



China's Interests in the Arctic: Opportunities and Challenges

Examining the implications of China's Arctic policy white paper

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Executive Summary

The geopolitical landscape of the Arctic today is a significant departure from the great power politics of the Cold War. Apart from traditional Arctic states, far more international organizations and non-Arctic states are showing an increased interest in the Arctic. This report explores the growing interests of China in the Arctic and examines the motivations behind its involvement in the region. China's interests range from participating in Arctic governance, promoting bilateral diplomacy in the Arctic area, accessing potential resources, exploiting shipping opportunities and undertaking polar research. Thus far, China's involvement in the Arctic has been fairly low-profile. Since obtaining observer status on the Arctic Council in 2013, China has modestly bolstered its bilateral relations with Arctic states and participated in the development of resources in the region.

The State Council Information Office of China published a white paper titled "China's Arctic Policy" on January 26, 2018. China's policy goals in the Arctic 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 white paper emphasizes the need for “respect, cooperation, win-win result and sustainability.” These policy goals and principles are reflected in the respective areas that China has shown interest in, which are analyzed in this report.

China's policy goals in the Arctic are shaped in four key words—to understand, protect, develop and participate in the governance of the Arctic. In order to realize these policy goals, the white paper emphasizes the basic principles of “respect, cooperation, win-win result and sustainability.”

China's Arctic white paper is the result of policymakers' careful deliberation. It also reflects the long-standing expectations of researchers, countries and international organizations involved in Arctic governance. The recent expansion of China's role has invited international suspicion of its intentions in the Arctic, especially from council member states. China's new white paper spells out its intentions for the Arctic and should relieve some concerns over its transparency and commitment to international law.

China's Arctic strategy is only just beginning to unfold and still faces many challenges, including the Arctic states' disputes over territorial sovereignty, vigilance among certain countries, the natural environment in the Arctic region and China's technological constraints. Nevertheless, with China's newly released Arctic policy white paper, China has emphasized a key theme—cooperation.

Introduction

The geopolitical landscape of the Arctic today is a significant departure from the great power politics that existed in the region during the Cold War. The supremacy of the military presence and security interests of the two superpowers during that time 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. Through the Ilulissat Declaration in 2008, these five Arctic coastal states (the Arctic Five) have asserted the predominant role in addressing both territorial issues and emerging issues related to resource development in the Arctic region (Yeager, 2008).

The exclusivity of Arctic governance has been challenged by the activities of states from outside the region, such as the United Kingdom, France, Germany, China, Japan, South Korea and India; these states are taking a special interest in many aspects of the Arctic that focus on scientific research, shipping and resource development. Estimated oil and gas reserves in the continental shelves of the northern seas and visions of new trans-Arctic sea routes are also attractive to transnational corporations that are increasingly interested in the potential commercial value of Arctic energy resources (Robinson 2007: 21). This report explores the growing interests of China in the Arctic and examines the nature of its interests and motivations in wanting to maintain its involvement and presence in the region. China's interests range from participating in Arctic governance and accessing potential resources to exploiting shipping opportunities and undertaking polar research.

Seeking participation in the Arctic Council

The Arctic Council is a high-level intergovernmental forum that addresses issues faced by the governments of the eight North Pole states in the areas of environment preservation, sustainable development, culture and well-being of Arctic peoples. Promoting “cooperation, coordination and interaction amongst Arctic states,” the Arctic Council does not deal with security issues and has no binding effect on the parties involved. It is unique as a forum for states in that it allows six indigenous peoples’ organizations’ permanent participant status, giving them full consultation rights in the Council’s negotiations and decision-making processes (Arctic Council).

Observer status in the Arctic Council is open to non-Arctic states, inter-governmental and inter-parliamentary organizations and NGOs. States that enjoy observer status receive automatic invitations to attend Arctic Council meetings. Before 2013, the composition of the observer states was predominantly European; it included France, Germany, the Netherlands, Poland, Spain and the United Kingdom. Participation of the observer states is seen by the Council as “a valuable feature through their provision of scientific and other expertise, information and financial resources” (Arctic Council).



The 10th Ministerial Meeting of the Arctic Council.

Source: Arctic Council/Flickr.

More recently, climate change has increased accessibility to potential Arctic resources, changing the geopolitical landscape and broadening the international focus on the Arctic to include more geographically distant countries such as China, Japan, South Korea, India and Singapore. Seeking observer status in the Arctic Council is regarded by these Asian countries to be an important step towards ensuring that they are involved in determining the future of the Arctic, a region which they believe will have an effect on their economic interests and global environmental concerns.

Since 2007, China has participated as an *ad-hoc* observer at Arctic Council meetings to gain a better understanding of the Council's work. In 2008, it began officially expressing its intentions to become an observer on the Arctic Council. Guo Peiqing, a law professor from China’s Ocean University, holds that China has great strategic interests in the Arctic; rather than adopting a “neutral” position as an outsider, it should push for the internationalization of the region instead (Guo Peiping, et al. 2009:323-26). However, Guo’s proposal of internationalizing the Arctic might risk damaging China’s image in the international community, as taking such a stance would not be consistent with its principle of “non-interference.”

In his speech at Svalbard, Hu Zhengyue, then Chinese Assistant Minister of Foreign Affairs, acknowledged that although the Arctic is mainly a regional issue, it is also an inter-regional issue because of climate change and international shipping. Unsurprisingly, China would like to see the Arctic states recognize the

interests of non-Arctic states. A statement by Ambassador Lan Lijun at a meeting between the Swedish Chairmanship of the Arctic Council and Observers in November 2012 reaffirmed China's view of the importance of involving non-Arctic states in the Arctic Council:

Arctic issues are trans-regional, such as climate change and international shipping, which involve the interests of non-Arctic states. Arctic states and non-Arctic states share common interests in addressing trans-regional issues and should further their communication and cooperation (China's statement to the Arctic Council Observer and Ad-hoc Observer delegates 2012).

