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Geopolitical Risks of Hydrocarbon Development in the Russian Arctic *

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Abstract. The article is devoted to the issues of geopolitical risks (GPR) in the hydrocarbon development of the Russian Arctic. The authors pay special attention to the analysis of modern geopolitical and geostrategic challenges of the Arctic region development. The article identifies the key geopolitical factors that affect the sustainable development of the Arctic and analyzes the similarities and differences in the geostrategic positions of the Arctic Five. One of the most important factors of the XXI century that determines the alignment and interaction of various geopolitical forces is the struggle for resources. In this regard, an increase in GPR in the Arctic, related to its resource potential, is inevitable. For oil and gas industry facilities, GPR can be transformed into opposite environmental factors in the form of additional opportunities or threats, which the authors identify in detail for each type of risk. The authors focus on such positions of the GPR, which are related to ensuring access and obtaining control rights over the Arctic's hydrocarbon resources from different countries, the uncertainty of the legal status of the Arctic region, and the use of geoecological risks (GER) as manipulative priorities of attention to Russia's actions in the Arctic.

Keywords: *geopolitical risk, geopolitics, geopolitical factor, oil and gas industry, Arctic.*

Introduction

In terms of global geopolitical processes, one of the most important factors determining the arrangement and interaction of various geopolitical forces in the 21st century is the struggle for resources. In this regard, an objective increase in geopolitical contradictions in the Arctic is inevitable, associated with its resource potential and transport value, on the one hand, and with the absence of a recognized and legally formalized demarcation of sea spaces and the shelf, on the other hand. Experts from leading world powers predict the possibility of military conflicts due to growing contradictions on the basis of division of the colossal wealth of the Arctic [1, Nurishev G.N., p. 83]. Modern Russian development of Arctic hydrocarbon resources is associated with geopolitical challenges, the essence of which can be interpreted as the emergence of qualitative signs of changes in the evolution of geopolitical factors affecting the processes of sustainable development of the Arctic region ¹.

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¹ Mitko A.V. Osobennosti arkticheskikh vyzovov rossiyskoy geopolitiki [Features of the Arctic Challenges of Russian Geopolitics]. URL: https://studref.com/420639/politologiya/osobennosti_arkticheskikh_vyzovov_rossiyskoy_geopolitiki (accessed 14 November 2020).

When studying the main trends in risk ratings of oil and gas companies [2, Trubitsina O.P., Bashkin V.N., p. 53; 3, Trubitsina O.P., Bashkin V.N., p. 220], the position of geopolitical background turned out to be among the key positions — “Access to reserves and markets: limiting factors of a political nature and competition for proven reserves”. In this regard, the analysis of geopolitical risks (GPR) in terms of their transformation into opportunities and threats is a priority task of oil and gas facilities in the implementation of Arctic field development projects.

The COVID-19 pandemic is currently a key challenge in the world. The global economic crisis is reducing the need for oil and gas as much as for other energy sources. However, energy demand has always been cyclical. Rise and fall in commodity prices can be predicted by identifying commodity cycles. For example, this is evidenced by the results of a study of super-cycles of rising oil prices by the UN Under-Secretary-General for Economic and Social Affairs, economist at Columbia University José Antonio Ocampo and his colleague Bilge Erten (Fig. 1). According to their predictions, markets will approach a cyclical downturn and, consequently, oil prices will fall in 2020². The forecast has come true. Since that year, a new super-cycle of decline has begun, and the recovery of global energy resources demand is currently largely due to the resolution of geopolitical contradictions.

