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ARCTIC COUNCIL
RUSSIA'S CHAIRMANSHIP

RUSSIAN CHINESE COOPERATION IN THE FIELD OF SUSTAINABLE DEVELOPMENT

BACKGROUND MATERIAL FOR THE EVENT «RUSSIAN-CHINESE COOPERATION IN THE FIELD OF SUSTAINABLE DEVELOPMENT OF THE ARCTIC REGION»

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1. China's Arctic policy: the main objectives and cooperation mechanisms in the region

1.1. Main priorities of Chinese Arctic policy

For a long time, the People's Republic of China has been interested in the Arctic region and its development. Despite the geographical remoteness to the region, China classifies itself as a state close to the Arctic, «Near-Arctic State» (近北极国家). China's interest in the development and government of the region is justified primarily by the ongoing climatic changes that have consequences for the PRC as well¹. In particular, climate change in the Arctic affects Chinese sectors of the economy, such as agriculture, forestry, and maritime industry².

China places emphasis on the importance of the special status of the Arctic that was established by the 1982 United Nations Convention on the Law of the Sea (UNCLOS³) and the 1920 Treaty of Spitsbergen⁴. These documents allow a wide range of countries to build up their presence in the Arctic. Against this background, China has developed the idea of viewing the Arctic as an «international space» in which states without territories in the region are also able to participate in its collective management⁵. In this context China primarily aims to build up the region's potential as a transport corridor. China has designed, inter alia, a new part of its Maritime Silk Road initiative - the Polar Silk Road, which has been positively received by other Arctic states⁶.

¹ The State Council the People's Republic of China. (2018, January 26). Full text: China's Arctic Policy. Retrieved April 26, 2022, from http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

² Bowman, L., & Xu, Q. (2020, February). China in the Arctic. Policies, Strategies, and Opportunities for Alaska. Roscongress. Retrieved April 26, 2022, from <https://roscongress.org/materials/kitay-v-arktike-politika-strategii-i-vozmozhnosti-dlya-alyaski/>

³ United Nations.(1982). United Nations Convention on the Law of the Sea. Retrieved April 26, 2022, from https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

⁴ Arctic portal. (n.d.). Treaty of Spitsbergen of February 9, 1920. Retrieved April 26, 2022, from http://library.arcticportal.org/1909/1/The_Svalbard_Treaty_9ssFy.pdf

⁵ The State Council the People's Republic of China.(2018, January 26). Full text: China's Arctic Policy. Retrieved April 26, 2022, from http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

⁶ Tillman, H., Yang, J., & Nielsson, E. T. (2018). The Polar Silk Road: China's New Frontier of International Cooperation. China Quarterly of International Strategic Studies, 4(3), 345–362. <https://doi.org/10.1142/S237740018500215>

The main priorities of China's policy in the Arctic are articulated in the White Paper of 2018⁷, according to which China seeks to 1) understand, 2) protect, 3) develop the region, and 4) participate in its management to ensure the common interests of the international community in the sustainable development of the Arctic.

In addition, China seeks to contribute to preserving the unique ecosystem of the Arctic and saving it from the possible adverse effects of climate change. Another area of China's interest is protecting the indigenous peoples of the region by preserving their lifestyle and culture. In order to promote the development of the Arctic China intends to strengthen the region's technological potential through innovation and applied technologies. The PRC will also advance maritime routes and help improve the quality of life of local communities. On the part of the participation in the management of the region, China seeks to promote both multilateral and bilateral mechanisms to establish and maintain an Arctic management system, as well as to ensure security. All of this China strives to accomplish with the respect to the principles of international law, including the UN Convention on the Law of the Sea. The PRC seeks to expand its scientific presence and network of scientific contacts in the region, actively implementing joint research projects with other countries.

In implementing its Arctic policy, China is guided by four principles:

RESPECT

COOPERATION

WIN-WIN RESULT

SUSTAINABILITY

«respect», «cooperation», «win-win result», and «sustainability». The principle of «sustainability» refers to environmental protection, rational use of the region's resources and ensuring the sustainability of human activities. These three pillars of «sustainability» must ensure harmonious coexistence between humans and nature.

China's White Paper identifies **five areas** of Chinese Arctic policy: deepening the exploration and understanding of the Arctic, protecting the eco-environment of the Arctic, and addressing climate change, utilizing Arctic resources in a lawful and rational manner, participating actively in Arctic governance and international cooperation, and promoting peace and stability in the Arctic. China emphasizes the rights of the Arctic states in the region, pointing to their exclusive jurisdiction over each issue in all aforementioned areas.

Deepening the exploration and understanding of the Arctic

In order to increase the country's understanding of the climatic and ecological situation in the region, China intends to build capacity in interdisciplinary scientific research. China seeks to expand the existing knowledge base of the region by encouraging research in geology, biology, marine chemistry, etc. (SDG 13 - Climate Action, SDG 14 - Life Below Water, SDG 15 - Life on Land). The state pays special attention to climate change research, especially monitoring and evaluation (SDG 13 - Climate Action).

China also seeks to build its capacity in the field of Arctic expeditions via development of Arctic research stations and construction of ships and icebreakers for scientific purposes. In order to enhance the quality of the research in the Arctic, China also intends to improve its technological component. For instance, China aims to upgrade existing equipment, particularly in deep-sea exploration, and to promote technological

⁷ The State Council the People's Republic of China. (2018, January 26). Full text: China's Arctic Policy. Retrieved April 26, 2022, from http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

innovation in fossil fuel extraction and renewable energy development in the region (SDG 9 - Industry, Innovation and Infrastructure).

Protecting the eco-environment of the Arctic and addressing climate change

China pursues to improve the stability of the region's natural ecosystems and protect them from the adverse effects of climate change (SDG 13 - Climate Action, SDG 14 - Life Below Water, SDG 15 - Life on Land). Therefore, China aims to strengthen control over marine and atmospheric pollution. In particular, China together with the Arctic states intends to reduce the number of pollutants that are discharged in the waters of the Arctic (SDG 13 - Climate Action, SDG 14 - Life Below Water). China seeks to conserve the biodiversity of the region, for example, by protecting certain species of migratory birds, and tries to increase the level of sustainability of the entire Arctic ecosystem (SDG 15 - Life on Land). The Chinese White Paper also outlines the need for the state to fulfill its international commitments to successfully combat climate change, i.e., to implement its nationally determined contribution to the Paris Agreement (SDG 13 - Climate Action). The PRC also seeks to raise public awareness of climate change through revealing results of the conducted research on the impact of climate change on the Arctic region.

Utilizing Arctic resources in a lawful and rational manner

Based upon international law, China aims to develop Arctic shipping routes especially through the Polar Silk Road initiative. In order to achieve it, China encourages its national companies to carry out trial commercial voyages, which will contribute to the development of the infrastructure of the shipping routes (SDG 9 - Industry, Innovation and Infrastructure).

Moreover, China pays special attention to the gas and mineral resources extraction, oil exploration and the development of renewable energy sources (geothermal, wind and other clean energy sources) together with the Arctic states (SDG 7 - Affordable and Clean Energy, SDG 13 - Climate Action, SDG 17 - Partnerships for the Goals).

In addition, China is committed to the rational use of fishery resources and the development of sustainable fisheries (SDG 12 - Responsible Consumption and Production, SDG 14 - Life Below Water). Therefore, China takes part in the study of the state of fish stocks in the region and searches for the necessary actions for their conservation. China actively promotes the idea of institutionalizing international cooperation on sustainable fisheries in the Arctic through the establishment of a regional fisheries management organization (SDG 17 - Partnerships for the Goals).

Working on responsible consumption and production, China advocates sustainable tourism and seeks to raise the awareness of tourists about the environmental and climatic situation in the Arctic (SDG 12 - Responsible Consumption and Production). At the same time, China draws attention to the fact that tourist activities should by no means have a negative impact on the unique way of life of the Arctic's indigenous inhabitants.

