

# Canary in the Coal Mine: The Need to Center Arctic Indigenous Voices amidst Great Power Competition

GRETA MARKEY

Each year since 1981, the Arctic has lost an average of 15 thousand square miles of solid ice cover, roughly the size of Switzerland.<sup>1</sup> Continued glacial melt coupled with an international relations framework of great power competition (GPC) will establish the Arctic as a hub for accumulating commercial, civilian, and military power; however, ice loss also threatens the well-being of indigenous cultures, current Arctic infrastructure, and the rest of the world. Politically, the Arctic Region consists of eight “Arctic States” – Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States. But what foreign policy conversations often fail to account for is the half million indigenous people living on circumpolar land who are essentially experiencing their culture melt away.

Twentieth century coal miners would bring canaries with them into their mines. Canaries were more vulnerable to carbon monoxide than the miners, so these birds acted as early indicators of this dangerous, life-ending toxin. An ill canary signaled immediate evacuation of the mines, and a dead canary meant it was even too late for some of the miners. Arctic indigenous communities are the canaries in a global coal mine. Throughout global history, larger, more powerful countries have taken advantage of the resources and positioning of indigenous land. Today, indigenous communities are threatened from two fronts: climate change and the focus on great powers in their region. Weak governance frameworks that lack climate change resilience leave native populations even more exposed to globalized, competitive exploitation.

A global focus on great power objectives threatens and underrepresents indigenous cultures in regional and global discussions. This article outlines the history of Arctic indigenous populations, how they are threatened by climate change and GPC, and why governing bodies need to focus on native perspectives and land-management rights when making decisions about the future of the Arctic. Native populations are the true stewards of the Arctic. Their traditional ecological knowledge and management skills are critical to preserve and protect this region.

## History of Indigenous Populations in the Arctic

The Arctic refers to all land and ocean north of the Arctic Circle plus the Aleutian Islands, the Bering Sea, and Portions of W. Alaska.<sup>2</sup> Within this region, there is land cover (a majority of which is permafrost-topped tundra), permanent sea ice cover, and seasonal sea ice cover. While indigenous populations have connected with and lived off this land from as early as 2500 BC, the Arctic has been of little global interest until the past two centuries.

<sup>1</sup> “Arctic Sea Ice News & Analysis,” *National Snow & Ice Data Center*, updated April 6, 2021, <http://nsidc.org/arcticseaicenews/>.

<sup>2</sup> Brian L Sittlow, “What’s at Stake with Rising Competition in the Arctic?” *Council on Foreign Relations*, May 1, 2020, <https://www.cfr.org/in-brief/whats-stake-rising-competition-arctic>.



*Greta Markey is a junior at Carnegie Mellon University majoring in Civil Engineering and Engineering and Public Policy. She also has a minor in Environmental and Sustainability Studies. Greta participated in CMU’s Washington Semester Program in spring 2021, doing renewable energy research with the Woodrow Wilson Center. She hopes to enter an interdisciplinary PhD program to continue to connect the STEM and policy fields.*

Most Arctic discourse is focused on Arctic indigenous populations as a whole, but in fact more than 40 culturally distinct ethnic groups live in the region, including the “Nenets, Khanty, Evenk and Chukchi in Russia, Aleut, Yupik and Inuit (Iñupiat) in Alaska, Inuit (Inuvialuit) in Canada and Inuit (Kalaallit) in Greenland.”<sup>3</sup> Arctic populations began to climb in the 1950s and 60s because of increased indigenous healthcare and the discovery of vast natural resources.<sup>4</sup> Larger urban hubs – often located near major resourcing infrastructure – have become more popular, but native Arctic populations tend to live in smaller, peripheral villages. Since the end of the Cold War, Arctic population growth has slowed. In places like the Russian Arctic, populations are actually decreasing, and this trend may continue as climate change and GPC renders previously stable communities less inhabitable.

In 1996, the eight Arctic states created the Arctic Council to promote common goals and harmony within the region, though it specifically excludes military dialogue. Within the council, six groups representing indigenous voices have permanent participation roles.<sup>5</sup> Even though indigenous representatives still have no actual vote on procedural matters, the roles ensure them a seat at the table. Moreover, the Arctic Council lacks law-making and enforcement capability, more often acting as an advisory council as opposed to a governing body.<sup>6</sup> Nevertheless, this council is valuable for its unique honoring of indigenous input and omission of militarized conversation.