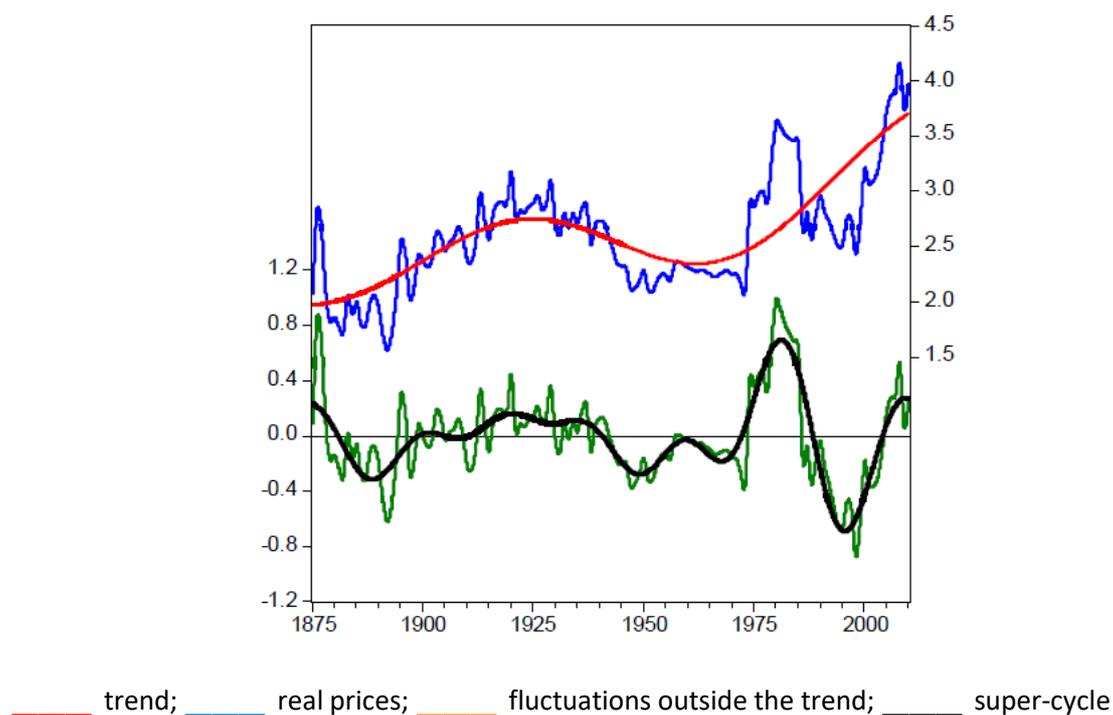


Fig. 1. Oil price dynamics³.

² Syr'evye tsikly: tseny na neft' upadut v 2020 godu [Commodity Cycles: Oil Prices will Fall in 2020]. URL: <https://www.interfax.ru/business/327893> (accessed 04 February 2021).

³ Ocampo José Antonio. Super-cycles of Commodity Prices since the Mid-Nineteenth Century. Presentation at the International Monetary Fund. March 20, 2013. URL: <https://www.imf.org/external/np/seminars/eng/2012/commodity/pdf/Ocampo.pdf> (accessed 04 February 2021).

In case of compliance with all international sources of law on the part of the states interested in the Arctic, oil and gas companies could focus more on GER issues, which occupy a dominant place in the risk ratings of such companies [2, Trubitsina O.P., Bashkin V.N., p. 53; 3, Trubitsina O.P., Bashkin V.N., p. 220]. However, the situation is not the same. For example, the United States often does not take into account Russian internal decisions on maritime borders, in particular, in the Sea of Japan and in the Arctic Ocean (AO). China is not yet moving towards decarbonization and is very interested in the NSR and LNG transport, in the production of which they have already invested a lot of money (Arctic-LNG-2). Large reserves of oil and gas have been discovered in the area of the Novosibirsk Islands, the production of which, as well as at the Shtokman oil and gas condensate field, will begin when it is economically profitable. Since the Russian Federation intends to defend this region, including by military means, this indicates the presence of threats, including those discussed in the article. It is aimed at identifying key geopolitical factors affecting the sustainable development of the Arctic, as well as analyzing the similarities and differences in the geostrategic positions of the Arctic Five states. At the same time, the authors focus on positions of the GPR, associated with ensuring access and obtaining control rights over the hydrocarbon resources of the Arctic from different countries, the uncertainty of legal status of the Arctic region, as well as the use of GER as a manipulation tool to draw attention to Russia's actions in the Arctic.

Geopolitical features of the Arctic challenges for Russia ***Geopolitical factors***

The geopolitics of the Arctic as a macro-region is determined by its position in relation to other countries in terms of similar or different positions of political systems and geopolitical potentials in conjunction with the presence or absence of mutual interests and problems [4, Baklanov P.Ya., Moshkov A.V., Romanov M.T., p. 9].

The Russian mission in the Arctic is determined by geopolitical factors, the evolution of which presupposes both tendencies to increase their influence on sustainable development processes and the redistribution of their share.

The influence of each factor and the relationship with social categories according to expert estimates by scientists from the Arctic Public Academy of Sciences (APAS) is shown in Fig. 2. The three key factors have the largest share (69%): 1. geographical (30%), 2. military (21%), 3. economic (18%).

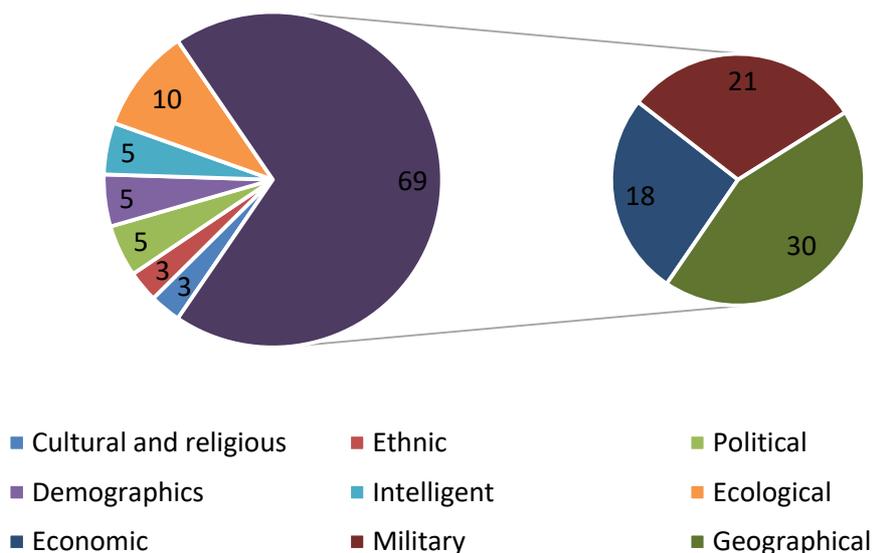


Fig. 2. Influence of geopolitical factors on the sustainable development of the Arctic, %, according to the materials⁴.