Participating actively in Arctic governance and international cooperation

A key priority for China in the Arctic is partnership for sustainable development and the promotion of multi-lateral governance of the region (SDG 17 - Partnerships for the Goals). China advocates for the coordination of Arctic policy by the Arctic and subarctic countries together with the states that do not have maritime and territorial borders with the region. For this purpose, it is also necessary to intensify cooperation between the countries on the establishment and further improvement of the international legal framework of the Arctic. At the same time, it is also important for China to coordinate the development strategies of all the states interested in the Arctic. This should become the basis for deepening economic and digital cooperation between countries. From China's point of view, the cooperation of states should take place within the core of existing international institutions, namely the Arctic Council.

Promoting peace and stability in the Arctic

China emphasizes the importance of peaceful cooperation in the Arctic, including the peaceful settlement of disputes, and intends to take an active part in maintaining security in the region (SDG 16 - Peace and Justice Strong Institutions).

Table 1 - Compliance between China's Policies in the Arctic and the UN SDGs

China's policy directions in the Arctic	UN SDGs
<p>1. Deepening the exploration and understanding of the Arctic</p> <ul style="list-style-type: none"> – Interdisciplinary research, including international research; – Monitoring and assessment of climate change; – Carrying out the Arctic expeditions; – Development of technological innovations. 	<p>SDG 13 – Climate Action SDG 14 – Life Below Water SDG 15 – Life On Land</p>
<p>2. Protecting the eco-environment of the Arctic and addressing climate change</p> <ul style="list-style-type: none"> – Strengthening of control over pollution of marine ecosystems and terrestrial ecosystems; – Protection of flora and fauna; – Preservation of the region's biodiversity; – Fulfillment of international commitments to reduce emissions; – Raising global awareness of the impact of climate change on the region. 	<p>SDG 13 – Climate Action SDG 14 – Life Below Water SDG 15 – Life on Land</p>

<p>3. Utilizing Arctic resources in a lawful and rational manner</p> <ul style="list-style-type: none"> – Development of Arctic shipping lanes and route infrastructure, in particular the Polar Silk Road; – Sustainable development of the region’s resources together with other Arctic states; – Development of renewable energy sources; – Development of sustainable fisheries; – Exploration of the region’s fish stocks; – Development of sustainable tourism. 	<p>SDG 7 – Affordable and Clean Energy SDG 9 - Industry, Innovation, and Infrastructure SDG 12 - Responsible Consumption and Production SDG 13 – Climate Action SDG 14 – Life Below Water SDG 15 – Life on Land</p>
<p>4. Participating actively in Arctic governance and international cooperation</p> <ul style="list-style-type: none"> – Compliance with international law; – Coordination of Arctic policies and strategies by all states interested in the region; – Intensification of cooperation within the framework of international platforms. 	<p>SDG 17 – Partnerships for the Goals</p>
<p>5. Promoting peace and stability in the Arctic</p> <ul style="list-style-type: none"> – Ensuring stability and security in the region 	<p>SDG 16 – Peace, Justice, and Strong Institutions</p>

1.2. Mechanisms and formats of China’s international cooperation in the field of sustainable development in the Arctic region

Since the 2010s, China has become more actively involved in the development of the Arctic region, and it has been particularly cordially involved in multilateral platforms. The main areas of cooperation include scientific activities, biodiversity conservation, combating global climate change, building transport and logistics infrastructure, and oil and gas exploration. Also, the tourism sector is gradually developing. Nevertheless, many Arctic countries are cautiously building cooperation with China on a bilateral basis as they fear excessive economic penetration from China in certain sectors. But in some cases, such as Iceland, China’s presence continues to increase every year.

Multilateral formats

The key platform for international cooperation in the region for China, as well as for other states, is the **Arctic Council**. Due to the lack of territories beyond the Arctic Circle, the state could not become a member of the organization, so it was granted formal observer status in 2013⁸. Thanks to this status, China can gain access to information on the management of the region, as well as participate in it: it can speak at Council meetings, comment on issues addressed at them, and participate in the projects and initiatives of the Council's working groups.



Together with Russia, Canada, Finland, Iceland, Norway, Sweden, Denmark, and the United States, as well as a number of observer countries of the Arctic Council, since 2012 China participates in the **project on Sustaining Arctic Observing Networks** within the framework of the Working Group on Arctic Monitoring and Assessment Program (AMAP)⁹. Its main purpose is to monitor changes in the Arctic, including climate. For example, in 2012-2014 there was a project to study the temperature and salinity of the Arctic Ocean¹⁰. Also, within the framework of this Working Group led by the United States, Canada, Finland, and Norway, China takes part in a project to assess **Impacts of Short-lived Climate Forcers on Arctic Climate, Air Quality and Human Health**¹¹. Thus, countries are striving to implement SDG 13 - Climate Action.

China also participates in **the Arctic Migratory Birds Initiative (AMBI)** of the working group Conservation of Arctic flora and fauna» (CAFF)¹². The goal of the project is to study the migration patterns of Arctic birds and improve their habitats (SDG - 15), and one of the AMBI workshops was held in China in 2018. In addition, China is involved in another CAFF project on **Actions for Arctic biodiversity**¹³. It aims to assess

⁸ Stephen, M. D., & Stephen, K. (2020). The Integration of Emerging Powers into Club Institutions: China and the Arctic Council. *Global Policy*, 11(3), 51–60. <https://doi.org/10.1111/1758-5899.12834>

⁹ Arctic Council. (n.d.). Sustaining Arctic Observing Networks (SAON). Retrieved April 26, 2022, from <https://www.arctic-council.org/projects/saon/>

¹⁰ Kharlamp'eva, N. K. (Ed.). (2017). *Mezhdunarodnoye nauchnoye sotrudnichestvo v Arktike* [International scientific cooperation in the Arctic]. St. Petersburg: St. Petersburg University.

Arctic Council. (n.d.) People's Republic of China Retrieved April 26, 2022, from <https://www.arctic-council.org/about/observers/non-arctic-states/peoples-republic-of-china/>

¹¹ Arctic Council. (2021, May 20). *Impacts of Short-lived Climate Forcers on Arctic Climate, Air Quality and Human Health. Summary for Policymakers*. Retrieved April 26, 2022, from <https://oarchive.arctic-council.org/handle/11374/2609>

¹² Arctic Migratory.(n.d.). Birds Initiative. Retrieved April 26, 2022, from <https://www.caff.is/arctic-migratory-birds-initiative-ambi/central-east-asian-flyways>

¹³ CAFF. (n.d.). *Actions for Arctic Biodiversity 2013–2021*. Retrieved April 26, 2022, from <https://www.caff.is/actions-for-arctic-biodiversity-2013-2021>

and develop recommendations for climate and environmental risks, including oil spills, and to identify drivers of animal migration (SDG 13 - Climate Action, SDG 14 - Life Below Water, SDG 15 - Life on Land). One of the objectives of the project is also to raise public awareness of the problem of environmental degradation and changes in Arctic ecosystems.

The various platforms and alliances for joint scientific and practical research are central to China's multi-lateral cooperation formats.

China is a member of **the International Arctic Science Committee**¹⁴, a major non-governmental organization that conducts joint environmental, nature and climate research in the Arctic region (SDGs - 13, 14, 15). Within the framework of the program there are working groups on research of atmosphere, cryosphere, social sphere, flora and fauna of the region. China takes an active part in many of them, for example, in the group on the examination of the marine environment, which studies the state of marine ecosystems and the impact of climate change on the quality of ice.

China also cooperates closely with the **UArctic**¹⁵, which brings together universities and educational centers involved in Arctic research. Chinese organizations cooperating with UArctic include the Chinese Academy of Meteorological Sciences and the Chinese Research Academy of Environmental Sciences¹⁶.

