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Kopra, Sanna; Wall, Colin

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A NEW CLIMATE: THE IMPACT OF RUSSIA'S WAR ON A MELTING ARCTIC

Dr. Sanna Kopra and Colin Wall

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Authors

Dr. Sanna Kopra and Colin Wall

Editorial team

Theresa Caroline Winter
Global Themes Division
Global Security Hub

Adam DuBard
Regional Office North America

Contact

Phone +49 30 220126-34

Fax +49 30 690881-02

Email service@freiheit.org

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1. Introduction

With climate change, globalization, and increased human activity in the northernmost parts of the globe, the strategic importance of the Arctic region has increased. In addition to the eight Arctic states that possess lands and waters above the Arctic Circle at 66° 32" N (Canada, Denmark via Greenland, Finland, Iceland, Norway, Russia, Sweden, and the United States), various non-Arctic states and stakeholders have become interested in the region over the past decade. As a result, regional security dynamics are in flux.

Moreover, Russia's illegal attack on Ukraine in February of 2022 has made clear that the Arctic is not an exceptional "zone of peace" in international relations, as portrayed by Mikhail Gorbachev in his historic speech in Murmansk in 1987.¹ Although the war in Ukraine has not spread to the Arctic, it will undoubtedly have a lasting impact on regional geopolitics and cooperation, not least due to the decisions by Finland and Sweden, traditionally neutral Arctic countries, to join NATO. This report reviews the contemporary security dynamics in the Arctic, with particular attention to climate change and the impact of Russia's war in Ukraine.

2. The Melting of the Arctic: Impact on Regional Dynamics and Security

The Arctic region is often viewed as a key barometer of the ongoing global ecological crisis. In the High North, climate change has proceeded nearly four times faster than other parts of the globe since 1979,² which has already led to a wide loss of sea ice and glacier mass and thawing of permafrost.³ For the unique Arctic biodiversity, the melting of ice and snow, soaring temperatures, rising sea levels, contamination and acidification of the ocean, and increased human activity cause unprecedented stress. Consequently, the ongoing changes in Arctic terrestrial, marine, and other aquatic systems cause a significant decline in species richness and harms traditional ways of life of the many Arctic communities, both indigenous and non-indigenous.⁴ This change can be expected to intensify in the coming years as a recent study estimates that the entire summer ice cover in the northernmost Arctic Ocean may be lost by 2035.⁵ Moreover, new data reveals that temperatures in the Barents Sea region are increasing inconceivably fast, up to seven times faster than the global average. Researchers warn that such extraordinary heating is likely to trigger extreme weather in North America, Europe, and Asia and should be considered an "early warning" signal of upcoming changes in the entire Circumpolar Arctic.⁶

Human Security in the Arctic

The latest Intergovernmental Panel on Climate Change (IPCC) report clarifies that climate change causes an unprecedented threat to human well-being around the globe. The Arctic, which is home to four million people (of which around 10 percent are Indigenous peoples), is one of the regions where high human vulnerability to climatic hazards can be identified due to "poverty, governance challenges and limited access to basic services and resources, violent conflict and high levels of climate-sensitive livelihoods (e.g., smallholder farmers, pastoralists, fishing communities)."⁷

As Arctic regions differ substantially in terms of population size, wealth, and the structure of settlements, among other things, the human security impact of climate change is not evenly spread in the High North. For many Indigenous communities, the melting of the Arctic poses an existential threat by causing irreparable harm to their traditional cultures and livelihoods: Thinning sea ice makes transportation and hunting over ice dangerous, changing weather conditions lead to mass starvation of reindeer, and permafrost thawing damages

- 1 Mikhail Gorbachev, "The Speech in Murmansk at the ceremonial meeting on the occasion of the presentation of the Order of Lenin and the Gold Star Medal to the city of Murmansk", October 1, 1987, https://www.barentsinfo.fi/docs/gorbachev_speech.pdf.
- 2 Mika Rantanen et al. "The Arctic has Warmed Nearly Four Times Faster Than the Globe Since 1979", *Communications Earth & Environment* 3, no. 168 (August 11, 2022). <https://doi.org/10.1038/s43247-022-00498-3>.
- 3 U.S. Global Change Research Program, "Our Changing Climate – KM 7: Arctic" in *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment Volume II*, ed. D. R. Reidmiller et al. (USGCRP, Washington, DC, 2018) <https://nca2018.globalchange.gov/chapter/2/#key-message-7>.
- 4 CAFF, *Arctic Biodiversity Assessment 2013: Status and Trends in Arctic Biodiversity*, ed. Hans Meltofte (Conservation of Arctic Flora and Fauna, Akureyri, 2013) <https://www.caff.is/assessment-series/arctic-biodiversity-assessment/233-arctic-biodiversity-assessment-2013>.
- 5 Maria-Vittoria Guarino et al. "Sea-ice-free Arctic During the Last Interglacial Supports Fast Future Loss", *Nature Climate Change* 10, 928-932 (August 10, 2020) <https://doi.org/10.1038/s41558-020-0865-2>.
- 6 Damian Carrington, "New Data Reveals Extraordinary Global Heating in the Arctic", *The Guardian* online, June 15, 2022, <https://www.theguardian.com/environment/2022/jun/15/new-data-reveals-extraordinary-global-heating-in-the-arctic>.
- 7 IPCC, *Climate Change 2022: Impacts, Adaptation and Vulnerability*, Working Group II Contribution to the IPCC Sixth Assessment Report of the Intergovernmental Panel on Climate Change, ed. H.-O. Pörtner et al, Cambridge University Press. In Press, 2022, https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_FullReport.pdf.

homes and infrastructure, for instance. Furthermore, Russian Arctic regions tend to have less favorable conditions for human development than Nordic and North American regions.⁸ At the same time, many Arctic communities and residents benefit from new economic opportunities in extractive industries and tourism.⁹

Resource Extraction

The Arctic is one of the remaining regions with vast potential for oil and gas extraction and mineral exploration. The loss of sea ice makes these resources increasingly accessible.

Russia has treated climate change, and the access it allows, as an opportunity for enrichment. Some calculations indicate that approximately 20 percent of Russia's GDP is generated in the Arctic and sub-Arctic region; 75 percent of its oil reserves, and 95 percent of gas reserves, are located in the north.¹⁰ It has initiated, often with the aid of foreign funding, many oil and gas extraction projects in the Arctic. In 2019, for example, 81.7 percent of Russia's natural gas was extracted in the Yamalo-Nenets Autonomous Region alone.¹¹ The most successful endeavor is Yamal LNG, a \$27 billion megaproject that shipped its first cargo in December 2017. Its output played a role in increasing overall Russian liquid natural gas (LNG) exports by a factor of three between 2010 and 2020.¹² Major forthcoming projects include Arctic LNG-2, Arctic LNG-1, and Vostok Oil.¹³ Russia views its Arctic oil and gas development as a core strategic interest, especially as the output of Siberian fields declines.¹⁴ The Russian Arctic also contains substantial deposits of minerals like nickel and copper.

In the years before the full-scale invasion of Ukraine, the Kremlin began to modify its rhetoric concerning climate change, shifting from denial to a reluctant acknowledgment of climate change, paired with modest commitments to reduce carbon emissions.¹⁵ And yet the reality has not quite matched the rhetoric: Russia's Energy Strategy to 2035 actually calls for an increase in Russian fossil fuel production, combustion, and exports, including a 50 percent increase in natural gas production from 2019 numbers.¹⁶ In short, before the war, Russia was likely to continue pursuing its Arctic resource extraction projects.

Arctic energy resources and minerals are also of interest to China, whose economic growth is dependent on heavy industry. Despite their historical distrust, China and Russia have intensified economic cooperation, especially since the Russian annexation of Crimea in 2014, when economic sanctions stopped Western investments in Russian Arctic energy and infrastructure projects. In 2013, the China National Petroleum Corporation invested in the Yamal LNG Project, and in 2016, China Silk Road Fund also joined the scheme. In 2017, "the Polar Silk Road" was added to Xi Jinping's flagship project, the Belt and Road Initiative, demonstrating the party-state's support for Arctic investments. And yet China's other investment plans in energy and infrastructure projects, mining, and tourism in Alaska, Canada, and Nordic countries have not been very successful. In the coming years, Chinese fishing vessels can be expected to sail to the Arctic waters. Having fished the nearby waters almost empty, large Chinese vessels have spread across the world's seas—some illegally. In addition to overfishing, their activity causes geopolitical, ecological, and humanitarian risks, as large Chinese vessels can fish on the coasts of Africa and South America in a week as much as local fishermen can catch in a year.¹⁷

Shipping

As a result of the thinning and shrinking of Arctic sea ice, three new main shipping lanes are opening in Arctic waters: The Northeast Passage, the Northwest Passage, and the Transpolar Sea Route. Of the three, the first is most likely to be a consideration in Arctic geopolitics.