Challenges related to the geographic factor, spatial location and natural resources are considered basic in Russia's current context. So, due to changes in its territory and approaches to determining the external boundaries of the continental shelf in the Arctic (instead of the sectoral one to comply with the Convention on International Maritime Law), the evolution of the geographical factor was quite significant in the last century. As a result of the last phase of geographic changes, Russia has undergone a significant “northernization” in the 21st century⁵. Norway and Denmark adjoin Russia through land and sea borders within the Western macro-region, and the United States of America and Canada — within the eastern region. The Arctic and its shelf are directly connected to Russia, USA, Canada, Denmark, Norway. The reason for obtaining the Arctic status and securing the Arctic sectors for them was their northern borders, which extend beyond the Arctic Circle. The length of the coastline of the Arctic Five states in descending order is shown in Fig. 3, based on materials [4, Baklanov P.Ya., Moshkov A.V., Romanov M.T., p. 9].

⁴ Syr'evye tsikly: tseny na neft' upadut v 2020 godu [Commodity Cycles: Oil Prices will Fall in 2020]. URL: <https://www.interfax.ru/business/327893> (accessed 04 February 2021).

⁵ Mitko A.V. Osobennosti arkticheskikh vyzovov rossiyskoy geopolitiki [Features of the Arctic Challenges of Russian Geopolitics]. URL: https://studref.com/420639/politologiya/osobennosti_arkticheskikh_vyzovov_rossiyskoy_geopolitiki (accessed 14 November 2020).

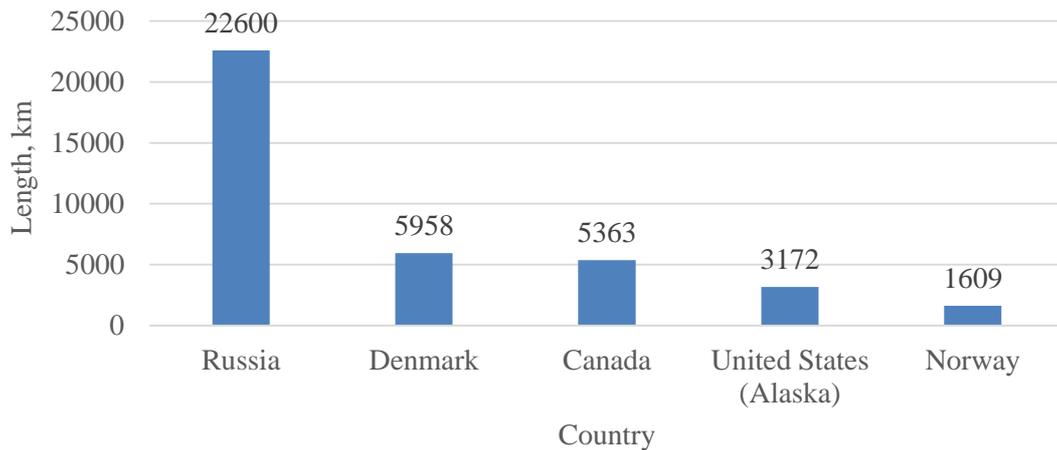


Fig. 3. The length of the mainland coast of the Arctic Five States beyond the Arctic Circle, km, according to the materials [4].

The coastal and insular territories of the Arctic Five states together with the water area of the marginal seas and the Arctic Ocean make up the Arctic transboundary region (ATR). This is a vast circumpolar basin zone, crossed by a large number of state borders: land borders, territorial waters, marine economic zones, the Arctic shelf delimitations. At present, the geopolitical interests of all these countries already intersect in the APR (Fig. 4), and in the future, the intersection zones will not only increase, but also become more complex [Ibid].

