

Arctic Council Topic A Update Paper



As nations struggled to reduce greenhouse gas emissions at the United Nations Climate Change Conference (COP26), global temperatures have continued to rise. In 2021, a report from scientists working with NASA found that average temperatures had increased in the Arctic four times quicker than the temperature has increased elsewhere.¹

Temperatures increase quicker

in the Arctic because when sea ice melts, sunlight previously reflected by the white ice is instead absorbed by the ocean—increasing the region’s temperatures at a faster rate.

This rapid warming reduces sea ice and melts permafrost, placing infrastructure and animals at risk. Buildings, roads and pipelines built or anchored into the region’s permafrost face structural challenges. Some experts believe that 50% of infrastructure built in the Arctic will be at a high risk of damage by 2050 due to permafrost melt.² Already, some entire towns in the Russian Arctic are seeing their roads and buildings sink into the ground by up to 12cm a year—making these structures unsafe for humans.³ Already reduced sea ice has caused the number of polar bears to decline, forcing those remaining to inbreed, which reduces the species’ genetic diversity, making it more susceptible to disease and poor health.⁴

As ice recedes in the Arctic, territorial disputes are likely to increase. Reduced ice coverage in the summer makes it possible for ships to sail through the region, potentially reducing shipping times from the Pacific region to Europe. Additionally, less frigid temperatures make it easier for companies and countries to exploit the region’s natural resources. Borne out of this desire for oil and precious metals, nations in the Arctic are increasingly looking to assert their territorial claims. The region is currently home to 4 main disputes which center on: Hans Island (a dispute between Denmark and Canada); the Lomonosov Ridge (a dispute between Denmark, Canada, and Russia); and the Northwest Passage and Beaufort Sea (a dispute between the United States and Canada).⁵ These territorial disagreements have seen negotiations stop and start, but the intensity of the disputes are likely to worsen as the region becomes more accessible for economic exploitation.

¹ <https://www.science.org/content/article/arctic-warming-four-times-faster-rest-world>.

² <https://reut.rs/3pE7Z8s>

³ <https://www.reuters.com/world/europe/russias-remote-permafrost-thaws-threatening-homes-infrastructure-2021-10-18/>

⁴ <https://abcnews.go.com/International/melting-arctic-ice-catastrophic-effects-world-experts/story?id=81588333>

⁵ https://theowp.org/crisis_index/arctic-circle-territorial-conflicts/