As with resource extraction, Russia's ambitions for Arctic shipping have been high: President Putin has set a target that 80 million tons of goods should be shipped annually along the Northern Sea Route (NSR) by 2024.¹⁸ (The NSR is part of the Northeast Passage and a shipping route Russia contends is an internal passageway.) Although climate change is melting much of the permanent sea ice impeding access, these aspirations will still be difficult to achieve. Shipping is still only possible on a seasonal basis and, in 2021, only 35 million tons were shipped along the route. Overall, shipping along the NSR is not yet consequential for overall global

8 Solveig Glomsrød, Gérard Duhaime and Lulie Aslaksen (eds.), *The Economy of the North – ECONOR 2020*. Statistical Analyses 167. Statistics Norway, published May 20, 2021; last modified September 8, 2021 <https://oearchive.arctic-council.org/handle/11374/2611>.

9 Joan Nymand Larsen and Gail Fondahl (eds.), *Arctic Human Development Report: Regional Processes and Global Linkages*, Nordic Council of Ministers, 2014 <http://norden.diva-portal.org/smash/get/diva2:788965/FULLTEXT03.pdf>.

10 Heather A. Conley and Matthew Melino, *America's Arctic Moment: Great Power Competition in the Arctic to 2050* (Center for Strategic & International Studies, March 2020) 4, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/Conley_ArcticMoment_layout_WEB%20FINAL.pdf?EkVudAIPZnRPLwEdAIPO.GlpyEnNzInx,%20p.%204.

11 Ingerid M. Opdahl, "Enlisting Oil and Gas Companies for Russia's Arctic Development. Implementation in a Rent-Based Political Economy," *Post-Communist Economies*, February 6, 2022, <https://doi.org/10.1080/14631377.2022.2028476>.

12 Pat Davis Szymczak, "Russian LNG Aims High, Leveraging Big Reserves and Logistical Advantages," *Journal of Petroleum Technology*, September 1, 2021, <https://jpt.spe.org/russian-lng-aims-high-leveraging-big-reserves-and-logistical-advantages>.

13 Heather A. Conley et al, "Russia's Climate Gamble: The Pursuit and Contradiction of Its Arctic Ambitions", CSIS, September 2021, 24, https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/210924_Conley_Russia%27s_Climate_Gamble.pdf?PehRoHxLxSL_CzhQ8sl.ss00AwQeXAXF.

14 Nastassia Astrasheuskaya, "Russia makes its oil reserves work harder as output declines", *Financial Times* online, November 11, 2019, <https://www.ft.com/content/6225ff10-ee9d-11e9-a55a-30afa498db1b>.

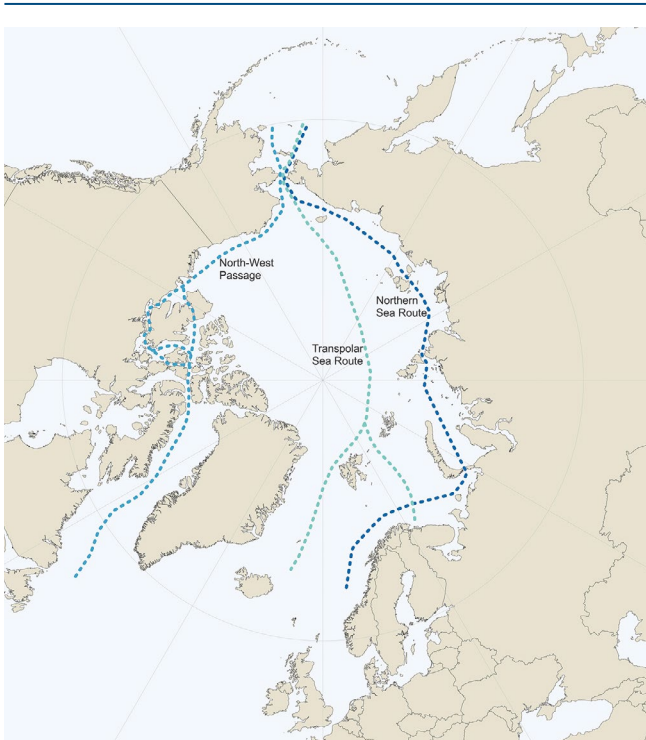
15 Heather A. Conley et al (n 13) 25-27.

16 Russian Federation, *Energy Strategy of the Russian Federation until 2035* (Moscow: June 2020), <http://static.government.ru/media/files/w4sigFOiDjGVDYT4lgsApssm6mZRB7wx.pdf>.

17 Ian Urbina, "How China's Expanding Fishing Fleet Is Depleting the World's Oceans", *Yale Environment 360*, August 17, 2020, <https://e360.yale.edu/features/how-chinas-expanding-fishing-fleet-is-depleting-worlds-oceans>.

18 Atle Staalesen, "Two aging oil tankers are breaking their way through Arctic sea-ice", *The Barents Observer*, July 10, 2022, <https://thebarentsobserver.com/en/industry-and-energy/2022/07/two-aging-oil-tankers-are-breaking-their-way-through-arctic-sea-ice>.

trade and may never be, according to some analysts.¹⁹ Nonetheless, the NSR remains one of Russia's flagship Arctic enterprises, and it plans to invest in new ports and other infrastructure.²⁰



Source: Arctic Centre, University of Lapland, <https://www.arcticcentre.org/EN/arcticregion/Maps/Seaways>

The right to use Arctic shipping lanes is important for China, which has renamed the series of planned Arctic shipping routes “the Polar Silk Road”. The NSR, which lies within Russia's exclusive economic zone, is of particular interest to China as it makes it possible to ship LNG and other natural resources from the Arctic to China, offers faster and shorter access to the European market, and diminishes China's “Malacca Dilemma.”²¹ Moreover, China is preparing for the use of the Transpolar shipping route as it would offer a genuinely international passage outside of Russian waters.²²

It is relatively clear that China's Arctic shipping fleet will grow significantly in the foreseeable future. In addition to China's Ukraine-built research icebreaker *Xuelong* (1994) and the first

domestically-built *Xuelong II* (2019), China aims to complete the design of its first heavy icebreaker by 2025.²³ Reportedly, China is also developing its first nuclear-powered icebreaker.²⁴ In the future, such heavy equipment will reduce China's dependence on the assistance provided by Russian icebreakers and enable the expansion of economic and research activities. Completing the new heavy ice-breaking vessels will also mean that China's ice-breaking capacity exceeds that of the United States: The United States Coast Guard has only two aging icebreakers. In August 2021, the Chinese Ministry of Transport published a proposal to start a pilot project on heavy icebreakers.²⁵ According to the document, the country aims to develop heavy icebreakers capable of sea rescue missions and a 100,000-ton semi-submersible heavy lift vessel. Since the report emphasizes the standardization and serialization of the design of heavy ice-breaking rescue vessels, it can be assumed that China aims to build several ships of the same type in the coming years. According to expert estimates, this means that China is preparing for increased use of Arctic shipping lanes and the growing exploitation of Russia's energy resources in the High North.²⁶ Despite their cooperative relationship so far, the extent to which Russia will tolerate Chinese presence in the region is not yet clear.

Arctic Governance

Recognizing the severity and global impacts of Arctic change, many non-governmental organizations, such as Greenpeace and the Parvati Foundation, have called for the creation of an Arctic Sanctuary without success. In the absence of an Arctic treaty similar to the one governing the Antarctic, the contemporary Arctic legal framework is composed of several international treaties and processes, such as the United Nations Convention on the Law of the Sea (UNCLOS), the United Nations (UN) climate convention, the UN Sustainable Development Goals, the UN Declaration on the Rights of Indigenous Peoples, the World Trade Organization as well as the International Maritime Organization (IMO) and its Polar Code. Currently, an international agreement on the conservation and sustainable use of marine biological diversity (Biodiversity Beyond National Jurisdiction treaty) is under negotiation at the UN.

In 1996, the Arctic Council, the key intergovernmental regional platform, was established in Ottawa, Canada. Composed of eight Arctic states and six indigenous peoples' organizations

19 Dr. Lawson W. Brigham, “Arctic Shipping Routes: Russia's Challenges and Uncertainties”, *The Barents Observer*, August 12, 2022, <https://thebarentsobserver.com/en/opinions/2022/08/arctic-shipping-routes-russias-challenges-and-uncertainties>.

20 “Construction of 12 Terminals, 153 Vessels Added to Northern Sea Route Development Plan”, Tass Russian News Agency, July 14, 2022, <https://tass.com/economy/1480193>.

21 Ian Storey, “China's Malacca Dilemma”, *The Jamestown Foundation*, (China Brief, April 12, 2006) Volume: 6 Issue: 8, accessed September 19, 2022, <https://jamestown.org/program/chinas-malacca-dilemma/>.