In 2013, **the China-Nordic Arctic Research Center (CNARC)**¹⁷ was founded in Shanghai, with its main objectives being the study of climate change (SDG 13 - Climate Action), the economic aspect of the region's functioning, and the development of shipping (SDG 1 - No Poverty, SDG 2 - Zero Hunger). The Center serves as a platform for international research, bringing together Chinese and Nordic think tanks, such as the Fridtjof Nansen Institute and the NDRC. It serves as a platform for international research, bringing together think tanks from China and northern Europe, such as the Fridtjof Nansen Institute and Polar Institute in Norway, the Arctic Center in Finland, the Polar Research Secretariat in Sweden, the Nordic Institute for Asian Studies in Denmark, the Center for Polar and Ocean Studies at Tongji University in China, the Research Institute for Polar Law and Policy at China Ocean University and the Shanghai Academy of International Studies. The center hosts regular symposiums to discuss promotion of the Polar Silk Road, sustainable development, and fisheries. The China-Nordic center promotes international cooperation and contributes to study of the Arctic at the global level, allowing China to be an active participant in the development of the region, along with the Arctic states¹⁸.

An important place in China's participation in Arctic research is occupied by the **Pacific Arctic Group**¹⁹, which is a commonwealth of Arctic research institutes founded within the framework of the International Arctic Science Committee. The key areas of the Group's scientific activities are climate change, environmental pollution, human capital development and the region's ecosystem (SDG 8 - Decent Work and Economic Growth, SDG 13 - Climate Action, SDG 14 - Life Below Water)²⁰.

¹⁴ IASC.(n.d.).Home - International Arctic Science Committee. Retrieved April 26, 2022, from <https://iasc.info/>¹⁵ UArctic. (n.d.).China & The Arctic: A View to 2050. Retrieved April 26, 2022, from <https://www.uarctic.org/news/2021/4/china-the-arctic-a-view-to-2050/>

¹⁶ UArctic. (n. d.). How We Operate – Organizational Principles. Retrieved April 26, 2022, from <https://www.uarctic.org/about-uarctic/how-we-operate/>

¹⁷ CNARC. (n.d.). China-Nordic Arctic Research Center. Retrieved April 25, 2022, from <https://www.cnarc.info>

¹⁸ Komissina, I. V. (2015). Arkticheskiy vektor vneshney politiki Kitaya [The Arctic vector of China's Foreign Policy]. Problems of the national strategy,1(18), 54-73.

¹⁹ Pacific Arctic Group. (n.d.). What is PAG. Retrieved April 26, 2022, from <https://pag.arcticportal.org/>

²⁰ Ibid



China attaches great importance to various scientific platforms and conferences, such as «The Arctic: Territory of Dialogue», «Arctic Circle», «Arctic Frontiers». For instance, China regularly sends its delegations to the Arctic Circle forum to participate in the forum itself and to hold thematic conferences²¹. In 2019, for example, the Arctic Circle China Forum was organized to highlight China's role and place in the Arctic²².

To unlock the region's potential as a transportation corridor, China proposed the Polar Silk Road (PSR) initiative and encouraged other countries to join. China is interested in the development of this trade route, as 90% of Chinese goods are delivered by water, and the use of the PSR reduces delivery time by three times compared with the route through the Suez Canal²³. But the underdeveloped infrastructure of the Arctic ports, lack of container hubs, seasonality and environmental vulnerability of the route seriously limit its use²⁴. According to experts' estimates, China will be able to transfer 5-15% of its foreign trade logistics flow to the PSR, which will save \$60-120 BN a year²⁵. Currently a number of PSR projects are only in development and their final scale is unknown. So far it is confirmed only that part of the initiative will pass through the shipping route in Eastern Scandinavia and Russia.

China considers international governance in the Arctic through not only regional integration associations, but also other multilateral conventions and organizations related to the Arctic (permanent member of the UN Security Council, UNCLOS, the International Maritime Organization (IMO), the Paris Agreement, etc.). As a member of the IMO, China supports the rules of **the Polar Code** adopted in 2017. The Polar Code sets legally binding standards for ships entering the Arctic Ocean (as well as the Southern Ocean). They are aimed at improving the safety of the ships themselves and protecting the environment (SDG 12 - Responsible Consumption and Production, SDG 14 - Life Below Water).

Together with members of the Arctic Council and other observer countries China signed the **Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean** in 2018. China played an important role in the negotiations of the document²⁶. Since there is currently no industrial fishing in the Agreement's regulated ocean area, this document demonstrates a «precautionary approach» to implementing SDG - 12 for Responsible Consumption and Production.

Bilateral formats

China seeks to establish a dialogue with Arctic and sub-Arctic countries through joint projects in the following sectors: gas, oil, infrastructure, telecommunications, and renewable energy.

²¹ Bowman, L., & Xu, Q. (2020, February). China in the Arctic. Policies, Strategies, and Opportunities for Alaska. Roscongress. Retrieved April 26, 2022, from <https://roscongress.org/materials/kitay-v-arktike-politika-strategii-i-vozmozhnosti-dlya-alyaski/>

²² Arctic Arctic Portal.(n.d.). Circle China Forum. Retrieved April 25, 2022, from <https://arcticportal.org/ap-library/news/2160-arctic-circle-china-forum>

²³ Gladkiy, Y. N., Sukhorukov, V. D., Yu Kornekova, S., Kulik, S. V., & Kaledin, N. V. (2020). «Polar Silk road»: project implementation and geo-economic interests of Russia and China. IOP Conference Series: Earth and Environmental Science, 434(1), 012009. <https://doi.org/10.1088/1755-1315/434/1/012009>

²⁴ Ibid.

²⁵ Labuyk, A. I. (2016). Politika KNR d Arkticheskoy Regiony [China's Policy in the Arctic region]. Russia and the Asia-Pacific region, 1 (91), 96–106.

²⁶ The Diplomat. (2018, June 21). How Has China Shaped Arctic Fisheries Governance? Retrieved April 26, 2022, from <https://thediplomat.com/2018/06/how-has-china-shaped-arctic-fisheries-governance/>

China and Norway

One of China's first steps toward the Arctic was the opening of the first national station on Spitsbergen, the Huanghe²⁷, on July 28, 2004. Sino-Norwegian bilateral dialogue on the Arctic issues was already organized in 2009. In October 2018, China National Petroleum Corporation (CNPC) signed an agreement with Norway's Equinor on cooperation on oil and gas exploration and carbon capture technology²⁸.

China and Finland

In 2018 China announced the first icebreaker of its own production, Snow Dragon 2, designed by Finnish company Aker Arctic. In April of the same year, the countries signed an agreement to create an Arctic research center and share data in a space observatory²⁹. Moreover, many Chinese companies, such as China COSCO Shipping Co., Ltd. and China Railway International Group are involved in the construction of the Helsinki-Tallinn tunnel³⁰.

China and Sweden

In 2016 the Institute of Remote Sensing and Digital Earth of the Chinese Academy of Sciences established a station for remote sensing of the Earth at Sweden's northernmost city, Kiruna³¹. In 2018, Hong Kong-based Sunbase International cancelled the construction of a deep-water port on the coast of Lysekil.

Moreover, education is a special area of cooperation between two countries. The Royal Swedish University of Technology has more than 40 agreements with various universities in China aimed at exchanging students and scientific expertise³². In addition, China is actively investing³² in the development of renewable energy in Sweden. At the moment, the Chinese state-owned company China General Nuclear Power Group has a share in six Swedish wind energy projects. That includes its 75% share in the Markbygden Ett project, which will be the largest European onshore wind farm in the future³³.

China and Iceland

Cooperation in the Arctic is particularly active between China and Iceland. Their cooperation is based on the Memorandum of Understanding and Cooperation in the Field of Marine and Polar Research and Technology, and the Memorandum of Understanding on Geothermal and Geoscientific Cooperation adopted

²⁷ Karandasheva, V. U. (2019). Politika Kitaya v Arkticheskom Regione [China's Policy in the Arctic region]. *Problems of the post-Soviet space*, 6(1). 24-32.

