in the Russian North. Initially, the federal project *Northern Sea Route (2018-2024)* was prepared by the Ministry of Transport but then transferred to Rosatom state company. The main tasks for the NSR development are increasing the freight traffic by the NSR up to 80 million tonnes per year, ensuring year-round navigation of ships on the NSR, the building of new ships and the mapping of natural resources. However, some experts consider that there is an indirect impact of economic sanctions on the NSR, through the slowdown of the offshore activities and consequential slowdown in shipping relative to expectations (Shapovalova et al., 2020). It is also important to highlight that the implementation of the tasks set within the Federal project of NSR (2018-2024) is carried out at the expense of the federal budget, which means that these government investments are already approved. Furthermore, there are some new agreements with private Russian companies to contribute to funding.

In October 2020, Russia approved the new *Strategy for Developing the Russian Arctic Zone and Ensuring National Security through 2035*, which defines the country's vision and development plans for the region over the next 15 years. The Strategy is to be implemented in three stages: 2020–2024, 2025–2030 and 2031–2035 (Decree of the President..., 2020). During the first stage, several important tasks are envisaged, which include the creation of mechanisms for the accelerated economic and social development of the region, the modernization of the health care system in the Russian Arctic, the application of a new model for the implementation of resource projects on the Arctic continental shelf and several other tasks. The new Arctic strategy plans for state support for investment in energy infrastructure and transport as well as oil and gas technology developments (The Russian Government, 2021). However, the strategy also has significantly increased content devoted to the assessment of climate change. Specifically, state support will also be provided for mitigating the impact of climate change on the region, including for projects that improve energy efficiency and increase the use of LNG and renewables. There is also a discussion of possibilities for international cooperation in the region. At the same time, taking advantage of the consequences of the ongoing warming of the Arctic, the strategy aims to advance the development of the Arctic's abundant resources, in particular oil and gas.

It is clear from the above-mentioned strategies that Russia continues to see the Arctic region as a key development priority. Official energy strategies prescribe the need to increase oil and gas production in the Arctic, including offshore, to secure the stable operation of the country's energy industry in the long term. At the same time, environmental risks, inadequate technologies, high risks for investors and limited access for private oil and gas companies are factors that could significantly complicate and hold back Arctic offshore oil and gas development.

### **Access to the Russian Arctic continental shelf**

Almost all issues associated with mineral extraction rights and their development in Russia are regulated by the Federal Law on Subsoil Resources (Federal Law № 2395-I, 1992). This Law stipulates that a license is required to explore and exploit subsoil resources, and the license certifies the right to carry out mineral extraction in a certain geographic area over a specified period. Articles of this law as well as different by-laws regulate most of the issues related to the terms of use of subsoil areas, the rights and obligations of the subsoil operators, the participation of foreign investors, etc. According to Article 20, the State can terminate a license for violation of its essential conditions, for safety threats in case of emergencies (natural disasters, military operations, etc.), or if the license holder has not started to operate within the period specified in the license. The State conducts nominal work and collects preliminary geological information, then puts up licensed blocks for auction.

At present this Law specifies that only state-owned (more than 50% state share in authorized capital) companies with at least five years' experience in Russian continental shelf development can apply for Arctic offshore licenses (Ibid.: Article 9). Currently, two Russian oil companies have met these requirements – Rosneft and Gazprom. These two companies and their subsidiaries currently hold 73.2% of licensed blocks on the Russian Arctic continental shelf (Bogoyavlensky, 2017), which raises the question of how the licenses for most available Arctic offshore areas have already been distributed between these two companies. Some commentators explain this situation as a consequence of a form of “competition” between Gazprom and Rosneft during the mass distribution of offshore licenses in the 2010s, while other companies were ineligible to access new