22 Mia Bennett, “The Arctic Shipping Route No One's Talking About”, *The Maritime Executive*, May 8, 2019, https://www.maritime-executive.com/editorials/the-arctic-shipping-route-no-one-s-talking-about?__ac_lkid=f4de-3e7-cc58-1ee817576cdcc99.

23 Polina Leganger Brønder, “China to build its third icebreaker”, *The Barents Observer*, December 21, 2010, <https://thebarentsobserver.com/en/arctic/2021/12/china-build-its-third-arctic-icebreaker>.

24 Thomas Nilsen, “Details of China's nuclear-powered icebreaker revealed”, *The Barents Observer*, March 21, 2019, <https://thebarentsobserver.com/en/arctic/2019/03/details-chinas-nuclear-powered-icebreaker-revealed>.

25 The Chinese Ministry of Transport, “交通运输部关于部救助打捞局开展重型破冰救助船研究等交通强国建设试点工作的意见” [Opinions of the Ministry of Transport on the Ministry's Salvage and Salvage Bureau to carry out research on heavy icebreaking rescue vessels and other pilot work for the construction of a strong transportation country] August 19, 2021, https://xxgk.mot.gov.cn/2020/jigou/zhghs/202110/t20211026_3623048.html.

26 Malte Humpert, “China to Build New Heavy Icebreaker and Lift Vessel for Arctic”, *High North News*, November 16, 2021, <https://www.highnorthnews.com/en/china-build-new-heavy-icebreaker-and-lift-vessel-arctic>.

(Aleut International Association, Arctic Athabaskan Council, Gwich'in Council International, Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North, and Saami Council), the Arctic Council seeks to "provide a means for promoting cooperation, coordination, and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic."²⁷ Thus, the council's mandate deliberately excludes military security – this was thought to be beneficial for a time as it offered an open communication channel between western Arctic states and Russia despite the latter's attack on Georgia in 2008 and the annexation of Crimea in 2014.²⁸ After Russia attacked Ukraine in early 2022, however, the other seven Arctic states paused their participation in the Arctic Council's official meetings. Over the years, the Arctic Council has accepted several non-state and state observers, including China, who have access to the council's activities but have no decision-making power. Although the EU's application for observer status has not been approved because of its dispute with Canada on seal product sales on the EU market, the European Commission has acted as an ad-hoc observer in the council since 2008.

According to the UNCLOS, the five Arctic coastal states – Canada, Denmark in respect of Greenland, Norway, Russia, and the United States (the Arctic Five) – enjoy extended sovereign rights on their exclusive economic zones of 200 nautical miles around their coasts. Although the Arctic five have succeeded in agreeing on many maritime boundary agreements, there are overlapping maritime claims among them.²⁹ In June 2022, Canada and Denmark ended their decades-long "Arctic Whisky War" and agreed to divide the Hans Island that sits between the two countries.³⁰ Canada and Russia have clearly overlapping jurisdictional claims to areas of the continental shelf beyond 200 nautical miles.³¹ Yet, there are no signs that these unsolved maritime disputes would lead to a conflict. According to the 2008 Ilulissat Declaration, the five coastal states are committed to "orderly settlement of any possible overlapping claims"³² via scientific and legal processes. In 2018, the Arctic Five, together with the EU, China, Japan, South Korea, and Iceland agreed on a legally binding agreement on preventing unregulated commercial fishing in the

Central Arctic Ocean until the sustainability of such activities can be guaranteed.

The (Re)militarization of the Arctic

After twenty years of functional collaboration and peaceful co-existence, the Arctic region has witnessed intensifying great power rivalry and the emergence of new influential players, especially China, during the past decade.

Russia

Russia militarizes its Arctic territories to secure its economic projects, defend its homeland (particularly its sea-based nuclear deterrent on the Kola Peninsula), and increase its capacity to project power from the Arctic into nearby areas – most significantly, the North Atlantic Ocean, through which the United States and Canada would transit to reinforce European NATO allies in a conflict. Climate change drives much of this: the increasing lack of sea ice functionally creates a new border that Moscow feels must be protected.

Russia has pursued this policy in a number of ways. It has refurbished, rebuilt, or expanded over fifty Soviet-era military installations, ranging from small radar installations to major military bases like the state-of-the-art Trefoil bases.³³ New radars and satellites increase capacity for early warning and situational awareness; fighter jets and missile defense systems grant increased capabilities to interdict and impose costs on adversaries. These developments are not uniformly spread: Russia's western Arctic is more militarized than the east, where it focuses primarily on air and maritime awareness.³⁴ In particular, Russia has strengthened its Northern Fleet, headquartered on the Kola Peninsula.³⁵ It is equipped with nuclear-powered submarines, air capabilities, coastal troops, ground forces, and surface ships with missiles, anti-submarine, and aircraft-carrying capabilities.³⁶ It has recently received new strategic submarines and will receive more.³⁷ Furthermore, Russia is also developing Arctic-specific military capabilities, tailored for a region that climate change has made harsher, such as drones, armed personnel carriers, and all-terrain vehicles.³⁸ Finally,

27 Arctic Council, "Declaration on the Establishment of the Arctic Council: Joint Communique of the Governments of the Arctic Countries on the Establishment of the Arctic Council", Ottawa, Canada, September 19, 1996, https://oarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00_Ottawa_1996_Founding_Declaration.PDF?sequence=5&isAllowed=y.

28 Kathrin Stephen, "An Arctic Security Forum? Please, No!" *The Arctic Institute*, May 26, 2016, <https://www.thearcticinstitute.org/arctic-security-forum-please-dont/>.

29 Andreas Østhagen & Clive H. Schofield, "The Arctic Ocean: Boundaries and Disputes", *The Arctic Yearbook*, 2021: 5-22. https://arcticyearbook.com/images/yearbook/2021/ScholarlyPapers/1_AY2021_Osthagen_Schofield.pdf.

30 Peter Beaumont, "Canada and Denmark end decades-long dispute over barren rock in Arctic", *The Guardian* online, June 14, 2022, <https://www.theguardian.com/world/2022/jun/14/canada-denmark-end-decades-long-dispute-barren-rock-arctic-hans-island>.

31 Viatcheslav Gavrilov, "Canada and the Russian Federation: Maritime Boundaries and Jurisdiction in the Arctic Ocean", *Arctic Review on Law and Politics*, Vol. 13 (2022): 219–231. <https://arcticreview.no/index.php/arctic/article/view/3233/6563>.

32 "The Ilulissat Declaration", Arctic Ocean Conference, Ilulissat, Greenland, May 27–29, 2008, <https://arcticportal.org/images/stories/pdf/Ilulissat-declaration.pdf>.

33 Matthew Melino and Heather A. Conley, "The Ice Curtain: Russia's Arctic Military Presence", CSIS, March 2020, <https://www.csis.org/features/ice-curtain-russias-arctic-military-presence>.

34 Ibid.

35 The fleet was elevated to a strategic command in 2014 and upgraded to a "military district" in 2021, Source: Thomas Nilsen, "Putin heightens the strategic role of the Northern Fleet," *Barents Observer*, June 8, 2020, <https://thebarentsobserver.com/en/security/2020/06/putin-heightens-strategicrole-northern-fleet>.

36 Matthew Melino and Heather A. Conley (n 33)

37 Heather A. Conley et al (n 13) 31

38 Mathieu Bouléque, "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment", June 28, 2019, 21-22, https://www.chathamhouse.org/sites/default/files/2019-06-28-Russia-Military-Arctic_0.pdf; and "A solar-powered drone to be launched over the Arctic for the first time," *The Arctic*, December 25, 2020, <https://arctic.ru/infrastructure/20201225/989775.html#:~:text=A%20solar-powered%20drone%20to%20be%20launched%20over%20the,drone%20in%20the%20Far%20North%20and%20Polar%20regions>.

it regularly tests its Arctic capabilities via exercises, training, and missile tests.³⁹

United States and NATO

The United States and NATO have responded in several ways. The Arctic strategies of most North American and European Arctic countries have gradually increased the weight they put on security concerns, relative to other policy goals like human security, climate change mitigation, and economic development. Even at the NATO level, the “High North” has begun to appear in significant documents, including the new Strategic Concept, which discussed the region in connection with Russia’s capability to “disrupt Allied reinforcements and freedom of navigation across the North Atlantic”.⁴⁰

The United States, for its part, has not released a government-wide Arctic strategy since 2013. The suite of regional strategies released by all branches of the U.S. military and the Department of Defense (DoD) indicates an understanding of military necessities but, overall, recent presidential administrations have not considered the region a priority because of the preponderance of competing global security concerns. The lack of Arctic-specific resource allocation is evidence of this: most notably, the United States only has two icebreakers to Russia’s fifty-plus.⁴¹ Under the Trump administration, there were indications that the highest levels of the U.S. government were beginning to think more geopolitically: in 2019, for example, Secretary of State Michael Pompeo declared the region an “arena of global power competition” at an Arctic Council meeting in Finland.⁴²