²⁸ Ryzhova, A. (2020). On the prospects for China' cooperation with the Arctic countries. *IOP Conference Series: Earth and Environmental Science*, 539(1), 012045. <https://doi.org/10.1088/1755-1315/539/1/012045>²⁹ Ibid

³⁰ Holz, H., Taffer, A., Miller, A., & DeThomas, B. (2022). Exploring the Relationship between China's Investment in the Arctic and Its National Strategy. CNA. Retrieved April 26, 2022, from <https://www.cna.org/reports/2022/01/exploring-the-relationship-between-chinas-investment-in-the-arctic-and-its-national-strategy>

³¹ Ibid

³² Forsby, A. B. (Ed.). (2019). *Country-specific perspectives on Nordic–Chinese relations: A Swedish Perspective*. University of Copenhagen.

³³ Duxbury, C. (2021, December 4). Chinese wind farm investments stoke concerns in Sweden. *POLITICO*. Retrieved April 26, 2022, from <https://www.politico.eu/article/chinese-wind-farm-investments-stoke-concerns-in-sweden/>

in 2012 following bilateral talks between Prime Minister J. Sigurdardottir and President of the Chinese State Council W. Jiabao³⁴.

In 2013, with the signing of the free trade agreement, cooperation began to strengthen, and trade between the countries increased from \$401 million to \$712 million between 2014 and 2018³⁵. In 2019, the free trade agreement was expanded: the export of aquaculture products, namely the export of farmed salmon, previously required a number of certifications and registrations, but as of 2019, the free trade agreement began to take effect in this area as well³⁶.

Moreover, there is cooperation between the countries in the energy sector. China is collaborating with Iceland to create geothermal infrastructure in its provinces (Shaanxi, with plans for Hebei, Shandong, Sichuan and Yunnan), and Iceland provides its specialists and expertise. In addition, through a six-month UN training program, Iceland supports young researchers from the PRC by helping them improve their skills in geothermal resources and reservoir development³⁷.

Scientific dialogue between the states is important for strengthening cooperation between Iceland and China. For example, in 2018 China and Iceland have established a joint Arctic science observatory in Akureyri, Iceland³⁸, to study solar-terrestrial relations and space weather, although the observatory is also open to Arctic research in other areas, such as climate, biodiversity conservation. China National Offshore Oil Corporation (CNOOC), Norway's Petoro and Iceland's Eykon Energy had planned to explore the Icelandic shelves for oil and gas as part of economic cooperation. Nevertheless, in January 2018, Norway and China announced their withdrawal from the project on the last of the three shelves, as new geological exploration data showed that the cost of the project was increasing significantly³⁹.

China and Denmark

The Danish government is wary of any action by China with regard to their Arctic zones. For example, it has criticized China's investment in the development of rare earth element mines in Greenland (In 2018 Australian exploration company, Greenland Minerals, and Chinese one, Shenghe Resources, signed a memorandum of understanding for cooperation on the project on the field Kvanefjeld, worth \$1.4 billion⁴⁰), as the Danish authorities fear the excessive dependence of Greenland on Chinese capital⁴¹.

³⁴ Nikolaev, N. A. (2016). Sotrudnichestvo Kitaya i Islandii v Arktike [Cooperation between China and Iceland in the Arctic]. *The Arctic XXI century. Humanities*, 2(8), 57-65.

³⁵ Bowman, L., & Xu, Q. (2020, February). China in the Arctic. Policies, Strategies, and Opportunities for Alaska. Roscongress. Retrieved April 26, 2022, from <https://roscongress.org/materials/kitay-v-arktike-politika-strategii-i-vozmozhnosti-dlya-alyaski/>

³⁶ Humpert, M. (2019, September 25). Icelandic-Norwegian Joint Venture 'Arctic Fish' To Begin Selling Salmon in China. *High North News*. Retrieved April 26, 2022, from <https://www.highnorthnews.com/en/icelandic-norwegian-joint-venture-arctic-fish-begin-selling-salmon-china>

³⁷ Rashmi, B. R. (2019). China in the Arctic: Interests, Strategy and Implications. Institute of Chinese Studies. Retrieved April 26, 2022, from <https://www.icsin.org/publications/china-in-the-arctic-interests-strategy-and-implications>

³⁸ CIAO. (n.d.). Arctic Observatory. Retrieved April 08, 2022, from <https://karholl.is/en/>

³⁹ Neft i Kapital. (2018). China and Norway withdrew from the project on the development of reserves on the shelf of Iceland. Retrieved April 08, 2022, from <https://oilcapital.ru/news/upstream/23-01-2018/kitay-i-norvegiya-vyshli-iz-proekta-po-osvoeniyu-zapasov-na-shelfe-islandii>

⁴⁰ Koivurova T. et al. (2019). China in the Arctic; and the Opportunities and Challenges for Chinese-Finnish Arctic Cooperation. Finnish Government. Retrieved April 08, 2022, from <http://urn.fi/URN:ISBN:978-952-287-636-2>

⁴¹ Bowman, L., & Xu, Q. (2020, February). China in the Arctic. Policies, Strategies, and Opportunities for Alaska. Roscongress. Retrieved April 26, 2022, from <https://roscongress.org/materials/kitay-v-arktike-politika-strategii-i-vozmozhnosti-dlya-alyaski/>

In addition, the kingdom is actively blocking any Chinese attempts to participate in infrastructure projects, such as the possibility of Chinese participation in the construction of airports in Greenland. It also refused to sell the abandoned marine base to Hong Kong company General Nice⁴².

China and the United States

Despite the existing foreign policy controversy between China and the United States, long negotiations were held between Alaska Gasline Development Corporation, Sinopec, the Bank of China and China Investment Corporation to involve China in a project on gas production, its liquefaction and transportation from the North Slope to the national and international markets. The cost of the project is estimated at \$43 billion, 75% of which is covered by the Bank of China⁴³. The parties signed a joint development agreement in November 2017, and a supplemental agreement was signed in September 2018 that promised 75% of the production volume to Sinopec⁴⁴.

China and Canada

Canada's parliament believes that a dialogue with China needs to be developed to determine Chinese interests in the Arctic. In its 2019 Arctic Strategy Canada emphasized that foreign direct investment is an important tool for growing the Arctic region's economy. It makes further cooperation with the PRC promising, especially with the consideration of China's overall increased economic presence in Canada. For example, the Australian company MMG Ltd⁴⁵, 68% of which is owned by China Minmetals Corporation, possesses copper and zinc deposits in Nunavut, Canada. China will also become its significant beneficiary after the implementation of the Izok Corridor project, financed by the Canadian National Trade Corridors fund⁴⁶, which aims to build 325 km of roads and a deep-water port in the Arctic Ocean.

2. Russian-Chinese Cooperation in the field of sustainable development of the Arctic region

Russian-Chinese cooperation in the Arctic region covers a wide range of areas, including scientific exchange, tourism, transport and logistics, oil and gas extraction. **However, the countries have several differences in their vision of the legal status of the Arctic. China** recognizes the rights of the Arctic states to manage the region, as stated in the UN Convention on the Law of the Sea and the Spitsbergen Treaty, **but advocates for greater access to resources and opportunities to develop the Arctic for all states, regardless of their territorial position. Russia takes the opposite view, accepting**

⁴² Ryzhova, A. (2020). On the prospects for China' cooperation with the Arctic countries. IOP Conference Series: Earth and Environmental Science, 539(1), 012045. <https://doi.org/10.1088/1755-1315/539/1/012045>

⁴³ Koivurova T. et al. Op. cit.

⁴⁴ Passut, C. (2019, January 4). Alaska, Chinese Firms Extend Negotiations for LNG Export Project. Natural Gas Intelligence. Retrieved April 11, 2022, from <https://www.naturalgasintel.com/alaska-chinese-firms-extend-negotiations-for-lng-export-project/>

⁴⁵ Izok Corridor. (n.d.). MMG. Development Projects. Retrieved April 10, 2022, from <https://www.mmg.com/our-business/development-projects/>

⁴⁶ Ryzhova, A. (2020). On the prospects for China' cooperation with the Arctic countries. IOP Conference Series: Earth and Environmental Science, 539(1), 012045. <https://doi.org/10.1088/1755-1315/539/1/012045>

only the division of states into «Arctic» and «non-Arctic»⁴⁷, which emphasizes the exclusive rights of the Arctic countries to manage the region and limits the possibility of intervention in the region by other states.

