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China and the United States in the Arctic: Exploring the Divergence and Convergence of Interests

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Executive Summary

The Arctic Ocean has an area of about 6.01 million square miles and makes up about 4.3% of the Earth's oceans.¹ The melting of Arctic sea ice has led to increased human activities in the Arctic and has heightened interest in and concerns about the region's future. The supremacy of the military presence and security interests of the two Cold War-era superpowers – the former Soviet Union and the United States – have now been replaced by the multiple political interests of the eight North Pole states, dominated mainly by the military and security interests and naval capacity of Russia, Canada, the United States, Norway, and Denmark. The exclusivity of Arctic governance has also been challenged by the activities of states from outside the region who are taking a special interest in many aspects of the Arctic that focus on scientific research, shipping, and resource development. China is one of these outside states with growing interest in the Arctic.²

The emergence of the Arctic as a region of political and economic opportunity adds yet another dimension to U.S.-China relations. This report explores and compares the policy and influence of two states in the Arctic: The United States as a key Arctic littoral state and China as an Arctic stakeholder. Their respective policy and legislations, presence, and influence in this region, engagement with international and regional institutions will be unfolded in this report before yielding to a discussion on the divergence and convergence of interests between China and United States in the Arctic. It can be concluded that there exist lots of divergence of interests between the two. Meanwhile, the Arctic is an arena where the U.S. and China, for the most part, enjoy converging interests, such as on issue areas that touch upon aspects of the law of the sea—be it conservation and climate change, marine scientific research, or construction of port and infrastructure facilities.

Given the current development in the Arctic region driven by the Ukraine conflict, the longstanding post-Cold War perception that the Arctic region would benefit from a disconnect from security concerns has lost its essence. Instead, the geopolitical importance of the Arctic region is coming back into focus with Russia's full military escalation of Ukraine and the worrisome loss of the status quo in Arctic cooperation. The joint statement by seven states of the Arctic Council in March 2022 to pause participation in all meetings of the Arctic Council indicates grave impediments to international cooperation in the Arctic.

China and the United States should aim to achieve cooperative activities, particularly on research field, which could play a useful role in stabilizing the troubled state of their current ties. The Ukraine conflict, while severing partnerships between researchers inside and outside of Russia across many fields of science, has a particularly profound impact on climate science in the Arctic, in which China and the United States could work together. China has the potential to be a strong partner for the United States if it can match up its own interests in the Arctic with the United States' interests and, together, address questions that are important to both nations.

PART I

Policy and Legislation on the Arctic

The United States

The United States, by virtue of Alaska, is an Arctic country. It has substantial political, economic, energy, and environmental, among other, interests in the region. The U.S. is also one of the eight founding Arctic Council member nations after the signing of the Ottawa Declaration in 1996 and is one of the five Arctic Ocean littoral states. Furthermore, the U.S. is also an observer of the Conference of Parliamentarians of the Arctic Region; a biennial conference involving the European Parliament established to support the existence and work of the Arctic Council, which was established in 1996 as the intergovernmental forum of the nations that border the Arctic Ocean.

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) ‘provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic’³ and was amended by P.L. 101-609 of November 16, 1990. The Act, among other outcomes, defined the term “Arctic” for purposes of the act; made a series of findings concerning the importance of the Arctic and Arctic research; established the U.S. Arctic Research Commission (USARC) ‘to promote Arctic research and recommend Arctic research policy’; designated the National Science Foundation (NSF) as the ‘lead federal agency for implementing Arctic research policy’; established the Interagency Arctic Research Policy Committee (IARPC) ‘to develop a national Arctic research policy and a five-year plan to implement that policy’; and designated the NSF representative on the IARPC as its chairperson.

The remainder of P.L. 98-373’s official title relates to Title II of the act, the short title of which is the National Critical Materials Act of 1984.

The IARPC currently includes more than a dozen federal agencies, departments, and offices.

Throughout recent administrations, the U.S. executive branch has issued several policy documents concerning the Arctic, including but not limited to: the January 2009 Arctic Policy Directive (NSPD 66/HSPD 25); the May 2013 National Strategy for Arctic Region; the January 2014 Implementation Plan for National Strategy for Arctic Region; the January 2015 Executive Order for Enhancing Coordination of Arctic Efforts; the December 2017 National Security Strategy Document; the March 2021 Interim National Security Strategic Guidance Document, and the October 2022 National Strategy for the Arctic Region.

The George W. Bush administration’s Arctic policy, released in NSPD-66 on January 9, 2009, included the following goals: meet national security and homeland security needs relevant to the Arctic region; protect the Arctic environment and conserving its biological resources; ensure environmentally sustainable natural resource management and economic

development; strengthen institutions for cooperation among the eight Arctic nations; involve the Arctic's indigenous communities; and enhance scientific monitoring and research into local, regional, and global environmental issues.⁴

The 2013 National Strategy for the Arctic Region released by the Obama White House emphasizes three areas: advancing U.S. security interests; pursuing responsible Arctic region stewardship; and strengthening international cooperation. This policy release sets forth Washington's strategic priorities for the Arctic region to position the United States to effectively respond to challenges and emerging opportunities arising from significant increases in Arctic activity from the diminishing sea ice and subsequent emergence of a new Arctic environment.⁵



Vector illustration of the physical map of the Arctic region, created by the U.S. Central Intelligence Agency. (Source: Getty Images, Royalty-Free; Public Domain)

Soon after the United States took over the two-year rotating chairmanship of the Arctic Council, on January 21, 2015 President Barack Obama signed Executive Order 13689—Enhancing Coordination of National Efforts in the Arctic.⁶ Section 2 of the order established an Arctic Executive Steering Committee to ‘provide guidance to executive departments and agencies and enhance coordination of Federal Arctic policies across agencies and offices, and, where applicable, with State, local, and Alaska Native tribal governments and similar Alaska Native organizations, academic and research institutions, and the private and nonprofit sectors.’

The Arctic was not given high priority under the Donald Trump administration, remaining largely dormant on the topic though the Arctic Executive Steering Committee (AESC) continued to exist. In December 2018, Alaska state senator Lisa Murkowski did introduce legislation to make the Department of Homeland Security (DHS) the AESC’s chair and a White House office its co-chair in an attempt to revive this institution and restore its status as a driver of Arctic policy.⁷ The Trump administration, concluding the U.S. Arctic Council chairmanship without significant changes, instead began to disassemble the Obama administration’s Arctic-specific administrative structures while emphasizing economic development and dismissing climate concerns in the region.⁸

The Trump administration’s December 2017 National Security Strategy mentions the term “Arctic” once: ‘A range of international institutions establishes the rules for how states, businesses, and individuals interact with each other, across land and sea, the Arctic, outer space, and the digital realm. It is vital to U.S. prosperity and security that these institutions uphold the rules that help keep these common domains open and free.’⁹

In 2019, the U.S. Department of Defense released a formal Arctic Strategy which outlines three areas of focus to achieve the desired Arctic end-state: building Arctic awareness, enhancing Arctic operations, and strengthening the rules-based order in the Arctic.¹⁰

Released during the Biden administration, the Fiscal Year 2021 National Defense Authorization Act (H.R. 6395/P.L. 116-283 of January 1, 2021) includes a number of provisions relating to the Arctic such as directing the Assistant Secretary of Defense for International Security Affairs to assign responsibility for the Arctic region to the Deputy Assistant Secretary of Defense for the Western Hemisphere (or any other Deputy Assistant Secretary of Defense the Secretary of Defense considers appropriate) and directing the Secretary of Defense and the Chairman of the Joint Chiefs of Staff to continue assessing potential multidomain risks in the Arctic.¹¹ In the FY2022 National Defense Authorization Act (S. 1605/P.L. 117-81), Section 1090 directs the Commander of the U.S. Northern Command—in consultation and coordination with the Commander of the U.S. Indo-Pacific Command, the Commander of the U.S. European Command, the military services, and the defence agencies—to complete an independent assessment of activities and resources that will be required from FY2023 to FY2027 to achieve certain objectives relating to the Arctic.¹²

Notably, the Interim National Security Strategic Guidance document released by the Biden administration in March 2021 does not include the term Arctic.¹³ Still, the Biden-Harris administration seems eager to bridge the gap of its leadership role in studying the effects of climate change in the Arctic and the Antarctica and the possibilities for adaptation. This is most evident in how the White House has reactivated a critical steering committee on the issue and added a slate of dedicated Arctic experts to its team.¹⁴

As of mid-2022, Washington has yet to release an overarching U.S. Arctic Policy. What is already known is that, as a member of the Arctic Council, the U.S. has agreed to protect the region and its inhabitants and agreed that '[t]he Arctic Council should not deal with matters related to military security.'¹⁵ While Washington may not, the different branches of the U.S. military do have their own Arctic Strategies which largely focus on the need to tackle common threats jointly.

For instance, the Strategic Blueprint for a Blue Arctic released by the US Navy on January 5, 2021 states that '[n]aval forces will preserve peace and build confidence among nations through collective deterrence and security efforts that focus on common threats and mutual interests in a Blue Arctic.'¹⁶ It also emphasizes that mutually beneficial alliances and partnerships are foundational to this regional blueprint.¹⁷ China and Russia are set aside in this document, suggesting that, in the mind of the US Navy, they are not likely partners in the Arctic.¹⁸

The Department of the Air Force Arctic Strategy released on July 21, 2020 states that the Arctic is an increasingly vital region for U.S. national security interests and is founded on respect for national sovereignty and the international rules-based order, benefits the United States. It also officially lists China's intentions in the region: 'China is not an Arctic nation...but it sees the region as important to its long-term economic and security interests. China's Arctic narrative attempts to normalize Chinese presence in the region, enhance polar operating capabilities, and gain a regional governance role.'¹⁹

The U.S. Coast Guard also established and ratified a law (82 FR 44108) related to the Arctic in 2017, titled 'Adding the Polar Ship Certificate to the List of SOLAS Certificates and Certificates Issued by Recognized Classification Societies'.²⁰ This law implements new rules, which requires certain ships operating in Arctic or Antarctic waters to have a Polar Ship Certificate.

From the beginning, the U.S. has always been a reluctant power in the Arctic. Compared to other Arctic nations, it has invested very little into its Arctic resources—resulting in no real ports along Alaska's Arctic shores, a minimal military presence and insufficient diplomatic engagement. However, in February 2019 Washington released a US\$330 billion spending bill allocating a total of US\$675 million in funding for new icebreakers, which U.S. military leaders deem vital for competing with Russia and China in the Arctic region. When the then-Secretary of State Mike Pompeo visited with NATO allies in the North Atlantic on February 15, 2019, he specifically discussed security relations and

the growing presence of China and Russia in the Arctic.²¹ It appears that the United States has begun to shift its Arctic policy aiming at countering the growing influence of China and Russia in the high north. For the first time, the Arctic Council did not reach a comment statement at its 11th ministerial meeting in Rovaniemi, Finland in May 2019 because Secretary Pompeo refused to sign off on the statement that refers to the Paris Climate Agreement and climate change.²² He instead chose to focus on geopolitics and the race for natural resources amid climate concerns. This failure to reach a consensus on combatting climate change is criticized as undermining the entire purpose of the Arctic Council as a platform for environmental cooperation.²³

The Office of Ocean and Polar Affairs (OPA) is a part of the U.S. State Department's Bureau of Oceans and International Environmental and Scientific Affairs (OES). The OPA is responsible for formulating and implementing U.S. policy on international issues concerning the ocean, the Arctic, and the Antarctic. According to this office, United States Arctic policy focuses on six overarching policy objectives: 1) meeting national security needs, 2) protecting the Arctic environment and conserving its biological resources, 3) promoting environmentally sustainable natural resource management and economic development, 4) strengthening institutions for cooperation among the eight Arctic nations, 5) involving Arctic indigenous people in decisions that affect them, and 6) enhancing scientific monitoring and research on local, regional, and global environmental issues.

A major area of contention in the Arctic region that has led to executive action from the last three administrations concerns the development of oil and gas resources. In December 2016, President Barack Obama issued E.O. 13754 ('Northern Bering Sea Climate Resilience') and the Presidential Memorandum of December 20, 2016 ('Withdrawal of Certain Portions of the United States Arctic Outer Continental Shelf From Mineral Leasing') in order to protect the region from oil and gas development.²⁴ Subsequently, the order was revoked and the memorandum was amended in Executive Order 13795 of April 28, 2017 ('Implementing an America-First Offshore Energy Strategy').²⁵ To date, the only federal action from the Biden administration on this issue is Executive Order 13990 of January 20, 2021,²⁶ which reversed Trump era-actions including E.O. 13795 ('Implementing an America-First Offshore Energy Strategy') and placed a temporary moratorium on all activities of the Federal Government relating to the implementation of the Coastal Plain Oil and Gas Leasing Program, as established by the Record of Decision signed August 17, 2020,²⁷ in the Arctic National Wildlife Refuge.

As Alaska is the only U.S. state in the Arctic, Alaskan state laws play an important role in shaping how America engages with the region. Therefore, there is a critical interplay between the Federal government and the Alaskan state legislature in implementing policy. In 1971, the U.S. Congress passed the Alaska Native Claims Settlement Act (ANCSA),²⁸ which settled land and financial claims for lands and resources which the Alaska Natives had lost to European-Americans. It also provided for the establishment of thirteen Alaska Native Regional Corporations to administer those claims.

On September 24, 2021, the Biden administration announced in a press release that it was '[r]eactivating the Arctic Executive Steering Committee (AESC), a mechanism to advance U.S. Arctic interests and coordinate Federal actions in the Arctic...[which] will also facilitate the implementation of the Northern Bering Sea Climate Resilience Area, including by standing up the Northern Bering Sea Task Force and Tribal Advisory Council. These structures reinforce collaborative partnerships—particularly with Alaska Native communities—and harness science and Indigenous Knowledge to inform management and policy.'²⁹

And then, in October 2022, the Biden administration issued its 'National Strategy for the Arctic Region', articulating an affirmative U.S. agenda to realize its Arctic vision across the next decade. The Strategy addresses the climate crisis with greater urgency and directs new investments in sustainable development to improve livelihoods for Arctic residents while conserving the environment. It also seeks to position the United States to both effectively compete and manage tensions amid Russia's unprovoked war in Ukraine which began earlier that year.