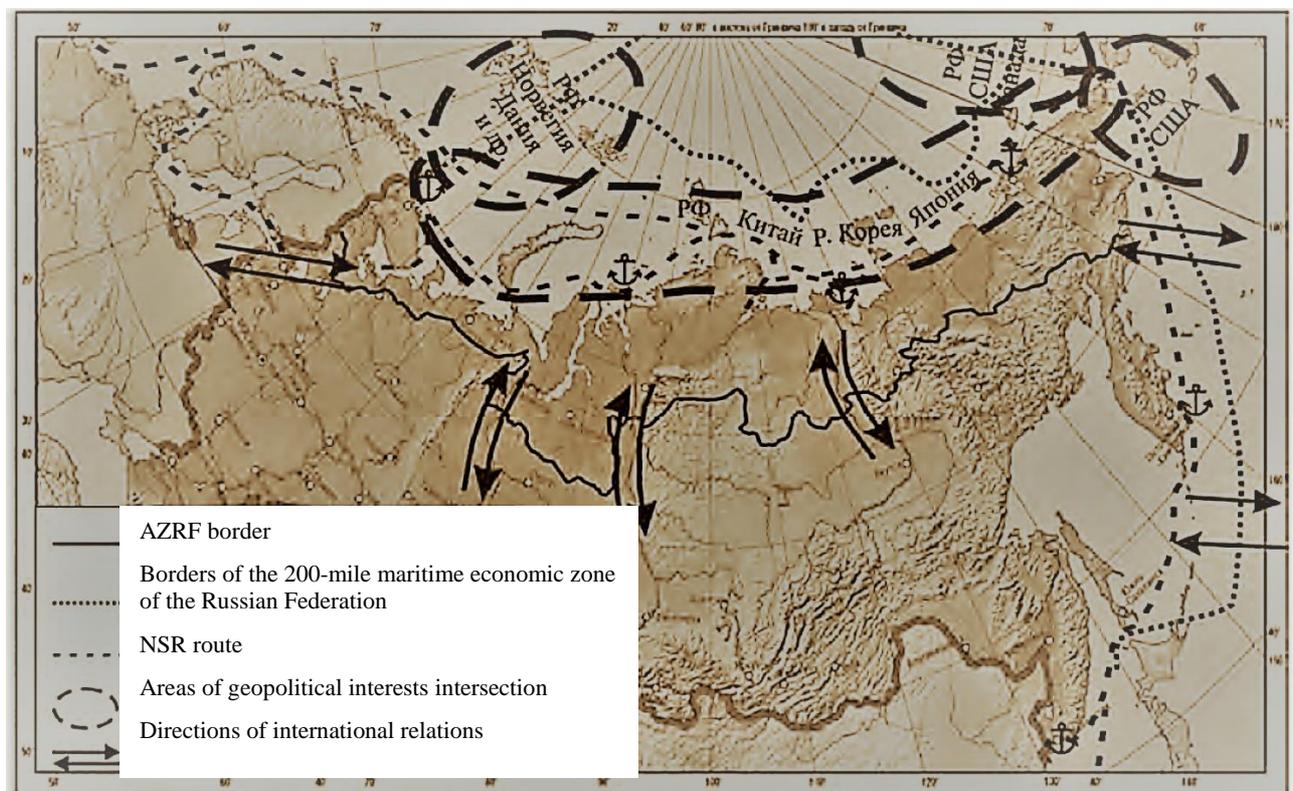


Fig. 4. Geopolitical position of the Arctic zone of Russia [4, Baklanov P.Ya., Moshkov A.V., Romanov M.T., p. 10].

Half of the entire Arctic Ocean shelf is the Siberian Arctic shelf, which contains huge reserves of hydrocarbon resources. Special attention should be paid to the East Siberian Shelf (ESS) in connection with the prerequisites for development of the most serious consequences associated with modern climatic changes. The ESS is the largest and shallowest continental shelf in the World Ocean. With an average depth of about 50 m, it occupies $2.1 \times 10^6 \text{ km}^2$ and covers the Laptev Sea, the East Siberian Sea and the Russian part of the Chukchi Sea. The entire area of the ESS is covered with underwater permafrost, which in the past 30 years has been degrading at a double rate, freeing up access to marine energy reserves, as well as contributing to methane emissions [5, Grinko A.A. et al, p. 561, 6, Gershelis E.V. et al, p. 190].

The challenges of the economic factor include a decrease in the share of added value of high-tech and science-intensive sectors of the economy in the gross regional product of the Russian Arctic, weak interaction of the research and development sector with the real sector of the economy, and the discontinuity of the innovation cycle ⁶.

The specific gradient of the military factor evolution in the Russian Arctic has comprehensively influenced the Arctic activities. It is important to note that the military factor is associated with almost all other factors of sustainable development or security of the Arctic society. The evolution of the military factor technically caused an increase in its share in the system of factors and a qualitative transformation of its content, with an emphasis on the main areas, requiring the abandonment of traditional methods of military operations due to environmental, political, humanitarian reasons, and the development of such vectors as information confrontation in the form of "network-centric" strategies, the massive use of non-lethal weapons in the fight against terrorism in the Arctic and the massive use of robotics ⁷. At the same time, the Strategy for the Development of the AZRF and Ensuring National Security for the Period up to 2035 indicates the challenge of increasing the conflict potential in the Arctic region, dictating a continuous increase in the combat capabilities of the groupings of troops (forces) of the Armed Forces of the Russian Federation, other troops, military formations and bodies ⁸.

The authors believe that the share of the environmental factor is underestimated, since environmental problems in the Arctic identify global trends and it is unacceptable to consider them only as national or regional ones. Today, the desire to make a profit dominates in the Arctic geopolitics, and the current trend of de-ecologicalization not only of Russia, but of the whole world is reflected [7, Lukin Yu.F., p. 6]. Climate warming is most evident in the Arctic, as evidenced

⁶ Decree of the President of the Russian Federation of October 26, 2020 No. 645 "On the Strategy for the Development of the Arctic Zone of the Russian Federation and Ensuring National Security for the Period up to 2035".

⁷ Mitko A.V. Osobennosti arkticheskikh vyzovov rossiyskoy geopolitiki [Features of the Arctic Challenges of Russian Geopolitics]. URL: https://studref.com/420639/politologiya/osobennosti_arkticheskikh_vyzovov_rossiyskoy_geopolitiki (accessed 14 November 2020).

⁸ Ocampo José Antonio. Super-cycles of Commodity Prices since the Mid-Nineteenth Century. Presentation at the International Monetary Fund. March 20, 2013. URL: <https://www.imf.org/external/np/seminars/eng/2012/commodity/pdf/Ocampo.pdf> (accessed 04 February 2021).

by a significant increase in air temperature, increased river flow, reduced area of ice cover [5, Grinko A.A., p. 562], which certainly requires enhanced environmental monitoring and accounting when making management decisions. In this regard, the issue of increasing the specific weight of the environmental factor is relevant. The transition to sustainable development makes it necessary to include it in the system of basic socio-economic development indicators. The underestimation of the environmental factor in decision-making is largely due to the lack of value reflection of natural capital and environmental degradation in traditional development indicators. The traditional macroeconomic indicators (GDP, per capita income, etc.) ignore environmental degradation. The growth of these indicators is based on technogenic nature-intensive development, thereby creating the possibility of sharp deterioration in economic indicators in future in case of natural resources depletion and environmental pollution [8, Yashalova N.N., Ruban D.Ya., p. 24]. For example, in the study of determining the relevant indicators for compiling the index of environmental safety of the Russian Arctic and ranking (compiling a rating) of the regions of the Russian Arctic, it is indicated that in the Krasnoyarsk Krai (an outsider of the rating), despite a number of environmental problems, there is a very high level within the regional GDP [9, Bobylev N.G. et al, p. 27, 31, 37], which is reflected in the ecological perception of people living there.