Despite a divergence in the positions of Russia and China, cooperation continues and intensifies each year. To strengthen interaction between the states, **the Working group on cooperation in the Arctic was established in 2017**, which operates on a permanent basis. It holds regular meetings of the parties to discuss opportunities for economic and scientific cooperation between the countries. In 2022, Russia and China signed **the Joint Statement on International Relations Entering a New Era and Global Sustainable Development**⁴⁸, which stressed the need to deepen cooperation in the Arctic and joint development of Arctic routes.



Production of liquefied natural gas

In 2013, the Russian company NOVATEK and the Chinese CNPC (China National Petroleum Corporation) began cooperating on the Yamal LNG project. As a part of the project, an integrated gas treatment and liquefaction plant consisting of three main process lines with a total design capacity of 16.5 million tons per year, LNG storage tanks, a seaport and an airport were built. In 2018, the Arctic LNG-2 was launched, which also involves Chinese capital (CNPC

- 10% and China National Offshore Oil Corporation - 10%). By the end of 2021, the project was ready for 59%. As a part of the project, three LNG production lines are to be built⁴⁹.

Both projects meet several UN Sustainable Development Goals: the creation of special reinforced ice-class tankers Arc7 and the use of gravity-type foundations during construction of Arctic LNG-2 correspond to SDG 9 - Industry, Innovation and Infrastructure. Moreover⁵⁰, and both projects serve SDG 7 - Affordable and Clean Energy and SDG 13 - Climate Action, since they set goals to increase energy efficiency through improved gas turbines, flue gas heat recovery, a gradual switch from gas to hydrogen, development of carbon capture and storage technologies, assessment of the wind potential of the Yamal Peninsula to further built a wind farm serving the needs of Yamal LNG⁵¹.

⁴⁷ TASS. (2020). Russia has no intention of delegating responsibility for the Arctic to other countries – envoy. Retrieved April 26, 2022 from <https://tass.com/politics/1168111>

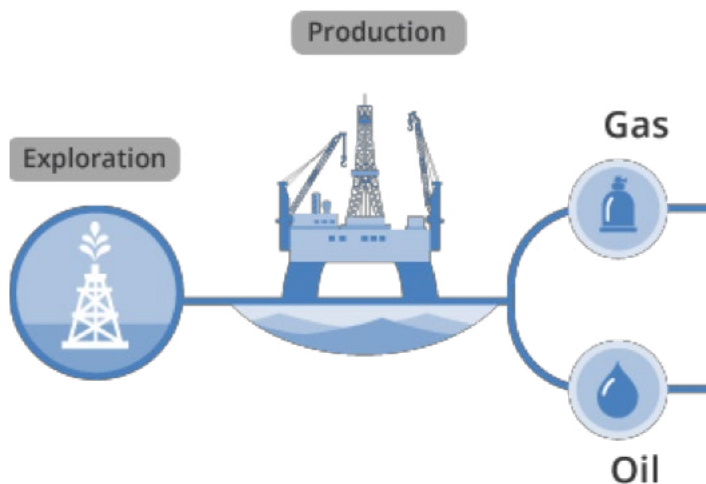
⁴⁸ Official Internet Resources of the President of Russia. (2022). Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development. Retrieved April 26, 2022 from <http://kremlin.ru/supplement/5770>

⁴⁹ Novatek. (n.d.). Business : Arctic LNG 2 Project. Retrieved April 26, 2022 from <https://www.novatek.ru/ru/business/arctic-lng/>

⁵⁰ Timchenko, M.E. (2021). NOVATEK sustainability report 2020. Novatek. Retrieved April 26, 2022 from <https://www.novatek.ru/en/development/>

⁵¹ Ibid

A number of environmental practices are also being implemented as part of Arctic LNG-2. An environmental and social action plan and an environmental and social management plan (describing management and monitoring procedures for relevant aspects of the project) are currently under development⁵².



Oil production and exploration

Due to the sanctions imposed on Russia, China has become its main technological partner in the oil and gas industry in the Arctic. In 2015, China Oilfield Services Limited (COSL), a subsidiary of China National Offshore Oil Corporation, Magadanmorneftegaz and Lysyanskmorneftegaz, joint ventures of Rosneft and Statoil ASA, signed a contract to drill two exploration wells in the Okhotsk Sea at the Magadan-1 and Lysyanskiy areas⁵³.

Gazprom Geologorazvedka is actively engaging the Nanhai VIII semi-submersible drilling platform (SSDR), which belongs to the Chinese oil service company COSL. In 2017, it was also delivered across the Arctic Ocean by the Chinese vessel Hai Yang Shi

You 278 to drill wells 2,400 m deep in the Kara Sea (at the Leningradsky GCF)⁵⁴. In 2018, this SSDR was engaged for exploration work in the Rusanovsky and Nyarmeisky subsoil areas in the Kara Sea⁵⁵; work with the SSDR also continued in 2020.

In addition, in 2020 PJSC Gazprom Neft transported 144 thousand tons of oil extracted in the Arctic to the Chinese port of Yantai via the Northern Sea Route (NSR)⁵⁶.

⁵² Arctic LNG-2. (2020). The Arctic LNG 2 project. Environmental impact assessment, socio-economic environment, public health. Retrieved April 26, 2022 from https://arcticspg.ru/ustoychivoe-razvitie/raskrytie-informatsii/Arctic%20LNG%20%20NTS%20v3_final%20report_RUS_clean.pdf?yclid=I28tk8rfa3

⁵³ Oil and capital. (2015). China Oilfield Services Limited will perform drilling within the framework of the Rosneft and Statoil project in the Sea of Okhotsk. Retrieved April 26, 2022 from <https://oilcapital.ru/news/upstream/02-09-2015/china-oilfield-services-vypolnit-burenie-v-ramkah-proekta-rosnefti-i-statoil-v-okhotskom-more>

⁵⁴ Ban'ko, Yu. (2017). China Oilfield Services Limited has extended a helping hand to Gazprom Geologorazvedka LLC. Arctic TV. Retrieved April 26, 2022 from <https://xn----7sbhwj3brd.xn--p1ai/news/pro-neft-i-gaz-18/kompaniya-china-oilfield-services-limited-protyanula-ruku-pomoshi-ooo-gazprom-geologorazvedka>

⁵⁵ Neftegaz.ru. (n.d.). On the way to the Kara Sea. Drilling platforms Arctic and Nanhai VIII left the port of Murmansk. Retrieved April 26, 2022 from <https://neftegaz.ru/news/Geological-exploration/199847-na-puti-k-karskomu-moryu-burovye-platformy-arkticheskaya-i-nanhai-viii-vyshli-iz-porta-murmansk/>

⁵⁶ Reuters. (2020). Russia's Gazprom Neft sends its first oil cargo to China via Arctic route: Commodities News. Retrieved April 26, 2022 from <https://www.reuters.com/article/us-russia-oil-gazpromneft-china-idUSKCN24E1X6>



Transportation and Logistics

Joint work in this area as well as in the field of science is based on the **«Concept of the action Plan to promote the joint Construction of the Silk Road Economic Belt and the Maritime Silk Road of the XXI Century»** from 2015, which implies the involvement of China in the Arctic region through the Russian northern routes. This document created the basis for the integration of logistics, research and environmental projects of the two countries⁵⁷.

In the field of sustainable shipping along the

Northern Sea Route and the Polar Silk Road, China identifies three main areas of activity: 1) Arctic research to build expertise in navigation and understanding of these seas, 2) China's participation in the governance of Arctic shipping (for example, in the International Maritime Organization), and 3) striving to balance the economic and climatic components of navigation, including through consideration of the risks of accidents and increased pressure on the Arctic seas ecosystem.