China

China has long held interests in both the Arctic and the Antarctic, most notably evident in their increasingly active polar research program. This research began taking serious shape in 1989 with the creation of the Chinese Polar Research Institute which primarily focused on conducting research on shipping and resources. On January 26, 2018, the State Council Information Office of China published a white paper titled 'China's Arctic Policy'.³⁰ This white paper highlighted China's policy goals in the Arctic, which are shaped by four key principles: to understand, protect, develop, and participate in the governance of the Arctic. In order to realize these policy goals, the paper emphasizes the need for 'respect, cooperation, win-win results and sustainability.' These policy goals and principles are reflected in the respective areas that China has shown an interest in, ranging from participating in Arctic governance and accessing potential resources to exploiting shipping opportunities and undertaking polar research.

China's Arctic-specific policy represents a key development in the country's overarching global plan – it has not done the same to all regions where it aims to be a key player.³¹ For instance, while China has released white papers for the Arab and Asia-Pacific regions, they have not released any for Central America or the Antarctic.³² Indeed, 'China's issuance of an Arctic-specific policy...contributes to confirming how determined China is to exercise its influence on a global scale.'³³

The recent expansion of China's role in the Arctic has invited international suspicion, especially from the Arctic Council member states. Researchers, international organizations and countries involved in Arctic governance have all held long-standing expectations for clarity from China. This white paper is the result of Chinese policy makers' careful deliberation following half a decade of observer status within the Arctic Council. It spells out China's intentions for the Arctic and should relieve some concerns over China's transparency and commitment to international law.

One of the four policy goals set in China's Arctic policy is to 'participate in the governance of the Arctic'.³⁴ In order to achieve this, 'China will participate in regulating and managing the affairs and activities relating to the Arctic on the basis of rules and mechanisms'.³⁵

Internationally, China is committed to 'the existing framework of international law including the UN Charter, the United Nations Convention on the Law of the Sea (UNCLOS), treaties on climate change and the environment and relevant rules of the International Maritime Organization'.³⁶ Domestically, China will 'regulate and manage Arctic-related affairs and activities within its jurisdiction in accordance with the law, steadily enhance its ability to understand, protect, and develop the Arctic, and actively participate in international cooperation in Arctic affairs'.³⁷



Director of the Information Bureau of the State Council Information Office and spokesperson Hu Kaihong announcing China's Arctic Policy white paper on January 26, 2018.

(Source: Chinese State Council Information Office, Public Domain)

In its white paper, China maintains that all activities to explore and utilize the Arctic should abide by both related treaties such as UNCLOS and the Spitsbergen Treaty and general international law. On the issue of shipping, China expresses a desire to work with all parties to build a Polar Silk Road by developing the Arctic shipping route. China encourages its domestic enterprises to participate in the infrastructure construction for these routes and to conduct commercial trial voyages, in accordance with the law, to pave the way for regular commercial operations. In addition to commercial shipping, the white paper also implies China's interests in supporting and encouraging its enterprises to cooperate with Arctic states in developing tourism in the region while also calling for concerted efforts to enhance Arctic security, insurance, and rescue systems to ensure the safety of tourists.

One of the four key principles included in the white paper is 'respect'. The white paper emphasizes China's interests in utilizing Arctic resources in a lawful and rational manner. China reiterates that it 'respects the sovereign rights of Arctic states over oil, gas and mineral resources in the areas subject to their jurisdiction [and] in accordance with international law and respects the interests and concerns of resident in the region'.³⁸ Another one of the four key principles, 'develop', is expounded upon in the resource development section of the white paper. Chinese enterprises, which can utilize advantages in capital, technology, and their domestic market, are explicitly required to observe the laws of Arctic states and conduct risk assessments for resource exploration. Though they are encouraged to participate in oil, gas, and mineral resource exploration, this is to be done through various forms of cooperation with Arctic nations and international organizations and under the condition of protecting the eco-environment of the Arctic.

In addition to energy resources, the white paper also addresses fisheries and other living resources. China supports efforts in formulating a legally binding international agreement on the management of fisheries in the high seas portion of the Arctic Ocean.

It also supports the establishment of an UNCLOS-based Arctic fisheries management organization or institutional arrangements.

The final two principles highlighted in China's white paper are 'understand' and 'protect'. China's Arctic policy uses these two words to underscore the importance of improving the capacity and capability of scientific research in the region to create favourable conditions for mankind to better protect, develop, and govern it.³⁹ China's Arctic interests are also environmental—a fact that is sometimes overlooked. 'In most climate models, China's coastlines will flood in the next century due to the melting of Arctic ice, which will force the relocation of up to 20 million people, not to mention reduce agricultural production.'⁴⁰ China has made tremendous efforts to facilitate the early entry and implementation of the Paris Agreement and is committed to the success of the 2030 Agenda for Sustainable Development. The white paper emphasizes China's determination to protect the eco-environment of the Arctic while simultaneously addressing climate change.

As a state located outside of the Arctic region, it is valuable for China to put into effect a framework of rules that strongly emphasizes China's role in Arctic governance. Within the predominant intergovernmental forum of the Arctic—the Arctic Council—China's observer status is lower than that of the Indigenous Peoples' organizations that would normally be dubbed as non-governmental organizations in other intergovernmental bodies or treaty negotiations. By calling upon the entire framework of international law, China places itself in the driver's seat.⁴¹ According to China, what governs the Arctic is: the United Nations and its Security Council in which China is one of the permanent members; UNCLOS to which China is a party of; specialized agencies of the UN such as the International Maritime Organization (IMO) and the treaties it produces, most of which China is a party to; and the UN-based regime fighting against climate change as well as various other international environmental treaties, many of which China is also a party to.

There are currently 46 High Contracting Parties to the Spitsbergen Treaty, including 14 original High Contracting Parties: Denmark, France, Italy, Japan, the Netherlands, Norway, Sweden, the United Kingdom, Australia, Canada, New Zealand, South Africa, India and the United States. China acceded to the Treaty on July 1, 1925.

Two particularly important laws that govern Arctic affairs are the 1925 Spitsbergen (Svalbard) Treaty and the 1982 UNCLOS, also simply referred to as the Convention.⁴² China ratified the Svalbard Treaty in 1925 and UNCLOS in 1996. Hence, the provisions of both documents constitute the legal basis for

China's activities in the Arctic. UNCLOS, which went into force in 1994, remains the most comprehensive international legal framework today for the governance of state activities over the world's oceans. The Convention aims to regulate all aspects of ocean resources and uses of the sea and is presented by the Arctic coastal states as the primary legal framework in relation of Arctic governance.⁴³ It offers general norms that govern the Arctic region, including the rights and responsibilities of both coastal and non-coastal states in areas within and beyond national jurisdictions. UNCLOS forms the main legal basis for states when they carry out marine activities. The legal framework established by the UNCLOS for maritime zones and the use of the sea is applicable to all parts of the ocean, including the marine areas of the Arctic Ocean.⁴⁴ Therefore, it provides essential legal basis for states within and outside the region in respect of navigation, fishing, oil exploitation, protection of the marine environment, maritime delimitation, and dispute settlement.

The 1925 Spitsbergen (Svalbard) Treaty, while giving Norway full and absolute sovereignty over the Svalbard archipelago, also grants the Treaty's 46 parties equal rights to undertake fishing, hunting, mining, trading and industrial activities in the region. Under this treaty, the High Contracting Parties enjoy the liberty of access and entry to certain areas of the Arctic, as well as the right to carry out scientific research, production, and commercial activities such as hunting, fishing, and mining in these areas in accordance with law. The High Contracting Parties, including some non-Arctic nations, are legitimately permitted to carry out activities in the Spitsbergen Archipelago as well as in its internal waters and territorial sea.

The Svalbard (Spitzbergen) Archipelago is located between mainland Norway and the North Pole.

The Svalbard Treaty is considered as another legal foundation to safeguard China's Arctic interests.⁴⁵ As previously mentioned, signatories of the Svalbard Treaty are allowed to enter designated Arctic zones and enjoy equal right to conduct commercial and production activities such as hunting, fishing and mining in the high Arctic region. Chinese vessels gained these rights when it became a signatory to the Svalbard Treaty in 1925. However, Chinese commercial and scientific endeavours were carried out in the region decades later.⁴⁶ China has stressed the importance of non-discriminatory rights under the treaty, such as scientific research, resource exploitation, fishing, hunting, and commercial activities. Therefore, the final determination of the treaty's applicable scope has a profoundly direct impact on China's interests in the Arctic region.⁴⁷

Other international regulations also exist to cover both universal and region-specific regulations related to issues like shipping, resources management, and the protection of the marine environment.⁴⁸ The Polar Code, which entered into force in January 2017, regulates the safety and security of vessel operation while simultaneously protecting marine environments in the Arctic.⁴⁹ The United Nations Framework Convention on Climate Change (UNFCCC), alongside subsequent, related regulations such as the Kyoto Protocol and Paris Agreement, are often referred to in discussions on climate change in the Arctic. In November 2017, all five Arctic coastal states along with four non-Arctic states (China, Japan, Singapore, and South Korea) and the European Union (EU) concluded an agreement to ban unregulated fishing in the Central Arctic Ocean (CAO) for at least the next 16 years pending the availability of more concrete knowledge on the marine ecology of the Arctic high seas.

Adopted within the framework of the International Maritime Organization (IMO), the Polar Code offers amendments to Annexes I, II, IV and V of MARPOL, and a new Chapter XIV within the framework International Convention for the Safety of Life at Sea (SOLAS). The measures in the Polar Code are in effect from 2017 and focus on safe vessel operation and protection of the marine environment in polar waters.

China has also made efforts to enhance internal mechanisms and legislation. For example, it established the Coordinated Mechanisms between Departments for the Arctic Affairs in 2011. The Foreign Ministry established the office of Special Representative for Arctic Affairs in 2016.⁵⁰ The Law on Exploration for and Exploitation of Resources in the Deep Seabed Area was adopted that same year. And in 2017 the State Oceanic Administration issued the Regulations on Administrative Licensing Management on Arctic Expedition Activities. This standardized China's Arctic expedition activities and

promoted the orderly conduct by setting rules on licensing and environmental impact assessment.⁵¹ Other normative instruments applicable to Arctic activities include the 2018 Measures for China's Polar Expeditions Data Management, the 2017 Measures for Licensing for the Exploration for and Exploitation of Resources in the Deep Seabed Area, the 2017 Interim Measures for Sample Management Concerning the Exploration for and Exploitation of Resources in the Deep Seabed Area, and the 2017 Interim Measures for Material Management Concerning the Exploration for and Exploitation of Resources in the Deep Seabed Area.⁵²

China has also been actively participating in the development of rules governing the global environment, climate change, international maritime issues, and high seas fisheries management while striving to fulfil its international obligations in accordance with the law.⁵³ China endeavours to play a constructive role in the work of the IMO and hopes to make solid efforts to fulfil its international responsibilities for ensuring maritime navigational security and preventing its ships from polluting the maritime environment. In addition, since 2006, China has advocated for stronger international cooperation in maritime technology as well as a globally coordinated solution to reducing greenhouse gas emissions from maritime transport under the IMO framework. Furthermore, China is taking part in the negotiation of an international legally binding instrument on biodiversity of areas beyond national jurisdiction (BBNJ). As of 2019, Beijing has made two written submissions and, already in practice, China abides by the Polar Code adopted by the IMO in 2014.⁵⁴

China's Arctic policy states its commitments to uphold its international legal obligation as embodied in UNCLOS, the Paris Agreement, and other multilateral environmental treaties applicable to the Arctic. It also states that China firmly commits to respect the 'diverse social culture and the historical traditions of the indigenous peoples.'⁵⁵ In other words, China strives to uphold the international legal framework, as it applies to the Arctic, while simultaneously seeks to assert its legitimate rights and interests within that legal framework.⁵⁶ Even though the aforementioned white paper confirms Beijing's international legal commitments, its text raises concerns regarding China's adherence to legal commitments for the protection and promotion of rights of indigenous peoples. While it states that China aims to accommodate the interests of the Arctic's indigenous peoples as part of its cooperation with the Arctic states, the document does not provide any clear articulation of which international legal frameworks China will observe. Although China has voted in favour of adopting the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), it has failed to ratify several other human rights treaties such as the International Covenant on Civil and Political Rights (ICCPR).⁵⁷

China's Arctic white paper may not be evidently presented as an autonomous international legal document. However, as a supplementary policy document, the reaffirmation of China's international legal commitment towards the Arctic is politically significant. Beijing's Arctic policy white paper presents China's official policy position towards the Arctic and thereby provides the foundation for other nations and organizations to act in mutual cooperation with China in the Arctic.

Presence and Influence in the Arctic

The United States

During the Cold War, the Arctic was an arena of military competition between the United States and the Soviet Union, with both countries operating long-range bombers, tactical combat aircraft, maritime patrol aircraft, nuclear-powered submarines, surface warships, and ground forces in the region.⁵⁸ The end of the Cold War and the collapse of most elements of the Russian military establishment following the dissolution of the Soviet Union in December 1991 greatly reduced this competitive arena and inevitably led to a post-Cold War period of reduced emphasis on the Arctic in U.S. military planning.⁵⁹ However, in recent years the emergence of a great power competition and a significant increase in Russian military presence and operations in the Arctic has led to growing concerns among U.S. officials and other observers. The Arctic is once again becoming a region of military tension and competition, resulting in a renewed focus on the Arctic in U.S. military planning.⁶⁰ U.S. Department of Defense (DOD) officials have specifically stated that U.S. military operations in Alaska can play a role in countering China's activities in the Arctic and the Indo-Pacific region.⁶¹

The US Army,⁶² Navy,⁶³ Marine Corps, Air Force,⁶⁴ and Coast Guard,⁶⁵ in addition to the DOD as a whole,⁶⁶ are devoting increased attention to the Arctic in their planning and operations,⁶⁷ each having issued their own Arctic strategy documents. Each of these U.S. military services are conducting increased exercises and training operations in the region—some in conjunction with forces from NATO allies and non-NATO Nordic countries—and sending Russia and China signals of resolve and commitment regarding the Arctic.⁶⁸

The diminishment of Arctic ice is creating new operating areas in the Arctic for Navy surface ships and Coast Guard cutters.⁶⁹ The Navy, for example, has increased deployments of attack submarines and surface ships to the Arctic for exercises and other operations.⁷⁰ The Coast Guard annually deploys a polar icebreaker, cutters, and aircraft into the region to perform various missions and to better understand the implications of operating such units there.⁷¹ The Navy and the Coast Guard currently have limited infrastructure in place in the Arctic to support expanded ship and aircraft operations in the Arctic,⁷² so cooperation with other Arctic countries will be valuable in achieving defence and homeland security goals. For example, the United States and Canada are working together to modernize the North American Aerospace Defense Command

(NORAD). Efforts are to include joint investments in new ‘sensing and command and control capabilities for defending against ballistic missile threats.’⁷³ Separately, on April 16, 2021 the U.S. State Department announced that the United States and Norway concluded negotiations over the Supplementary Defense Cooperation Agreement (SDCA). The SDCA supplements the provisions of the 1951 NATO Status of Forces Agreement (SOFA) and establishes a framework to advance the capabilities in support of the NATO alliance’s collective defence.⁷⁴

Some observers have expressed concern about whether the United States is doing enough militarily to defend its interests in the Arctic and, in some cases, have offered recommendations for doing more.⁷⁵ For example, some argue that the DOD and Coast Guard should build ice-hardened surface ships other than icebreakers for deployment to the Arctic or establish a strategic port in Alaska’s north to better support DOD and Coast Guard operations in the Arctic.⁷⁶

Polar-class icebreakers are specifically designed for icebreaking and have reinforced hulls, special icebreaking bows and other special systems that make them operable in both the Arctic and Antarctic. For almost a decade, there has been discussion in U.S. Congress about replacing the older cutters with newer models.