The statement also recognized that the “participation of observers in the work of the Council is based on the recognition of Arctic states’ sovereignty, sovereign rights and jurisdiction in the Arctic as well as their decision-making power in the Council.”

In May 2013, the Arctic Council granted China, Japan, South Korea, India and Singapore observer status (CBC News 2013). As Norwegian Foreign Minister Espen Barth Eide stated, “There is no such thing as a free lunch. By becoming an observer you're also signing up to the principles embodied by this organization” (CBC News 2013). These non-Arctic states have been working hard to make that happen, though some analysts still question the new criteria for observer status on the Arctic Council (Guo Peiping 2012:21). Part of the new criteria includes an explicit direction that observers must respect “Arctic states’ sovereignty” (Arctic Council 2013).

One of the four policy goals set in China's Arctic policy is to “participate in the governance of the Arctic” (white paper). 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 mechanism.” Internationally, China is committed to “the existing framework of international law including the UN Charter, UNCLOS, treaties on climate change and the environment and relevant rules of the International Maritime Organization.” Domestically, China will devote itself to “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.”

China has submitted an Observer Review Report to the Arctic Council annually since it was granted observer status in 2013. In its 2016 report, China states that it continues to contribute to the work of the Arctic Council as an observer through attending all governmental meetings open to observers under the umbrella of the Arctic Council, attending the Working Groups, Task Forces and/or Expert Groups WG/meetings of the Council and recommending more than 25 experts to relevant programs—8 of whom have been invited to engage in specific programs.

One of the four policy goals set in China's Arctic policy is to “participate in the governance of the Arctic.” 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 mechanism.”

The 2016 report also noted that China has hosted several meetings and sessions related to Arctic issues, including the Ny-Ålesund Science Managers Committee Seminar, the country session in the Third Arctic Circle Assembly, the breakout session regarding the sustainable development of the indigenous peoples and Asia's contribution in the Arctic Frontier Meeting. China has contributed to the Indigenous Peoples Secretariat on the “A Story Map of Indigenous

Peoples” project and to the celebration of the 20th Anniversary of the Arctic Council (China Observer Review Report 2016).

Promoting bilateral diplomacy in Arctic area

Besides participating in multilateral mechanisms, China is also active in promoting bilateral relations with Arctic states for strategic purposes. Just as Guo remarked in his incisive analysis, China should deal with Arctic states on an individual basis, while rejecting a one-to-many negotiation model because different states have different interests (Guo 2012: 34). This way, China will have much more leeway for strategic operations. This one-on-one model is similar to China's stance in the South China Sea issue, where China insists on bilateral rather than multilateral negotiation. In order to advance bilateral diplomacy in the Arctic region, China is making two separate but simultaneous efforts. First, China is focusing on resource acquisition in the Arctic through resources-oriented diplomacy. Second, China is trying to expand its influence by bolstering relations with five North European countries.

Canada is important to China's cooperation agenda in terms of resources-oriented diplomacy. Canada assumed the chairmanship of the Arctic Council in 2013 and controls the Northwest Route in the Arctic region. China has become Canada's second largest trading partner, its seventh largest source of foreign investment and accounts for half of Canada's mineral exports. In the last few years, China's state-run enterprises—such as China Petrochemical Corporation (Sinopec Group) and China National Offshore Oil Corporation (CNOOC)—have continued to invest heavily in Canada (Rainwater 2012:72). China is also paying attention to other players such as Greenland, which has been attempting to break away from Denmark and become an independent state. Greenland is rich in iron ore, oil, natural gas, uranium, rare earth and other minerals. As Denmark prepares to end its subsidy of Greenland's national budget, Greenland has begun to turn its eye toward China, offering an opportunity for China to find its way into Greenland's mining industry (Beststeel 2013). China is also seeking cooperation with Norway on the development of energy and resources as part of the Bilateral Dialogue on Arctic Issues (Jakobson 2010:11).

China is also focusing on improving bilateral diplomatic relations with the five Northern European nations: Iceland, Denmark, Norway, Sweden and Finland. Cooperation with these countries is not only aimed at acquiring resources, but also to expand China's influence in the Arctic. As Zhang Shengjun and Li Xing have pointed out, the Northern European states are not strong enough to compete with Russia or with their ally the United States—both state parties in the Arctic region—so these states are willing to turn to China for help (Zhang and Li 2010: 17). If China can establish a long-term strategic cooperation mechanism on Arctic affairs with the Northern European states, it will achieve a greater say in Arctic affairs.

China is making a concerted effort to strengthen its relations with these five Northern European states. The new Chinese embassy in Reykjavik, Iceland will be the largest embassy in the capital. Iceland is also the first European state to sign a free trade agreement with China. In 2012, then Chinese Premier Wen Jiabao visited Iceland and Sweden. Shortly thereafter, the Chinese icebreaker *Xue Long* (*Snow Dragon*) docked in the Port of Akureyri in Iceland. In the same year, then Chinese President Hu Jintao also paid a visit to Denmark, the first Chinese president to visit Denmark in the sixty-two years since the establishment of diplomatic relations between the two countries. In 2013, during his first foreign visit as the Chairman of

the CPPCC National Committee, Mr. Yu Zhengsheng visited Finland, Sweden and Denmark to show the importance that China attaches to the Northern European states.

In 2015 and 2016, China held dialogues on Arctic affairs with Russia, the United States, the United Kingdom, France and Iceland respectively; China also attended the Assembly of the Arctic Circle, the Arctic Frontier, the Arctic Summit Week, the International Arctic Science Committee and the Year of Polar Prediction (YOPP).

