



RESOURCE SCARCITY IN THE
Russian Arctic

New Challenges and Threats
to U.S. Prosperity and Security

A CHAPTER SUMMARY FROM
IN PURSUIT OF PROSPERITY



Russia sees its future in the Arctic. The 9 million square kilometers that make up the Arctic Zone of the Russian Federation (AZRF) already produce 12–15% of Russian GDP. By 2050, AZRF is expected to be responsible for 50% of the country's GDP through the massive development of extractive industries, shipping and commercial centers.

Of the five Arctic coastal states, Russia has the most to gain economically and strategically from the rapidly melting ice cap. New transportation routes, including the opening of the Northern Sea Route (NSR), will facilitate export of Russian natural resources. Exploitation of vast natural resources will increase Russian government coffers. However, thawing will also aggravate climate change, damage existing infrastructure and release toxic waste, creating challenges to regional development.



Environment

No region on Earth is more directly affected by climate change than the Arctic. The region has already experienced an unprecedented intensity of climate-related weather events, including extreme heat waves, fires and winter snowfall. The huge Russian Arctic delta has suffered uncontrolled flooding and excessive soil erosion. Erosion of coastlines and ocean acidification are endangering vital fisheries and disrupting coastal communities, wildlife migration and species distribution.

The Arctic is critical not only to conserving biodiversity, but also to maintaining a stable global climate. Regional warming is a major contributor to greenhouse gas emissions—permafrost, which covers 60% of Russia, is releasing unbounded quantities of methane as it thaws. Warming in the Russian Arctic will create new opportunities along with socioeconomic costs. The opening of the Northern Sea Route (NSR) will accelerate both domestic and foreign investment in the region's extensive

mineral and hydrocarbon deposits, believed to hold as much as 90 billion barrels of oil and 47 trillion cubic meters of natural gas. New ports, railroads, airports, pipelines, storage terminals and entire urban centers are planned for the Russian Arctic.

However, loss of permafrost is causing existing infrastructure to sink because once-frozen soil can no longer support the weight of rail and road traffic, pipelines and industrial plants. This

situation significantly increases the risks of oil spills and gas leaks. The thaw will also release the toxic legacy of Cold War military and extractive activities in the region, including chemical contaminants, persistent organic pollutants, solid waste and radiation contamination. More than 100 identified polluted hot spots will require extensive remediation efforts.

The opening of the NSR will oblige Russia to expand cooperation both with its Arctic neighbors and many other countries





seeking to use the new maritime passage. The coordination functions of the Arctic Council, which includes eight member states and five indigenous observer organizations, will likely expand considerably as regional traffic grows

Increased international traffic will require more sophisticated communication systems, icebreakers and rescue ships.

Russia's economic ambitions will require far closer economic and financial arrangements with corporate interests and foreign governments. In addition, Russia will have to play an active role in the region's evolving governance regime.

The Russian government is beginning to address the staggering economic costs while also anticipating the opportunities that could make Russia a new global economic powerhouse. Planning ministries are prioritizing economic development zones and preparing for construction of infrastructure. Lacking technological capacity in many areas, the government has opened discussions with foreign companies that have strong capacities in extractive industries, shipping and construction. Such ties are expected to expand markedly in the coming decade.

Implications for the U.S.

Where geopolitical and military dynamics have predominated in the past, increased economic activity in the Arctic in the 21st century will draw the U.S. and Russia into closer coordination and cooperation. The U.S., like Russia, has substantial natural resources in the Arctic, including oil, minerals, fisheries and conservation

interests in Alaska that will be affected by environmental change and regional development. While doors are opening for cooperation, increased military presence and investment in the Russian Arctic will likely continue to fuel tensions with the U.S. and other Arctic states. Moscow is open to greater Western investment and technology transfer, which are needed for oil and gas exploitation. At the same time, the Russian government prefers to keep the region closed to outside interests that could pose a military or economic challenge.

The NSR will reshape both trade relations and security, with the potential to foster economic growth and promote global trade. However, Russia views the NSR as a national transit route, not an international strait. Russia's decisions about the NSR, particularly regarding the development of infrastructure, such as deep water ports, will determine the viability of the new passage as a competitive shipping route.

In addition to cutting fuel costs, shipping along the NSR would allow transporters to avoid politically volatile or dangerous shipping routes, such as the Suez Canal. International traffic along the NSR will require increased coordination between the U.S., Russia and the other Arctic states, likely through the Arctic Council.

Managing the increase in human and commercial traffic through the Bering Strait will be a key test of the U.S.-Russia relationship, requiring mutual understanding and a comprehensive approach to environmental regulations and safety.

Constructive cooperation across the Arctic region could be threatened if Russia does not address the environmental challenges to regional development. These challenges necessitate a forward-looking strategy, involving cooperation with, and support from, other state and non-state actors with the appropriate expertise and capabilities. However, Russia has recently adopted a law on NGOs that is expected to restrict the activities of environmental organizations operating in Russia.

Recommendations

Successful U.S.-Russian cooperation is already occurring within the Arctic Council, utilizing the council's framework for securing multilateral agreements in the Arctic, such as the recent agreements on international search and rescue and oil spill response. The Arctic Council will continue to be the primary venue for confronting regional problems. In addition to working through existing international organizations, both the U.S. and Russia must keep bilateral





investments and services could become particularly attractive areas of cooperation between the two countries. In this context, the U.S. should seek to develop innovative public-private partnership arrangements with the oil and gas, mining, shipping, fishing and cruise industries to improve environmental practices in the Arctic.

This summary is drawn from In Pursuit of Prosperity, Chapter 5, by Heather A. Conley, of the Center for Strategic and International Studies, and Dr. Lev Neretin, of the Global Environment Facility.

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communications open to strengthen ties and prevent tensions from escalating.

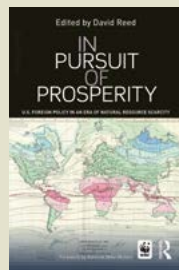
While there is a broad array of national security needs in the Arctic, clear governance of the maritime border on the Bering Sea, the Bering Strait and the Chukchi Sea will be paramount to U.S. policies. A critical area of focus will be vessel traffic through the Bering Strait, a potential choke point for shipping along the NSR. Issues ranging from search and rescue to illegal smuggling will require increased U.S. capabilities and cooperation with regional partners to monitor and police the new passage.

Partnerships and cooperation between Russia and the U.S. will hinge increasingly on finding ways to address the growing environmental challenges. The most logical place to begin strengthening bilateral cooperation is in the Bering Strait. Strengthening cooperation in environmental management, traffic management, and enhanced marine and coastal area protection would be important measures.

In addition, U.S.-Russian scientific collaboration could be fostered through

the development of integrated assessment capabilities for climate resilience and an early warning system. A U.S.-Russia Environmental Working Group has already been created, with a focus on the Arctic. The group will gear its efforts towards the reduction of black carbon emissions, waste management and disposal, and wildlife conservation.

Finally, given the normalization of trade relations and the significant demand for expertise in the Russian Arctic, U.S.



In Pursuit of Prosperity: U.S. Foreign Policy in an Era of Natural Resource Scarcity explores the evolution of environmental sustainability in U.S. foreign policy. Through expert analysis of nine strategically important regions, WWF's David Reed and a team of experts in foreign policy and environmental affairs identify emerging threats to the prosperity and national security of the United States. They assert that the combined impacts of climate change and natural resource scarcity require a fundamental shift in U.S. foreign policy to ensure the prosperity of our country's trading and political partners around the globe.

For more about WWF's In Pursuit of Prosperity initiative, visit www.worldwildlife.org/ipop.

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