# HIDDEN GEMS: THE RACE FOR RARE EARTH METALS IN GREENLAND

Soft Power Competition in an Opening Arctic

Master of Arts in Law and Diplomacy Capstone Project **Submitted by Gauri Gupta**May 8, 2020

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# **Executive Summary**

Despite being the largest island in the world, Greenland is often overlooked as a player of key strategic significance on the global geopolitical stage. Lately however, this quiet, remote and starkly beautiful land finds itself increasingly in the midst of a flurry of international attention. This renewed interest in Greenland stems from the presence of special, largely obscure minerals found in its depths that hold the key to the production of some of the most powerful and profitable technologies in the world. These minerals, also known as Rare Earth Elements (REE, or rare earths) have innumerable technological applications that literally form the bedrock of modern society, while also providing a potential roadmap to Greenland's independence.

While the availability of rare earths is not as rare as the name would suggest, the extraction process is costly as these minerals are naturally found in combination with larger minerals or oxides. China currently dominates the various stages of the supply chain globally, from mining the minerals found in their national reserves to downstream processing and refining REE for commercial use. However, given the ubiquitous use of rare earths, such a monopoly on the production of rare earths may be disastrous to global supply chains in the event of a disruption.

This paper therefore seeks to explore the possibility of alternately sourcing rare earths through mining projects in Greenland, an option which has increasingly viable potential as melting polar ice has made it possible to access previously remote sites. While the prospect of newfound development will open the door to increased competition over resource development in the region, China and the United States will likely be pitted against each other as key

contenders in a competition of soft power over Greenland's resources. China's Arctic footprint can already be seen through its existing soft power engagements, strong business partnerships with Russia, scientific and cultural exports, and commercial diplomacy in Greenland, indicative of its broader strategic interests in the Arctic. These initiatives are worthy of the national attention of the United States, which has thus far lacked a proactive and aggressive Arctic policy.

Due to the critical need for REE in defense technologies, it is in the best interests of the national security of the United States to shift away from its reliance on a singular source for their supply of REE. It may achieve this by strengthening its relations with Greenland, while also engaging Denmark and other NATO allies in providing a counterweight to the commercial diplomacy of China. One way to do this may be through public-private partnerships and collaborative investments in Greenland infrastructure projects. In order to straddle the complex geopolitical dynamics at play and in order to be sensitive to Greenlandic identity, this should be accompanied by strategic initiatives crafted to directly benefit Greenland's economy, including projects that employ locals, use environmentally friendly technologies, and respect the independence and cultural heritage of the indigenous Inuit community that make up the majority of Greenland's population. This will achieve the multiple aims of strengthening U.S. national security, establishing a greater American presence in the Arctic and critically, cementing American leadership in the geopolitical landscape of Great Power Competition that will inevitably emerge in the aftermath of COVID-19 and beyond.

# I. Introduction to Greenland: A Remote and Unexplored Treasure Trove

#### A. Political Landscape

Greenland is one of the most unique territories in the world. Despite its vast size, it is also the most sparsely populated, boasting a population of roughly 56,000, most of whom comprise indigenous Inuit communities. Greenland's cultural and political makeup is also complex, as it transitioned from a Danish colony to a Danish territory in 1953, earning the right to self rule in 1979. Greenlanders were accorded a greater expansion of self-governing powers in 2009, when it achieved autonomy in internal affairs decision-making. Despite greater gradual pushes toward autonomy, the Kingdom of Denmark continues to maintain control over issues of defense, foreign policy, and monetary policy. It is notable that Denmark is one of the United States' strongest NATO allies and the two countries enjoy a very healthy and mutually beneficial partnership.

#### B. Harsh Conditions and a Limited Economy

Despite the vast size of Greenland, 80% of its land is covered by ice sheets, making the island largely uninhabitable and undeveloped. The harsh climate, marked by long winters and stretches of 24-hour darkness, coupled with an inhospitable terrain, make the cost of commercial development particularly high, which in turn can be seen in Greenland's lack of infrastructure and commercial activity. Fishing is the predominant source of employment for Greelanders, and fish and shrimp exports account for 90% of the economy.<sup>3</sup> Greenland also relies heavily on

<sup>&</sup>lt;sup>1</sup> Central Intelligence Agency, "North America:: Greenland — The World Factbook," https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html.