The rapid expansion of Chinese activity in the Arctic in recent years has been noted by the United States government. A report by the U.S. State Department's International Security Advisory Board (ISAB) states "China's...quest for resources, particularly in Iceland and Greenland, are sources of concern for some" (ISAB Report 2016). The report noted China's cooperation with Russia in the development of natural-gas deposits in the Arctic Siberian Yamal Peninsula. 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 in advance of potential future security crises (ISAB Report, 2016).

The white paper also highlights China's will to cooperate with other non-Arctic states. In 2016, China, Japan and South Korea launched high-level trilateral dialogues on Arctic issues to promote exchanges on policies, practices, and experience regarding Arctic international cooperation, scientific research, and commercial cooperation.



Delegates from South Korea, Japan and China at the 1st Trilateral High-level Dialogue on the Arctic. *Source: Xinhua News.*

Interests in shipping

China, Japan and South Korea in particular see the melting Arctic Ocean as a unique opportunity for international trade and access to resources. In September 2012, China's icebreaker *Xue Long* (*Snow Dragon*) made history by becoming the first Chinese vessel to cross the Arctic Ocean. The vessel crossed the Pacific to the Atlantic and carried out oceanographic research; this 85-day voyage was a clear statement of Beijing's interest in increasing its presence in the Arctic. The Shanghai-based Polar Research Institute of China said in a statement that the *Snow Dragon* gained "first-hand information about navigation in Arctic sea lanes, the oceanic environment and carried out useful exploration and practice for our nation's ships that use Arctic passages in the future" (National Post, 2012).



The *Xue Long* (*Snow Dragon*) is the first Chinese vessel to cross the Arctic Ocean. © International Polar Foundation / Jean de Pommereu.

route via the Strait of Malacca and the Suez Canal (Guo, et al 2009: 323-26). The shortest route for maritime transport between Europe and Asia may then be transited via the Barents Sea, reducing the maritime distance between Western Europe and Asia by over 7,400 kilometers. This shorter route provides strategic alternatives to countries such as China and potentially makes it a key player, due to its shipping industry and current dependence on foreign energy (Research and Innovation, Position Paper 2010: 4-20).

According to the 2010 CIA World Factbook, China's merchant fleet was the third-largest in the world with 2,030 "total" ships, behind Panama with 6,413 and Liberia with 2,559. China (excluding Hong Kong and Taiwan) experienced a 6.9 percent growth rate of merchandise exports in 2015 (UNCTAD 2016). Because China's economy is reliant on foreign trade—with 46 percent of its GDP being shipping-dependent—there are substantial commercial implications if shipping routes are shortened during the summer months (Jakobson 2010:5). For instance, the voyage from Shanghai to Hamburg via the Northern Sea Route, which runs along the north coast of Russia from the Bering Strait in the east to Novaya Zemlya in the west, is 6,400 kilometers shorter than the

Any events that affect international shipping will have a measurable effect on the Chinese economy because of its dependence on shipping. The changing physical landscape of the Arctic will have a major impact on China's economic future. China is four thousand nautical miles closer to Europe and the east coast of North

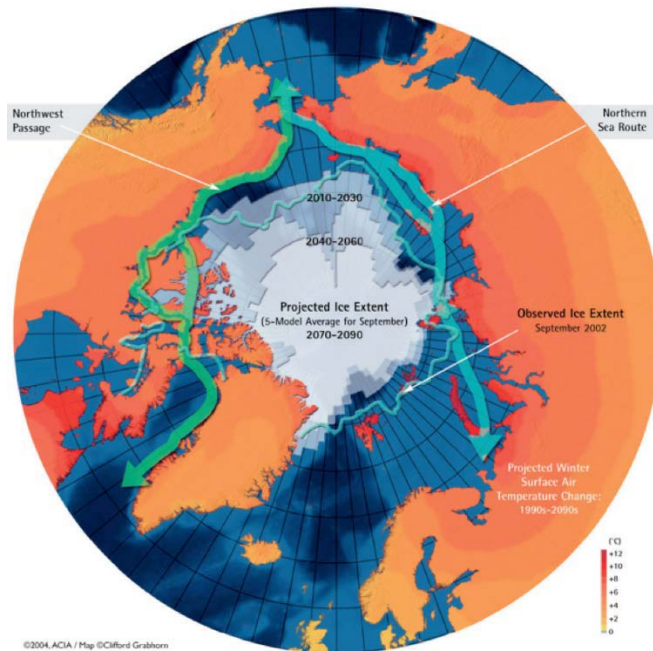
America when sailing across the Arctic Ocean. Currently, there are no restrictions on vessel size or other regulations in the Arctic, unlike in the Suez or Panama Canal. There are also no fees for Arctic routes. Additionally, the smaller ecological footprint of reduced fuel costs per ton-mile could serve as an additional incentive for the development of an Arctic route. Arctic shipping could be another crest of the new green wave that is sweeping the shipping industry, as more attention is being paid to the environmental impact of shipping, including the fuel efficiency and emission reduction of commercial shipping (Spears 2009).

Li Zhenfu, an associate professor at Dalian Maritime University, and a team of specialists have assessed China's advantages and disadvantages when the Arctic sea routes do open up. "Whoever has control over the Arctic route will control the new passage of world economics and international strategies," writes Li, referring to the shortened shipping routes between East Asia and Europe or North America and to the abundant oil, gas, mineral and fishing resources presumed to be in the Arctic (Jakobson 2010:5). Referring to the successful test voyages from South Korea to the Netherlands via the Northeast Passage undertaken by two German commercial vessels in the summer of 2009, Chen Xulong of the China Institute of International Studies writes that "the opening of the Arctic route will advance the development of China's north-east region and eastern coastal area ... It is of importance to East Asian cooperation as well" (Zhou 2009).