In 2015, the Ministry of the Russian Far East and Arctic Development and the State Committee for Development and Reform of the People's Republic of China signed **an agreement on cooperation on the Northern Sea Route**⁵⁸. On June 20, 2017, the State Oceanographic Administration and the National Development and Reform Committee of China jointly published **the One Belt, One Road Maritime Cooperation Concept**, according to which it was proposed to add another route, via the Arctic Ocean, to the «traditional» China-European routes⁵⁹. On December 8 of the same year, during the first loading of LNG at the Yamal plant, Russian President Vladimir Putin noted: «The Silk Road has reached all the way to the North. We should combine it with the Northern Sea Route, and we will have what we need, and the Northern Sea Route will become the Silk Road⁶⁰».

In addition, an agreement was signed in 2019 between NOVATEK, China COSCO SHIPPING Corporation Limited, Sovcomflot and the Silk Road Fund to establish the Maritime Arctic Transport⁶¹ enterprise. The company's activities are aimed at creating ice-class tankers and ensuring safe year-round transportation of LNG from the Yamal LNG and Arctic LNG-2 projects and other current NOVATEK projects. In these areas, the states are striving to fulfill SDG 9 - Industrialization, Innovation and Infrastructure.

⁵⁷ Kolzina, A. L., Mindubayeva, A.A. «Polyarniy Shelkoviy Pyt'» kak sfera strategicheskogo partnerstva Rossiyskoy Federatsii i KNR [The Polar Silk Road] as a sphere of strategic partnership between the Russian Federation and the People's Republic of China]. Bulletin of the Udmurt University, 4,(2),186-195.

⁵⁸ Hsiung C. The Emergence of a Sino-Russian Economic Partnership in the Arctic // The Arctic Institute. 19.05.2020. Retrieved April 26, 2022 from <https://www.thearcticinstitute.org/emergence-sino-russian-economic-partnership-arctic/>

⁵⁹ Kolzina, A. L., Mindubayeva, A.A. Op. cit.

⁶⁰ The BRICS National Research Committee. (2017). Putin: Russia and China will jointly make the Northern Sea Route Silk. Retrieved April 26, 2022 from <https://www.nkibrics.ru/posts/show/5a39d5a062726903f43b0000>

⁶¹ Novatek. (2019). NOVATEK, COSCO SHIPPING, Sovcomflot and the Silk Road Foundation have signed an agreement regarding Arctic Marine Transport. Retrieved April



Scientific cooperation

Currently, cooperation in this area is based on a number of documents, such as **the 2018 Memorandum of Understanding on Trade in Services Cooperation**, which covers joint tourism, science, and education. China and Russia have established several scientific centers for joint Arctic research. In 2019, as part of the International Arctic Forum the Arctic - Territory of Dialogue, **the Arctic Research Center was established**, whose activities are aimed at develop-

ing bilateral relations between Russian and Chinese research centers, including strengthening cooperation between the Shirshov Institute of Oceanology of the RAS and the Qingdao National Laboratory for Marine Science and Technology. On the basis of the Center the research on effects of climate change on the Arctic, ice quality, changes in Arctic ecosystems, on geological and biogeochemical is conducted⁶², which contributes to the achievement of SDG 13 - Climate Action, SDG 14 - Life Below Water.

As part of the Maritime Forum at Jilin University and the Russian Academy of Military Sciences, **a Russian-Chinese research center** was established to develop and implement the «Ice Silk Road» concept⁶³. Research activities of the center are focused on the issues of Arctic shipping and the use of advanced developments in the field of logistics (SDG 9 - Industrialization, Innovation and Infrastructure, SDG 13 - Climate Action, SDG 14 - Life Below Water). It is also engaged in the development of Arctic monitoring systems and research as well as it prepares transport corridor projects. The Russian-Chinese Polar Silk Road Development Fund was established to provide material support for this research center and research⁶⁴.

In recent years, several agreements on joint scientific activities of Russian and Chinese institutes were signed. For example, since 2016, **the Russian-Chinese Polar Engineering and Research Center** has been operating in cooperation with the **Far Eastern Federal University (FEFU) and Harbin Polytechnic University** (KHPU, China). The Center implements applied projects for the industrial development of the Arctic, including the development of ice-resistant platform structures for the Arctic zone of the Russian Federation and the Yellow Sea shelf, conducts research on the durability of concrete in the polar zone, reliability of engineering structures and ice loads on ships⁶⁵ (SDG 9 - Industrialization, Innovation and Infrastructure, SDG 11 - Sustainable Cities and Communities).

⁶² P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences. (2019). Russia and China will start joint research in the Arctic. Retrieved April 26, 2022 from <https://ocean.ru/index.php/novosti-left/novosti-instituta/item/1311-rossiya-i-kitaj-v-arktike>

⁶³ Ibid

⁶⁴ Mit'ko, V. B., Minina, M. V. (2019). Rossiysko-kitayskoe sotrudnichestvo v Arktike i bezopasnost' morskoy deyatel'nosti [Russian-Chinese cooperation in the Arctic and maritime security]. Eurasian Integration: economics, Law, Politics, 2, 69-78.

⁶⁵ Interfax. (2016). Russia and China have established a research center for industrial development of the Arctic. Retrieved April 26, 2022 from <https://www.interfax.ru/russia/530393>⁶⁶ Pilot National Laboratory for Marine Science and Technology. (n.d.). Pilot National Laboratory for Marine Science

The intensification of scientific cooperation between Russia and China can be observed in the growing number of joint expeditions. For example, in 2016, **a large-scale expedition was conducted under the supervision of the Chinese Arctic and Antarctic Administration with the support of the State Oceanic Administration of the PRC and the Russian Academy of Sciences.** The expedition lasted for over a month and involved scientists from the First Institute of Oceanography of the State Oceanic Administration (PRC) and the Laboratory of Geochemistry of Sedimentary Processes at the Ilyichev Pacific Oceanological Institute of the Far Eastern Branch of the Russian Academy of Sciences. During the expedition, scientists conducted a joint analysis of marine geology, flora and fauna, and the chemical composition of water in the Arctic region (SDG 13 - Climate Action, SDG 14 - Life Below Water, SDG 15 - Life on Land, SDG 17 - Partnerships for the Goals). This study emphasized the importance of bilateral relations between Russia and China to implement joint projects aimed at developing a unified approach to Arctic development and management with little environmental damage⁶⁶.

Lectures and joint events are also held, such as the roundtable **Sino-Russian Cooperation in the Arctic: Opportunities and Limitations**, which took place in March 2022 and was led by the Russian Council on Foreign Affairs (RIAC) and the Chinese Academy of Social Sciences (CASS)⁶⁷. The event was dedicated to the prospects of cooperation between Moscow and Beijing in the Arctic, finding a common approach to developing the region, and identifying possible risks. Researchers from the Center for the Study and Forecasting of Russian-Chinese Relations of the Institute of the Far East of the Russian Academy of Sciences, Dalian Maritime University, St. Petersburg State University (SPbSU) of the Institute of Ecological Civilization of the CAON participated in the round table as experts. Such joint events contribute to academic exchange and the development of applied projects thus achieving a number of UN SDGs: SDG 9 - Industrialization, Innovation and Infrastructure, SDG 13 - Climate Action, SDG 14 - Life Below Water.

In addition, according to a statement by Ambassador for Special Assignments of the Ministry of Foreign Affairs of Russia N. Korchunov, the Chinese side is interested in **the construction of the Arctic station «Snowflake»**⁶⁸, where it is planned to conduct research, Arctic monitoring, develop and introduce technologies in various fields, primarily regarding climate change⁶⁹.