The Coast Guard is the U.S. agency responsible for polar icebreaking. U.S. polar ice operations, conducted in large part by the Coast Guard’s polar icebreakers, support nine of the Coast Guard’s eleven statutory missions.⁷⁷ The Coast

Guard’s large icebreakers are called polar icebreakers rather than Arctic icebreakers because they perform missions in both the Arctic and the Antarctic. Operations to support NSF research activities in both polar regions account for a significant portion of U.S. polar icebreaker operations.⁷⁸ The operational U.S. polar icebreaking fleet currently consists of one heavy polar icebreaker, Polar Star, and one medium polar icebreaker, Healy. In addition to Polar Star, the Coast Guard has a second heavy polar icebreaker,



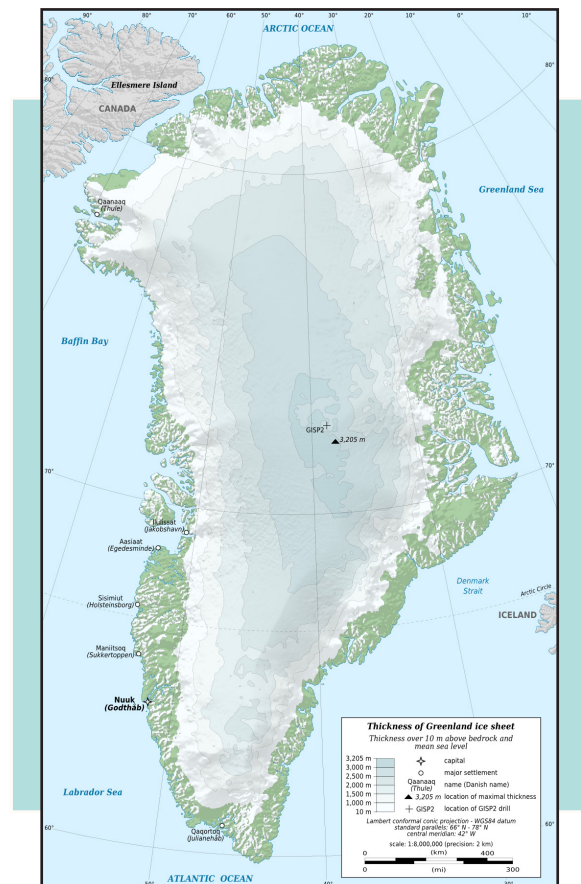
The Coast Guard Cutter Polar Star, with 75,000 horsepower and its 13,500-ton weight, is guided by its crew to break through Antarctic ice en route to the National Science Foundation’s McMurdo Station, Jan. 15, 2017. The ship, which was designed more than 40 years ago, remains the world’s most powerful non-nuclear icebreaker. (Source: US Coast Guard via Flickr, Public Domain)

Polar Sea, which suffered an engine casualty in June 2010 and has been non-operational since.⁷⁹

Some observers have identified polar icebreaking capacity as a component of U.S.-Russia (or U.S.-China) competition in the Arctic, expressing concern about what they view as a U.S. 'icebreaker gap' compared to the much-larger Russian polar icebreaker fleet.⁸⁰ In its FY2013 budget, the Coast Guard initiated a program, now known as the Polar Security Cutter program, to acquire new heavy polar icebreakers.⁸¹ This program has received a total of US\$1,754.6 million (i.e., about US\$1.8 billion) in procurement funding through FY2021. With the funding the program has received through FY2021, the first two polar security cutters are fully funded.

Washington's renewed attention to its Arctic policy can also be reflected in its relations with and considerations of the major Arctic land mass of Greenland. In August 2019, former U.S. President Donald Trump announced that he was considering buying the land mass,⁸² which is a quarter of the size of the United States. In his own visit to Greenland on May 20, 2021, the current Secretary of State Antony Blinken stressed that he was not there to buy the country, signalling a change in considered policy from the Trump administration.⁸³

With the brief Greenland case as a mild example, the region's geopolitical importance and fragile system of governance make it fertile ground for either cooperation or conflict. Russia's invasion of Ukraine beginning in late February 2022 has substantially affected U.S., Canadian, and Nordic relations with Russia in the Arctic. On March 3, 2022, in response to Russia's invasion, seven Arctic states—meaning all Arctic states except for Russia—issued a joint statement in which they announced that they would be 'temporarily pausing participation in all meetings of the Council and its subsidiary bodies.' The announced pause in participation came in the midst of Russia's two-year chairmanship of the Arctic Council, which began in May 2021. The consequences of this decision to boycott council activities over Russia's military aggression could prove devastating as many decisions are left stranded at a vital time for the expanding region.



A map of Greenland depicting the ice sheet thickness and its surrounding waters. (Source: Wikimedia Commons, CC3.0)

China

China has interest in the Arctic in the fields of shipping, resource development and scientific research. Both climate change and technological developments are opening the Arctic region for longer year-round navigation through the Northern Sea Route (NSR), the Northwest Passage, and even straight across the North Pole. Commercial shipping is the lifeblood of international trade. According to the International Chamber of Shipping in London, around 90 percent of the world's international trade is carried by commercial shipping vessels.⁸⁴ Ice-class vessels and icebreakers hold the key to successfully voyaging through the Arctic. Subsequently, several Asian nations' shipyards have developed expertise in building ice-class ships and icebreakers. China is one of the leading Asian shipbuilding nations and its shipyards can construct a variety of vessels. Given China's well-known concern over the vulnerability to closure of its southern sea lines of communications connecting the Indian Ocean with the South China Sea, it will view the NSR as a potential alternative trading route to its markets in Europe and the United States.⁸⁵

Future economic opportunities are abundant and include capitalizing on increased Europe-bound traffic through the North Sea.⁸⁶ The prospects of an ice-free Arctic led the Stornoway Port Authority, given their strategic location in Scotland, to propose in 2013 a long-term vision to become an 'Arctic gateway hub' in 20 years.⁸⁷ Tests are already underway. In 2016, the state-owned China Ocean Shipping (Group) Company (COSCO), one of the world's largest shipping and logistics companies, sent five vessels through the NSR. One of the vessels delivered wind power equipment to the United Kingdom, making it the third successful voyage to the U.K. through the NSR.⁸⁸ Between 2014 and 2019, about two dozen Chinese vessels transited Russia's NSR, making it more active in the route than any other country except Russia.⁸⁹

China possesses the Xuelong (Snow Dragon) icebreaker, which was originally built in Ukraine in 1993 and converted from an Arctic cargo ship to a polar research and re-supply vessel by Hudong-Zhonghua Shipbuilding of Shanghai by the mid-1990s. It was then extensively upgraded in 2007 and 2013. Jointly designed by the Finland-based Aker Arctic Technology Inc., the Chinese Arctic and Antarctic Administration and the Polar Research Institute of China, a second Chinese polar icebreaker named Xuelong 2, slightly smaller but more capable than Xuelong, entered service in July 2019.⁹⁰ Some Chinese shipyards such as the Shanghai Shipyard and the Hudong-Zhonghua Shipbuilding Co. Ltd. are already building ice-class ships of their own.⁹¹

There are multiple benefits for exploring the Arctic as a new commercial shipping route. Notably, sailing through the Arctic brings China 4,000 nautical miles closer to the European Union and the east coast of North America. Unlike in the Suez or Panama Canals, there are currently no fees, vessel size restrictions or other regulations in this route. In addition, the smaller ecological footprint of reduced fuel costs per ton-mile might also be an added incentive for the development of an Arctic route. Arctic shipping



*An aerial photo taken on December 1, 2019 showing China's icebreakers Xuelong (behind) and Xuelong 2 (in front) at an area close to China's Zhongshan Station in Antarctica.
(Source: Xinhua/Liu Shiping via Getty Images)*

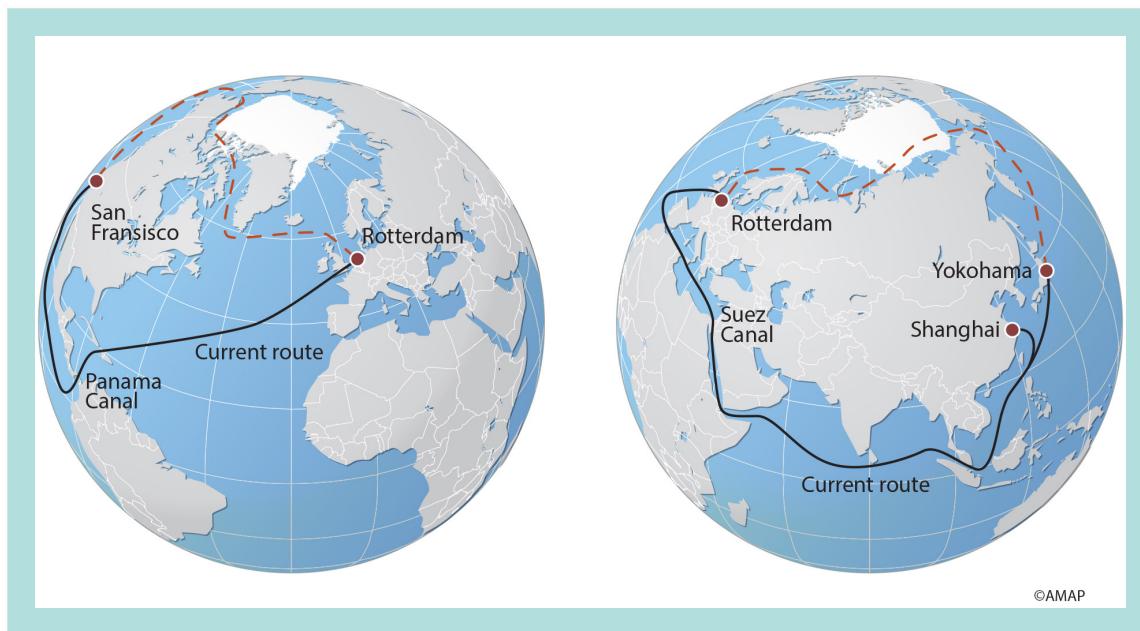
could be another aspect of the new 'green wave' currently sweeping the shipping industry as more attention is being paid to the environmental impact of fuel efficiency and emissions from commercial shipping.⁹² Moreover, it could save companies money on piracy insurance. Piracy caused the cost of insurance for ships traveling via the Gulf of Aden in the Arabian Sea towards the Suez Canal to increase more than tenfold between September 2008 and March 2009. These potential alternative routes certainly serve to lower the risk of sailing through piracy affected regions.⁹³

Stimulated by the lure of these advantages, China has begun to advance its interests in the region. These interests have resulted in very strong polar research capabilities and, coupled with its heavy dependence on exports and greatly enhanced shipbuilding expertise, China has naturally examined the prospects of greater exploitation of the Northern Sea Route and the commercial possibilities along its length.

The opening up of the Arctic will also provide access to new reserves of natural resources on which China's economic growth increasingly relies upon. The U.S. Geological Survey estimates that the Arctic contains up to 30 percent of the world's undiscovered gas deposits and 13 percent of the world's undiscovered oil deposits.⁹⁴

With all of this in mind, China has sought to obtain observer status at the Arctic Council. The Council serves as a forum to deal with Arctic issues, including shipping, and is keenly aware of the challenges presented by Arctic shipping.⁹⁵ Examples of their collaborative work and attention on this issue is their March 2020 report on 'The Increase in Arctic Shipping 2013-2019'⁹⁶ and their updated May 2021 'Arctic Maritime Shipping Assessment' report.⁹⁷

Traditionally, China has kept relatively quiet on shipping matters. Now, it is starting to take a much more active role in increasing Polar research. China is currently conducting research in both the Arctic and the Antarctic with an emphasis on climate change and possesses one of the world's largest non-nuclear icebreakers used in polar research. In modern history, it has maintained an active program of Arctic and Antarctic stations, has partnered with several Arctic nations and has set up a research station in Norway. Much of the international community is clamouring for a special international regulatory regime to govern commercial activity in the pristine Arctic Ocean Basin. China's Arctic research is also well-coordinated. In 2008, China established a research station at 87 degrees north, which has since been providing extensive scientific research and a solid basis for the development of Arctic commercial shipping.



*The two potential Arctic shipping routes compared to the traditional routes through the Panama Canal (left) and Suez Canal (right).
(Source: Arctic Council Arctic Monitoring and Assessment Programme, 2011)*

With China's dependency on shipping, China is eager to diversify its supply and trade routes, particularly by reducing its reliance on shipping through the Straits of Malacca and the Lombok Strait. An Arctic route would bring the additional advantage of contributing to the development of China's northeast region. There have been reports that China has been working to develop navigation charts for parts of the Arctic, and that very preliminary discussions have occurred to establish a transshipment hub in Iceland.