Geostrategic challenges

In terms of their geostrategic relationship to the Arctic, states can be divided into three groups (see Table 1), which “compete both among themselves and in the format of international organizations” [10, Smirnov A.I., p. 44; 11, Trubitsina O.P., Bashkin V.N., p. 58].

Table 1

Geostrategic attitude of groups of states to the Arctic

State group number			
	The first group	The second group	The third group
States	The Arctic Five states (Russia, USA, Denmark, Canada, Norway) have access to the Arctic Ocean.	Subarctic states (Iceland, Finland and Sweden) do not have access to the Arctic Ocean, but are members of the Arctic Council.	Non-regional states (Brazil, India, China, Singapore, South Korea, Japan, EU countries, etc.)
Characteristic	They have the right to develop natural resources of the shelf, the expansion of which to the north is the subject of unresolved interstate contradictions.	They do not have rights to the shelf, but they strive to increase their status and influence in the format of the Arctic Council.	They try to maximize their geostrategic attitude to the Arctic, influence the revision of its status, referring it to the common heritage of mankind.

In the first group, the United States, Denmark, Canada and Norway are NATO members; this exacerbates the potential for a military conflict in the Arctic between NATO and the Russian Federation. Canada, Russia, USA, Norway expressed their intentions to develop the Arctic region in the state policy documents, some of the provisions of which coincide in the following positions [12, Komleva N.A., p. 2]:

- Strategic importance of the Arctic region both for the state and for the whole world;
- Leadership in the Arctic and implementation of the task of strengthening its sovereignty over the relevant sector of the Arctic;
- Development of the economy and social sphere, environmental protection, scientific research, improvement of the management structure of their own Arctic sector in a circumpolar dialogue regime;
- Military presence as an integral part of its presence in the region: creation of Arctic groups of forces (land and sea), new bases for such groupings, strengthening of border formations, improvement of infrastructure.

Along with general positions, there are those that distinguish each state of the first group from others in the form of specific strategies, namely:

- The Danish Arctic Strategy, adopted in May 2011 for the period 2011–2020, is based on the Ilulissat Declaration of May 28, 2008, in which scientific, geological data and international law form the basis for future land allocation. This declaration informs the non-Arctic states about the internal nature of issues related to the division of the Arctic and their belonging only to the Arctic countries. It is also noted that a format close to the Antarctic Treaty (1959) will not be considered⁹. The 2011 Danish Arctic strategy showed the first noticeable signs of a national aspiration toward the Arctic as opposed to only a narrowly focused view of Greenland earlier.
- The attitude of the Arctic states towards this region has been transformed in conjunction with the Ilulissat Declaration. The assessment of the Arctic importance has become deeper among the states of the Arctic Council (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States), founded on September 19, 1996, which was reflected in the formation of guidelines for the foreign and domestic policy of the Arctic Eight. The chronological range of states that have formulated their Arctic strategy is as follows: Norway (2006), Russia (2008), Canada (2009), Finland (2010), Iceland (March 2011) and Sweden, Denmark (May 2011), USA (2013) [13, Allayarov R.A., Shubin S.I., p. 199].
- Fundamentals of the state policy of the Russian Federation (RF) in the Arctic for the period up to 2020 and beyond were approved by the President of the Russian Federation on September 18, 2008. The main national interests of Russia in the Arctic include: use of the Arctic zone as a strategic resource base that provides social and economic development of the country, preservation of the Arctic as a zone of peace and cooperation,

⁹ For more about Camp Century, watch 'The U.S. Army's Top Secret Arctic City Under the Ice! "Camp Century" Restored Classified Film'. URL: www.youtube.com/watch?v=1Ujx_pND9wg (accessed 15 November 2019).

preservation of unique Arctic ecosystems, use of the Northern Sea Route (NSR) as a national unified transport communication of Russia in the Arctic.