### Climate Change in the Arctic

The Arctic is warming at roughly twice the rate of the rest of the globe, resulting in a decreasing amount of sea ice cover and permafrost. This melting opens up more channels for travel in the region, but also poses risks for the ecosystem and the indigenous populations who rely on ice cover. Even the most conservative estimates of warming predict Arctic temperature changes above five degrees Fahrenheit by 2050, which will most likely force certain indigenous communities to relocate.<sup>7</sup> For communities not displaced, glacial melt makes traditional travel routes inaccessible and poses a risk for infrastructure previously built on frozen land. Moreover, a depleted stock of seafood from overfishing and oceanic change will lead indigenous populations to rely on less nutritious, more expensive, imported perishables, further destroying their culture and perpetuating global nutrition inequity.<sup>8</sup>

Melting ice cover will render the region more economically and politically significant, as oil and gas stores become accessible.<sup>9</sup> At the same time, the negative effects of warming may pose risks for the U.S. economy.<sup>10</sup> The Arctic acts as a global heat sink, or “refrigerator,” where air and water are cooled and distributed to the rest of the world<sup>11</sup>. A warming of the Arctic atmosphere and Ocean may affect this circulation, which can harm global ecological services. As permafrost melts, methane is also released from the underlying carbon-rich peat, which may create a positive feedback loop of global warming.<sup>12</sup>

<sup>3</sup> “Arctic Indigenous Peoples,” *Arctic Centre University of Lapland*, <https://www.arcticcentre.org/EN/arcticregion/Arctic-Indigenous-Peoples>.

<sup>4</sup> “Arctic Indigenous Peoples,” Arctic Centre University of Lapland.

<sup>5</sup> Elizabeth Mayer, “Establishing the role of Permanent Participants on the Arctic Council: How Arctic Indigenous groups gained recognition on the Arctic Council,” *University of Washington*, January 31, 2019, <https://jsis.washington.edu/news/establishing-the-role-of-permanent-participants-on-the-arctic-council-how-arctic-indigenous-groups-gained-recognition-on-the-arctic-council/>.

<sup>6</sup> “Indigenous Peoples of the Arctic,” Grid-Arendal, <https://www.arcgis.com/apps/Cascade/index.html?appid=2228ac6bf45a4cebacfc1c3002ffef0c4>.

<sup>7</sup> “Climate Change in the Arctic,” *National Snow & Ice Data Center*, 2021, [https://nsidc.org/cryosphere/arctic-meteorology/climate\\_change.html](https://nsidc.org/cryosphere/arctic-meteorology/climate_change.html).

<sup>8</sup> “Arctic Indigenous Peoples,” Arctic Centre University of Lapland.

<sup>9</sup> Lawson Brigham, “The Russian Maritime Arctic: Region of Great Change in the 21st Century,” *The Wilson Center*, April 6, 2021.

<sup>10</sup> Rostin Benham, et al., “Managing Climate Risk in the U.S. Financial System,” *U.S. Commodity Futures Trading Commission*, 2020.

<sup>11</sup> “Climate Change and Security in the Arctic,” Center for Climate and Security

<sup>12</sup> “Climate Change in the Arctic,” National Snow & Ice Data Center.

Arctic indigenous communities that are most affected by ice melt contribute almost nothing to Arctic climate change. In fact, many countries who have major seats in determining the outcome of this changing region are the most responsible for warming. This hypocrisy is not lost on native arctic tribes. In 2005, the Arctic Climate Impact Assessment noted massive changes in Arctic ice cover.<sup>13</sup> This same year, the Inuit population of Canada and Greenland filed a petition to the Inter-American Commission of Human Rights (IACHR), blaming the United States for failing to decrease CO2 emissions.<sup>14</sup> IACHR did not specifically proceed with this petition, though they did begin to link climate change with human rights.<sup>15</sup>

### Great Power Competition in the Arctic

Arctic climate change occurs within the framework of global competition between China, Russia, and the United States, each with their own interests in the region.<sup>16</sup> Although the Arctic has historically been peaceful and demilitarized, during the Cold War, the Arctic became a strategic zone in the competition between the United States and the Soviet Union (USSR). The USSR positioned much of their nuclear deterrent capabilities in the Arctic. While the creation of the Arctic Council in 1996 signaled US-Russian regional de-escalation, the Arctic has since gained renewed coverage in resourcing, trade, and military potential.<sup>17</sup>