What is known is that China is working to develop a 33,069 ton nuclear icebreaker designed to easily smash and grind its way through ice-covered waters and be bigger than even the epic nuclear-powered vessels built by Russia.⁹⁸ A nuclear icebreaker will further enhance China's ability to navigate the Arctic Ocean, even during winter conditions.⁹⁹ In original project documents, the vessel is described as an 'experimental ship platform', hinting at its role as a test vehicle for nuclear propulsion.¹⁰⁰ As China's

first nuclear-powered surface vessel, according to the South China Morning Post, this experimental ship would travel at a max speed of 11.5 knots, or just over 13 miles per hour, paving the way for nuclear-propelled aircraft carriers.¹⁰¹

In addition to the advantage of acquiring shipping-related technology, experts also see this development from a strategic view: 'While a nuclear icebreaker is a strong statement of the country's Arctic goals...it is important to remember China's wider foreign policy ambitions.'¹⁰² China's first atomic icebreaker could pave the way for nuclear technological advances which will reverberate far beyond the Arctic region. As of 2019, China operates two conventional aircraft carriers and, in its great-power competition with the United States, nuclear-powered carriers will be indispensable as guarantors of China's capabilities.¹⁰³ China launches its third aircraft carrier, the Fujian, which began construction in Shanghai in 2018 and is China's first domestically-developed aircraft carrier.¹⁰⁴

China is deepening its Arctic presence through resource-oriented investments and the development of ports. It is in the process of diversifying its energy resources by investing in both Russia's Yamal liquefied natural gas complex and Norway's oil and gas fields. These sources not only provide China with an alternative supply of oil and gas but also help China gain experience in developing Arctic infrastructure and technology, which will eventually allow it to control the routes through which its imports travel. For similar reasons, China is now seeking to make oil and gas investments in Alaska, Canada and Norway, as well as investments in the mineral industries and ports of many Northern European Arctic states.¹⁰⁵

The five Northern European members of the Arctic Council (Denmark, Finland, Iceland, Norway, and Sweden) are potential regional partners for Beijing and are especially eager for financial backing for their own Arctic ambitions.¹⁰⁶ Iceland, Greenland, and Finland are particularly attractive targets for Chinese foreign direct investment. Iceland has had a mixed response to Chinese presence, which is evident in how it welcomes investments in geothermal technology and discusses opportunities for Chinese support of a deep-sea port, yet still declines tourism-related land purchases. Across the Denmark Strait in a melting Greenland, China is investing in potential ports and the rare earth minerals needed to feed its vast manufacturing economy. Simultaneously, in 2012 the Chinese energy company Sinopec and the Icelandic company Orka Energy announced plans to invest more than US\$100 million in geothermal technology.¹⁰⁷ Finland and China have recently inked a deal to create a data Silk Road that will link Arctic communications to the Asian market.¹⁰⁸ Chinese investments in the mining and energy industries are also taking place beyond the immediate region surrounding Iceland, Greenland, and Russia.¹⁰⁹

In Canada, for example, Chinese firms have acquired interests in two oil companies that could afford them access to Arctic drilling. Lackenbauer, Lajeunesse, & Dean, however, argues against the narrative that describes China as a peer competitor in the

Arctic.¹¹⁰ They points out that commentators have often overstated the scale of Chinese investment and other forms of engagement in the Arctic. Though China articulates its interests in the Arctic by defining itself as a stakeholder, in its 2018 Arctic Policy white paper it does emphasize the important role of cooperation between Arctic states and non-Arctic states. In short, China does not see itself as a competitor in the Arctic region.

China's active polar research program is intensifying its presence in both the Arctic and Antarctic regions and naturally involves interactions with Arctic states. In 2004, China opened its first Arctic scientific research station Huang He Zhan (Yellow River Station) at Ny-Ålesund in Svalbard, Norway. Furthermore, with Xuelong, the world's largest non-nuclear icebreaker, China has embarked on several Arctic research expeditions. These activities are part of China's larger polar scientific research efforts, which have resulted in more than 20 expeditions being sent to the Arctic and Antarctic since 1984.

China's interest and research involvement in the Arctic is also heavily influenced by its environmental goals and commitments, which China has already shown serious commitment to in its 2018 Arctic policy, the Paris Agreement and the UN's 2030 Agenda for Sustainable Development.

Engagement with International Institutions

The United States

A founding member of the Arctic Council, the United States has held the chairmanship of the Arctic Council twice: from 1998-2000 and again from 2015-2017. During its first chairmanship, the U.S. presided over the release of the 2000 Barrow Declaration.¹¹¹ Together with the other seven Arctic States, the U.S. launched the International Circumpolar Surveillance at the turn of the century; a region-wide disease surveillance system led by the U.S. Centers for Disease Control and Prevention.¹¹² Around this time the U.S. also launched the Arctic Climate Impact Assessment; the first-ever comprehensive scientific assessment of the effects of climate change in the Arctic, which was completed under Iceland's chairmanship in 2004. The United States and Russia co-chaired a special task force on science cooperation under the auspices of the Arctic Council that led to the conclusion of a legally-binding 'Agreement on Enhancing International Arctic Scientific Cooperation', which was signed by foreign ministers at the Arctic Council Ministerial meeting on May 11, 2017 in Fairbanks, Alaska.¹¹³ The U.S. has served as chair of both Expert Groups on Marine Environmental Response and Search and Rescue in exercising the 'Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic', which was signed in 2013, and the 'Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic', which was signed in 2011.

The United States has been a key member state of the United Nations International Maritime Organization since 1950. The IMO's International Code for Ships Operating in Polar Waters (known simple as the Polar Code) is mandatory under both the International Convention for the Safety of Life at Sea and the International Convention for the Prevention of Pollution from Ships.¹¹⁴ The Polar Code, entering into force in 2017, covers the full range of design, construction, equipment, operational, training, search and rescue and environmental protection matters relevant to ships operating in the inhospitable waters surrounding the two poles.

The United States is a member of NATO, as are another four Arctic states—Canada, Denmark, Iceland, and Norway. During the Cold War, U.S. and allied political and military officials viewed Norway and its adjacent sea areas as the northern flank of NATO's defensive line against potential aggression by the Soviet-led Warsaw Pact alliance. With

the end of the Cold War, NATO planning efforts shifted away from defending against potential aggression by Russia toward other concerns. With the emergence of great power competition, NATO is now once again focusing more on the question of how to deter potential Russian aggression against NATO countries, including in the Arctic.¹¹⁵

BOX 1: Examples of Arctic-Dedicated Multinational and Non-Governmental Institutions, Organizations & Centers

MULTINATIONAL INSTITUTIONS AND GROUPS

- The Arctic Council
- International Arctic Research Center (IARC)
- International Arctic Science Committee (IASC)
- International Arctic Social Sciences Association (IASSA)
- International Study of Arctic Change (ISAC)
- International Union of Circumpolar Health (IUCH)
- Northern Forum
- Inuit Circumpolar Council

ACADEMIC INSTITUTIONS AND CENTERS

- Scott Polar Research Institute (University of Cambridge)
 - Arctic Institute of North America (University of Calgary)
 - Arctic Law and Policy Institute (University of Washington)
 - Institute of Arctic and Alpine Research (University of Colorado)
 - Arctic Centre (University of Lapland)
 - University of the Arctic (Global)
 - Institute for Arctic Studies (Dartmouth College)
 - Polar Center (Penn State University)
- More: <https://www.pmel.noaa.gov/arctic-zone/orgs.html>

NON-GOVERNMENTAL INSTITUTIONS

- The Arctic Institute (The United States)
- Arctic Frontiers (Norway)
- European Polar Board (The Netherlands)
- Institute of the North (The United States)
- International Polar Foundation (Belgium)
- Polar Research and Policy Initiative (United Kingdom)
- The Gordon Foundation (Canada)

JOINT OBSERVATORIES & STATIONS

- Tiksi International Hydrometeorological Observatory (The United States., Russia, Finland)
 - China-Iceland Arctic Observatory (CIAO)
 - Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAiC)
 - AWIPEV Arctic Research Base (Germany, France)
- More: https://asm3.org/library/Files/190402_ASM2_Bericht_V2_bf.pdf

China

Traditionally, China has been neither enthusiastic in developing international organizations nor in great favour of multilateralism in international cooperation.¹¹⁶ However, since China's chairman Xi Jinping took office in 2012, China has presented the world with a series of spectacular initiatives for multilateral cooperation. Specific examples include the Silk Road Fund, the Free Trade Area of Asia Pacific Framework, the Asian Infrastructure Investment Bank, and the One Belt One Road Initiative (also known as the Belt and Road Initiative or the BRI). The Arctic is an issue area where China has been actively experimenting with various tactics to overcome structural obstacles, advance

Chinese Chairman Xi Jinping announced the Silk Road Economic Belt plan during his state visit to Kazakhstan in September 2013. A month later, Xi proposed the 21st Century Maritime Silk Road in his address to the Indonesian parliament. Later, the Chinese government combined these two regional proposals of international development cooperation and named it One Belt One Road initiative.

its position in existing multilateral institutions and make the best of its position as an outsider by engaging with Arctic regional states bilaterally.¹¹⁷

China, for example, views the Arctic Council as an important body for governance and cooperation. Since 2007, China has attended the Arctic Council sessions regularly as an ad hoc observer to gain a better understanding of the Council's work. In 2008, China began to officially express its intentions in becoming an observer on the Arctic Council. China's bid for a seat on the Arctic Council, which officially started in 2009, has made a big media splash because of China's growing power and increasing global reach. During this process, China's efforts also encountered different reactions from Arctic states. For example, Canada considers the Arctic Council to be 'the primary forum for collaboration among the eight Arctic States' and prefers a regional governance regime dominated by the Arctic States.¹¹⁸ Canada 'insists the Arctic Council eight are "best placed to exercise leadership in the management of the region," at a time when China and others are showing interest in the North'.¹¹⁹ Furthermore, Canada seems to advocate for Arctic issues to be governed by as fewer players as possible while keeping the rest of the world at a distance.¹²⁰ Canadian ambivalence towards China's participation in the Arctic Council was evident until the final decision was made in May 2013.¹²¹

In May 2013, the Arctic Council granted China, Japan, South Korea, India, and Singapore observer status.¹²² As an observer at the Arctic Council, China will increase its popularity in the international community and will also find its way to be informed of and air its voice in legislations on Arctic affairs.¹²³ Problems within the current system of international law in the Arctic area include a lack of universality and authority in regional legal documents. Thus, building a uniform legislative system within a multilateral, authored and institutionalized organization with certain constraints is the most urgent task for negotiating the interests of all parties in the Arctic region. The most realistic choice is to formulate multilateral treaties under the framework of the Arctic Council, follow the related terms in international law, and consider special circumstance of the Arctic region.

In recent years, the Arctic Council has released many reports and resolutions to lay a foundation for the formulation of multilateral normative documents. As one of the Arctic Council's observers, China will be able to audit and offer opinions related to these topics. China will then be able to track the progress of legislation on Arctic issues and on Arctic Council resolutions. In the meantime, it can recognize the standpoints and appeals of these countries. On one hand, this can help Beijing effectively adjust its strategy on disputes and cooperate with other related parties. On the other hand, joining the Arctic Council also enables China to have a voice on Arctic affairs, protect its legal interests, and clear the air for misunderstandings regarding China.¹²⁴

In this regard, China's Arctic policy white paper highlights China's determination to better understand the region, utilize the opportunities arising from change in the Arctic region, and protect the region from imminent threats such as climate change. China, as demonstrated in its white paper, clearly prioritizes a multilevel governance approach at global, regional, and bi-lateral levels.¹²⁵ China also intends to explore avenues to

participate in Arctic governance via the United Nations. Its role on the United Nations Security Council (UNSC) provides China with the prerogative, along with other permanent members of the Security Council, to link the maintenance of 'peace and security' to Arctic governance.¹²⁶

China also participated in the development of the IMO's Polar Code of January 2017, which set rules for ships operating in polar waters. It is in China's interest to adopt a mandatory Polar Code since China, as a flag state, would deal with internationally agreed rules and standards rather than unilateral national legislation when sailing in the exclusive economic zones of Arctic coastal states.¹²⁷

Also in its Arctic policy white paper, China stated that disputes over shipping lanes should be settled in accordance with international law and expresses support for the IMO's Polar Code. It encouraged the IMO to play an active role in future navigation rules. The policy affirms the sovereignty of Arctic states over oil, gas, mineral, and other non-living resources, and encourages China's enterprises to follow national law, if engaged in those activities.¹²⁸

China was also one of ten states involved in the adoption of the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (CAOFA), which took place outside the umbrella of the Arctic Council. This agreement, which entered into force in June 2021, presents a vivid example of China's role in the governance at the final frontiers of the world. China also supports the establishment of an Arctic fisheries management organization or making other institutional arrangements based on UNCLOS. In other words, as a rising power, China aims to first understand the Arctic and then to protect and use the resource-rich region.¹²⁹

As previously noted, China has long pursued active international cooperation in Arctic scientific research. It joined the International Arctic Science Committee in 1996 and jointly initiated the establishment of the 2004 Asian Forum on Polar Science with South Korea and Japan. China also hosted the 2005 Arctic Science Summit Week and became a member of Ny-Ålesund Science Managers Committee during the same year. In 2009, Chinese experts participated in the 'Melting Ice: Regional Dramas, Global Wake-up Call' conference and the Task Force on Melting Ice. Concurrently, Chinese experts have participated in the drafting of a mandatory code for ships operating in polar waters in the Subcommittee on Ship Design and Equipment of the IMO, although China has not conducted systematic research on Arctic shipping.¹³⁰

Most notable is the China Nordic Arctic Research Center (CNARC), which was founded in 2013. The CNARC acts as a bridge among Nordic institutions and universities along with their Chinese counterparts for natural and social science exchange and cooperation. By the end of 2021, China had carried out 12 scientific expeditions in the Arctic Ocean and had been conducting related research, based at Yellow River Station, for 18 years. Using its research vessel and stations as platforms, China gradually established a multidiscipline observation system covering the sea, ice and snow, atmosphere, biological and geological system of the Arctic.

Divergence and Convergence of Interests

By comparing the United States' and China's respective policies and influences in the Arctic, it can be concluded that there exist numerous divergences of interests between the two. These divergences are reflected in how the United States views China's increasing presence in the Arctic, how it views China's relationship with Arctic States, particular with Russia, and how its relationship with China is implied from the identified U.S.-China bilateral relations on many of the global issues.