- Decree of the President of the Russian Federation of October 26, 2020 No. 645 approved the “Strategy for the Development of the Arctic Zone of the Russian Federation (AZRF) and Ensuring National Security for the Period up to 2035”¹⁰ in order to ensure the national interests of the Russian Federation in the Arctic zone, as well as to achieve the goals defined in the Fundamentals of the state policy in the Arctic. There are also detailed measures for the three-stage implementation (2020–2024, 2025–2030, 2031–2035) of the main tasks in the spheres of social, economic, infrastructural, scientific, technological, environmental development, international relations, ensuring both military security and safety from natural and anthropogenic emergencies. The new Strategy has a special regional section that defines the main directions for the implementation of the Strategy for each territory within the AZRF.
- Norway's strategy for the Arctic differs from the Arctic states in the desire to develop the region in an ideological space, along with geographic and economic. This approach is reflected in Norwegian-Russian relations, recognized in the text of Norway's Northern Strategy. So, for the implementation of learning and research processes in educational institutions of Northern Norway, students and scientists from Russia are established the Scholarship of the Northern Regions. In this way, there is a certain degree of consciousness transformation of the fellows, aimed at implementing the policy of the “country of study” within the geopolitical spaces of other societies that are native to the fellows. Norway, actively preparing to the struggle for its interests in the Arctic, uses the so-called “soft” power, not excluding the development of “hard” power [12, Komleva N.A., p. 5].
- The Canadian Arctic Strategy “Canada's Northern Strategy: Our North, Our Heritage, Our Future” [14, Canada's Northern Strategy] focuses on aspects of public policy related to the integrated development of the northern territories. The document highlights the position emphasizing that the north is an integral part of the identity of modern Canada, historically formed even before the arrival of Europeans to the American continent and associated with the continued development of the north by indigenous peoples. This position is supported by the majority of Canadians, who consider the confirmation of the rights to the Arctic as a priority of the foreign policy of modern Canada [15, Konyshov V.N., Sergunin A.A., p. 77]. As an Arctic country, Canada claims an active leadership role in shaping the governance, sustainable development and environmental pro-

¹⁰ Decree of the President of the Russian Federation of October 26, 2020 No. 645 "On the Strategy for the Development of the Arctic Zone of the Russian Federation and Ensuring National Security for the Period up to 2035".

tection of the strategic Arctic region, as well as interacting with other countries to advance its interests [16, Statement on Canada's Arctic Foreign Policy].

- The US Arctic Policy Directive of January 12, 2009 emphasizes that “the United States has broad fundamental national security interests in the Arctic and is prepared to act independently or in alliance with other states to protect these interests”¹¹ [15, V. Konyshev. N., Sergunin A.A., p. 66]. The US government's strategic priorities in the Arctic are reflected in the US National Strategy for the Arctic Region. For example, the security sphere includes anti-missile defense and warning, deployment of maritime and air systems for strategic maritime transportation and strategic deterrence, operations to ensure maritime security and freedom of the seas, including the NSR. In general, the strategy focuses on ensuring the country's security interests, responsible management in the context of protecting the Arctic environment and preserving its resources, and developing international cooperation in the Arctic¹². Innovations regarding US government planning for the Arctic region were announced on June 6, 2019 in the Arctic Strategy of the US Department of Defense, which updated the previous 2016 strategy. The new document contains a secret appendix and context of the rivalry of different countries, security threats from Russia and China, highlighted by Secretary of State Michael Pompeo in Finland¹³. Previously, the Arctic Council had hardly discussed security issues, mainly addressing climate change, environmental protection and sustainable development in the region. In this regard, since 2019, there is a new tendency to take security issues into account in the context of national rivalries¹⁴.

Threats and opportunities of GPR for hydrocarbon development in the Arctic

The Arctic has enormous oil and gas reserves and is believed to contain about a quarter of the world's undiscovered oil reserves: most of them are located in Alaska, northern Canada, Norway and Russia, including significant amounts in offshore areas. Continuing reduction of sea ice is likely to result in increased oil and gas activity on the shelf, especially in terms of increased offshore oil transportation as the navigation season lengthens and new sea routes open [17, Bashkin

¹¹ National Security Presidential Directive (NSPD-66) and Homeland Security Presidential Directive (HSPD-25). 2009. January 12. URL: <https://polarconnection.org/national-security-presidential-directive-66homeland-security-presidential-directive-25-january-2009/> (accessed 15 November 2020).

¹² Natsional'naya strategiya SShA dlya Arktiki: put' k sotrudnichestvu. Mezhdunarodnyy ekspertnyy Sovet po sotrudnichestvu v Arktike [US National Strategy for the Arctic: A Path to Cooperation. International Expert Council on Cooperation in the Arctic]. URL: <http://www.iecca.ru/zakonodatelstvo/voprosy-prava/item/146-natsionalnaya-strategiya-ssha-dlya-arktiki-put-k-sotrudnichestvu> (accessed 15 November 2020).

¹³ Looking North: Sharpening America's Arctic Focus. Speech. Michael R. Pompeo, secretary of state. Rovaniemi, Finland. May 6, 2019. URL: <https://www.state.gov/looking-north-sharpening-americas-arctic-focus/> (accessed 14 November 2020).

¹⁴ Gorobets A. Novaya arkticheskaya politika SShA [New US Arctic Policy]. URL: <https://icds.ee/ru/novaja-arkticheskaja-politika-ssha/> (accessed 15 November 2020).

V.N., Trubitsina O.P., Priputina I.V., p. 110]. However, warming in the Arctic has an opposite side, which is the gradual destruction of the Polar infrastructure, created in permafrost conditions¹⁵.

Mass attention to hydrocarbon projects of the Arctic shelf is based on the likelihood of discovering the largest deposits here, while onshore discoveries in the last decade are characterized by small reserves. Easily accessible oil and gas resources have already been discovered and used. It is predicted that fossil fuels will remain a significant source of energy until 2050, against the backdrop of global energy demand, which will grow by more than a third by 2035 alone. As the owner of one-third of the world's known natural gas reserves and the largest oil-producing country in the world, Russia is interested in the Arctic as an area of new opportunities, along with both geopolitical and geo-ecological challenges. This region will play a vital role in meeting the world's energy supply in the next few decades [18, Trubitsina O.P., Bashkin V.N., p. 277].