offshore license blocks in the Arctic (Ampilov, 2020). Another interpretation is that there was a rational approach in these companies' activities. During the period when most of the licenses were purchased in 2011-2014, the global oil price was very high (\$100-120 per barrel), making it advantageous for the two Russian companies to develop hydrocarbon production on the Arctic shelf and to increase their capitalization by acquiring the licenses. Foreign oil and gas companies were equally interested in Russian Arctic offshore development at this time. During this period, strategically important cooperation agreements were signed between Rosneft and ExxonMobil in the Kara Sea in 2011, and with ENI and Equinor in the Barents Sea in 2012. In 2013, Rosneft and ExxonMobil set up joint ventures to conduct Arctic offshore research and exploration. The CEO of Rosneft Igor Sechin even stated that the Rosneft alliance with ExxonMobil "... surpasses projects such as the first spacewalk or flight to the Moon, and the volume of investments was compared with the development of the Brazilian shelf or the North Sea shelf" (Kommersant, 2012). However, importantly, a moratorium on the issue of new licenses on the Arctic shelf is currently in place in Russia.

### **Company activities and new strategies since 2014**

A major geopolitical shift occurred in 2014, with economic sanctions applied by the USA and EU specifically targeting the Russian Arctic offshore areas covered by agreements with foreign partners (EU, 2014). After the imposition of sanctions, the two major Russian oil companies tried to continue offshore activities in the Arctic independently. At the same time this shift opens opportunities for Russian oil and gas companies to direct an eye to the East, where Chinese, Vietnamese and other companies do not necessarily have to abide by these sanctions. Moreover, some Russian petroleum companies already have such experience in onshore oil and gas projects in the Russian Arctic (such as Arctic-LNG, Arctic LNG-2).

#### *Gazprom Neft*

In 2014, Gazprom Neft commenced production at the Prirazlomnoye oil field in the Pechora Sea. Currently this is the only field on the Russian Arctic shelf that is being actively exploited. Though Gazprom Neft did not engage with foreign companies to develop this field, many external contractors took part in the project. Several foreign partners were employed in the stages of the drilling, engineering and servicing of the systems operating at the Prirazlomnaya platform (Mitrova et al., 2018). For seven years, production has been carried out at the Prirazlomnoye, and by November 2020, the field had produced 110 million barrels of oil out of an estimated 600 million barrels available. The production period of the field is estimated to be at least 36 years (Gazprom, 2020).

The Arctic continental shelf is a region of strategic interests for Gazprom and its affiliate company, Gazprom Neft, in particular. At present, Gazprom Neft subsidiaries own licenses to the Severo-Zapadny block in the Pechora Sea and the Severo-Vrangelevsky block, located on the continental shelves of the East Siberian Sea and the Chukchi Sea respectively (Figure 1).



**Figure 1.** Arctic offshore licenses owned by Gazprom Neft (Source: Gazprom Neft, modified by author)

Except for the Prirazlomnoye, all these fields are currently undergoing geological prospecting. The most thoroughly investigated is the Dolginskoye oil field (more than 1500 million barrels of oil estimated), where several exploratory wells have been drilled, along with geophysical and hydrodynamic investigations during the short ice-free period (Gazprom Neft, 2018). In 2015, Gazprom Neft signed an agreement with Vietnam's PetroVietnam company on the potential joint exploration and development of the Dolginskoye field, which is located relatively close to the Prirazlomnoye project facilities. In 2016, Gazprom invited the Chinese company "China National Offshore Oil Corporation" (CNOOC) to participate in the development of oil fields on the Russian Arctic shelf (Vedomosti, 2016). CNOOC specializes in offshore production, and Gazprom lacks both financial resources and competencies. At the same time, CNOOC needs to look for resources for the future, so they may be interested in cooperation in Russian offshore projects. In 2017, Gazprom Neft and Indian Oil & Natural Gas Corporation signed a framework agreement on Arctic offshore cooperation, also focusing on exploration opportunities in the Dolginskoye field. However, there remain questions about the competencies of these Asian oil companies to replace the expertise of the previous western partners in the challenging Arctic offshore conditions. Gazprom Neft initially planned to launch the Dolginskoye field in 2019 but then delayed the target date to 2031, citing the need to reconfigure the field's geological model. In 2017-2018, 3D seismic studies were completed in the Severo-Zapadny license area, as well as offshore 2D seismic investigations at the Severo-Vrangelevskiy license area. Another of the company's assets, the Kheysovskiy license block, located 1,000 km offshore in the Barents Sea (Figure 1), with more challenging geographical and weather-related challenges, remains a prospect for the much more distant future. Gazprom Neft is systematically establishing cooperation with prospective partners, a process that can take many years.