Shipbuilding technology is already advanced enough for vessels to operate in the Arctic; it simply needs to make economic sense. China has not yet engaged in the development of maritime ice-faring technology, which tends to be dominated by the Nordic countries. In recent years, this technology has mostly focused on the development of the Russian gas field in the Barents Sea (Spears 2009). Yet this technology is readily available commercially; technology transfer agreements could be developed between shipbuilding and engineering firms and China. This approach has been used in South Korean shipyards for new vessel construction destined for the icebreaking tankers used in the Russian Arctic gas fields. It is likely that China will soon adopt a similar approach and speed up maritime ice faring technology.

On November 22, 2010, the Sovcomflot Group (SCF)—a Russian maritime company specializing in shipping petroleum and liquid natural gas (LNG)—and the China National Petroleum Corporation (CNPC) signed a strategic long-term cooperation agreement. The parties agreed to develop a partnership in the sphere of seaborne energy solutions, with the SCF fleet providing for the continually growing Chinese import of hydrocarbons. Taking into account Sovcomflot's significant experience in developing the transportation of hydrocarbons in Arctic seas, SCF and CNPC agreed upon a format for coordination in using the transportation potential of the Northern Sea Route along Russia's Arctic coast to deliver transit shipments of hydrocarbons from Russia's developing Arctic offshore fields to China. A new fleet of tankers designed to operate in Arctic conditions as well as additional heavy-duty ice breakers will be built to that end. In an article that appeared in the Financial Times in January 2008, Robert Wade of the London School of Economics described China's special interest in Iceland:

Tiny Iceland suddenly takes on new geo-economic significance. It sits at the mouth of the Arctic Ocean, ideally located for transshipment of cargoes to or from giant container ships travelling between Iceland and a transshipment port in the Bering Sea. It has at least three plausible deep fjord sites. China maintains the biggest of all the embassies in Reykjavik and it welcomed the president of Iceland with all the pomp normally reserved for the head of a major state on his visit in 2007. [China] has been very helpful as Iceland seeks election to the United Nations Security Council in 2008 (Wade 2008).



The Northwest Passage and Northern Sea Route. ©
Arctic Monitoring and Assessment Programme (AMAP).

For China and other non-Arctic states, their position on the legal status of the Northwest Passage and the Northern Sea Route is a fundamental question. Sooner or later, these non-Arctic states will have to adopt a clear position on whether these two passages enjoy the status of international waters for navigation, as the United States and the EU hold, or whether they are internal waters, as Canada and Russia insist. Should China adopt the position of the United States and the EU, it will weaken China's own argument that the Qiongzhou Strait, between Hainan and continental China, lies in China's internal waters (Alexeeva & Lasserre 2012:86). Worth noting, however, is that the Qiongzhou Strait has rarely, if ever, been a matter of debate, while the status of the Northwest Passage and the Northern Sea Route has been frequently contested.

Shipping in the Arctic will likely be dangerous. It will require improvements to a suite of safety issues, including charting and monitoring and the

control of ship movements in the Arctic (PAME Workplan 2009-2011). Currently, radio and satellite communications and emergency response—including search and rescue—are unsatisfactory; observational networks and forecasts for weather, icing, waves and sea ice are insufficient; and present standards for escape, evacuation and rescue (EER) need to be updated.

Jurisdictional and economic issues aside, as shipping traffic increases, the possibility of environmental damage to the fragile Arctic marine environment will also increase. The accidental spill of oil and chemicals due to increased shipping activities in the Arctic is, although by no means the only concern, perhaps the greatest one (Chircop 2010: 177-202). As the lasting effect of the Exxon Valdez grounding demonstrates, large oil spills can have a lasting impact on the local marine environment. The level of concern has been elevated as a result of the blowout in the Gulf of Mexico in April 2010, and the fact that oil spills resulting from shipping accidents occur regularly worldwide (e.g. Prestige, Heibei Spirit, Full City). Considering the added challenges of Arctic operations, the risk of accidents may increase in these waters. Presently, there are very few ways of recovering spilt oil from ice-covered waters. These factors need to be addressed in order to avoid severe ecological and economic consequences.

Other equally important concerns include the introduction of invasive marine species through ballast water discharges and the need for rigorous control of ships' garbage and waste products. Even carefully controlled shipping can cause unintended damage to wildlife if the shipping routes run through areas of critical environmental concern, such as whale foraging zones or migration corridors. Ship strikes are already one of the most significant threats to the survival of the northern right whale. Indeed, most of the environmental dangers posed by shipping activities are not due to explicit accidents—like the accidental large-scale oil spills that catch the media's attention—but rather to routine shipping operations (Ng and Song 2010: 301-11). Increased shipping in the Arctic must be conducted in an environmentally sound fashion. But

environmentally sound shipping can only be accomplished with the help of an international agreement involving all parties involved in shipping in northern waters (Huebert and Yeager 2007).

In April 2016, the Chinese government published a guidebook on Northwest Passage shipping, including navigation charts (Vanderlippe 2016). Various ice conditions indicate that the Northwest Passage will never be as important as the Canal, but it still can be an important shipping route.

In its white paper, China maintains that all activities to explore and utilize the Arctic should abide by treaties such as UNCLOS and the Spitsbergen Treaty as well as general international law. On 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 enterprises to participate in the infrastructure construction for these routes and conduct commercial trial voyages in accordance with the law to pave the way for regular commercial operations.

All activities to explore and utilize the Arctic should abide by treaties such as the UNCLOS and the Spitsbergen Treaty as well as general international law. China expresses hope to work with all parties to build a “Polar Silk Road” through developing the Arctic shipping route.