Since then, a handful of policies have indicated some willingness to act on this view. The announcement in August 2022 that the United States would appoint an ambassador-at-large for the Arctic region is the most significant recent step; the United States has been the only Arctic nation without ambassador-level representation in the region.⁴³ The aforemen-

tioned military service strategies are also part of this trend. In addition, there has been an increase in cold-weather training and exercises in Alaska,⁴⁴ as well as with NATO allies in the European Arctic.⁴⁵ To facilitate the former and act as the service’s Arctic experts, the U.S. Army also has reactivated the 11th Airborne Division in Alaska.⁴⁶ In addition to the U.S. Armed Forces’ Alaskan bases, the United States also maintains a base at Thule, Greenland, and has allocated money to refurbishing the airbase in Keflavik, Iceland, which, in the meantime, has capacity to host NATO aircraft, often on a rotational basis.⁴⁷ In 2022, there was also a promising joint statement with Canada on modernizing the North American Aerospace Defense Command (NORAD),⁴⁸ with an emphasis on investing in replacing the aging North Warning System to improve situational awareness. Canada, for its part, has pledged to spend over \$30 billion over the next two years on Arctic priorities, including \$3.8 billion over the next six years for NORAD specifically.⁴⁹ Finally, there have been modest provisions in annual U.S. defense budgets: the creation of an Arctic Security studies center;⁵⁰ directing the DoD to assign responsibility for the Arctic to a specific Deputy Assistant Secretary of Defense;⁵¹ and directing the DoD to prepare a report outlining “the activities and resources required” for, among other objectives, “[t]he maintenance or restoration of the comparative military advantage of the United States in response to great power competitors in the Arctic region.”⁵²

Overall, however, concrete and substantive investments in the region have been minimal: the U.S. Air Force accounts for 80 percent of overall DoD resources devoted to the region, and it spends only \$6 billion annually on Arctic-focused assets and tasks.⁵³ When compared to an overall DoD budget of well over \$700 billion (\$740.30 billion in 2022, and possibly even more in the pending 2023 budget), this is a minor investment.⁵⁴ The United States has many global priorities, and the Arctic remains low on the list.

At the NATO level, despite the language in the Strategic Concept, the Arctic has also not been a high priority. Even in the

39 “Arctic Military Activity Tracker”, CSIS. Accessed September 19, 2022. <https://arcticmilitarytracker.csis.org/>.

40 NATO, “Strategic Concept”, 2022, <https://www.nato.int/strategic-concept/>.

41 Christopher Woody, “As US Tries to Close Icebreaker Gap With Russia, Its Only Working Icebreaker Is Making a Rare Trip North” *Business Insider*, November 9, 2020. <https://www.businessinsider.com/us-worried-about-icebreaker-gap-with-russia-in-arctic-2020-11>.

42 Somini Sengupta, “United States Rattles Arctic Talks with a Sharp Warning to China and Russia”, May 6, 2019. <https://www.nytimes.com/2019/05/06/climate/pompeo-arctic-china-russia.html>.

43 U.S. Department of State, “Establishing an Ambassador-at-Large for the Arctic Region”, Press Statement, August 26, 2022. <https://www.state.gov/establishing-an-ambassador-at-large-for-the-arctic-region/>.

44 Jen Judson, “US Army Looks to Address Capability Gaps as It Rebuilds Arctic Operations”, *Defense News*, June 2020. defensenews.com/digital-show-dailies/eurosatory/2022/06/20/us-army-looks-to-address-capability-gaps-as-it-rebuilds-arctic-operations/.

45 “Arctic Military Activity Tracker” (n 39)

46 Mikayla Easley, “Army Tackles Arctic Challenges Alongside European Allies,” *National Defense*, August 2, 2022. <https://www.nationaldefensemagazine.org/articles/2022/8/2/army-tackles-arctic-challenges-alongside-european-allies>.

47 Christopher Woody, “With Another Historic Trip to Iceland, US Stealth Bombers Are Building ‘Muscle Memory’ as the Arctic Heats Up”, *Business Insider*, September 22, 2021. <https://www.businessinsider.com/historic-b2-deployment-to-iceland-reflects-increasing-us-arctic-focus-2021-9>.

48 Paul Vieira, “Canada Plans Billions in Military Spending to Counter Russia Threat in Arctic”, *The Wall Street Journal*, updated June 20, 2022. <https://www.wsj.com/amp/articles/canada-plans-billions-in-military-spending-to-counter-russia-threat-in-arctic-11655750422#>; and Theresa Hitchens, “Canada’s new Space Division: Evolution not revolution”, *Breaking Defense*, July 26, 2022. https://breakingdefense.com/2022/07/canadas-new-space-division-evolution-not-revolution/?utm_source=sailthru&utm_medium=email&utm_campaign=dfn-ebb&STOverlay=2002c2d9-c344-4bbb-8610-e5794efcfa7d.

49 U.S. Department of Defense, “Joint Statement on NORAD Modernization”, August 17, 2021. <https://www.defense.gov/News/Releases/Release/Article/2735041/joint-statement-on-norad-modernization/>.

50 NDAA, “H.R. 6395 – William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021”, 116th Congress (2019-2020). <https://www.congress.gov/bill/116th-congress/house-bill/6395/text>.

51 *Ibid.*

52 NDAA, “S. 1605 - National Defense Authorization Act for Fiscal Year 2022”, 117th Congress (2020-2021) <https://www.congress.gov/bill/117th-congress/senate-bill/1605/text>.

53 Brian W. Everstine, “USAF to Increase Arctic Investment as Strategy, Wargames Outline Needs in the Region”, *Air Space Forces*, July 27, 2021. <https://www.airforcemag.com/air-force-to-increase-arctic-investment/#:~:text=The%20Department%20of%20the%20Air%20Force%20in%20July%202020%20unveiled,is%20working%20to%20implement%20it>.

concept – which reflects months of negotiations and is therefore an excellent encapsulation of current allied consensus – the “Arctic” is not referred to as such, and the “High North” is not discussed as a theater of possible conflict in itself, only as the origin of a threat to the North Atlantic. Without insight into the confidential and highly sensitive negotiations, it is difficult to identify the nature and source of objections to NATO taking a leading role in Arctic security. However, this aversion is consistent with the approach of some Arctic allies, especially Canada, whose “Arctic and Northern Policy Framework” emphasizes Canada’s Arctic sovereignty and does not mention NATO.⁵⁵ It is likely also that non-Arctic allies are reticent to commit alliance attention and resources to a region where their own interests are not directly at stake – for all NATO’s rhetoric about maintaining a “360 degree” alliance,⁵⁶ this competition to focus on national priorities is a defining feature of the alliance.

Regardless of NATO’s reluctance to officially assign itself a role in strategic documents, however, the de facto activity of individual allies and groups of allies is increasing. The accession of Sweden and Finland is one major step. In addition, NATO allies – often but not always with U.S. participation – are frequently exercising in the region. The most prominent example is the major Cold Response exercise, a biannual event in Norway. The most recent Cold Response in March 2022 was a massive training event across southeastern, central, and Arctic Norway, featuring approximately 30,000 troops, 20 aircraft, and 50 naval vessels, including major platforms like aircraft carriers.⁵⁷ While not NATO-led, it involved most allies, as well as Sweden and Finland. Notably, it took place a few short weeks after Russia’s invasion of Ukraine. While NATO took care to emphasize in its strategic communications that the exercise had been planned long before the war and was not a response to it,⁵⁸ Allied leaders will have known that the decision to go ahead with the training could have been read as hostile in Moscow. Other minor exercises featuring individual allies or small groups take place regularly as well.⁵⁹ Finally, the United Kingdom is increasing its milita-

ry attention to the region, both conceptually by releasing a new Arctic defense strategy,⁶⁰ by deploying major capabilities like aircraft carriers,⁶¹ and by leading the Joint Expeditionary Force, a multinational force of Northern European nations – all of whom are or will soon be NATO members – that explicitly has the High North within its geographical remit.⁶²

China

For the time being, China’s military presence in the Arctic has not increased: Its growing regional influence remains primarily economic and political. Yet, the Pentagon has warned about the potential dual-use of Chinese facilities in the Arctic: civilian research and infrastructure investments can be used for military purposes in the future.⁶³ This would be consistent with how Russia has used civilian infrastructure in the region. Several Nordic intelligence agencies have also warned about the security implications of China’s growing influence in the Arctic. In the light of China’s national intelligence law, which obligates Chinese citizens to support national intelligence work, these fears are justified.⁶⁴ Currently, China has two Arctic research stations: the Yellow River station, established in Ny Alesund, Svalbard, in 2004, and the China-Iceland Arctic Science Observatory, launched in northern Iceland in 2018. China’s military has also increasingly invested resources to study the party-state’s security priorities in the Arctic.⁶⁵

In the foreseeable future, China seeks to improve ground- and satellite-based communications in the Arctic, which may not only serve efforts to improve the safety of shipping but also military interests.⁶⁶ In 2016, the China Remote Sensing Satellite North Polar Ground Station was opened in Kiruna, Sweden. Concerned that the station may provide additional military satellite surveillance or complement Chinese military intelligence, the Swedish authorities have decided not to renew the contract.⁶⁷ In 2019, a Joint Research Center for Arctic Space Observations and Data Sharing was agreed to be established in Sodankylä, Finland. Still, the plans have not been realized

54 NDAA, “Summary of the Fiscal Year 2022”, accessed September 19, 2022,

<https://www.armed-services.senate.gov/imo/media/doc/FY22%20NDAA%20Agreement%20Summary.pdf>;

Possibly even more this year: “A Trillion-Dollar Defense Budget?”, CAP, July 12, 2022,

<https://www.americanprogress.org/article/a-trillion-dollar-defense-budget/>.