The Northern Sea Route (NSR), a Russian-dominated shipping route, can reduce Europe-to-China transport times by 40 percent.<sup>18</sup> Previously accessible for only three to four months out of the year, ice coverage loss is making the NSR available for much longer. Even if the NSR never rivals other international routes like the Suez Canal, China is interested in developing the NSR into a 'Polar Silk Road' (PSR), part of their 'Belt and Road Initiative' (BRI). While China's push for the PSR seems to align with other powers' goals in the region, there are concerns that the PSR is a grey zone tactic to extend China's influence and control into the north.<sup>19</sup>

International fishing, hard minerals, fossil fuels and freshwater all exist in abundance in the Arctic. Many countries are positioning themselves to benefit from the NSR as a cargo route into the Arctic rather than a trade route or passage. Russia expects their destination cargo industry in the Arctic to reach 75 million tons per year by 2025 – a 300 percent increase from 2019<sup>20</sup> – to set their natural gas production on par with Qatar and the United States. Where US resourcing in the Arctic accounts for less than 1 percent of their GDP, the Arctic contributes to about 20 percent of Russian GDP.<sup>21</sup> As a result, Russia has a much larger incentive to promote resource extraction in the Arctic, and inversely they will probably oppose any measures to limit it.

Russia is also rebuilding its military presence in the Arctic, and other countries, including the United States, Canada, and Norway, have expanded Arctic military training.<sup>22</sup> Whether for resource protection or nuclear deterrence, more Arctic activity creates uncertainty around each state's intentions. A poorly defined governance structure in the region exacerbates this uncertainty, leaving populations vulnerable to grey zone tactics. Even though it is in each

13 "Arctic Climate Impact Assessment," Working Group of the Arctic Council, 2005.

14 Charlotte Luke, "The Effects of Arctic Warming on Indigenous Communities," *Earth.org*, February 11, 2021, <https://earth.org/effects-of-arctic-warming-on-indigenous-communities/>.

15 "Inuit Petition and the IACHR," *Campaign Update*, Center for International Environmental Law.

16 "Great Power Competition," The Wilson Center, 2021, <https://www.wilsoncenter.org/issue/great-power-competition>.

17 Andreas Østhagen, "Geo-Strategic Competition in the Arctic: What Next?" *Konrad Adenauer Stiftung*, <https://www.kas.de/documents/272774/272823/Østhagen+Studie.pdf/742910f6-fcce-613d-add6-712d100dea52?version=1.0&t=1599727616835>.

18 "Climate Change and Security in the Arctic," Center for Climate and Security, 2021.

19 Østhagen, "Geo-Strategic Competition in the Arctic: What Next?"

20 Brigham, "The Russian Maritime Arctic: Region of Great Change in the 21st Century."

21 Brigham, "The Russian Maritime Arctic: Region of Great Change in the 21st Century."

22 "Climate Change and Security in the Arctic," Center for Climate and Security.

state's best interest for the Arctic to remain peaceful, increased military presence establishes the Arctic as a region of increasing tension.

### **Indigenous Inequity created by GPC**

The current focus on GPC in policy circles – and thus American, Chinese, and Russian arctic capabilities – diverts attention from the vulnerabilities of underrepresented populations. “Competition isn’t a strategic goal,” says Daniel Nexon, a professor in Georgetown University’s School of Foreign Service. “It’s a means to an end. The decision to compete with another great power should always be over something specific; it should center on . . . how the specific objective contributes to long-term goals.”<sup>23</sup>

While increased activity in the region does not directly oppose native objectives, the most important Arctic voices are being stifled by bigger, louder, dirtier states. Infrastructure development in the Arctic, like access to broadband, may connect and amplify indigenous voice; however, they must not be instituted without the consultation of the communities.<sup>24</sup> Indigenous populations have strong connections to the land, which means their economic and cultural health are most sensitive to large shifts in resource accessibility. As larger countries continue to export capital from less-developed regions without assurance that these regions are equitably managed, globalization can lead to exploitation.