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, and calling for concerted efforts to enhance security, insurance, and rescue systems to ensure the safety of tourists in the Arctic.

Interests in resource development

Beyond shipping, energy resources in the Arctic abound. The U.S. Geological Survey estimates that the Arctic contains up to 30 percent of the world's undiscovered gas and 13 percent of the world's undiscovered oil. Successful development of these reserves would help to alleviate the pressure on the global oil and gas markets and potentially enhance energy security as a result (Johnston 2010: 3).

The melting of Arctic sea ice, in combination with external developments elsewhere concerning future energy security, have led to some commentators and analysts to construct different future scenarios for the region. These speculative scenarios range from low-level friction to potential conflict between Arctic states, and they lead to the legal question of who owns the energy resources in those parts of the Arctic that do not fall under national jurisdiction (Zellen 2011).

The UNCLOS Article 76 provides that the continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance. The UNCLOS contains provisions regarding the delineation of the outer limits of continental shelves and maritime boundaries. It obliges states to submit their boundary claims to the UN Commission on the Limits of the Continental Shelf (CLCS) within ten years of ratifying UNCLOS (Gunitskiy 2008: 261-2). Russia, the United States, Canada, Denmark and Norway have all claimed 12 nautical miles territorial seas, and 200 nautical miles exclusive economic zones (EEZ) from their baseline. Within the extended continental shelf, a state has sovereign rights on and under the seabed, including resources such as hydrocarbons (e.g., oil, gas, and gas hydrates), minerals, and so on. In the Arctic Ocean, it is estimated that 88 percent of the seabed would be subject to coastal state control if all the claims were to be accepted as presented.

Article 136 of UNCLOS provides that the “Area” beyond national jurisdiction and its resources are the common heritage of mankind, and Article 137 declares that “no State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources. All rights in the resources of the Area are vested in mankind as a whole, on whose behalf the International Seabed Authority shall act” (UNCLOS). The non-Arctic states have interests in the exploration and exploitation of the natural resources in the seabed beyond the jurisdiction of any Arctic states in this region. However, the general conduct of states in relation



Commission on the Limits of the Continental Shelf (CLCS) Map. © IBRU, Durham University (<http://www.durham.ac.uk/ibru/resources/arctic>).

to the Area shall be in accordance with the provisions of UNCLOS, the principles embodied in the Charter of the United Nations and other rules of international law in the interests of maintaining peace and security and promoting international cooperation. Outside the EEZ, the waters in the Arctic Ocean are considered High Seas under Part XI of the Law of the Sea Convention. To this purpose, non-Arctic states, with no sovereignty claims and coasts, can only lay claim to resource access in this Area. But until the CLCS comes out with recommendations to the Arctic states who have submitted applications, it is too early to determine what the boundary between national jurisdiction and the Area will be. The only way for non-Arctic states to be engaged in resources development is through cooperation with the littoral states in the Arctic.

Article 137 of UNCLOS

Legal status of the Area and its resources

1. No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or natural or juridical person appropriate any part thereof. No such claim or exercise of sovereignty or sovereign rights nor such appropriation shall be recognized.
2. All rights in the resources of the Area are vested in mankind as a whole, on whose behalf the Authority shall act. These resources are not subject to alienation. The minerals recovered from the Area, however, may only be alienated in accordance with this Part and the rules, regulations and procedures of the Authority.
3. No State or natural or juridical person shall claim, acquire or exercise rights with respect to the minerals recovered from the Area except in accordance with this Part. Otherwise, no such claim, acquisition or exercise of such rights shall be recognized.

One of the four key principles 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 “China respects the sovereign rights of Arctic states over oil, gas and mineral resources in the areas subject to their jurisdiction in accordance with international law and respects the interests and concerns of resident in the region.” Another key principle, “**develop**” is reflected in the resource development section of the white paper. Chinese enterprises, which utilize their advantages in capital, technology and the domestic market, are required to observe the laws of relevant states, conduct risk assessments for resource exploration and are encouraged to participate in the exploration of oil, gas and mineral resources in the Arctic through cooperation in various forms and on the condition of protecting the eco-environment of the Arctic.

According to the International Energy Outlook 2011, published by the U.S. Energy Information Administration, world energy consumption will grow by 53 percent from 2008 to 2035. The report points to Asia’s rapidly growing economies as the primary drivers of increasing global energy demand. China and India are emerging as major importers of oil. By 2035, China and India’s combined energy use is projected to account for 31 percent of total world energy consumption (Today in Energy 2011). Chinese companies, some with close government ties, are investing heavily across the Arctic. Chinese companies stand to gain by investing in the Arctic, as China is a top ten trading partner for each of the Arctic countries and the second largest partner for the United States, Canada and Russia. Chinese investments in the mining and energy industries are taking place in Iceland, Greenland, Russia and beyond (Chater 2016). In Canada, Chinese firms have acquired interests in two oil companies that could afford them access to Arctic drilling.

“China respects the sovereign rights of Arctic states over oil, gas and mineral resources in the areas subject to their jurisdiction in accordance with international law and respects the interests and concerns of resident in the region.”

India has also managed to gain access to potential resources in the Arctic. A consortium led by the public-sector unit Oil and Natural Gas Corporation (ONGC) has recently acquired a 15 percent stake—worth \$3.4 billion—in the South Tambayskoye LNG project on the northeastern part of the Yamal Peninsula, which is being developed by Novatek, Russia’s largest independent natural gas producer. ONGC has also acquired stakes in oil and gas fields

in Sakhalin in Russia’s Far East. In 2012, the Chinese energy company Sinopec and the Icelandic company Orka Energy announced plans to invest more than \$100 million in geothermal technology (Richter 2012).