In June 2021, Gazprom Neft and the Russian private gas company NOVATEK established a joint venture for offshore operations in the Arctic, specifically to develop the Severo-Vrangelevskiy license area. Pursuant to this agreement, NOVATEK acquired a 49% interest in the charter capital of Gazprom Neft's subsidiary Gazpromneft-Sakhalin, which holds geological prospecting,

exploration and development rights within the Severo-Vrangelvsky license block. Gazprom Neft's interest in the joint venture will be 51%.

### Rosneft

One of the main strategic directions of Rosneft, similar to Gazprom Neft, is the development of oil and gas resources on the continental shelf. According to company statements, today, “when almost all major large oil and gas onshore fields have been discovered and developed, when technologies and shale oil production are rapidly developing, it is undeniable that the future of world oil production lies on the continental shelf” (Rosneft, 2020). As of June 1, 2021, Rosneft holds 28 licenses for Arctic offshore areas (Figure 2), including 19 in the Western Russian Arctic (the Barents, the Pechora and the Kara Seas), and 9 in the Eastern Russian Arctic (the Laptev, the East Siberian and the Chukchi Seas).

Rosneft signed a number of cooperation agreements with ExxonMobil, ENI and Equinor during 2011-2013. In 2012, Rosneft and ENI signed a joint venture agreement on the development of two offshore licensed areas in the Barents Sea. However, at present, this project is postponed. In September 2014, Rosneft and ExxonMobil began drilling the northernmost well on the Russian shelf – the Universitetskaya-1 well in the Kara Sea. They made a major discovery of oil and natural gas reserves and named the field “Pobeda”, which means “victory” in Russian. However, following the second round of sanctions imposed a few days before the planned opening, ExxonMobil suspended the project and withdrew from Russian joint ventures under the sanctions, writing off one billion US dollars (Mitrova et al., 2018). For ExxonMobil itself, the withdrawal from this project was a serious financial blow, and further, the company could not put these reserves on its balance sheet, so it also lost the opportunity to increase its capitalization. Rosneft announced that independent development of this project would proceed, but as yet no activities are taking place.



**Figure 2.** Arctic offshore licenses owned by the Rosneft (Source: Rosneft Upstream, modified by author)

In 2017, Rosneft began drilling the Central-Olginskaya-1 well in the Laptev Sea, which was the first-ever well in this Sea. Later, Rosneft confirmed the discovery of a new field in the Khatanga Bay with reserves estimated at more than 600 million barrels of oil (similar to the Prirazlomnoye field reserves). The company secured the license to develop the Khatanga block on the eastern Russian Arctic shelf in December 2015. In record time, they carried out preparatory work and started exploratory drilling in early April 2017 (Offshore, 2017). “Drilling is carried out from the shore. Thus, this technology can significantly save financial resources, ensure efficiency and high environmental standards” – said Igor Sechin, who was at that time on the shore of the Khatanga



Bay (Rosneft, 2017). However, while there are no ports close to this field and the navigation period in this area currently does not exceed two months each year, the company is not slowing the pace of work and intends to increase the scale of investment in developing Arctic offshore oil and gas. Rosneft is trying to attract eastern partners whenever possible. In August 2020, Rosneft began drilling the Vikulovskaya-1 well at the East-Prinovozemelskiy-1 block in the Kara Sea (see Figure 2) by using the Chinese platform Nan Hai Jiu Hao (Nan Hai IX), owned by China Oilfield Services Limited (controlled by CNOOC). Another Chinese jack-up rig “Oriental Discovery” (owned by Tianjin China State Shipbuilding Corporation) is drilling now the Ragozinskaya-1 exploratory well at the East-Prinovozemelskiy-2 block (Neftianka, 2020). All exploration offshore areas are estimated to have significant reserves of natural gas. The company stated that, by 2050, the Arctic shelf will provide 20-30% of all Russian oil production (Rosneft, 2017).