At the same time, it is extremely important to take into account the environmental factor, since in connection with the expansion of oil and gas development projects, especially on the sea shelf, the ecology of the Arctic may suffer. According to the Strategic Action Program for Environmental Protection in the Russian Arctic, "... the increased rates of the oil and gas industry development in the Arctic zone of the Russian Federation (AZRF) in the last decade and the planned development of work on the shelf of the Barents Sea and other Arctic seas create a threat of escalation of the local scale of environmental degradation into a zone-wide one. At present, the direct flow of crude oil into the marine environment, freshwater reservoirs and landscapes of the coastal areas of the Russian Arctic is of a limited nature and is not considered as a factor that significantly complicates the general zonal ecological situation. The danger of pollution of the marine environment with oil is associated with plans for its production on the continental shelf of the Russian Federation" [19, Trubitsina O.P., p. 88].

Activity in the oil and gas industry of the Russian Arctic has been growing in the past few years, and the GER is also growing accordingly. This leads to the formation of "hot spots" and "impact zones", characterized by a high level of chemical pollution of the environment and transformation of the natural geochemical background, degradation of marine flora, vegetation, soils, uncontrolled development of erosion, cryogenesis, formation of sinkholes in vast areas, influx of pollutants in the food chain, a high level of morbidity in the population, air pollution with strontium compounds, heavy metals (in particular mercury), oil products, etc. [20, Morgunov B.A., p. 35; 21, Trubitsina O.P., Bashkin V.N., p. 144].

Thus, it is extremely important to strengthen the importance of the ecological position in the general structure of geopolitical factors affecting the sustainable development of the Arctic region. Currently, many experts in the world are investigating the assessment of probability of en-

¹⁵ Mitko A.V. Osobennosti arkticheskikh vyzovov rossiyskoy geopolitiki [Features of the Arctic Challenges of Russian Geopolitics]. URL: https://studref.com/420639/politologiya/osobennosti_arkticheskikh_vyzovov_rossiyskoy_geopolitiki (accessed 14 November 2020).

vironmental hazard in the absence of an unambiguous answer about the impact of chemical pollution of modern industries on natural ecosystems. However, regardless of the type and nature of production, an enterprise is an element that determines the structural relationship between it and natural environment, while the fragile nature of high latitudes is extremely vulnerable to anthropogenic impact [22, Trubitsina O.P., p. 21].

Globally, the GPR is caused by global processes and trends in use of natural resource potential of the Arctic, both in the interests of the world and individual countries. Possible manifestations of the GPR are the violation of the system of strategic stability in the Arctic geostrategic space. Thus, the GPR represents the likelihood of a change in the geopolitical situation at the regional and global levels, expressed in unfavorable conditions (risk of a hybrid war, military clashes, etc.) or additional opportunities.

The situation with the NSR has contradictory legal subtleties. Norms of the UN Convention on the Law of the Sea of 1982 (hereinafter the Convention) are on the side of unrestricted exploitation of this highway by ships of foreign states. In accordance with the Convention, ships of any states have the right to free navigation within the exclusive economic zone of the coastal state, which is equal to the distance of 200 nautical miles from the coastline minus 12 nautical miles of the territorial sea and 12 miles of the adjacent zone. According to this rule, part of the NSR can indeed be freely used by foreign vessels, including military ones. However, the complexity of the situation is that the sea route along the northern borders of Russia is very changeable and its configuration depends on freezing of the seas, weather and hydrological conditions.

In response to foreign claims, the Russian leadership declares the northern transport highway “a historically established national transport communication”. It also refers to Article 234 “Ice-covered areas” of the Convention. In an extreme climate and severe ice conditions, coastal countries (in this case, Russia) can independently regulate shipping to prevent possible environmental damage. Coastal countries are responsible for Safety and Disaster Prevention. Borders are legally described as “ice-covered areas”. In addition, according to the tradition that has developed over the centuries, the powers over the territory are transferred to the pioneer state. From this point, Russia has much more legal “bonuses”.

But the United States, along with the northern countries of the NATO bloc, is not entirely satisfied with this. NATO warships are increasingly appearing in the region, guided by a one-sided understanding of the provisions of the Convention. Potential objects of control include not only the NSR itself, but also rich deposits of minerals hidden in the continental shelf. Trainings are being organized in the neutral waters of the Arctic zone, in which not only NATO countries participate, but also “neutral” Sweden and Finland.

According to the Russian defence ministry, the intensity and scale of NATO's operational and combat training in the Arctic in 2019 has increased by 17%, while intelligence activities have

increased by 15%. Missile defence systems are being strengthened in coastal states. Some countries are resuming underwater patrols in the region.

Since 2018, the second operational fleet of the US Navy has been re-established and its area of responsibility included part of the Northern Sea Route off the Russian coast. By 2022, the United States together with the Europeans are to form a joint NATO command "Atlantic", which, together with the support command, will ensure the rapid transfer of American troops to Europe. At a distance of 60 km from the Russian border, the Norwegians are building a new radar station. In addition, Norway doubled the number of US Marines deployed in 2018. British submarines with "Tomahawks" have been patrolling the Arctic since 2016, while ground units are honing their "war in the cold" skills in Norway¹⁶.