55 Government of Canada, “Canada’s Arctic and Northern Policy Framework”, last modified on November 18, 2019,

<https://www.rcaanc-cirnac.gc.ca/eng/1560523306861/1560523330587>.

56 Jim Garamone, “NATO Defense Chiefs Build 360-Degree Defense on Maturing Framework, Dunford Says”, U.S. Department of Defense, October 1, 2018.

<https://www.defense.gov/News/News-Stories/Article/Article/1650814/nato-defense-chiefs-build-360-degree-defense-on-maturing-framework-dunford-says/>.

57 “Cold Response 2022”, last updated on August 24, 2022. <https://www.forsvaret.no/en/exercises-and-operations/exercises/cr22>.

58 NATO, “Exercise Cold Response 2022 – NATO and Partner Forces Face the Freeze in Norway”, last updated March 25, 2022,

https://www.nato.int/cps/en/natohq/news_192351.htm?selectedLocale=en.

59 “Arctic Military Activity Tracker” (n 39)

60 UK Ministry of Defense, “The UK’s Defense Contribution in the High North”, Policy Paper, March 29, 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1063855/The_UK_s_Defence_Contribution_in_the_High_North.pdf.

61 Thomas Nilsen, “British aircraft carrier visits remote island in Norwegian Arctic”, *The Barents Observer*, April 18, 2022.

<https://thebarentsobserver.com/en/security/2022/04/british-aircraft-carrier-visits-remote-island-norwegian-arctic>.

62 UK Ministry of Defense, “Joint Expeditionary Force (JEF) – Policy direction”, Policy Paper, 12. Juli 2021.

<https://www.gov.uk/government/publications/joint-expeditionary-force-policy-direction-july-2021/joint-expeditionary-force-jef-policy-direction>.

63 US Department of Defense, “Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China”, May 2, 2019.

https://media.defense.gov/2019/May/02/2002127082/-1/-1/2019_CHINA_MILITARY_POWER_REPORT.pdf.

64 Bonnie Girard, “The Real Danger of China’s National Intelligence Law”, *The Diplomat*, February 23, 2019,

<https://thediplomat.com/2019/02/the-real-danger-of-chinas-national-intelligence-law/>.

65 Heljar Havnes and Johan Martin Seland, “The Increasing Security Focus in China’s Arctic Policy”, *The Arctic Institute*, July 16, 2019.

<https://www.thearcticinstitute.org/increasing-security-focus-china-arctic-policy/>.

66 Malte Humpert, “China Looking to Expand Satellite Coverage in Arctic, Experts Warn Of Military Purpose”, *High North News*, updated on September 4, 2019.

<https://www.highnorthnews.com/en/china-looking-expand-satellite-coverage-arctic-experts-warn-military-purpose>.

67 Keegan Elmer, “Swedish defence agency warns satellite station could be serving Chinese military”, *SCMP*, January 14, 2019.

<https://www.scmp.com/news/china/diplomacy/article/2182026/swedish-defence-agency-warns-satellite-station-could-be-serving>.

due to security concerns.⁶⁸ In 2022, China plans to launch a new satellite to monitor the Arctic shipping routes,⁶⁹ and in the next five years, the party-state will make significant invest-

ments in its space program to become a “space power.”⁷⁰ This is likely to increase geopolitical tensions in the Arctic.

3. The war in Ukraine and the Arctic

Arctic Governance

Shocked by Russia’s attack on Ukraine in February 2022, seven other Arctic states decided in early March to halt formal cooperation with Russia, the current chair of the Arctic Council. Acknowledging the urgency of the looming ecological crisis in the Arctic and beyond, however, the seven Arctic states announced in early June that they intend to narrowly resume their work on environmental protection and sustainable development without Russia’s participation. Norway, which will take over the Arctic Council chairmanship in May 2023, is preparing its chairmanship priorities as planned.⁷¹ In some areas, however, Western countries and Russia continue a limited collaboration. For example, the United States and Russia reportedly maintained their collaborative programs for marine safety in the Bering Strait up to two months after the invasion began, and there have been no indications that the countries have withdrawn from the joint agreement underpinning that work.⁷²

The Saami Council, a non-governmental organization promoting the indigenous rights and interests in Sápmi (the traditional territory of Indigenous Sámi stretching over Finland, Norway, Sweden, and Russia), also suspended its cooperation with the Russian member organizations in April 2022.⁷³ While most Russian indigenous groups have condemned Putin’s war in Ukraine,⁷⁴ the Russian Association of Indigenous Peoples of the North, in contrast, has supported it.⁷⁵

Over the past decade, the eight Arctic states have agreed on three international treaties under the auspices of the Arctic Council: The Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (2011), the Agreement on Cooperation on Marine Oil Pollution Preparedness

and Response in the Arctic (2013), and the Agreement on Enhancing International Arctic Scientific Cooperation (2017). These legally binding treaties remain in force despite the war, like other international treaties that directly or indirectly govern Arctic affairs. As geopolitical tensions rise globally, however, international collaboration is likely to become increasingly troublesome.

NATO Enlargement

The forthcoming accession of Sweden and Finland to NATO is a watershed moment for Arctic geopolitics. From a symbolic perspective, it is notable that Russia’s brutal invasion was so extreme that it compelled Finland and Sweden to reverse decades- and centuries-old policies for official military neutrality, respectively. Diplomatically, Russia is now isolated in the region: every other member of the Arctic Council will soon be members of NATO, an alliance that President Putin views as a threat and accuses of having “imperial ambitions.”⁷⁶ This will complicate any potential for Russia to be integrated into the future functions of that organization.

From a military perspective, the accession of Sweden and Finland will more than double the NATO-Russia border, with much of the new boundary in Arctic latitudes. Although this increases defensive responsibilities for both sides, it is likely a net benefit for NATO: from a simple geographical perspective, it creates opportunities like “operational depth and logistical routes that it had previously lacked” in the High North, as well as more options for pre-positioning air assets.⁷⁷ Barriers that had previously impeded joint planning between allies and non-allies will be lifted; the full integration of Helsinki and Stockholm into these processes will facilitate better prepara-

68 Matti Keränen, “T&T selvitti: Ilmatieteen laitoksen Kiina-yhteistyö katkaistiin kuin seinään ja yhteiset suunnitelmat avaruustutkimuksesta haudattiin vähin äänin”, *Tekniikka & Talous*, updated June 2, 2022. <https://www.tekniikkatalous.fi/uutiset/tt-selvitti-ilmatieteen-laitoksen-kiina-yhteistyö-katkaistiin-kuin-seinaan-ja-yhteiset-suunnitelmat-avaruustutkimuksesta-haudattiin-vahin-aanin/>e93732a5-5869-4bec-9a64-47bbaa94f170.

69 Huaxia, “China to launch new imaging satellite for Arctic routes monitoring”, *Xinhua Net*, December 3, 2020. http://www.xinhuanet.com/english/2020-12/03/c_139561346.htm.

70 The State Council Information Office of the People’s Republic of China, “China’s Space Program: A 2021 Perspective”, CNSA, January 28, 2022. <http://www.cnsa.gov.cn/english/n6465652/n6465653/c6813088/content.html>.

71 Ellis Quinn, “Senior Arctic Officials Working on Plan Forward Amidst Arctic Council Pause”, *The Barents Observer*, May 10, 2022. <https://thebarentsobserver.com/en/2022/05/senior-arctic-officials-working-plan-forward-amidst-arctic-council-pause>.

72 Yereth Rosen, “Despite Ukraine war, US and Russia continue emergency cooperation in the Bering Strait”, *Arctic Today*, April 11, 2022. <https://www.arctictoday.com/despite-ukraine-war-us-and-russia-continue-emergency-cooperation-in-the-bering-strait/>.

73 The Saami Council, “Cooperation with Russian side on hold”, April 10, 2022. <https://www.saamicouncil.net/news-archive/cooperation-with-russian-side-on-hold>.