#### *New strategies and technology development*

In general, the Gazprom Neft strategy aims to adapt swiftly to external challenges in the upstream segment, focusing on cost control, import-substitution, development of new technologies, and implementation of major onshore and offshore projects in the Arctic (Overland & Poussenkova, 2020). According to Gazprom Neft Sustainable Development Report (2021), one of the company’s primary targets today is improving transport safety and logistics in its Arctic operations. Thus, in 2020, Gazprom Neft commissioned the Arctic heliport at Varandey rotation camp (the company Lukoil owns the Varandey terminal). It should allow reliable and uninterrupted delivery of shift workers to the field, transport of cargo and, in the future, may serve as a springboard for the development of other offshore petroleum projects in the Barents Sea (Gazprom Neft Report, 2021: 86). A large part of Gazprom Neft’s Arctic investment in innovation is focused on digital transformation. The company is rolling out its intelligent “Kapitan” system that ensures safe operations in the Arctic offshore environment. The system monitors crude oil shipments and inventories 24/7, taking into account weather conditions and changes in ice conditions to support optimum operational planning. The deployment of this system resulted in a 12% cost reduction in 2019-2020 through optimizing tanker operational costs (by selecting the most viable routes), better fuel economy, lower expenditure on icebreaker support, together with reduced down-time (Gazprom, 2021). In 2020, the company worked with experts to develop the formulation of a dispersant able to manage oil spills in ice conditions (Oilcapital, 2020). The technology is tailored to the Arctic marine climate and is currently the only Russian-manufactured reagent for oil spill management at low temperatures.

Since Gazprom Neft has active onshore and offshore projects in the western part of the Russian Arctic, Rosneft positions itself more as a pioneer in the eastern part of the Arctic offshore, which presents more severe environmental challenges for exploration and development. The development of appropriate Arctic offshore activities is a central focus of Rosneft’s strategy. The company is seeking to build its capacity to manufacture offshore equipment and vessels capable of operating in this more severe region. Its main effort to date has been aimed at creating the “Zvezda” shipbuilding facility in the Russian Far East. Contracts with the leading international companies involved in offshore equipment manufacturer signed illustrate that sanctions have not entirely succeeded in restricting Rosneft’s access to foreign partners and their technologies.

It is important to have the sequence of actions necessary to work on the Arctic shelf while international sanctions are in place. In Russia, the challenges of hydraulic fracturing, drilling of

horizontal wells and production of a number of components have been resolved. State oil and gas companies are quite active in using Chinese drilling rigs on the Russian Arctic shelf, as well as in repairing of Russian offshore rigs in China (PortNews, 2020) and Singapore. But the key issue of offshore platform construction remains. For the active development of the Arctic shelf, it is necessary to create a new industry. So far, only Rosneft is following this path. As noted above, the “Zvezda” shipyard was created near Vladivostok, and a shipyard is also planned for the construction of the foundations of drilling platforms in Roslyakovo, Murmansk region. These must provide the entire range of vessels required for offshore development, including platforms for drilling exploration and production wells on the Arctic shelf. This is a new type of platform and needs to be fully ice classified. Thus, the work on the creation of this equipment is still at the R&D stage.

### **The liberalization of access**

Over the past few years, Russia has been discussing tools to attract foreign partners for oil and gas development on the country’s Arctic shelf. In particular, Deputy Prime Minister and Presidential Plenipotentiary Envoy to the Far Eastern Federal District Yury Trutnev put forward a proposal to create a state agency that would own a share of 25.1% of all Arctic shelf projects. To this end, the Ministry for the Development of the Far East and the Arctic proposed to establish the “RosShelf” state corporation, with which foreign investors would have to conclude agreements on joint activities on the Russian Arctic shelf. However, the proposal did not find support in the Ministry of Energy of Russia. Explaining the position of his department, Deputy Minister Pavel Sorokin noted that “the project creates a conflict of interest: the state corporation is endowed with both administrative and law-making powers, at the same time it will be a party to the agreement” (Kommersant, 2020).