In addition to energy resources, the white paper also addresses the issues of 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 Arctic fisheries management organization or other institutional arrangements based on UNCLOS.

Interests in polar research

“Understand” and *“protect”* are the other two principles highlighted in China’s white paper. China’s Arctic policy uses these two words to underscore the importance of improving the capacity and capability of scientific research in the region, so as to create favorable conditions for mankind to better protect, develop and govern it.



China’s Yellow River research station on Svalbard, Norway. © Rerun van Pelt/Flickr.

China has taken an active role in intensifying research in both the Arctic and Antarctic and maintains an active polar research program. China opened its first Arctic scientific research station *Huang He Zhan (Yellow River Station)* at Ny-Ålesund in Svalbard in 2004. Furthermore, with *Xue Long*, 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 twenty expeditions being sent to the Arctic and Antarctic since 1984. China views itself as a “near Arctic state” and perceives the

environmental changes and economic development happening in the region as having “a significant impact on [its] climate, ecological environment, agricultural production as well as social and economic development” (China’s Statement at Arctic Council Observer and Ad-hoc Observer delegates 2012).

Affiliated with the State Oceanic Administration, the Chinese Arctic and Antarctic Administration (CAA) is the national authority that organizes, coordinates and supervises Chinese Arctic and Antarctic expeditions. The functions of CAA cover the following areas: (1) Drawing up the development strategies, principles and policies of Chinese Arctic and Antarctic expeditions, as well as framing the expedition plan and formulating the corresponding laws, regulations and rules concerning polar activities; (2) Organizing the examination and verification of major projects on infrastructure and large-scale material equipment for Chinese polar expeditions and being responsible for the implementation, supervision of the projects; (3) Establishing major polar scientific research projects, formulating the implementation plan and supervising the practice as well as managing the data, samples, files and scientific results of polar expeditions; (4) Organizing and participating in international affairs and the organizations involved in polar research.

The Polar Research Institute of China (PRIC) was founded in 1989 and coordinates national polar research. PRIC provides logistics for Chinese National Arctic/Antarctic Research Expeditions (CHINARE). PRIC is also in charge of running and managing the M/V *Xue Long*, the *Great Wall* and *Zhongshan* Antarctic stations.

China has taken steps to augment Arctic scientific cooperation and governmental dialogue with Norway as well as relevant cooperation with Canada and the United States. While it has enjoyed Arctic scientific cooperation with Russia, there has not yet been any formal governmental dialogue between the two countries. Norway has welcomed China's increased involvement in polar research. The Norwegian Minister of Research and Higher Education, Tora Aasland, attended the signing ceremony in Shanghai of an agreement on cooperation on polar research and said that "Chinese polar researchers are among the best in the world, and we are happy that China is now investing increased efforts in polar research" (Solerød 2010).

China's Arctic Policy underline the importance of improving the capacity and capability in scientific research on the Arctic, pursue a deeper understanding and knowledge of the Arctic science, and explore the natural laws behind its changes and development, so as to create favorable conditions for mankind to better protect, develop, and govern the Arctic.

In 2016, China successfully conducted its seventh Arctic scientific expedition. China initiated various projects regarding climate change, pollution and environmental security in the Arctic. China built the Arctic UAV remote sensing system and carried out 5 flights over the Svalbard archipelago. As a member of the International Arctic Science Committee and the Ny-Ålesund Science Managers Committee, China also actively engaged in international cooperation in Arctic scientific research. In 2015, the Ocean University of China dispatched experts to the sixth Korean Arctic scientific research, as well as worked on data collection in the Nordic Sea with the Institute of Marine Research of Norway. In 2016, China and Russia conducted a joint Arctic scientific research mission. The foundation-stone laying ceremony of the China-Iceland Joint Aurora Observatory (CIAO), a scientific cooperation between Icelandic and Chinese research institutions, was held in October 2016 at Kárhóll, Þingeyjarsveit. The Observatory will be open to international society when established (China Observer Review Report 2016).

China's Arctic interests are also environmental, a fact that is sometimes overlooked (Chater 2016). "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" (Nicholls et al 2007:5). China has made tremendous efforts to facilitate the early entry into force and implementation of the Paris Agreement and is committed to the success of the 2030 Agenda for Sustainable Development. The white paper also emphasizes that China is determined to protect the eco-environment of the Arctic and address climate change.

The challenges facing China

Thus far, China's involvement in the Arctic has been fairly low-profile. Since obtaining observer status on the Arctic Council in 2013, China has modestly bolstered its bilateral relations with Arctic states and participated in the development of resources in the region. China's Arctic strategy is only just beginning to unfold and still faces many challenges, including the Arctic states' disputes over territorial sovereignty, vigilance among certain countries, challenges from the natural environment in the Arctic region and the limits of China's current technology.

Disputes over territorial sovereignty in the Arctic region

As the melting of Arctic ice heralds potential benefits, territorial sovereignty disputes in the region have begun to surface. There are currently five main territorial disputes. First is the dispute between Russia and Norway in the Barents Sea. Although they reached a maritime delimitation agreement in 2010, the issue of sovereignty was not fundamentally solved. Second is the dispute between Norway and certain countries about the Svalbard Treaty. Third is the race between Canada and Denmark for Hans Island. Fourth is the dispute between the United States and Canada about the delimitation of the Beaufort Sea. Fifth is the dispute between the United States and Russia about the delimitation of the Bering Straits (He 2010:69).