74 International Committee of Indigenous Peoples of Russia, “Statement of the International Committee of Indigenous Peoples of Russia”, March 11, 2022. <https://polarconnection.org/international-committee-of-indigenous-peoples-of-russia/>.

75 Indigenous Russia, “RAIPON supports the decision of President Putin to start the war in Ukraine”, March 13, 2022. <https://indigenous-russia.com/archives/19434>.

76 “Putin condemns NATO’s ‘imperial ambitions’, warns Finland, Sweden”, *Al Jazeera*, June 29, 2022. <https://www.aljazeera.com/news/2022/6/29/putin-condemns-natos-imperial-ambitions-warns-finland-sweden>.

77 Jan Källberg, “The entry of Sweden and Finland into the NATO alliance radically improve its ability to defend the High North.”, CEPA, July 1, 2022. <https://cepa.org/defending-nato-in-the-high-north/>.

tion for conflict.⁷⁸ Furthermore, Finland and Sweden bring to bear small but capable militaries,⁷⁹ including military kit designed for use in the Arctic environment and soldiers trained to fight there, like Finland's Jaeger Brigade or Sweden's Norbotten Regiment. The countries will contribute over 150 fighter aircraft and Finland will procure an additional 64 F-35s; it will deploy the first set of jets to Lapland Air Command in Rovaniemi starting in 2026.⁸⁰ Finland will join the U.S., Norway, and Denmark as Arctic allies flying the aircraft – with Canada possibly soon to follow.⁸¹ The use of a common platform would make operating together in the region easier. Finland also has one of the strongest artilleries in Europe and is a leading manufacturer of icebreakers. Sweden, for its part, has a capable submarine fleet. Finally, because of their status as NATO Enhanced Opportunity Partners who exercise frequently with the alliance, they have a high degree of interoperability with NATO forces and could be prepared to fight under allied command soon after joining.

Given the strengthening of NATO's hand in the Arctic and Russia's warnings of "serious" military consequences,⁸² one might have expected a strong response from the Kremlin. Instead, the initial reaction was moderate: after the Finnish and Swedish decision, Putin downplayed the challenge their membership would pose and indicated Russia's response would depend on the establishment of new military infrastructure in those countries.⁸³ At the same time, there are indications that tensions in the Arctic have increased. For example, Moscow recently accused Norway of violating the treaty that governs access to the island of Svalbard and threatened "retaliatory measures".⁸⁴ In May, a long-standing, joint, Norway-Russia search-and-rescue and oil spill response training in the Barents Sea was canceled.⁸⁵ In late June, the Secretary of Russia's Security Council Nikolai Patrushev spoke of the need to strengthen border control vis-à-vis Finland and other Nordic countries.⁸⁶ Finally, the Norwegian government reported in

July that Russia has increased its GPS jamming of aircraft since the invasion, an electronic warfare tactic that can be a dangerous nuisance in peacetime and a weapon in conflict.⁸⁷

Sanctions and Impact on Russian Arctic Interests

Many of the international sanctions imposed on Russia after the invasion are relevant for its Arctic economic interests and some are already having an effect. The United States has banned all Russian oil and gas imports, and the UK intends to phase out oil imports by the end of 2022.⁸⁸ More relevantly, at the beginning of June, the sixth round of EU sanctions included a partial ban on Russia oil imports, to include all seaborne crude oil and petroleum products with their origin in Russia.⁸⁹ It is probable that Russian companies like Gazprom, Lukoil, and Rosneft would now need to seek new markets and routes for their Arctic oil (many of their pre-existing plans targeted the European market).⁹⁰ This is likely to be an expensive transition. As for gas, the EU has a strategy to reduce its reliance on Russian gas by two-thirds within a year, though the degree of Europe's dependence on that fuel source will make realizing that goal difficult.⁹¹ This too has Arctic implications.

However, government-imposed import bans are not the only relevant factor. Russian Arctic energy projects have historically relied on foreign financing, including from the West: for example, Russia's Novatek owns only a 50.1 percent stake in Yamal LNG, with the rest held by two Chinese entities (29.9 percent) and the French energy company Total (20 percent).⁹² Increasingly, however, western and western-aligned firms are declining to participate in new projects or partnerships, or even pulling out of existing ones. For example, the Geneva-based global commodities trader Traspigura opted to sell its 10 percent stake in Rosneft's Vostok Oil Project to a Hong Kong-

78 Michael Claesson and Zebulun Carlander, "How Sweden and Finland can Bolster NATO", *War on the Rocks*, July 19, 2022. https://warontherocks.com/2022/07/how-sweden-and-finland-can-bolster-nato/?_s=oxn0lis4qip6z6sybpe5.

79 For more: Bradley Bowman et al, "Finland and Sweden in NATO are strategic assets, not liabilities", *Defense News*, July 20, 2022.

<https://www.defensenews.com/opinion/commentary/2022/07/20/finland-and-sweden-in-nato-are-strategic-assets-not-liabilities/>.

80 John A. Tirpak, "Finland Formalizes Deal for 64 Block 4 F-35s", *Air & Space Forces Magazine*, February 11, 2022.

[https://www.airforcemag.com/finland-formalizes-deal-for-64-block-4-f-35s/#:~:text=Finland%20finalized%20its%20%249.4%20billion,industrial%20participation%20on%20the%20program;andBradleyBowmanetal\(n78\);ThomasNilsen,Finland'sfirstF-35swillbebasedupnorth",TheBarentsObserver,May28,2022.https://thebarentsobserver.com/en/security/2022/05/finlands-first-f-35-will-be-based-north](https://www.airforcemag.com/finland-formalizes-deal-for-64-block-4-f-35s/#:~:text=Finland%20finalized%20its%20%249.4%20billion,industrial%20participation%20on%20the%20program;andBradleyBowmanetal(n78);ThomasNilsen,Finland'sfirstF-35swillbebasedupnorth).

81 Greg Hadley, "Brown Visits Counterparts in Canada to Talk Arctic, NORAD Modernization, F-35", *Air & Space Forces Magazine*, June 13, 2022, <https://www.airforcemag.com/brown-visits-canada-counterparts-to-talk-arctic-norad-modernization-f-35/>.

82 "Finland expected to announce bid to join Nato", *The Guardian* online, May 12, 2022.

<https://www.theguardian.com/world/2022/may/12/finland-expected-to-announce-bid-to-join-nato>.

83 RFE/RL's Russian Service, "Shoigu Says Russia to Strengthen Its Western Defenses in Response to NATO Growth", *RFERL*, May 20, 2022.

<https://www.rferl.org/a/russia-shoigu-new-military-bases-west-nato/31859938.html>.

84 AFP - Agence France Presse, "Moscow Accuses Norway Of Blocking Transit To Svalbard, Threatens Reprisals", *Barron's*, June 29, 2022.

https://www.barrons.com/news/moscow-accuses-norway-of-blocking-transit-to-svalbard-threatens-reprisals-01656502507?refsec=topics_afp-news.

85 Astri Edvardsen, "Norwegian-Russian Preparedness Exercise in the Barents Sea Cancelled", *High North News*, accessed September 19, 2022.

<https://www.highnorthnews.com/en/norwegian-russian-preparedness-exercise-barents-sea-cancelled>.

86 Atle Staalesen, "Russia Security Official Says Borders with Nordic Countries Must Be Strengthened", *Arctic Today*, June 28, 2022.

<https://www.arctictoday.com/russia-security-official-says-borders-with-nordic-countries-must-be-strengthened/>.

87 Thomas Nilsen, "Arctic Norway sees more Russian GPS jamming than ever before", *ArcticToday*, July 11, 2022,

<https://www.arctictoday.com/arctic-norway-sees-more-russian-gps-jamming-than-ever-before/>.

88 Jake Horton & Daniele Palumbo, "Russia sanctions: 'How can the world cope without its oil and gas?' *BBC*, September 8, 2022.

<https://www.bbc.com/news/58888451>.

89 Danica Šebestová and Lucia Pružinská, "EU Adopts 6th Package of Sanctions Against Russia", *The National Law Review*, June 23, 2022,

<https://www.natlawreview.com/article/eu-adopts-6th-package-sanctions-against-russia>.

The former will take effect on December 5, 2022, and the latter on February 5, 2023.

90 Atle Staalesen, "How the EU's latest sanctions could halt Russia's Arctic oil plans", *Arctic Today*, June 3, 2022.

<https://www.arctictoday.com/how-the-eus-latest-sanctions-could-halt-russias-arctic-oil-plans/>.

91 Matt McGrath, "Climate change: EU unveils plan to end reliance on Russian gas", *BBC*, March 8, 2022.

<https://www.bbc.com/news/science-environment-60664799>.