To the present, there have been limited exchanges of views between the United States and China on polar issues. Most notably, since 2011 there have been topical debates within the framework of the Strategic and Economic Dialogue, as well as a series of workshops on U.S.-China Arctic policy involving academic and government experts, first in Shanghai in May 2015 and then in Washington D.C. one year later.¹³¹ Nonetheless, the Arctic has not yet played a major role in U.S.-China diplomacy. This fact may reflect the relatively modest role the Arctic has played in U.S. foreign policy to date, at least before 2019, or reflect the relative lack of importance of the Arctic on their bilateral agenda, especially as it compares to hot button issues such as the South China Sea, trade, and human rights.¹³²

The U.S. position on China's application of obtaining an observer status in the Arctic Council was somewhere in-between Canada's and Russia's wariness and Northern Europe's inclusiveness.¹³³ The U.S. was open to observers and considered China to be a responsible applicant.¹³⁴ Moreover, China's observer status in the Arctic Council would provide the then-U.S. Secretary of State John Kerry an additional forum in which to engage China (as well as India) on climate change; a key priority for the Obama administration.¹³⁵ In 2013, Secretary of State Kerry brokered a compromise which involved requiring observers to agree to specific rules for their conditional participation, particularly recognizing the sovereignty of Arctic states and UNCLOS as the determining legal framework. This compromise paved the way for the admission of China and several other states as observers in the Arctic Council.¹³⁶

Some other U.S. officials held scepticism about China's long-term intentions in the Arctic. For example, they noted China's 'potential to exploit economic weakness in the Nordic states or to take advantage of opportunities to engage in scientific research to improve anti-submarine warfare capabilities.'¹³⁷ This scepticism has since remained and was

reaffirmed by both the former Trump administration and the current Biden team as the international security environment has shifted to that of a renewed great power competition. This change underscores a question for the U.S. regarding whether—and how—to respond to China’s growing activities in the Arctic.

Although there is a certain level of cooperation between the United States and China in the Arctic, thanks to a variety of uncertain factors, China’s emergence as an Arctic player is taking place at a time of rising tension between China and the United States. Examples of the factors that add to this tension for the U.S. includes issues over freedom of navigation in the South China Sea, China’s emergence as a global naval power, and the deepening Sino-Russian partnership on some cooperative projects in the Arctic.¹³⁸ Actions like these concern Washington; especially as they happen near-simultaneously. Washington’s National Security Strategy (2017) and National Defense Strategy (2018),¹³⁹ make clear that the U.S. believes it is facing a new era of great power competition which does extend into the Arctic.¹⁴⁰ The Trump administration saw the Arctic as the next frontier of geopolitical competition with China. The then-Secretary of State Pompeo’s address in May 2019 at the Arctic Council Ministerial Meeting in Finland was aimed at Russia and China—the main strategic rivals of the U.S.¹⁴¹ Despite the absence of any imminent military threat in the region, the U.S. said it will boost its military and diplomatic presence in the Arctic by hosting military exercises, strengthening its force presence, rebuilding its icebreaker fleet, and expanding coast guard funding. In addition, it said it would create a new senior military post for Arctic affairs within the U.S. Department of Defense, which further highlights the severity with which American leaders are now paying attention to the region.



A ceremony celebrating the arrival of Yamal LNG Project Ice-Breaking LNG Carrier 'Vladimir Rusanov' from Russia's Arctic region is held on July 19, 2018 in Nantong, Jiangsu Province of China. The first direct shipment of LNG from Russia's Arctic region to Asia was also delivered to PetroChina's Rudong terminal on July 19, 2018.

(Source: Visual China Group via Getty Images)

There are concerns from the U.S. views that China's increasing engagement with Russia would begin to dominate the Arctic area. The recent report titled as "China's Strategy and Activities in the Arctic" by Rand and Swedish Defence Research Agency examines the potential implications of Chinese investments and activities in the Arctic. It points out that, while Chinese investments and presence in the North American sections of the Arctic remain limited, the world should keep an eye on Russia's relationship with China, which the report warns brings uncertainties in the Arctic.¹⁴² The report raises several recommendations for the U.S. government; one of which is to maintain the governance of Arctic affairs among Arctic states and keep it as a powerful instrument to undesirable Chinese involvement in the region. There are some voices calling for a continual U.S. leadership role on Arctic issues and a fortification of its Arctic operational capacity. Considering the new triangulation between the United States, China, and Russia in the Arctic, the United States is now called upon to do a principal-level review of national political-military strategy for the Arctic Ocean region. This policy research group should include representatives of the National Security Council, the National Economic Council, the Departments of State, Department of Homeland Security, and Department of Defense, as well as the Joint Chiefs of Staff. It should also be able to consult as necessary with other departments and agencies, most notably the Director of National Intelligence, who chairs the Intelligence Community Arctic Working Group, as well as the Arctic Executive Steering Committee.¹⁴³

The United States has always been a reluctant power in the Arctic. Among the Arctic nations, it has invested very little into its Arctic resources, resulting in no real ports along Alaska's Arctic waters, a minimal military presence, and insufficient diplomatic engagement. However, in early 2019 the U.S. government released a US\$330 billion spending bill allocating a total of US\$675 million in funding for new icebreakers,¹⁴⁴ which U.S. military leaders deem vital in competing with Russia and China in the Arctic region. When the Secretary of State Pompeo visited with NATO allies in the North Atlantic on February 15, 2019, he also discussed security relations and China and Russia's growing presence in the Arctic. With moments like these, it seems clear that the United States has begun to shift its Arctic policy to that of one aimed at countering the growing influence of China and Russia in the high north.

In the past few years, the U.S. government has taken note of the rapid expansion of Chinese activity in the Arctic. For instance, a 2016 report by the U.S. State Department's International Security Advisory Board (ISAB) explained that 'many U.S. officials and academics suspect that part of China's expressed interest in the Arctic is to exert influence as a rising regional power, through partnerships with Arctic countries and a presence in the region, in order to pursue its economic interests and political influence.'¹⁴⁵ The report noted China's cooperation with Russia in the development of natural-gas deposits in the Arctic Siberian Yamal Peninsula, which makes sense since, following the collapse of Russia's relationship with the West over Ukraine, the Sino-Russian strategic partnership has become more pronounced. There have been instances of Chinese military vessels

operating near the Arctic Ocean; one example being the passage of People's Liberation Army (PLA) Navy ships near Alaska in September 2015 and another example being the July 2017 joint manoeuvres between PLA Navy and Russian Navy vessels in the Barents Sea. Sherri Goodman, an ISAB member, suggested the impact of Sino-Russian cooperation on Arctic regional security has not attracted enough attention from the U.S. government. The report also concluded that the United States should strengthen its operational capacity in the Arctic by building new icebreakers and gradually establishing infrastructure in the Arctic as a precaution for potential future security crises.¹⁴⁶

Some observers have simply called it a 'new cold war' in which Russia, China, and the United States are all vying for influence and control in the Arctic. The recent policy shift of the United States is also driven by its concern on this increasing influence of Russia and China and the cooperation between the two. Some even question whether there is any potential for something similar to occur today regarding the Arctic as was seen during the Cold War, whether that be the U.S. allying with China or with Russia.

While upgrading its own Arctic strategy, U.S. policymakers will need to consider the growing links between a traditional Arctic player and an ambitious newcomer. In light of the complex relationships among the United States, China, and Russia, the United States tends to frame the growing Sino-Russian partnership in hard-power terms. However, U.S. policymakers would have a different perception by looking at a broader picture in addressing Sino-Russian interests in the Arctic, as well as understanding that both great powers may have different long-term goals in the region.

Holistically, Chinese and Russian activity in the Arctic does not pose a great risk to U.S. interests. Russia and China, though sharing a common desire in many aspects, have a complex relationship balancing competition and cooperation with lingering mistrust on both sides, be it in Central Asia, the Russian Far East, or the Arctic. The Sino-Russian relationship in the Arctic will continue to be shaped by pragmatism with a focus on mutual economic benefits rather than as a strategic pact. Russia, as a major Arctic coastal state that is keen on protecting the sovereignty of Russia's Arctic territories and their resources, will remain cautious about Chinese ambitions in the Arctic. On the other hand, China will be alerted by any movement by Arctic states toward the closing of access to the Arctic Ocean to any non-Arctic state.

Reviewing existing cooperation between the United States and Russia and between the United States and China may serve to provide a broader view of the China-Russia-US relations in the Arctic. The emergence of the Arctic as a region of political and economic opportunity adds a new dimension to U.S.-China relations. The Arctic is an arena where the U.S. and China, for the most part, enjoy converging interests. This includes issue areas that touch upon aspects of the law of the sea such as conservation and climate change, marine scientific research, or the construction of port and infrastructure facilities. The two countries should aim to realize cooperative activities on these issue areas, which could play a useful role in stabilizing the troubled state of their current ties. China has the potential to be a strong partner for the United States if it can match

up its own interests in the Arctic with the United States' interests and, together, address questions that are important to both nations.

In addition to past cases of bilateral and multilateral cooperation between Russia and the United States in the Arctic, there are also common interests and goals that China, Russia, and the United States collectively share. They all signed an agreement to prevent unregulated commercial fishing on the high seas in the central Arctic Ocean (CAO); notably being the first instance of a legally binding, precautionary approach to protect an area from commercial fishing before fishing has begun in the area. This CAO Agreement consists of the international waters beyond the national jurisdiction of the Arctic coastal states, which do not have exclusive access to fisheries. China, a large stakeholder, has a significant voice on this regional fishery management agreement and China and the United States, in particular, have had good exchanges and communication on this issue.



*Search and rescue personnel training in an icy, polar environment.
(Source: Getty Images, Royalty-Free)*

If such momentum of multilateral cooperation will be sustained over a meaningful period, it may create a more functional context to address other pressing and multilateral issues of global importance in the Arctic. One other example is the five-year ARCSAR (Arctic Search and Rescue) project, which aims at improving Arctic emergency response capabilities. This project, to be led by a Norwegian agency, is funded by the European Union's Horizon 2020 program, which has allocated approximately US\$4.1 million for the project. The main goal of ARCSAR is to establish an international network consisting of governmental authorities, organizations, and frontline actors in the Arctic to increase security and to face the challenges created by increased traffic and activity. Thirteen nations, including the United States and Russia, and a total of 21 partners will participate in the project. Though China is not yet listed as participating country,

future participation in ARCSAR would be in its interest considering the common need of emergency-support and disaster-response capabilities for this dangerous region.

The 2021 United States-China dialogue in Alaska began with unprecedented harsh accusations from both sides. However, by the end of the summit, the top diplomats from both countries were obliged to agree that there are several areas where U.S. and Chinese interests intersect. One of these issues is the climate crisis. The two sides expressed their willingness to enhance cooperation in tackling climate change and stated that they will 'establish a joint working group on that subject.' However, it remains unclear whether this establishment will come to fruition.

Still, there is a clear understanding that China has taken significant steps to contribute to Arctic science through both unilateral and cooperative initiatives. For example, scientists aboard China's research icebreaker Xuelong completed the ninth Chinese Arctic expedition in 2018 and deployed two atmosphere-sea-ice-ocean (ASO) unmanned stations on Arctic drift ice floes.¹⁴⁷

More recently, China has established and supported Arctic research centres with Arctic states such as the Chinese-Russian Arctic Research Center and the China-Nordic Arctic Research Center. Experts on the issue argue that there are several avenues for initiating constructive scientific collaboration between the two countries, including, establishing a high-level dialogue on Arctic climate research to maintain transparent communication on each countries' research aims in the region and provide much-needed data sharing; reviving The U.S.-China Climate Change Working Group, which first launched in 2013, though was suspended by the Trump administration; and facilitating easier movement for researchers by reducing visa requirements and restoring closed consulates and diplomats working in scientific exchanges.

China has historically invited foreign scientists to participate in its Arctic expeditions. For instance, China invited American researchers to join the ninth expedition aboard Xuelong in 2018. And Chinese and American researchers and institutions are already working together as part of the MOSAiC expedition.¹⁴⁸

Following the release of the April 2021 U.S.-China joint statement on climate change, the first in more than four years,¹⁴⁹ Chinese President Xi joined Biden's virtual Leaders' Summit on Climate on April 21, which marked the first meeting of the two leaders since Biden came to office in January 2021.¹⁵⁰ And later that fall, the U.S. climate envoy John Kerry made a trip to China to further discuss climate issues.¹⁵¹ Though some may predict little concrete result from this series of meetings,¹⁵² climate change in the context of the polar studies, both in the Arctic and the Antarctic, opens a window for U.S.-China cooperation when the bilateral relationship has experienced its most difficult and tense phase since the normalization of ties in 1979. However, it remains as a question whether the two countries would make progress on their climate talk after China announced to suspend the dialogue after Nancy Pelosi's visit to Taiwan in August 2022.

The Arctic, like Antarctica, containing unique ecosystems where flora and fauna can be studied in largely pristine surroundings, are key regions for undertaking a range of research projects that are necessary to understand global climate systems. The United States has been a leader in polar science for decades.¹⁵³ Though the United States has always been a reluctant power in the Arctic compared with other littoral states, during its two-year rotating chairmanship of the Arctic Council, it called for more attention to the impacts of climate change and advanced some environmental priorities. And on the other side of the globe, the United States is in many ways the most influential country in Antarctica, operating the only research station at the South Pole as well as the largest station on the continent, and also continuing to support establishment of marine protected areas in the Southern Ocean.

China's Arctic policy white paper issued in 2018 emphasizes China's determination to both protect the eco-environment of the Arctic and address climate change.¹⁵⁴ It has significantly increased its strategic research and development in the Arctic with dozens of scientists in Svalbard as well as over 200 scientists dedicated to the Polar Research Institute of China and its mission. Beijing has also invested in scientists and technology within its oceanographic research enterprise to better understand the undersea domain.

The Biden administration appears eager to bridge the gap of its leadership role in studying the effects of climate change in the Arctic and, subsequently, possibilities for adaptation. The study of this topic was left behind during his precedent's tenure, whose leader was more focused on power politics than climate change and environment. Immediately following his inauguration, Biden began taking executive action to enact many of his administration's initial priorities, including 31 executive orders, 8 proclamations, and 10 presidential orders, memoranda, and determinations. Among these presidential documents, there are two executive orders on climate change and environment: the Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis and the Executive Order on Tackling the Climate Crisis at Home and Abroad.¹⁵⁵ Similarly, President Biden ordered a moratorium on oil and gas leasing in the Arctic National Wildlife Refuge and ordered a review of the potential environmental impacts of the long debated oil and gas program in the coastal refuge.¹⁵⁶

BOX 2: Recent Climate Change Statistics Regarding the Arctic

- The average Arctic sea ice volume for 2021 as a whole was the "7th lowest on record at 13,800 km³ with recent years all clustered closely together." 2017 still holds the annual volume record with 12,800km³.
- The average Arctic sea ice volume in September 2022 was 5,200 km³. This value is the 10th lowest on record for September, about 1,400 km³ above the previous record which was set in 2012.
- The average Arctic sea ice extent for September 2022 was 4.87 million km², tying with 2010 for the 11st lowest in the satellite record. The total extent of Arctic sea ice one year earlier was the 12th lowest on record.
- "The June 2021 snow cover in Arctic North America was below the long-term average for the 15th consecutive year."
- In 2021, the "Greenland Ice Sheet experienced three extreme melt episodes in late July and August." On August 14, 2021, rainfall was directly observed at the 10,500-foot Summit Station "for the first time ever."
- "Air temperatures during September at the 925 millibar level (approximately 2,500 feet above the surface) were above average over the North American side of the Arctic and near average or below average over most of the Eurasian side."
- The average surface air temperature over the Arctic between October 2020 and September 2021 was the 7th warmest on record. This is the "8th consecutive year since 2014 that surface air temperatures were at least 1°C above the long-term average."