In addition, the complexity of the sovereignty disputes has been compounded by two of the methods used to support sovereignty claims. The first method is the Sector Principle put forward by Canada in 1907. According to this principle, the territory is divided in the form of arbitrary sectors, each one having an apex at the poles and including an outer area bounded by the coast. Based on this principle, both Canada and Russia have claimed sovereignty over parts of the Arctic. The second method is the continental shelf mechanism. According to the 1958 Convention on the Continental Shelf and UNCLOS, a coastal state's continental shelf is defined as the natural prolongation of the land territory to the continental margin's outer edge or 200 nautical miles from the coastal state's baseline. The fixed points comprising the line of the outer limits of the continental shelf on the seabed either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured, or shall not exceed 100 nautical miles from the 2,500 meter isobath, a line connecting the depth of 2,500 meters. If the ownership of islands in the Arctic region is clearly defined, then the country that has territorial sovereignty over an island can delimit its territorial sea and maritime zone according to the UNCLOS (Li 2009: 69). The Senior Arctic Official (SAO) Report to Ministers required all observers of the Arctic Council to "recognize the Arctic states' sovereignty, sovereign rights and jurisdiction in the Arctic region," which forces extra-regional states to recognize the Arctic as a sphere of influence for regional players (SOA 2011: 50).

In the Arctic players' race, China faces a dilemma. Its over-active posture may cause Arctic states and other players to be suspicious of China's intentions. In this respect, China's white paper was issued at the right time. It should go a long way towards reducing skepticism and providing strategic guidelines for China's participation in Arctic governance. China defines itself as "an important stakeholder" in Arctic affairs, in addition to a purely geographical "near-Arctic state." China also "supports the peaceful settlement of disputes over territory and maritime rights and interests by all parties concerned in accordance with such treaties as the UN Charter and the UNCLOS and general international law and supports to safeguard security and stability in the region." China's language is consistent with its position on international dispute settlement.

Vigilance among Arctic states

China has actively sought to have a say in Arctic affairs through multilateral and bilateral means. Unfortunately, China's intentions have been met with suspicion by Arctic states. China's application to become a permanent observer of the Arctic Council was rejected three times before being approved, which demonstrates the vigilance of the Arctic states, especially the five coastal states bordering the Arctic Sea.

Of the five coastal states, the most vigilant are Russia and Canada. These two states seek to control the northern and north-western sea lanes respectively, but China has yet to recognize their rights over these two lanes (Jakobson 2013). Russia in particular has shown serious bias against China's attempts to join the Arctic Council. Ever since Russia planted its flag on the Arctic seabed in 2007, China has paid a great deal of attention to the region. In 2012, after China's icebreaker *Xue Long* (*Snow Dragon*) finished its fifth scientific survey in the Arctic region, it returned to Shanghai through the northern sea lane of the Arctic, which runs along the Russian coast. Because this sea lane has been emblematic of Russian influence, it is natural that the expansion of China's influence would invite vigilance from Russia.

China's growing interest in the Arctic has enhanced the vigilance of the Russian military, which is highly sensitive to security issues. In a rare public warning to China in 2010, Russian Navy Commander Admiral Vladimir Vysotsky said "We are observing the penetration of a host of states which...are advancing their interests very intensively, in every possible way, in particular China," and stressed that Russia would increase its military presence in the Arctic to defend Russia's interests (Reuters 2010). In 2012, Russia resumed its live-fire drills in Arctic waters. In February 2013, Russian President Vladimir Putin remarked in a conversation that Russia's interests in the Arctic were under threat and necessitated enhanced military actions. In September 2013, Russia announced that it would reopen a military base in the New Siberian Islands and resume its former permanent military presence there.

Canada also harbors suspicions against China, which are equal to if not greater than those of Russia. In 2012, an opinion poll conducted by the Asia Pacific Foundation of Canada showed that only 12 percent of Canadians had a favorable impression of China, and 29 percent had an unfavorable impression. Although Canadian officials do not show vigilance against China, the Canadian academic community has shown suspicion. Professors David Wright and Rob Huebert from University of Calgary and Victor Suthren from the Canadian War Museum are concerned about China's stance on Arctic affairs. For example, they assume that China believes the Arctic is open to the international community and does not acknowledge Canadian sovereignty over northwestern sea lanes. Canada is also suspicious of China's desire for resources, sea lanes and strategic positions in the Arctic region; China's accelerated pace of military modernization suggests the possibility that China might enhance its military presence in the region. Commodore Tyrone Pile, Commander of the Canadian Fleet Atlantic, was quoted by the *Calgary Herald* as saying that the Chinese

Navy would soon have twice as many submarines as the U.S. Navy, leading the newspaper to ask whether Canada was prepared to defend its Arctic sovereignty (Lackenbauer and Manicom 2013: 3-5).

Interestingly, Canada is the Arctic state that seems the most concerned about what China's Arctic policy

The white paper integrates the Chinese narrative into Western discourse, defining itself as an important stakeholder. This narrative has won recognition and respect from the international community and serves to reduce concerns from the Arctic Council member states.

white paper will mean for them. Canadian experts say that China's Arctic policy is attempting to tread a line between respecting the sovereignty of Arctic nations like Canada and the United States, and leaving room to benefit from disputes under international law. Language used in the white paper—such as “respect for international law”—is viewed by scholars like Robert Huebert and professor Frédéric Lasserre of Université Laval to be an attempt to articulate limits on member states' sovereignty.

Even non-coastal states in the Arctic are suspicious of China. Iceland has rejected a Chinese businessman's attempts to buy its land twice, suspecting that he might build a harbor there even though Iceland was assured that the land would be used to build a golf course (The Disaffected Lib 2013). The attitudes of Iceland and Russia signal that China will encounter many challenges in future efforts to take part in Arctic affairs.