92 Total Energies, "Yamal LNG Project Begins Gas Exports", December 7, 2017.

<https://totalenergies.com/media/news/press-releases/yamal-lng-project-begins-gas-exports>.

based firm.⁹³ Other examples abound: BP announced its own exit from its shareholding in Rosneft, with likely implications for Vostok; Shell ended its stake in the Sakhalin LNG 2 project; Exxon Mobil announced it would not invest in new Russian projects; and India's state-owned oil company announced it would reconsider its previous plan to invest in both Vostok and Novatek's Arctic LNG 2 project.⁹⁴ In renewables, the Finnish energy company Fortum announced in May it would sell its stakes in Russia, including investments in some Arctic hydropower projects. The Italian company Enel also sold its stake in its Russian unit, with implications for its Kolskaya Wind Farm project in the Kola Peninsula.⁹⁵ Finally, while the decision was not explicitly tied to sanctions, a South Korean company canceled in May, for the second time, the delivery of an Arc7 LNG carrier that was intended to service Arctic LNG 2.⁹⁶ As a result, Russia's capacity to reach its ambitions for Arctic energy development is increasingly challenged.

Sino-Russian Relations

Driven by their mutual antipathy toward the West and NATO, China and Russia have considerably increased their bilateral defense cooperation over the past decades. For example, they have organized annual bilateral naval exercises since 2012.⁹⁷ Generally, China has benefitted from the deteriorating relationship between Russia and the West, as economic sanctions have made Russia more dependent on Chinese cash flows since 2014. At the same time, the United States

and the European Union are China's two largest trading partners, and the party-state certainly does not want to aggravate these relations – at least before it is fully prepared for an eventual contest with the United States. Therefore, China has sought to balance its strategic interests between the West and Russia and has not explicitly chosen its siding in the Ukraine war. Despite portraying itself as a responsible great power globally, it has not offered a mediator role in the crisis, presumably because Xi Jinping is occupied with the faltering Zero Covid strategy, slowing economic growth, and the pivotal National Congress to be held in fall 2022.⁹⁸

On the eve of the Beijing Olympics in early 2022, Xi Jinping and Vladimir Putin issued a joint statement that unveiled new deals on energy and wheat imports and underlined that their friendship has “no limit”. The statement criticized further enlargement of NATO and mentioned the two countries' willingness to intensify “practical cooperation for the sustainable development of the Arctic.”⁹⁹ A few weeks later, Russia severely violated Ukraine's sovereignty and territorial integrity – some of China's key foreign policy principles. Yet, the Chinese government has refused to condemn Russia's attack on Ukraine and instead criticized Western sanctions against Russia. Worried about being targeted by similar sanctions, China has not provided material support for Putin's army.¹⁰⁰ While many Chinese businesses continue their operations in Russia, the state-run Sinopec Group has scaled back its energy investments in the Russian Arctic.¹⁰¹

93 “Trafigura completes sale of 10% stake in Russia's Vostok Oil project”, *Reuters*, July 13, 2022,

<https://www.reuters.com/markets/deals/trafigura-completes-sale-10-stake-russias-vostok-oil-project-2022-07-13/>.

94 Melody Schreiber, “Major Oil Companies and Investors Pull Back From Russian Arctic Oil and Gas”, *Arctic Today*, March 5, 2022,

<https://www.arctictoday.com/major-oil-companies-and-investors-pull-back-from-russian-arctic-oil-and-gas/>.

95 Alberto Brambilla, “Enel Sells Russian Unit as Gas Standoff with Europe Intensifies”, *Bloomberg*, June 16, 2022.

[https://www.bloomberg.com/news/articles/2022-06-16/enel-sells-russian-unit-as-gas-standoff-with-europe-intensifies#xj4y7vzkg](https://www.bloomberg.com/news/articles/2022-06-16/enel-sells-russian-unit-as-gas-standoff-with-europe-intensifies#xj4y7vzkg;);

and Atle Staalesen, “Russian renewable energy projects could soon lose foreign partners”, *Arctic Today*, June 16, 2022,

<https://www.arctictoday.com/russian-renewable-energy-projects-could-soon-lose-foreign-partners/>.

96 Atle Staalesen, “South Korean yard cancels order on Russian Arctic tanker”, *The Barents Observer*, May 24, 2022,

<https://thebarentsobserver.com/en/arctic-ling/2022/05/south-korean-yard-cancels-order-russian-arctic-tanker>.

97 Alec Blivas, “Sino-Russian Military Exercises Signal a Growing Alliance”, USNI, Vol. 147/6/1,420, June 2021,

<https://www.usni.org/magazines/proceedings/2021/june/sino-russian-military-exercises-signal-growing-alliance>.

98 Frédéric Lemaître, “Xi Jinping grapples with faltering Covid-19 strategy ahead of party congress”, *Le Monde* online, April 28, 2022. https://www.lemonde.fr/en/international/article/2022/04/28/xi-jinping-grapples-with-faltering-covid-19-strategy-ahead-of-cpp-national-congress_5981835_4.html.

99 President of Russia, “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”, February 4, 2022, <http://en.kremlin.ru/supplement/5770>.

100 “China not Giving Material Support for Russia's War in Ukraine – US official”, *Reuters*, 30. Juni 2022.

<https://www.reuters.com/world/china-not-giving-material-support-russias-war-ukraine-us-official-2022-07-01/>.

101 Chen Aizhu, Julie Zhu and Muyu Xu, “Exclusive China's Sinopec Pauses Russia Projects, Beijing Wary of Sanctions -Sources”, *Reuters*, March 28, 2022,

<https://www.reuters.com/business/energy/exclusive-chinas-sinopec-pauses-russia-projects-beijing-wary-sanctions-sources-2022-03-25/>.

4. Looking Forward – What Does This All Mean?

Arctic Governance

As the Arctic Council is not an international organization established via a legally binding treaty but an intergovernmental forum established by a declaration, there are no legal rules that would prevent seven Arctic states from continuing the implementation of the large number of projects undertaken by the Council's six working groups, at least the ones in which Russia does not hold a leadership role. In practice, however, the absence of the representatives of the largest Arctic state makes implementing Arctic science projects difficult, if not impossible. In particular, the Russian Arctic is an important location for monitoring climate change and permafrost thawing.¹⁰² Scientists cannot share this data without Russian participation in the Arctic Council. What is more, the continuation of the work of the Arctic Council would be very important for Arctic indigenous peoples' organizations in general, and indigenous groups living in Russia in particular.¹⁰³

Economics

Europe's plans for decarbonization – coupled with the probable impact of climate change-related phenomena like coastal erosion and permafrost thaw – were already threatening the economic viability of Russia's Arctic economic undertakings.¹⁰⁴ In the months since its invasion of Ukraine, there have been indications that the combination of sanctions and the toxicity of war-time Russia as a destination for foreign investment is accelerating this process. Given the expense of building infrastructure in the harsh and remote Arctic, a sensible option, in theory, for many companies would be to wind down projects or turn to other priorities.¹⁰⁵

And yet Russia is not a market economy in the strictest sense of the word – the Kremlin has a high degree of control over economic activity. For example, two of the most important companies involved in Arctic economic development, Rosneft

and Gazprom, are state-owned. And short of outright ownership, the government in Moscow may intervene in other ways, such as implementing fixed prices in certain sectors, some of which have significant Arctic activity. (Norilsk Nickel, whose ore clusters north of Norilsk account for about half of the company's overall production,¹⁰⁶ introduced such a price fix in March.)¹⁰⁷ In other words, it is the Kremlin who ultimately decides whether Arctic enterprises will continue, and not the market per se – and so far, there have been no indications that the Russian government intends to temper its Arctic economic ambitions. In fact, Rosneft announced in late July that it had just broken ground on a new oil terminal at the Bukhta Sever port; the terminal, located on the NSR, is part of the Vostok Oil project.¹⁰⁸ Furthermore, a new plan for the development of the NSR that the Russian government will likely soon approve outlines a proposal to construct 12 new port terminals, upgrade two others, and build 153 new vessels, including 12 new icebreakers.¹⁰⁹

It is not easy to turn the ship of the state; this is especially true regarding Russian Arctic economic policy, which is simultaneously a symbolic legacy project for President Putin and a source of short-term economic gain that will be difficult to forgo. It is probable that, as the European market becomes less receptive, Russia will increasingly focus on Asian markets for its Arctic fossil fuels. This comes with risks: first, it is expensive to build the infrastructure required to realize this goal; and second, it will increase Russia's reliance on China, giving Beijing leverage as it seeks to increase its own Arctic presence.

Security

There is little reason to expect Russia will intentionally reduce its military footprint in the region. This is first because it appears that it intends to sustain its economic projects, which are a crucial rationale for that presence in the first place. Another rationale remains: to protect the sea-based nuclear deterrent

102 Alexandra Witze, "Russia's War in Ukraine Forces Arctic Climate Projects to Pivot", *Nature*, Vol 607: 432, July 21, 2022, <https://www.nature.com/articles/d41586-022-01868-9.pdf>.