Thus, the main threats and opportunities of the GPR are as follows:

1. Ensuring access to sufficient reserves of hydrocarbon raw materials in the Arctic from various states, obtaining control rights over its natural resources

Threats:

- Depletion of traditional hydrocarbon deposits (for example, depletion of "light" oil and low-permeability gases resources;
- The need to search for new oil and gas sources and transfer of exploration to more inaccessible areas;
- Loss of control over the Arctic territories;
- Military confrontation of the polar countries on issues related to the delimitation of the Arctic shelf and oil and gas resources located on it.

Opportunities:

- Increased development of unconventional hard-to-recover deposits;
- Expansion of the resource base, including by increasing the share of oil and gas production in the Arctic regions with difficult conditions and low development;
- Development of advanced technologies to exploit new Arctic reserves, previously considered unprofitable due to difficult natural and climatic conditions;
- Ensuring stable access to hydrocarbon reserves;
- Resolving controversial issues of the Arctic territories ownership by global consensus or consensus of global policy actors;
- International cooperation with the attraction of foreign investments and technologies while maintaining the national interests of the state;
- Development of necessary technologies and resources to reduce the level of GPR.

2. Uncertainty of the legal status of the Arctic region

¹⁶ Fedorov E. Severnyy morskoy put': l'dy tayut – napryazhennost' rastet [Northern Sea Route: the Ice is Melting — the Tension is Growing]. URL: <https://topwar.ru/178138-severnyj-morskoj-put-ldy-tajut-napryazhennost-rastet.html> (accessed 04 February 2021).

Threats:

- Increase and complication of the current position of the geopolitical interests' intersection zone of the main geostrategic and regional players;
- Uncertainty in the interpretation of unified international requirements and mechanisms for their application.

Opportunities:

- Resolving controversial issues of the Arctic territories ownership by global consensus or consensus of global policy actors;
- Unification of regulatory requirements and creation of a unified international mechanism for regulating the companies' activities in the Arctic.

3. GER as one of the priorities of attention to Russia's actions in the Arctic**Threats:**

- Putting pressure on Russia in the context of its plans to develop Arctic infrastructure and build an oil and gas complex. The goals and actions of the Arctic states are aimed at proving lack of legal grounds for Russia to develop offshore fields, to use the NSR as an internal passageway, as well as at blaming Russia for its inability to ensure environmental safety when developing deposits in the region;
- Threat of Russian "hybrid war" in the Arctic in the format of coordinated use of political-diplomatic, information-psychological, economic and power tools to achieve strategic goals. In NATO expert circles, as a rule, the concept of "hybrid wars" is already used to denote the role of Russia in crisis points;
- Manipulation of GER through geopolitical provocations in the context of inability of Russian oil and gas facilities to ensure environmental safety in the Arctic. For example, Greenpeace activists advocate the Arctic development as a whole, but oppose individual projects that damage the region's ecology. At the same time, the danger of the project is determined by Greenpeace itself. As a rule, Russian projects (Gazprom and Rosneft) regularly find themselves among the environmentally hazardous ones;
- The sanctions policy against Russia by the European Union and the United States is also aimed at weakening influence in the Arctic region.
- In connection with the above point 4, low oil prices are also perceived by foreign initiators as one of the factors limiting Russia's resources in the NSR development.

Opportunities:

- Russia has developed special rules for the passage of foreign military vessels along the NSR as a retaliatory measure:
 - Firstly, notification of a warship visit must be delivered at least 45 days in advance. The document must reflect the ship's name, sailing time and a clear route. In addition, the notice separately describes the vessel's dis-

placement, draft and propulsion parameters. Formally, all this is required by Article 234 “Ice-covered areas” of the UN Convention.

- Secondly, a Russian marine pilot is mandatorily sent to a military vessel. The movement of the vessel is under the full control of the Russian Navy. In case of an emergency, icebreakers will come to the aid of a military vessel.
- Development of national innovative technologies, know-how, BAT in order to improve the environmental safety of oil and gas development of the Arctic by Russia and reduce the aforementioned threats.

Conclusion

In the modern world, the development of the Arctic region should be aimed at the formation of sustainable development of the polar territories, which is facilitated by the rational placement of production industries (primarily oil and gas), which meets the protection and restoration of the environment, as well as new geopolitical conditions.

The key geopolitical factors affecting the sustainable development of the Arctic are geographic, economic and military. It is necessary to strengthen the role of the environmental factor. Moreover, the environmental problems of the Arctic are an indicator of global trends, and they cannot be regarded as purely national or regional. Despite geopolitical constraints, the strategic importance of the Arctic is growing. International political, military and legal disputes over the possession of its territories, connected with economic interests, are intensifying.

The most important risks of oil and gas development in the Arctic are gas exploration projects, the analysis of their transformation into opportunities and threats is one of the priority tasks of oil and gas facilities. At the same time, the authors draw attention to the following key GPRs: 1) ensuring access to sufficient reserves of hydrocarbon raw materials in the Arctic from various states, obtaining control rights over its natural resources; 2) the uncertainty of the legal status of the Arctic region; 3) GER as one of the priorities of attention to Russia's actions in the Arctic.

Analysis of GPR in terms of their transformation into opportunities is a priority task of oil and gas facilities in the implementation of Arctic field development projects, especially in the context of a cyclic raw materials supercycle of energy prices falling in the world.

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