REFERENCES:

NOAA: <https://www.noaa.gov/news-release/arctic-report-card-climate-change-transforming-arctic-into-dramatically-different-state>
NOAA Arctic Report Card: <https://arctic.noaa.gov/Report-Card/Report-Card-2021>
UW: <http://psc.apl.uw.edu/research/projects/arctic-sea-ice-volume-anomaly/>
NSIDC: <http://nsidc.org/arcticseaicenews/>

He also reinstated the protections for a ‘climate resilience area’ off the coast of Alaska; a key policy discussed during Barack Obama’s presidency. With these as the starting point, it is hoped that the Biden administration can revitalize related U.S. policies and bring with it a welcome opportunity to restore American leadership at the poles on environmental issues and climate change.

Nevertheless, whether climate cooperation between the United States and China in the context of the Arctic is achievable or not largely depends on how the current Biden administration views China’s policy and presence in the region. Soon after President Biden’s election, David Balton noted that the Biden administration may not view Chinese engagement in the poles in quite the same way as the Trump administration and that the Biden administration may become less aggressive in pushing back against China on this issue.¹⁵⁷ Overall, unlike the U.S.-Soviet relationship during the Cold War, the U.S.-China relationship need not be a zero-sum game in nature.

Washington will not be reluctant to cooperate with China; especially with respect to the Southern Ocean where China has already supported the U.S.-New Zealand Ross Sea marine protected area proposal in 2016 and with respect to the Central Arctic Ocean Fisheries Agreement that both the U.S. and China signed in 2018. In addition, a commitment to multilateralism and a willingness to cooperate with other states on tackling global climate challenges, will naturally bring the United States closer to the other Arctic nations.

Joint scientific cooperation in the Arctic, as well as in the Antarctic, could not only provide a political signal of warming relations between the two states, but also offer much more equality in the relationship for limited costs. Based on the existing history of bilateral collaboration in the polar regions, U.S.-China scientific cooperation to tackle climate change in the high north and the south point is achievable and can yield meaningful benefits even during this most challenging time between the two countries.

One of the greatest areas of both cooperation and contention between the U.S. and China in the Arctic relates to fisheries. As fisheries represent one of the largest areas of Alaska’s economy, it has had a strong commercial relationship with China, who buys US\$1 billion in Alaskan fish annually, making it Alaska’s top seafood export market.¹⁵⁸ With seafood making up well over 30% of the state’s export volume,¹⁵⁹ the ongoing trade war with China and related tariffs have resulted in huge losses for Alaska’s fishing industry. An 2020 analysis by the Alaska Seafood Marketing Institute shows that exports to China reached the highest level ever in 2017 at nearly US\$1 billion.¹⁶⁰ By 2018, Alaska seafood exports dropped by \$204 million—the largest year over year decrease ever. And by 2019, sales to China were at the lowest level since 2010 at US\$702 million—a drop of more than US\$250 million across two years. During the same time period, China saw a 91% increase in seafood imports from other nations, going from US\$8.1 billion to US\$15.4 billion. Although the removal of some of the tariffs following the Phase One Trade Deal has led to an increase in Chinese purchases, the economic losses have yet to fully recover.

Another ongoing area of concern is illegal, unreported, and unregulated (IUU) fishing. Over the years, the U.S. claims that numerous Chinese vessels have been apprehended illegally fishing in Alaskan waters. China and the U.S. currently have a memorandum of understanding to conduct joint boardings and high seas inspections related to IUU fishing, which outlines boarding procedures for law enforcement officials of either country to board and inspect American- or Chinese-flagged vessels suspected of high seas driftnet fishing. This has led, in many instances, to the U.S. Coast Guard collaborating with its Chinese counterparts when fishermen are apprehended and released to Chinese authorities.¹⁶¹

Another area reflecting the common interests of the U.S. and China in the Arctic is their engagement with the indigenous peoples. Both the U.S. and China have formally and extensively recognized the impact that commercial and military activity will have on the indigenous peoples of the Arctic. Both have released goals of developing sustainable Arctic tourism. For the U.S., approximately 18% of the Alaskan population are indigenous. However, there is yet to be any evident, formal engagement between the U.S. and China over the Arctic's indigenous peoples.

As a founding member of the Arctic Council and signatory to the 1996 Ottawa Declaration,¹⁶² which was signed in a meeting attended by senior representatives of three Arctic indigenous organizations, the United States has agreed multiple times to acknowledging and respect the Arctic's indigenous population. The Declaration on the Establishment of the Arctic Council, for example, recognizes the traditional knowledge of the indigenous people of the Arctic and ensures full consultation with and the full involvement of indigenous people and their communities and other inhabitants of the Arctic. Furthermore, the U.S. through the Ottawa Declaration itself stated that '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.'¹⁶³

China's own Arctic Policy recognizes that '[c]ommerical activities in the region will have considerable impact on...the way of work and life of Arctic residents including the indigenous peoples' and lists as one of its Basic Principles on the Arctic that 'China will... respect its diverse social culture and the historical traditions of the indigenous peoples.'¹⁶⁴ Respect and accommodation for indigenous peoples is mentioned multiple times throughout China's Arctic Policy, specifically in regard to preserving tradition and culture, preserving the eco-environment, and developing responsible tourism.

Additionally, China's overarching push for governance change in the Arctic—one that provides more voice to non-Arctic states—includes a message that indigenous peoples should also have an equal stake in Arctic governance; a message that Arctic states like Denmark and their Nuuk population have received well. With these multiple promises made by both the United States and China, it is reasonable to suggest that caring for and addressing the concerns of the Arctic indigenous population could be one clear convergence of interest that the two sides could readily agree on and move forward

Endnotes

- 1 National Oceanographic and Atmospheric Administration, 'Volumes of the World's Oceans from ETOPO1', accessed 24 February 2022, https://www.ngdc.noaa.gov/mgg/global/etopo1_ocean_volumes.html.
- 2 Rush Doshi, Alexis Dale-Huang, and Gaoqi Zhang, 'Northern expedition: China's Arctic activities and ambitions', Foreign Policy at Brookings, April (Washington D.C.: Brookings Institute, 2021).
- 3 These words are taken from the official title of P.L. 98-373. (Arctic Research and Policy Act of 1984 is the short title of Title I of P.L. 98-373.) The remainder of P.L. 98-373's official title relates to Title II of the act, the short title of which is the National Critical Materials Act of 1984.
- 4 George W. Bush, 'Homeland Security Presidential Directive 25: Arctic Region Policy', NSPD 66, January (Washington D.C.: White House Office, 2009), www.hsdl.org/?abstract&did=232474.
- 5 Barack Obama, 'National Strategy for the Arctic Region', May (Washington D.C.: White House, 2013), https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf.
- 6 Barack Obama, 'Executive Order No. 13689 – Enhancing Coordination of National Efforts in the Arctic', Federal Register Vol, 80 No. 16 (January 2015), 4191-4194.
- 7 Robert Orttung and Katherine Weingartner, 'U.S. Arctic Policymaking Under Trump and Obama: Implications for Russia and China', PONARS Eurasia, 12 April 2019, www.ponarseurasia.org/memo/us-arctic-policymaking-under-trump-and-obama-implications.
- 8 Heather A. Conley and Matthew Melino, 'The Implications of U.S. Policy Stagnation Toward the Arctic Region', Center for Strategic & International Studies, 3 May 2019, www.csis.org/analysis/implications-us-policy-stagnation-toward-arctic-region.
- 9 Donald Trump, 'National Security Strategy of the United States of America', December (Washington D.C.: White House, 2017), p. 40.
- 10 Office of the Under Secretary of Defense for Policy, 'Report to Congress Department of Defense Arctic Strategy', June (U.S. Department of Defense: 2019), <https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF>.
- 11 William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Public Law 116-283, 1 January 2021, Section 905 and Section 1045.
- 12 U.S. Library of Congress, Congressional Research Service, Changes in the Arctic: Background and Issues for Congress, by Ronald O'Rourke et al., R41153 (2022).
- 13 Joseph R. Biden, 'Interim National Security Strategic Guidance', March, (Washington D.C.: White House, 2021).
- 14 White House, 'Biden-Harris Administration Brings Arctic Policy to the Forefront with Reactivated Steering Committee & New Slate of Research Commissioners', 24 September 2021, <https://www.whitehouse.gov/ostp/news-updates/2021/09/24/biden-harris-administration-brings-arctic-policy-to-the-forefront-with-reactivated-steering-committee-new-slate-of-research-commissioners/>.
- 15 Arctic Council, 'Declaration on the Establishment of the Arctic Council', 19 September 1996, https://oarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00_Ottawa_1996_Founding_Declaration.PDF?sequence=5&isAllowed=y.
- 16 Department of the Navy, 'a Blue Arctic: A Strategic Blueprint for the Arctic', January (Department of the Navy 2021), <https://media.defense.gov/2021/Jan/05/2002560338/-1/-1/0/ARCTIC%20BLUEPRINT%202021%20FINAL.PDF/ARCTIC%20BLUEPRINT%202021%20FINAL.PDF>.
- 17 Department of the Navy, 'a Blue Arctic'.
- 18 Department of the Navy, 'a Blue Arctic'.
- 19 Department of the Air Force, 'The Department of the Air Force Arctic Strategy', July (Department of the Air Force 2020), <https://www.af.mil/Portals/1/documents/2020SAF/July/ArcticStrategy.pdf>.
- 20 United States Coast Guard, 'Adding the Polar Ship Certificate to the List of SOLAS Certificates and Certificates Issued by Recognized Classification Societies', 82 Federal Register 44108, 21 September 2017, <https://www.federalregister.gov/documents/2017/09/21/2017-20155/adding-the-polar-ship-certificate-to-the-list-of-solas-certificates-and-certificates-issued-by>.
- 21 Lesley Wroughton, 'U.S. and Iceland Boost Trade Ties. Discuss Arctic Security', Reuters, 15 February 2019, www.reuters.com/article/us-usa-iceland-pompeo/us-and-iceland-boost-trade-ties-discuss-arctic-security-idUSKCN1Q41RT.
- 22 NEOnline, 'Arctic Council Meeting Is Overshadowed by Lack of Consensus on Climate Change', New Europe Online, 7 May 2019, www.neweurope.eu/article/arctic-council-meeting-is-overshadowed-by-lack-of-consensus-on-climate-change/.
- 23 NEOnline, 'Arctic Council Meeting Is Overshadowed by Lack of Consensus on Climate Change'.
- 24 Executive Office of the President, 'Northern Bering Sea Climate Resilience', Executive Order 13754, 81 Federal Register 90669, 14 December 2016, <https://www.federalregister.gov/documents/2016/12/14/2016-30277/northern-bering-sea-climate-resilience>; Barack H. Obama, 'Memorandum on Withdrawal of Certain Portions of the United States Arctic Outer Continental Shelf From Mineral Leasing', DCPD-201600860, 20 December 2016, <https://www.govinfo.gov/app/details/DCPD-201600860>.
- 25 Executive Office of the President, 'Implementing an America-First Offshore Energy Strategy', Executive Order 13795, 82 Federal Register 20815, 28 April 2017, <https://www.federalregister.gov/documents/2017/05/03/2017-09087/implementing-an-america-first-offshore-energy-strategy>.
- 26 Executive Office of the President, 'Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis', Executive Order 13990, 86 Federal Register 7037, 20 January 2021, <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.
- 27 U.S. Department of the Interior, 'Secretary Bernhardt Signs Decision to Implement the Coastal Plain Oil and Gas Leasing Program in Alaska', 17 August 2020, <https://www.doi.gov/pressreleases/secretary-bernhardt-signs-decision-implement-coastal-plain-oil-and-gas-leasing-program>.
- 28 Alaska Native Claims Settlement, U.S. Code 43 Chapter 33.
- 29 Office of Science and Technology Policy, 'Northern Bering Sea Climate Resilience Area', White House, accessed 5 July 2022, <https://www.whitehouse.gov/ostp/arctic-executive-steering-committee-aesc/northern-bering-sea-climate-resilience-area/>; White House, 'Biden-Harris Administration Brings Arctic Policy to the Forefront'.
- 30 The State Council Information Office of the People's Republic of China, 'China's Arctic Policy', Xinhua, 26 January 2018, http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm.