In June 2020, the Ministry for the Development of the Far East and the Arctic prepared a draft of another law, which proposes to establish a new model for foreign investor operations on the Arctic shelf of the Russian Federation. It involves the transfer of powers in matters of field development on the Arctic shelf to the state corporation VEB.RF (ВЭБ.РФ). VEB.RF is Russia’s national economic development institution, established by Russian federal law exclusively for the public good, as a non-commercial, non-profit organization with no shareholders. VEB.RF’s charter capital comprises funds and other property contributed by the Russian Federation; it also receives direct contributions from the Federal Budget. However, it is not a ministry, but a special entity, tasked with facilitating a wide range of socio-economic development activities. The corporation’s tasks will include facilitating the implementation of investment in hydrocarbon projects on the continental shelf of the Russian Federation, as well as attracting foreign investment in the development of offshore projects in the Arctic. In December 2020, this draft law was submitted by the Ministry for the Development of the Far East and the Arctic for consideration to the Russian government. At the time of writing, this draft law can be inspected on the Official site of draft regulatory legal acts by federal executive authorities for their public discussion (Draft Federal Law, 2021). The bill provides for the right of private investors to be allocated an unlimited number of subsoil areas on the shelf, provided that a financial guarantee is provided. The bill is intended to create conditions for stimulating both foreign and domestic private investors to operate on the Russian continental shelf.

## Concluding remarks

The contemporary oil and gas industry is under significant pressure due to increasing environmental and climate concerns, especially in the context of developing resources in the Arctic region. At the same time, more accessible reserves have been developed already and exploration is taking the industry to more remote and challenging areas. One such area is the Arctic region and its continental shelf, in particular. Increasing access to Arctic resources through improved shipping routes is widely expected to increase the levels of activity of Arctic states and resource extraction industries. Moreover, some investment activities from non-Arctic states are involved. New offshore hydrocarbon developments continue to be of particular interest for the Arctic littoral states. Commercial development on the Arctic continental shelf continues in Norway (“Snohvit”, “Goliat”, “Aasta Hansten”), the USA (“Northstar”, “Oooguruk”, “Nikaichuq”, “Liberty” prospect) and Russia (“Prirazlomnoye”).

The largest element of the Arctic offshore area falls under Russian sovereign administration and includes many locations of current and potential oil and gas production. Thus, Russia may prioritize the Barents Sea or other areas such as the Pechora Sea or the Kara Sea shelf of the Russian Arctic, and its Arctic offshore exploration activities are continuing. At present these activities are not very intensive and mostly involve geological exploration in various license blocks, amendments to the legislation regarding the further development of the Arctic shelf, and the development of associated industries, such as the Arctic shipbuilding and new offshore technology development.

New Arctic oil and gas projects may be attractive for foreign investors, depending on the region of production, the resource itself and global geopolitics (including the use of sanctions). The Russian Government views western sanctions as an opportunity to develop its own Arctic technologies, also with the support of eastern partners from China, Korea and Vietnam. When analyzing the prospects for Russian oil and gas offshore projects in the Arctic, it is important to understand that the size and potential reserves of the fields yet identified will complicate offshore operations by companies, and will require the careful selection of technologies, partners and strategies. For Russia it is necessary to study the experience of foreign oil and gas companies currently operating on the Arctic shelf (Brodt, 2021). The summaries presented here demonstrate that the current and somewhat enforced slow activity presents a good opportunity for the Russian oil and gas industry and its component companies to improve and test the technologies that will be required for the successful and environmentally sensitive future implementation of offshore projects in the Russian Arctic.

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