103 The Saami Council, "The Russian section of the Saami Council has issued a statement regarding the current situation in Russia", February 27, 2022, <https://www.saamicouncil.net/news-archive/statement-by-the-russian-side-of-the-saami-council-regarding-the-current-situation-in-russiaa>.

104 "By 2030, realization of the European Union's emissions targets could mean a 25 percent reduction in oil imports and a 15 percent reduction in gas imports, relative to 2015 levels, potentially eliminating a tenth of Russia oil and gas exports (worth \$25 billion). By 2050, the European Union meeting its climate targets could mean an 80 percent decrease in oil imports, relative to 2015, and a 58 to 67 percent decrease in gas imports. This is projected to reduce Russian oil and gas exports by 40 percent (roughly \$100 billion in 2019 terms). The final number may be even higher, as oil is the more valuable of the two and would be hit harder by the European Union's reduction." See above Heather A. Conley et al. (n 13)

105 NB: "The oil price threshold for turning a profit on Russian Arctic projects is estimated at around 80 US\$ a barrel (Henderson & Grushevenko, 2019, p. 18), which is high amid expectations of oil price volatility (International Energy Agency, 2021)." See above Ingerid M. Opdahl (n 11)

106 Heather A. Conley et al. (n 13), 24; "Taimyr", Norilsk Nickel, accessed September 19, 2022, <https://www.nornickel.com/business/assets/taimyr/>;

"Nornickel Set to Expand and Upgrade Dudinka Port", *ArcticToday*, July 23, 2022, https://www.arctictoday.com/arctic_business/nornickel-set-to-expand-and-upgrade-dudinka-port/.

107 Maximilian Hess, "What will Russia's post-invasion economy look like?" *Aljazeera*, March 31, 2022, <https://www.aljazeera.com/opinions/2022/3/31/russias-post-invasion-political-economy>.

108 "Russia's Rosneft starts construction of huge Arctic oil terminal", *Reuters*, July 26, 2022, <https://www.reuters.com/business/energy/russias-rosneft-starts-construction-huge-arctic-oil-terminal-2022-07-26/>.

109 "Construction of 12 Terminals, 153 Vessels Added to Northern Sea Route Development Plan", *Tass*, July 14, 2022, <https://tass.com/economy/1480193>.

110 Malte Humpert, "Control Over Arctic Ocean Top Priority Of New Russian Naval Doctrine", *High North News*, accessed September 19, 2022, <https://www.highnorthnews.com/en/control-over-arctic-ocean-top-priority-new-russian-naval-doctrine>; full document here: <http://static.kremlin.ru/media/events/files/ru/xBBH7DL0RicfdtdWPol32UekiLMTAycW.pdf>.

on the Kola Peninsula. Finally, Russia's threat perception vis-à-vis NATO in the Arctic will be higher following the applications of Sweden and Finland. Both European countries will take seriously Putin's threat to respond forcefully if the alliance places new military infrastructure on their territory. The Northern Fleet remains dangerous and Russia's increased activity in the Arctic, while not yet extreme, is notable. Russia's recently adopted naval strategy reinforces this presumption of continuity: it describes U.S. and NATO activity in the region as a threat and announces that the Northern Fleet will intensify its activities and receive new capabilities.¹¹⁰

And yet, there are reasons to expect relative stability as well. First, as two of NATO's closest partners, it is likely Putin has long recognized Sweden and Finland's de facto alignment with the alliance, meaning an invasion would not forestall a major leap in Euro-Atlantic integration for those countries, as it is doing for Ukraine. Second, Russia's military capacity is reduced as a result of the war in Ukraine and may yet be impacted by sanctions targeting its defense technology sector.¹¹¹ Third, Russia too has an interest, in theory at least, in

the Arctic remaining a zone of peace – it still needs foreign investment for its economic projects, especially oil and gas, and any conflict (or perceptions of probable conflict) would make that more difficult.

Whether these variables are sufficient to prevent an Arctic conflict is unclear. Putin has proven himself an unpredictable actor and may respond to a perceived escalation from NATO. So far, NATO's reticence to speak of the Arctic in strategic documents, conduct regular and major exercises under a NATO flag, or create new Arctic-specific structures like an Arctic command indicates that the alliance seeks to proceed somewhat cautiously in the region. Nonetheless, a conflict could still arise because of a misunderstanding or accident, especially as military activity in the region increases.¹¹² Furthermore, as Arctic security experts have long said, a conflict that arises elsewhere between NATO and Russia could 'spill over' into the region – if a war were to erupt between the two powers, Russia would likely try to leverage its advantage in a region where it currently has greater military capacity.

5. Conclusions

Once viewed as a "zone of peace" characterized by functional cooperation on environmental protection and sustainable development, the Arctic region is witnessing intensifying great power rivalry. The melting of Arctic ice caps is opening new economic opportunities, especially in the field of resource extraction and shipping – a critical reason that various non-Arctic states and stakeholders, including China, have become interested in the region. Despite their historical mistrust, Russia, the largest regional state, has so far welcomed Chinese investments in its Arctic energy and infrastructure projects. Due to sanctions that the EU and United States imposed after Russia's annexation of Crimea in 2014, Russia has become increasingly dependent on Chinese cash flows. To defend its maritime boundaries and economic projects and to increase its capacity to project power into other potential theaters of conflict, Russia has begun to remilitarize its Arctic territories. In response, the United States and NATO have also started to pay more strategic attention to the High North.

Although Russia's war in Ukraine has not spread to the Arctic, it has dramatically impacted the region. Regional collaboration under the Arctic Council has officially paused, and

scientific projects on monitoring climate change have been put on hold. Various Western investors have withdrawn from Russian energy projects, offering China a chance to increase economic leverage over Russia. The war has also split the Sápmi, that is, the traditional territory of indigenous Sámi overlapping northern parts of Finland, Norway, Sweden, and Russia.

Regarding security considerations, the Ukraine war will have long-lasting impacts on the Arctic. Shocked by Putin's aggression, traditionally neutral countries Finland and Sweden have applied for NATO membership. Against this backdrop, there is little prospect for Russia to demilitarize its northern territories. As both NATO and Russia increase their military presence in the Arctic, the risk of misunderstanding and accidents increases. And as long as Putin's war in Ukraine continues, it is nearly impossible to envision cooperation in the Arctic returning to the pre-war status quo, even if there is important cross-border work to be done on mitigating climate change. In the meantime, it is in the interest of both Western Arctic states and Russia itself to prevent regional tensions from spiraling into direct confrontation.

111 U.S. Department of State, "Imposing Additional Costs on Russia for Its Continued War Against Ukraine" Press release, August 2, 2022.

<https://www.state.gov/imposing-additional-costs-on-russia-for-its-continued-war-against-ukraine/>;

U.S. Commerce Secretary Gina Raimondo testified in a recent Senate hearing that, according to reports from the ground in Ukraine, Russia had begun using semiconductors from household appliances like dishwashers and refrigerators: Jeanne Whalen, "Sanctions forcing Russia to use appliance parts in military gear, U.S. says", Washington Post, May 11, 2022, <https://www.washingtonpost.com/technology/2022/05/11/russia-sanctions-effect-military/>.

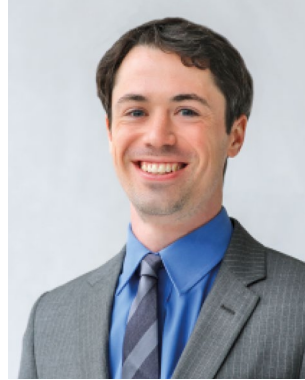
112 Recently, for example, the Russian Ministry of Defense accused a British RC-135 electronic surveillance plane of violating Russian airspace over the Barents Sea; the UK asserted the aircraft was in international airspace: Thomas Nilsen, "UK Denies Violation of Russian Airspace Over the Barents Sea", The Barents Observer, August 17, 2022. <https://thebarentsobserver.com/en/security/2022/08/uk-denies-violation-russian-airspace-over-barents-sea>.

About the authors



Dr. Sanna Kopra

is Senior Researcher at the Arctic Centre of University of Lapland and Senior Fellow at the Arctic Institute. Her research focuses on Arctic politics and governance in general, and the role of China in Arctic affairs in particular. Her other research interests include International Relations theory, international environmental politics as well as discourses and norms of international responsibility. She received her Doctoral Degree in International Politics from the University of Tampere, Finland, in November 2016.



Colin Wall

is an Associate Fellow with the Europe, Russia, and Eurasia Program at the Center for Strategic and International Studies (CSIS), where he provides research and analysis on NATO, European security, and the Arctic. Prior to joining CSIS, he worked as a research assistant at the NATO Parliamentary Assembly and at the Harvard Kennedy School's Carr Center for Human Rights Policy. Previously, he interned at the European Parliament, Atlantic Council, and Stimson Center. He holds a B.A. in government and international studies from Franklin & Marshall College and an M.A. in transatlantic affairs from the College of Europe and the Fletcher School of Law and Diplomacy.