- 31 Maria Bastos, 'A Polar Silk Road? China's Quest for the Arctic and Its Global Consequences', *Pakistan Politico*, 15 January 2019, <http://pakistanpolitico.com/a-polar-silk-road-chinas-quest-for-the-arctic-and-its-global-consequences>.
- 32 The State Council Information Office of the People's Republic of China, 'China's Arab Policy Paper', *Xinhua*, 13 January 2016, http://english.www.gov.cn/archive/publications/2016/01/13/content_281475271412746.htm; *Xinhua*, 'China issues white paper on Asia-Pacific security cooperation', 11 January 2017, www.xinhuanet.com/english/2017-01/11/c_135974121.htm.
- 33 Bastos, 'A Polar Silk Road?'
- 34 The State Council, 'China's Arctic Policy'.
- 35 The State Council, 'China's Arctic Policy'.
- 36 The State Council, 'China's Arctic Policy'.
- 37 The State Council, 'China's Arctic Policy'.
- 38 The State Council, 'China's Arctic Policy'.
- 39 Andrew Chater, 'What Is China's Interest in the Arctic?', *The Polar Connection*, 12 October 2016, <http://polarconnection.org/china-interest-arctic/>.
- 40 Robert Nicholls et al., 'Ranking of the World's Cities Most Exposed to Coastal Flooding Today and in the Future' (Paris: Organisation for Economic Co-operation and Development, 2007), <https://climate-adapt.eea.europa.eu/metadata/publications/ranking-of-the-worlds-cities-to-coastal-flooding/11240357>.
- 41 Timo Koivurova, 'China & the Arctic: Why the Focus on International Law Matters', *The Yearbook of Polar Law Online* 10, 1 (2019), 427-430, https://doi.org/10.1163/22116427_010010019.
- 42 'Spitsbergen (Svalbard) Treaty', 9 February 1920, in force 14 August 1925, 2 League of Nations Treaties Series 8, art 1.; 'United Nations Convention on the Law of the Sea', 10 December 1982, in force 16 November 1994, United Nations Oceans & Law of the Sea, United Nations Treaty Series Vol. 1833-1835, No. 31363.
- 43 The Ilulissat Declaration, 28 May 2008, Arctic Ocean Conference, Ilulissat, Greenland, 27-29 May 2008, <https://cil.nus.edu.sg/wp-content/uploads/2017/07/2008-Ilulissat-Declaration.pdf>.
- 44 Vladimir Golitsyn, 'The Legal Regime of the Arctic', in David Joseph Attard (ed.), *The IMLI Manual on International Maritime Law* (Oxford: Oxford University Press 2014), 464.
- 45 Jiang and Zhou, 'China and Maritime Sovereignty and Rights Issues in the Arctic'.
- 46 Zhiguo Gao, 'Legal Issues of MSR in the Arctic: A Chinese Perspective', in Susanne Wasum-Rainer et al. (eds.), *Arctic Science, International Law and Climate Change* (Berlin, Heidelberg: Springer 2012), https://doi.org/10.1007/978-3-642-24203-8_16.
- 47 Tianbo Qin, 'Dispute Over the Applicable Scope of the Svalbard Treaty: A Chinese Lawyer's Perspective', *Journal of East Asia and International Law* 8, No. 1 (May 2015).
- 48 Kamrul Hossain, 'China's White Paper on the Arctic: Legal Status Under International Law', *American Society of International Law* 22, no. 7 (May 2018), www.asil.org/insights/volume/22/issue/7/chinas-white-paper-arctic-legal-status-under-international-law.
- 49 See 'International Code for Ships Operating in Polar Waters (Polar Code)', 21 November 2014, in force 1 January 2017, IMO Doc. MSC. 385.
- 50 Xu Hong, 'Bei Ji Zhi Li Yu Zhong Guo De Can Yu' [The Arctic Governance and China's Participation], *Bian Jie Yu Hai Yang Yan Jiu* [Journal of Boundary and Ocean Study] 2 (2017), 5-8, <http://www.cibos.whu.edu.cn/index.php?id=498>, 7-8.
- 51 State Oceanic Administration, 'Guo Jia Hai Yang Ju Guan Yu Yin Fa "Bei Ji Kao Cha Huo Dong Xing Zheng Xu Ke Guan Li Gui Ding" De Tong Zhi' [State Oceanic Administration's Notification of the Issuance of the Regulation on Administrative Licensing Management on Arctic Expedition Activities], 30 August 2017, http://www.gov.cn/xinwen/2017-09/07/content_5223192.htm.
- 52 Xinmin Ma, 'China's Arctic Policy on the Basis of International Law: Identification, goals, principles and positions', *Marine Policy* Volume 100 (February 2019), 265-276, <https://doi.org/10.1016/j.marpol.2018.11.027>, 273.
- 53 Ma, 'China's Arctic Policy on the Basis of International Law', 273.
- 54 Ma, 'China's Arctic Policy on the Basis of International Law', 273.
- 55 The State Council Information Office of the People's Republic of China, 'China's Arctic Policy'.
- 56 Kamrul, 'China's White Paper on the Arctic'.
- 57 Kamrul, 'China's White Paper on the Arctic'.
- 58 Eugene Rumer, Richard Sokolsky and Paul Stronski, 'Russia in the Arctic—A Critical Examination', *Carnegie Endowment for International Peace*, 29 March 2021, <https://carnegieendowment.org/2021/03/29/russia-in-arctic-critical-examination-pub-84181>.
- 59 Congressional Research Service, *Changes in the Arctic*.
- 60 Congressional Research Service, *Changes in the Arctic*; Tyler Rogoway, 'Massive Expansion Underway At Russia's Northernmost Arctic Air Base (Updated)', *The Drive*, 23 August 2021, <https://www.thedrive.com/the-war-zone/42116/massive-expansion-underway-at-russias-highly-strategic-northernmost-arctic-air-base>; Center for Strategic and International Studies, 'Arctic Military Activity Tracker', accessed 13 July 2022, <https://arcticmilitarytracker.csis.org/>.
- 61 Congressional Research Service, *Changes in the Arctic*; Hilde-Gunn Bye, 'US Secretary of Defense Highlights the Importance of Alaska', *High North News*, 2 August 2021, <https://www.highnorthnews.com/en/us-secretary-defense-highlights-importance-alaska>.
- 62 Department of the Army, 'Regaining Arctic Dominance: The U.S. Army in the Arctic', January (Department of the Army 2021), <https://api.army.mil/e2c/downloads/2021/03/15/9944046e/regaining-arctic-dominance-us-army-in-the-arctic-19-january-2021-unclassified.pdf>, 48.
- 63 Department of the Navy, 'a Blue Arctic', 25.
- 64 Department of the Air Force, 'The Department of the Air Force Arctic Strategy'.
- 65 U.S. Coast Guard Headquarters Office of Emerging Policy, 'United States Coast Guard Arctic Strategic Outlook', April (Washington D.C.: U.S. Coast Guard 2019), 45.
- 66 Office of the Under Secretary of Defense for Policy, 'Report to Congress Department of Defense Arctic Strategy', 18.
- 67 Congressional Research Service, *Changes in the Arctic*.
- 68 Congressional Research Service, *Changes in the Arctic*.

- 69 Congressional Research Service, Changes in the Arctic; Sonoko Kuhara, 'What the "Blue Arctic" Means for the US Pacific Military Presence', *The Diplomat*, 21 August 2021, <https://thediplomat.com/2021/08/what-the-blue-arctic-means-for-the-us-pacific-military-presence/>; Seapower Staff, 'U.S. Coast Guard Cutters Patrol the U.S. Arctic', *Seapower*, 13 August 2021, <https://seapowermagazine.org/u-s-coast-guard-cutters-patrol-the-u-s-arctic/>.
- 70 Congressional Research Service, Changes in the Arctic; Diana Stancy Correll, 'Destroyer Ross Treks into the Barents Sea's Arctic Waters—Again', *Navy Times*, 21 October 2020, <https://www.navytimes.com/news/your-navy/2020/10/21/guided-missile-destroyer-ross-treks-into-arctic-barents-sea-again/>; Thomas Nilsen, 'U.S. Warship Returns to Barents Sea', *Barents Observer*, 20 October 2020, <https://thebarentsobserver.com/en/security/2020/10/us-warship-returns-barents-sea>.
- 71 Seapower Staff, 'U.S. Coast Guard Completes Operation Nanook 2021'.
- 72 Christopher Woody, 'The Navy Is Putting 'The Proper Equipment' Back on Its Ships to Operate in Harsh Arctic Conditions', *Business Insider*, 8 August 2020. <https://www.businessinsider.com/navy-putting-survival-gear-back-on-ships-for-arctic-operations-2020-8>; Andrew Eversden, 'Failure to Communicate: US Navy Seeks Faster Data Transfers amid Arctic Ice', *Defense News*, 12 May 2020, <https://www.defensenews.com/smr/frozen-pathways/2020/05/11/failure-to-communicate-us-navy-seeks-faster-data-transfers-amid-arctic-ice/>; Nathan Strout, 'SpaceX Could Fill the US Military's Arctic Communications Gap by the End of This Year', *Defense News*, 12 May 2020, <https://www.defensenews.com/smr/frozen-pathways/2020/05/11/spacex-could-fill-the-us-militarys-arctic-communications-gap-by-the-end-of-this-year/>; Geoff Ziezulewicz, 'Welcome to the Arctic: Degraded Radios, Poor Satellite Geometry and Sea Charts Dating Back to Capt. Cook', *Navy Times*, 19 September 2019, <https://www.navytimes.com/news/your-navy/2019/09/19/welcome-to-the-arctic-degraded-radios-poor-satellite-geometry-and-sea-charts-dating-back-to-capt-cook/>.
- 73 See, for example, Department of Defense, 'Joint Statement on NORAD Modernization', U.S. Department of Defense News Release, 17 August 2021, <https://www.defense.gov/News/Releases/Release/Article/2735041/joint-statement-on-norad-modernization/>; Nathan Strout, 'US and Canada Want to Collaborate on NORAD Modernization', *C4ISRNet*, 18 August 2021, <https://www.c4isrnet.com/battlefield-tech/2021/08/18/us-and-canada-want-to-collaborate-on-norad-modernization/>; Jason Sherman, 'U.S., Canada Set New Framework for NORAD Modernization, Guide for Future Investments', *Inside Defense*, 18 August 2021, <https://insidedefense.com/daily-news/us-canada-set-new-framework-norad-modernization-guide-future-investments>; Lee Berthiaume, 'Ukraine War Sparks Fresh Worries About North America's Own Defences', *CBC*, 5 March 2022, <https://www.cbc.ca/news/politics/ukraine-russia-norad-1.6374252>.
- 74 Bureau Of Political-Military Affairs, 'U.S.-Norway Supplementary Defense Cooperation Agreement (SDCA)', U.S. Department of State, Fact Sheet, 16 April 2021; Ministry of Defense, 'Norway signs Supplementary Defense Cooperation Agreement with the United States', Government of Norway, 16 April 2021; Chad Garland, 'US Can Build Military Facilities in Norway Under New Defense Cooperation Pact', *Stars and Stripes*, 16 April 2021, <https://www.stripes.com/theaters/europe/us-can-build-military-facilities-in-norway-under-new-defense-cooperation-pact-1.670014>; Thomas Nilsen, 'U.S. Navy Will Build Airport Infrastructure in Northern Norway to Meet Upped Russian Submarine Presence', *Barents Observer*, 16 April 2021, <https://thebarentsobserver.com/en/security/2021/04/us-navy-build-airport-infrastructure-northern-norway-meet-increased-russian>; Terje Solsvik and Nerijus Adomaitis, 'Norway to Allow U.S. Military to Build on Its Soil in New Accord', *Reuters*, 16 April 2021, <https://www.reuters.com/world/europe/norway-may-allow-us-military-build-its-soil-revised-cooperation-deal-2021-04-16/>; Paul McLeary, "Norway, US Bolster Russian Sub Watching With New Bases," *Breaking Defense*, 19 April 2021, <https://breakingdefense.com/2021/04/norway-us-bolster-russian-sub-watching-with-new-bases/>.
- 75 Congressional Research Service, Changes in the Arctic; Hilde-Gunn Bye, 'Air Force General: The US Needs to do More to be Ready for Operations in the Arctic', *High North News*, 9 March 2022, <https://www.highnorthnews.com/en/air-force-general-us-needs-do-more-be-ready-operations-arctic>.
- 76 Brian W. Everstine, 'DOD Leaders Want More Arctic Funding, But Not Right Now', *Air Force Magazine*, 17 June 2021, <https://www.airforcemag.com/dod-leaders-increased-arctic-funding-not-right-now/>; Greg Hadley, 'VanHerck: Services "Didn't Move the Ball Very Far" With Arctic Spending in 2022', *Air Force Magazine*, 10 June 2021, <https://www.airforcemag.com/vanherck-military-arctic-budget-2022/>.
- 77 U.S. Library of Congress, Congressional Research Service, Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress, by Ronald O'Rourke, RL34391 (2022).
- 78 Congressional Research Service, Changes in the Arctic.
- 79 Congressional Research Service, Coast Guard Polar Security Cutter (Polar Icebreaker) Program.
- 80 Mike Glenn, "U.S. Icebreaker Gap with Russia a Growing Concern as Arctic 'Cold War' Heats Up," *Washington Times*, 23 September 2021, <https://www.washingtontimes.com/news/2021/sep/23/us-icebreaker-gap-russia-growing-concern-arctic-co/>.
- 81 Congressional Research Service, Changes in the Arctic.
- 82 Martin Pengelly, 'Trump confirms he is considering attempt to buy Greenland', *The Guardian*, 18 August 2019, <https://www.theguardian.com/world/2019/aug/18/trump-considering-buying-greenland>.
- 83 Helen Sullivan, 'US no longer wants to buy Greenland, Blinken confirms', *The Guardian*, 20 May 2021, <https://www.theguardian.com/us-news/2021/may/21/us-no-longer-wants-to-buy-greenland-blinken-confirms>.
- 84 International Chamber of Shipping, 'Shipping and World Trade: Overview', accessed 13 July 2022, www.ics-shipping.org/shipping-facts/shipping-and-world-trade.
- 85 Rupert Herbert-Burns, 'Arctic Commercial Shipping and the Strategic Significance of the Northern Sea Route', August (Stimson Center 2013), 8.
- 86 Nathanael Mella, Keith Haines and Ed Hawkins, 'Future of the Sea: Implications from Opening Arctic Sea Routes', July (London: Government of the United Kingdom Government Office for Science 2017), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/634437/Future_of_the_sea_-_implications_from_opening_arctic_sea_routes_final.pdf, 24.
- 87 BBC, 'Stornoway Port Authority in Arctic Hub Plan', 31 July 2013, www.bbc.com/news/uk-scotland-highlands-islands-23515405; Jim Mcbeth, 'An Over-the-Top Route to Riches', *Scottish Daily Mail*, 8 August 2013.
- 88 Atle Staalesen, 'COSCO Sends Five Vessels through Northern Sea Route', *The Barents Observer*, 10 October 2016, <https://thebarentsobserver.com/en/arctic-industry-and-energy/2016/10/cosco-sends-five-vessels-through-northern-sea-route>.
- 89 Malte Humpert, 'China's First Nuclear Icebreaker Could Serve as Test Platform for Future Nuclear Aircraft Carriers', *Arctic Today*, 26 March 2019, www.arctictoday.com/chinas-first-nuclear-icebreaker-could-serve-as-test-platform-for-future-nuclear-aircraft-carriers/.
- 90 Xiaoci Deng, 'Icebreaker Xuelong 2 Joins Service on China National Maritime Day', *Global Times*, 11 July 2019, <http://www.globaltimes.cn/content/1157529.shtml>.
- 91 Vijay Sakhua, 'The Polar Code and Arctic Navigation', *Strategic Analysis* 38:6 (November 2014), 803-811, DOI: 10.1080/09700161.2014.952943, 809.