Cooperation between universities is also flourishing. Universities of the Arctic regions of Russia establish contacts and maintain them with universities in China through research projects and student and academic exchange

and Technology (Qingdao). Retrieved April 26, 2022 from <http://www.qnlm.ac/en/page?a=1&b=2&c=224&d=2&e=1&p=detail>

⁶⁷ Russian International Affairs Council. (2021). Russian and Chinese Experts Discuss Development of Bilateral Cooperation in the Arctic. Retrieved April 26, 2022 from <https://russiancouncil.ru/news/rossiyskie-i-kitayskie-eksperty-obsudili-razvitie-dvustoronnego-sotrudnichestva-v-arktike/>

⁶⁸ RIA News. (2021). The Foreign Ministry talked about China's interest in cooperation in the Arctic. Retrieved April 26, 2022 from <https://ria.ru/20210601/arktika-1735043127.html>

⁶⁹ Arctic Council. (n.d.). The Snowflake International Arctic Station – A hub for energy innovation and cultural exchange. Retrieved April 26, 2022 from <https://arctic-council.org/news/the-snowflake-international-arctic-station-a-hub-for-energy-innovation-and-cultural-exchange/>

⁷⁰ Ministry of Education of the Russian Federation. (n.d.). Joint educational projects with Chinese universities. Retrieved April 26, 2022 from <https://mininuniver.ru/international/china> ⁷¹ RIA News. (2019). The Chinese-Russian Institute named after Bauman opened in Harbin on the basis of KHPU. Retrieved April 26, 2022 from <https://ria.ru/20190227/1551403197.html>

⁷² MSU Faculty of Materials Sciences. (n.d.). MSU-PPI University in Shenzhen. Retrieved April 26, 2022 from <http://www.fnm.msu.ru/international/mgu-ppi/>

programs. For example, Minin University cooperates with Anhui State Pedagogical University⁷⁰. In addition, there are unique interuniversity projects: a joint Chinese-Russian Bauman Moscow State Technical University in China and the Bauman Moscow State Technical University⁷¹, and a joint MSU-PPI University in Shenzhen based on the Beijing Polytechnic Institute⁷².

Tourism

Chinese tourism in the Russian Arctic has been gaining in. Since 2008, the Chinese tourist company Polar Beauty (Jizhimei) has been organizing regular flights to the North Pole in cooperation with the international agency Poseidon Arctic Voyages, using the Russian nuclear-powered icebreaker «50 Years of Victory»⁷³. Polar Beauty is growing rapidly, and by now the company has carried out tours for 2,000 people, mostly Chinese, making up the largest Chinese tourist company in the Arctic⁷⁴.



Chinese tourists show interest in the unique nature of the Arctic, which does not exist in China. Therefore, prospects of the Arctic tourism seem to be promising for the both sides⁷⁵. In 2018, the Russian delegation headed by the deputy head of the Federal Agency for Tourism visited China in order to consider possible ways of deepening tourism cooperation and developing a mechanism for cooperation in the tourism market⁷⁶ (SDG 8 - Decent Work and Economic Growth, SDG 9 - Industrialization, Innovation and Infrastructure).

3. Prospects for Russian-Chinese cooperation in the field of sustainable development of the Arctic region

Despite the intense political situation and limited opportunities for multilateral cooperation in the Arctic, Russia stands for continuing the dialogue between countries and institutions in the region⁷⁷. Therefore, there are great opportunities for cooperation between Russia and China in the field of sustainable development of the Arctic region.

⁷³ Kiselyov, D. V. Arkticheskiy turizm v kontekste polyarnoy politiki KNR [Arctic tourism in the context of China's Polar Policy]. History and culture of China. Society and the state in China, 44, 300–306.

⁷⁴ Xingzhi Exploring Group. (n.d.). Outbound Tourism. Retrieved April 26, 2022 from <http://en.exploring.cn/outbound-tourism/>

⁷⁵ TASS. (2018). The Federal Tourism Agency said that China is interested in increasing the flow of Chinese tourists to the Arctic. Retrieved April 26, 2022 from https://tass.ru/obschestvo/5403961?utm_source=google.com&utm_medium=organic&utm_campaign=google.com&utm_referrer=google.com

⁷⁶ Ibid

⁷⁷ International Arctic Forum. (2022). Discussion of Current Arctic Agenda for Region's Inhabitants to Continue during Russia's Chairmanship of Arctic Council. Retrieved April 26, 2022 from <https://forumarctica.ru/news/obsuzhdenie-aktualnoj-arkticheskoy-povestki-v-interesah-zhitelej-regiona-prodolzhitsja-v-ramkah-predsedatelstva-rossii-v-arkticheskom-sovete/>

Several agreements and memorandums on cooperation in the Arctic between Russia and China have been already established and there is a Russian-Chinese working group on cooperation in the Arctic acting under the Russian-Chinese intergovernmental commission on trade and economic cooperation⁷⁸. Nevertheless, **there is a lack of a complete institutional framework which remains a substantial obstacle to strengthening cooperation between the countries.** Namely, a framework agreement would outline the main areas of cooperation and tasks for each aspect.

Besides, the promotion of Russian-Chinese cooperation in the Arctic requires information support for possible areas of Russian-Chinese partnership in the region, e. g. the creation of an Internet portal in Chinese with up-to-date information on current projects and possible areas for investments.

The accumulated experience of cooperation between Russia and China in the Arctic region presents significant potential for expanding the portfolio of joint projects. This could be done mostly on a bilateral basis, as China is not a member or observer of most international platforms in the Arctic region where Russia takes part, e. g. the Barents/Euro-Arctic Council. Thereby, the following areas of cooperation where there is already some groundwork for joint activities can be opted as the promising ones:

- development of Arctic resources;
- transport and logistics;
- tourism;
- science and education;
- environmental protection and combating climate change.

Development of Arctic resources

The development and exploitation of natural resources in the Russian Arctic zone is one of the key areas of cooperation. At present, the Yamal LNG and Arctic LNG-2 projects are an important basis for cooperation in this sphere, which can be developed by attracting Chinese investment in new Arctic offshore drilling and LNG and oil production projects (such as the Vostok Oil project⁷⁹). In this case, the qualitative elaboration of the regulatory and legal framework for successful investment and technological cooperation between Russian and Chinese companies should also be taken into consideration.

The successful experience of using the Chinese Nanhai VIII semi-submersible drilling platform (SSDR) for drilling wells for oil production demonstrated the viability of this area of cooperation. Therefore, when China develops new SSDRs, the technological collaboration between the two countries can be continued. In addition, the environmental side of the projects should be noted, so as not to cause significant damage to the Arctic marine ecosystems. Therefore, the parties should introduce innovative technologies for resources exploration and mining (SDG 14 - Life Below Water).

⁷⁸ Trade Representation of the Russian Federation in the People's Republic of China. (n.d.). Russian-Chinese intergovernmental commissions. Retrieved April 26, 2022 from <http://www.russchinatrade.ru/ru/ru-cn-cooperation/comission-new>

⁷⁹ Vostok Oil is a project of PJSC Rosneft aimed at combining the largest oil fields into a single infrastructure, which will facilitate their development and transportation.

Transport and logistics

The role of the Northern Sea Route and the Polar Silk Road as important transport hubs will only increase which contributes to the logistical accessibility of the region. Therefore, in addition to the existing enterprise Sea Arctic Transport LLC, it is possible to create other joint projects with China aimed at improving the region's infrastructure and transport accessibility. Implementation of such initiatives also requires a thoroughly elaborated regulatory and legal framework, which would be understandable and attractive to Chinese investors. Providing informational support and creating the proper conditions (for example, attracting specialists with knowledge of the Chinese language) in the ports of the Russian Arctic zone can increase its attractiveness for Chinese shipowners. Also, the creation of an expert scientific group, which would work together with Marine Arctic Transport LLC to study the load on Arctic ecosystems of ice-class tankers being created, could become an important component of sustainable cooperation between Russia and China in the Arctic (SDG 14 - Life Below water, SDG 15 - Life on Land).

In addition, both sides pay attention to cooperation in the field of rescue activities, which was noted at the 26th regular meeting of Russian and Chinese heads of government in 2021⁸⁰, and therefore it is possible to sign a corresponding Russian-Chinese agreement. It is also possible to continue working on a number of projects for the development of PSR. Since PSR can play a key role in socio-economic development (SDG 9 - Industry, Innovation and Infrastructure) of the northern regions of Russia, which are heavily dependent on food and commodity supplies, creation of a joint working group to work on the sustainability of the routes could have far-reaching implications.