Still, the white paper sends a positive signal to Chinese researchers and policy practitioners who now have clear strategic guidance. The international community, including Arctic Council member states, have welcomed the transparency and increased confidence China shows in participating in Arctic governance. As China experiences rapid military and economic growth, suspicions regarding its global strategic intentions as it moves towards the Arctic are unavoidable. The white paper integrates the Chinese narrative into Western discourse, defining itself as an important stakeholder. This narrative has won recognition and respect from the international community and serves to reduce concerns from the Arctic Council member states (Hong 2018).

China's views on Arctic cooperation

The gradual disappearance of Arctic sea ice raises serious sovereignty and security issues, some of which are increasingly evident in the evolving relationships between the Arctic states and non-Arctic states such as China, Japan, South Korea and India. In the same vein, there is a strong and practical need to strengthen international cooperation on Arctic matters.

While some of the most critical Arctic issues are national, many issues are regional or trans-regional and relate to the environmental impacts of climate change, shipping and resource development. These issues require a more comprehensive understanding of the causes and impacts of natural variability and human-induced environmental changes in the Arctic. The areas of international Arctic cooperation are continuously expanding, creating enormous potential as well as significant challenges. Arctic cooperation began in the early 1990s with a focus on environmental protection and scientific research, but quickly expanded to encompass sustainable development. Cooperation between Arctic and non-Arctic states has continued to develop on a number of levels, either bilaterally or within the existing frameworks of regional forums and international organizations, on scientific research, environmental protection and sustainable development.

At the third Arctic Circle Assembly in Reykjavik, Iceland in 2015, Zhang Ming, China's then Vice Minister of Foreign Affairs, delivered a keynote speech titled "China in the Arctic: Practices and Policies" (China MFA 2015). The following year, Gao Feng, China's chief negotiator for climate change, gave another speech about China's view on Arctic cooperation at the fourth Arctic Circle Assembly (China MFA 2015). Furthermore, Xu Hong, head of the Department of Legal Affairs in China's Ministry of Foreign Affairs, talked about China's view on Arctic economic development at the sixth International Meeting of Representatives of Arctic Council Member States, Observer States, and Foreign Scientific Community, hosted by the Russian Federation between August 29 and September 2, 2016 (Information Office, 2016). Though they are not published in a single document, these speeches evidence an emerging Chinese Arctic policy and use "cooperation" as their key word (Liu 2016).

Recognizing and respecting each other's rights constitutes the legal basis for cooperation between Arctic and non-Arctic states. In accordance with the UNCLOS and other relevant international legal frameworks, Arctic states have sovereign rights and jurisdiction in their respective areas in the Arctic region, while non-Arctic states also enjoy rights of scientific research and navigation. To develop a partnership of cooperation, Arctic and non-Arctic states should proceed, first and foremost, from the basis of recognizing and respecting each other's rights under international law.

Second, mutual understanding and trust provide a political guarantee for cooperation between Arctic and non-Arctic states. Arctic states, with a larger stake in Arctic-related issues, argue that they should play a more important role in Arctic affairs than non-Arctic countries. In the meantime, given the trans-regional implications of certain Arctic issues, non-Arctic states that fall under such influence argue that they have legitimate interests in Arctic-related issues. With their interests intertwined, there is no doubt that both Arctic and non-Arctic states will play increasingly significant roles in Arctic affairs. To enhance

cooperation, Arctic and non-Arctic states should, on the basis of respecting each other's rights, strengthen their communication, increase mutual understanding and trust of, support of and assistance for each other and seek areas of converging interests.

Third, addressing trans-regional issues through joint research endeavors represents a major field of cooperation between Arctic and non-Arctic states. Enhanced cooperation on scientific research will enable Arctic and non-Arctic states to view trans-regional issues from a wider perspective, send a more comprehensive message to the international scientific community and facilitate the settlement of relevant issues. This model of cooperation has already yielded sound results in addressing such issues as climate change and Arctic shipping. The issue for Arctic Council members now is how to involve non-Arctic states in relevant research endeavors and in-depth discussions at an early stage.

“Such cooperation should ensure that the benefits are shared by both Arctic and non-Arctic states as well as by non-state entities and should accommodate the interests of local residents including the indigenous people.”

Arctic and non-Arctic states have different rights, interests and specific concerns with regards to Arctic-related issues. However, peace, stability and sustainable development in the Arctic serve the common interests of both Arctic and non-Arctic states. Mutually-beneficial cooperative partnerships that promote and enhance these interests will surely be the most appropriate way forward in a region of growing global importance.

“**Cooperation**” is an effective means for China’s participation in Arctic affairs and “**respect**” is the key basis for China’s participation (white paper). A “**win-win result**” is the value pursuit of China’s participation in Arctic affairs, which carries on the message that all stakeholders should pursue mutual benefits and common progress in all fields of activities. “Such cooperation should ensure that the benefits are shared by both Arctic and non-Arctic states as well as by non-state entities and should accommodate the interests of local residents including the indigenous people.”

Conclusion

China's interests range from participating in Arctic governance affairs, promoting bilateral diplomacy in the Arctic area and accessing potential resources to exploiting shipping opportunities and undertaking polar research. Thus far, China's involvement in the Arctic has been fairly low-profile. Since obtaining observer status on the Arctic Council in 2013, China has modestly bolstered its bilateral relations with Arctic states and participated in the development of resources in the region.

The recently published white paper titled "China's Arctic Policy" implies that the policy goals on the Arctic 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 white paper emphasizes the need for “respect, cooperation, win-win result and sustainability.”

China's Arctic strategy is only just beginning to unfold and still faces many challenges, including the Arctic states' disputes over territorial sovereignty, vigilance among certain countries, the natural environment in the Arctic region and China's technological constraints. Nevertheless, with China's newly released Arctic policy white paper, China has emphasized a key theme—cooperation.

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