Ninety five percent of the world’s indigenous population live in developing countries,<sup>25</sup> and often, their cultures and traditions directly oppose the appetite of consumer-fueled resourcing. Powerful countries have a history of harming native communities for capital. This history of exploitation for economic and political advantage must not be disguised or validated by GPC.

### **How Governing Bodies Should Adapt**

Since 2005, activity within the Arctic region has increased tremendously, yet governing bodies have failed to establish policies that account for such a drastically changed environment. Arctic governance should be reevaluated, as “increased commercial activity [will] strain the monitoring and enforcement [capabilities] of existing regulatory agreements.”<sup>26</sup> In 2016, The International Maritime Organization revised their Polar Code to more extensively monitor shipping operations in polar waterways.<sup>27</sup> Other regulatory agencies and governing bodies should follow suit, particularly when it comes to resourcing legislation. The Arctic Council is the current and most relevant advisory committee within the Arctic, and while it has created a few binding agreements, strong governing strategies are necessary to hold players accountable.<sup>28</sup>

Because the Arctic warms more quickly than the rest of the world, Arctic native experiences serve as early and accurate indicators of failing ecological, economic, and political structures. Indigenous place-based knowledge of ecological cultivation is invaluable to Arctic management regimes. Governing bodies must adapt to promote indigenous stewardship in their decision-making. The Wilson Center Polar Institute proposed a body to carry out international objectives within the Arctic, which it calls SILK for “scientific knowledge, Indigenous knowledge,

---

23 Robert Farley, “Welcome to the All-Consuming Great Power Competition,” *The Diplomat*, February 23, 2021, <https://thediplomat.com/2021/02/welcome-to-the-all-consuming-great-power-competition/>.

24 Tina Pidgeon, “Building the Broadband Bridge between Arctic Providers and Peoples,” *The Wilson Center, Polar Institute*, March 8, 2021, <https://www.wilsoncenter.org/blog-post/no-1-building-broadband-bridge-between-arctic-providers-and-peoples>.

25 Erica-Irene Daes, “The impact of globalization on Indigenous Intellectual Property and Cultures,” <https://www.humanrights.gov.au/about/news/speeches/impact-globalization-indigenous-intellectual-property-and-cultures>.

26 “Climate Change and Security in the Arctic,” Center for Climate and Security.

27 “International Code for Ships Operating in Polar Waters (Polar Code),” *International Maritime Organization*, <https://www.imo.org/en/MediaCentre/HotTopics/Pages/Polar-default.aspx>.

and local knowledge.”<sup>29</sup> SILK acknowledges a governmental obligation to promote the input of scientific, indigenous, and local knowledge to support equitable and inclusive policymaking.

International bodies must also provide displaced indigenous populations with resources, autonomy, and input into place-based action plans. Insufficient, short-term aid has previously been a solution to looming Arctic degradation. Governments and agencies must

*“International bodies must also provide displaced indigenous populations with resources, autonomy, and input into place-based action plans.”*

strategize to provide long-term financing for community development or more focused aid for individual resettlement.<sup>30</sup> When it comes to countering GPC, a majority of government funding goes toward defense. In reality, this funding may be more effectively allocated toward addressing the human-security issue rather than escalating the military-security one.

### Conclusion

The Arctic indigenous population, in terms of climate change and the resurgence of GPC, is an ill canary in a global coal mine. This irreplaceable region experiences global warming more than twice as fast as the rest of the world, and indigenous populations are losing their land and traditions. The instability of native populations in the Arctic should serve as a warning for the negative effects of climate change and preoccupied foreign policy on periphery populations around the world. GPC as a strategy harms and devalues the voices of indigenous populations within the Arctic. Governing bodies must therefore work to validate, refocus, and collaborate with these voices if they hope to combat the largest global and regional effects of a warming planet.

---

29 Betsy Baker, “Smart as SILK: An innovative advisory body for implementing the knowledge- based requirements of the Central Arctic Ocean Fisheries Agreement,” *Wilson Center, Polar Perspectives*, April 2021, [https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/Polar%20Perspectives%204.%20Smart%20as%20SILK\\_0.pdf](https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/Polar%20Perspectives%204.%20Smart%20as%20SILK_0.pdf).

30 Fran Ulmer, “Addressing Dramatic Changes in the Bering Strait Region Requires Governance Adaptations,” *Belfer Center for Science and International Affairs, Harvard Kennedy School*, 2020.