Tourism

Even though certain COVID restrictions remain in both countries, the development of special full-fledged tourist programs by the Federal Agency for Tourism for Chinese tourists may become promising. Thus, the attractiveness of Russia as a tourist destination for Chinese citizens can be increased, and locals in the Murmansk and Arkhangelsk regions can be provided with new jobs (SDG 8 - Decent Work and Economic Growth). Creating an information portal about the Arctic region for Chinese tourists in Chinese, which would also contain detailed information about tourist opportunities, could increase the attractiveness of this tourist destination for Chinese citizens. In addition, creation of a simplified accommodation reservation system for Chinese tourists or its integration with the already existing Russian online hotel reservation services (e.g., Ostrovok.ru⁸¹) seems crucial. Also, due to the withdrawal of Visa and Mastercard payment systems from Russia, it is important to expand the use of the Chinese Union Pay payment system in the Arctic regions of Russia to book tours.

Considering the fragility of Arctic ecosystems, it is necessary to pay great attention to environmental friendliness and sustainability of tourism, with a focus on preservation and recreation (SDG 11 - Sustainable Cities and Communities, SDG 9 - Industry, Innovation and Infrastructure).

⁸⁰ The Russian Government. (n.d.). Joint communique on the results of the twenty-sixth regular meeting of the Heads of Government of Russia and China. Retrieved April 26, 2022 from <http://static.government.ru/media/files/jLtBZyRLWHH1QJ3JR3nEiAnjtydeNJEc.pdf>

⁸¹ Ostrovok. ru. (n.d.). Booking hotels. Retrieved April 26, 2022 from <https://ostrovok.ru/?sid=0c90f7f3-c51e-4fb8-be84-99b1d8bf748b>



Collaborative Russian-Chinese events on the culture of indigenous peoples of the Arctic region appear an attractive area of cooperation, since support for indigenous peoples is the part of both the Russian agenda of the Arctic Council presidency and one of the China's priorities in the Arctic⁸², as stated in the White Paper.

Science and education

Cooperation between research centers seems to be the most critical area of Sino-Russian relations, since the countries have a great deal of groundwork and interest in this area. Thus, the years 2020-2021 were declared as the years of Russian-Chinese scientific, technological, and innovative cooperation⁸³. Possible joint research projects can be launched in the field of climate change in the Arctic, Arctic flora and fauna. They can be carried out both within the Arctic Council working groups (Arctic Monitoring and Assessment Programme, Sustainable Development Working Group, Protection of the Marine Environment Working Group), and on the basis of the Arctic research station «Snowflake» (SDG 13 - Climate Action; SDG 14 - Life below water; SDG 15 - Life on land) which is currently under construction.

The University of the Arctic and the Russian-Chinese Arctic Research Center also serve as possible platforms for cooperation in science, as well as the establishment of Russia-China scientific centers in the Arctic seems promising. The expansion of the number of joint scientific expeditions is in demand, which can be conducted in the field of sea ice melting forecasting thus creating crucial scientific reference material in the light of the implementation of the NSR project.

In addition, the exchange of experts in the field of sustainable development of the Arctic region should be stimulated, which can be implemented as an inter-university exchange (via Shirshov Institute of Oceanology of the Russian Academy of Sciences, Bauman Moscow State Technical University, St. Petersburg State University, Dalian University of Information Technology, Harbin Engineering University, Qingdao National Laboratory for Marine Science and Technology, and Harbin Polytechnic University). Also, in order to attract the attention of the general public and raise awareness about the Arctic region in China, it is possible to create joint online courses in Chinese (SDG 4 - Quality Education).

Protecting the environment and combating climate change

Cooperation on the climate agenda also appears to be a priority in the context of Russia's and China's commitments under the Paris Agreement. In this direction, attention should be paid to the creation of a joint system for monitoring black carbon emissions in the region and its concentrations in the driving layer of the atmosphere, as well as further study of its impact on the Arctic ecosystems and climate (SDG 13 - Climate Action).

Another promising area could be the research of microplastics pollution in the Arctic region and its control. The research centers of both countries can prepare a joint report on the current level of microplastics pollution in the Arctic Ocean and the Arctic seas. Based on the data obtained, it is possible to implement

⁸² Arctic Council. (n.d.). Russia's chairmanship in the Arctic Council in 2021-2023. Retrieved April 26, 2022 from <https://www.arctic-council.org/ru/about/russian-chairmanship-2/>

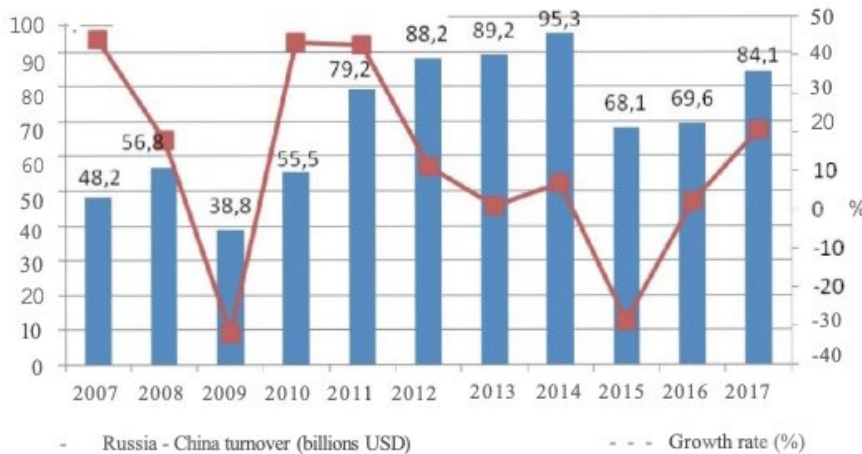
⁸³ Ministry of Education of the Russian Federation. (n.d.). Action plan for the Years of Russian-Chinese Scientific, Technical and Innovative Cooperation in 2020-2021. Retrieved April 26, 2022 from <https://minobrnauki.gov.ru/upload/iblock/f65/f65b5dde86f146d4a55b47a09e4a5d1.pdf>

an initiative for the collection and disposal of marine debris and microplastics (SDG 14 - Life Below Water).

It is also important to cooperate on biodiversity conservation in the Arctic region. It can be carried out within the working group of the Arctic Council on the Conservation of Arctic Flora and Fauna, in which China is already actively involved (SDG 14 - Life Below Water, SDG 15 - Life on Land). It is also important to bring environmental cooperation to multilateral platforms, such as BRICS and the SCO, in order to draw international attention to important issues in the Arctic and the necessary actions for its sustainable development.

An important aspect of cooperation in environmental protection is the establishment of the principle of «enhanced environmental responsibility» by states under Art. 234 of the UN Convention on the Law

of the Sea, due to the fragile nature of Arctic ecosystems. Since at present only operators, i.e., companies operating in the Arctic, are responsible for damage to the environment, it is necessary to expand the number of responsible actors and, first and foremost, include states with access to the Arctic Ocean. China has successful experience in organizing such projects within the country, so with its help a new regime of increased climate responsibility can be formed.



Supporting indigenous peoples and human capital development

The implementation of joint projects with China to develop human capital and improve the living standards of the indigenous population of the Arctic is one of the promising areas of joint activities. Cooperation between states and their companies requires the provision of professional support for translators and interpreters with knowledge of the Chinese language. It will create new jobs and increase employment in Russia's northern regions. For example, Yakutia lacks qualified personnel who could provide interaction with China at the highest level. In this regard, training Chinese specialists seems to be a logical way not only to develop human capital in the region, but also to qualitatively improve cooperation between the states. In addition, Chinese investment in projects to develop the region's infrastructure, provide the indigenous population with energy and communications, and develop overland transportation routes could contribute significantly to improving the living conditions of the indigenous peoples of the Arctic.