- 92 Joseph Spears, 'China and the Arctic: The Awakening Snow Dragon', China Brief Volume 9, Issue 6 (March 2009), 10-13. <https://jamestown.org/program/china-and-the-arctic-the-awakening-snow-dragon/>.
- 93 Linda Jakobson, 'China Prepares for an Ice-free Arctic', SIPRI Insights on Peace and Security No. 2010/2 (March 2010), 5.
- 94 'Arctic oil and natural gas resources', U.S. Energy Information Administration, 20 January 2012, <https://www.eia.gov/todayinenergy/detail.php?id=4650>.
- 95 Author Note: The overall work of the Arctic Council can be found at www.arctic-council.org. Information on the Arctic Shipping Working Group of the Arctic Council can be viewed at www.arcticportal.org/pame/amsa.
- 96 Protection of the Arctic Marine Environment, 'Arctic Shipping Status Report (ASSR) #1: The Increase in Arctic Shipping 2013-2019', March 31, 2020, https://oaarchive.arctic-council.org/bitstream/handle/11374/2733/ASSR%201_final_.pdf?sequence=1&isAllowed=y.
- 97 Protection of the Arctic Marine Environment, 'Arctic Marine Shipping (ASMA) Report: Updated Recommendations', May 2021, <https://oaarchive.arctic-council.org/handle/11374/2648>.
- 98 Charmaine Caparas, 'Russia's Largest Ever Nuclear Icebreaker Is a Ship Captain's Dream', Futurism, 21 June 2016, <https://futurism.com/russias-largest-ever-nuclear-icebreaker-is-a-ship-captains-dream>; Trym Aleixandre Eiterjord, 'Checking in on China's Nuclear Icebreaker', The Diplomat, 5 September 2019, <https://thediplomat.com/2019/09/checking-in-on-chinas-nuclear-icebreaker/>.
- 99 Dan Robitzski, 'China is Building a 33,000 Ton Nuclear Icebreaker', The Byte, 20 March 2019, <https://futurism.com/the-byte/china-nuclear-icebreaker>.
- 100 Humpert, 'China's First Nuclear Icebreaker Could Serve as Test Platform'.
- 101 Liu Zhen, 'Could China's 'Experimental' Ship be the World's Biggest Nuclear-Powered Icebreaker?', South China Morning Post, 20 March 2019, www.scmp.com/news/china/military/article/3002455/china-build-30000-tonne-nuclear-powered-ship-described.
- 102 Humpert, 'China's First Nuclear Icebreaker Could Serve as Test Platform'.
- 103 Humpert, 'China's First Nuclear Icebreaker Could Serve as Test Platform'.
- 104 'China launches third aircraft carrier, the Fujian', Al Jazeera, 17 June 2022, <https://www.aljazeera.com/news/2022/6/17/china-launches-third-aircraft-carrier-the-fujian>.
- 105 Sherri Goodman and Elisabeth Freese, 'China's Ready to Cash In on a Melting Arctic', Foreign Policy, 1 May 2018, <https://foreignpolicy.com/2018/05/01/chinas-ready-to-cash-in-on-a-melting-arctic/>.
- 106 Goodman and Freese, 'China's Ready to Cash In on a Melting Arctic'.
- 107 Alexander Richter, 'Icelandic Orka Energy to Collaborate More Closely With Sinopec on Geothermal Development', Think Geoenergy, 9 May 2012, www.thinkgeoenergy.com/icelandic-orka-energy-to-collaborate-more-closely-with-sinopec-on-geothermal-development/.
- 108 Chater, 'What Is China's Interest in the Arctic?'.
- 109 Chater, 'What Is China's Interest in the Arctic?'.
- 110 P. Whitney Lackenbauer, Adam Lajeunesse and Ryan Dean, 'Why China Is Not a Peer Competitor in the Arctic', Journal of Indo-Pacific Affairs, 3 October 2022, <https://www.airuniversity.af.edu/JIPA/Display/Article/3172586/why-china-is-not-a-peer-competitor-in-the-arctic/>.
- 111 Arctic Council, 'Barrow Declaration on the occasion of the Second Ministerial Meeting of the Arctic Council', 13 October 2000, <http://hdl.handle.net/11374/87>.
- 112 Alan J. Parkinson et al., 'International Circumpolar Surveillance, an Arctic network for the surveillance of infectious diseases', Emerging infectious diseases 14(1) (January 2008), 18–24, <https://doi.org/10.3201/eid1401.070717>.
- 113 Arctic Council, 'Fairbanks Declaration', 11 May 2017, <http://hdl.handle.net/11374/1910>.
- 114 International Maritime Organization, 'Milestone for polar protection as comprehensive new ship regulations come into force', 1 January 2017, <https://www.imo.org/en/MediaCentre/PressBriefings/Pages/02-Polar-Code.aspx>.
- 115 Candace Huntington, 'NATO Needs Unity as Russia's Arctic Presence Grows', Center for European Policy Analysis (CEPA), 19 May 2021; Christopher Woody, 'Russian and NATO Militaries Are Getting More Active in the Arctic, but Neither Is Sure About What the Other Is Doing', Business Insider, 21 July 2020; Colin Barnard, 'Why NATO Needs a Standing Maritime Group in the Arctic', Center for International Maritime Security, 15 May 2020; The Economist, 'NATO is facing up to Russia in the Arctic Circle', 14 May 2020; Sebastian Sprenger, 'NATO's Camille Grand on the Alliance's Arctic Tack', Defense News, 12 May 2020; Rebecca Pincus, 'NATO North? Building a Role for NATO in the Arctic', War on the Rocks, 6 November 2019; Anna Wieslander, 'It's Time for NATO to Engage in the Arctic', Defense One, 16 September 2019; Tyler Cross, 'The NATO Alliance's Role in Arctic Security', Maritime Executive, 19 July 2019.
- 116 Fengshi Wu, 'China's Ascent in Global Governance and the Arctic', thesis, Vestnik of Saint-Petersburg University, 2016, <http://hdl.handle.net/11701/2771>.
- 117 Wu, "China's Ascent in Global Governance," 118–126.
- 118 Government of Canada, 'Statement on Canada's Arctic Foreign Policy', FR5-111/2010E-PDF (Ottawa: Government of Canada 2010), publications.gc.ca/pub?id=9.833064&sl=0; P. Whitney Lackenbauer et al., China's Arctic Ambitions and What They Mean for Canada (Calgary: University of Calgary Press 2018), 132.
- 119 Lackenbauer et al., China's Arctic Ambitions, 139; Toronto Star, 'Charting New Arctic Waters', 21 August 2010, www.thestar.com/opinion/editorials/2010/08/21/charting_new_arctic_waters.html.
- 120 Lackenbauer et al., China's Arctic Ambitions, 139.
- 121 Lackenbauer et al., China's Arctic Ambitions, 139.
- 122 Associated Press, 'Arctic Council Grants China, Japan Observer Status', CBC News, 15 May 2013, www.cbc.ca/news/canada/north/Arctic-council-grants-china-japan-observer-status-1.1375121.
- 123 Zuoyu Liu, 'Analyzing Benefits and Costs With China's Overserve Status in the Arctic Council', Law and Society 1 (2014), 175.
- 124 Liu, 'Analyzing Benefits and Costs With China's Overserve Status in the Arctic Council'.
- 125 The State Council, 'China's Arctic Policy'.
- 126 Hossain, 'China's White Paper on the Arctic'.
- 127 Hossain, 'China's White Paper on the Arctic'.
- 128 Koivurova, 'China & the Arctic'.

- 129 Nengye Liu, 'How Has China Shaped Arctic Fisheries Governance?', *The Diplomat*, 20 June 2018, <https://thediplomat.com/2018/06/how-has-china-shaped-arctic-fisheries-governance/>.
- 130 Ye Jiang, 'China's Role in Arctic Affairs in the Context of Global Governance', *Strategic Analysis* 38 no. 6 (November 2014), 913–916, <https://doi.org/10.1080/09700161.2014.952938>.
- 131 Peng and Wegge, 'China's Bilateral Diplomacy in the Arctic'.
- 132 Elizabeth Wishnick, 'China's Interests and Goals in the Arctic: Implications for the United States', *The Letort Papers*, March (The United States Army War College 2017), <https://pdfs.semanticscholar.org/1543/b2f392fa3124f13480fa1863ca103f3c60d2.pdf>, 58–59.
- 133 Wishnick, 'China's Interests and Goals in the Arctic', 53.
- 134 Kim Ghattas, 'Arctic Council: John Kerry Steps into Arctic Diplomacy', *BBC News*, 14 May 2013, www.bbc.com/news/world-us-canada-22528594.
- 135 Wishnick, 'China's Interests and Goals in the Arctic', 53.
- 136 Steven Lee Myers, 'Arctic Council Adds 6 Nations as Observer States, Including China', *The New York Times*, 15 May 2013, www.nytimes.com/2013/05/16/world/europe/arctic-council-adds-six-members-including-china.html.
- 137 Wishnick, 'China's Interests and Goals in the Arctic', 54.
- 138 Wishnick, 'China's Interests and Goals in the Arctic', 2.
- 139 Trump, 'National Security Strategy of the United States of America'.
- 140 Department of Defense, 'Summary of the National Defense Strategy of the United States of America' (Washington D.C.: U.S. Department of Defense 2018), <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.
- 141 Martin Breum, 'For the First Time Ever, an Arctic Council Ministerial Meeting Has Ended Without a Joint Declaration', *Arctic Today*, 7 May 2019, www.arctictoday.com/for-the-first-time-ever-an-arctic-council-ministerial-meeting-has-ended-without-a-joint-declaration/.
- 142 Stephanie Pezard, et al., 'China's Strategy and Activities in the Arctic: Implications for North American and Transatlantic Security' (Santa Monica, CA: Rand Corporation, 2022), https://www.rand.org/pubs/research_reports/RRA1282-1.html.
- 143 Rebecca Pincus and Walter A. Berbrick, 'Gray Zones in a Blue Arctic: Grappling With China's Growing Influence', *War on the Rocks*, 24 October 2018, <https://warontherocks.com/2018/10/gray-zones-in-a-blue-arctic-grappling-with-chinas-growing-influence/>.
- 144 Ryan Uljua, 'Trump, Congress earmark 675 million USD for icebreaker program in major move', *High North News*, 27 February 2019, <https://www.highnorthnews.com/en/major-move-trump-congress-earmark-675-million-usd-icebreaker-program>.
- 145 International Security Advisory Board, 'Report on Arctic Policy', 21 September 2016, <https://2009-2017.state.gov/t/avc/isab/262342.htm>.
- 146 International Security Advisory Board, 'Report on Arctic Policy'.
- 147 Xinhua, 'Icebreaker returns to Shanghai after completing Arctic research expedition', *The State Council of the People's Republic of China*, 27 September 2018, http://english.www.gov.cn/news/photos/2018/09/27/content_281476320317900.htm.
- 148 'MOSAiC Expeditions', accessed 13 July 2022, <https://mosaic-expedition.org>.
- 149 Office of the Spokesperson, 'U.S.-China Joint Statement Addressing the Climate Crisis', U.S. Department of State, 17 April 2021, <https://www.state.gov/u-s-china-joint-statement-addressing-the-climate-crisis/>.
- 150 Reuters, 'Xi to attend Biden's climate change summit in first meeting of two leaders', 21 April 2021, <https://www.reuters.com/business/environment/chinas-xi-attend-climate-change-summit-bidens-invitation-2021-04-21/>.
- 151 Office of the Spokesperson, 'Special Presidential Envoy for Climate John Kerry's Visit to Japan and the People's Republic of China', U.S. Department of State, 3 September 2021, <https://www.state.gov/special-presidential-envoy-for-climate-john-kerrys-visit-to-japan-and-the-peoples-republic-of-china/>.
- 152 Jiangtao Shi, 'US climate envoy John Kerry ends China trip with little to show', *South China Morning Post*, 17 April 2021, <https://www.scmp.com/news/china/diplomacy/article/3129979/us-climate-envoy-john-kerry-ends-china-trip-little-show>.
- 153 Evan T. Bloom, 'No. 4 | Polar Priorities: The Biden Administration Needs to Revive U.S. Environmental Protection Efforts in the Arctic and Antarctic', *Polar Points*, Wilson Center Polar Institute, 19 March 2021, <https://www.wilsoncenter.org/blog-post/no-4-polar-priorities-biden-administration-needs-revive-us-environmental-protection>.
- 154 The State Council, 'China's Arctic Policy'.
- 155 Executive Office of the President, 'Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis', Executive Order 13990, *Federal Register*, 25 January 2021, <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>; Executive Office of the President, 'Tackling the Climate Crisis at Home and Abroad', Executive Order 14008, *Federal Register*, 27 January 2021, <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.
- 156 The Associated Press, 'Biden signals plans to halt oil activity in Arctic refuge', *CBC News*, 20 January 2021, <https://www.cbc.ca/news/world/biden-signals-plans-to-halt-oil-activity-in-arctic-refuge-1.5881332>.
- 157 Olivia Popp, 'How U.S. Arctic Policy and Posture Could Change Under President-elect Biden', *New Security Beat*, 15 December 2020, <https://www.newsecuritybeat.org/2020/12/u-s-arctic-policy-posture-change-president-elect-biden/>.
- 158 Yereth Rosen, 'Alaska seafood industry braces for China tariff pain', *Reuters*, 12 August 2018, <https://www.reuters.com/article/us-usa-trade-china-alaska/alaska-seafood-industry-braces-for-china-tariff-pain-idUSKBN1KX0CQ>.
- 159 Laine Welch, 'Seafood, Alaska's top export, is omitted from federal trade data', *Anchorage Daily News*, 21 July 2020, <https://www.adn.com/business-economy/2020/07/21/seafood-alaskas-top-export-is-omitted-from-federal-trade-data/>.
- 160 Alaska Seafood Marketing Institute, 'FY2020 Alaska Seafood Marketing Institute Annual Report' (Juneau, Alaska: ASMI 2020), https://uploads.alaskaseafood.org/2021/04/ASMI_2020_AR_final_urls.pdf.
- 161 Suzanne Downing, 'China fish pirates have their way with Alaska salmon', *Must Read Alaska*, 25 June 2018, <https://mustreadalaska.com/china-fish-pirates-have-their-way-with-alaska-salmon/>.
- 162 Arctic Council, 'Declaration on the Establishment of the Arctic Council'.
- 163 Arctic Council, 'Declaration on the Establishment of the Arctic Council'.
- 164 The State Council, 'China's Arctic Policy'.

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