<sup>&</sup>lt;sup>2</sup> U.S. State Department, "U.S. Relations With Denmark," https://www.state.gov/u-s-relations-with-denmark/

<sup>&</sup>lt;sup>3</sup> Central Intelligence Agency, "North America:: Greenland — The World Factbook," https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html.

annual subsidies from the Danish government, which was in the amount of \$535 million in 2017, forming more than 50% of Greenland's revenue and 25% of its GDP<sup>4</sup>. The lack of diverse economic opportunity in Greenland is a cause for unemployment among youth and in areas where fishing industries are subject to fluctuation. The prospect of rare earths is therefore an attractive solution to combat the issue of unemployment and revitalize the local economy.

### C. Geographic Advantage

Greenland occupies a prime geostrategic location, straddling the Arctic and North Atlantic Oceans and providing a connection between the United States and Europe. Its geographic location is of military-strategic value to the United States and its NATO allies, evidenced by the presence of the U.S. Air Force at Thule Air Base since the 1950's in northwest Greenland, which plays a critical role in our early warning radar system and space surveillance<sup>5</sup>. The continuous presence of the air base is also a testament to the strong relationship shared between the United States and Denmark.

#### D. Untapped Resources

Despite Greenland's harsh climate, lack of infrastructure, and struggling economy,

Greenland is believed to have largely untapped reserves of raw material deposits that may be of
great value and which have thus far not been commercially exploited due to the rough natural

<sup>4</sup> Central Intelligence Agency, "North America :: Greenland — The World Factbook,"

https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html.

Brett Tingley and Tyler Rogoway, "The U.S. Can't Buy Greenland But Thule Air Base Is Set To Become More Vital Than Ever Before," *The Drive*, September 23, 2019,

www.thedrive.com/the-war-zone/29541/the-u-s-cant-buy-greenland-but-thule-air-base-is-set-to-become-more-vital-than-ever-before.

conditions and difficult access. These include reserves of REE, in addition to uranium, ferrous metals, oil and natural gas. While Greenland is inherently interested in the economic value of these resources, the high cost of mining means that Greenland will need to rely on foreign direct investment to exploit these resources. However, new partnerships resulting from an opening Arctic may be paving the way for mining opportunities and commercial production of some of these materials.

# II. An Opening Arctic

Climate change has led to the Greenland ice-sheet melting at an increasing rate, which has led to greater access to areas that were previously impervious to development. While the potential to finally tap into the precious rare earth industry and use it as a means to self-sufficiency is highly attractive to native Greenlanders, they are also wary of the environmental damage that mining operations will entail. There are also concerns regarding the degree to which locals will be involved in the operations of the international firms that seek to exploit Greenland's natural resources.

An opening Arctic will place Greenland at the center of an evolving geopolitical competition for resources, where countries seeking to increase their presence in the Arctic region, -- previously remote, uninhabitable and unprofitable -- will soon vy for a piece of the coveted metals that lay beneath the surface. The significance of rare earth metals to global technology and military systems worldwide make them inherently valuable resources critical to international security, and the United States and China, with distinct but competing Arctic ambitions, will emerge as key players in this arena. While Russia has significant military and

commercial influence in the Arctic, growing Sino-Russian partnerships also present a trend that is likely to affect the overall geopolitical dynamics and competition for precious Arctic resources.

#### A. Geopolitical Dynamics

The race for resources and power in Greenland is characterized by complex geopolitical relationships that comprise intersecting and conflicting interests from various parties involved. While Denmark and the United States enjoy a very strong alliance, Greenland's relationship with Denmark is more complex. As an autonomous territory of Denmark, Greenland maintains control over decisions regarding the commercialization of its resources, yet Denmark has the ability to overrule such decisions where matters of national security are at stake. The debate surrounding the development of rare earths straddles this delicate line, as on the one hand, they offer the potential for burgeoning economic opportunity, yet on the other, there are national security implications. Additionally, given Greenland's reliance on Denmark for a sizable percentage of its income, native Greenlanders are hoping to find a path to developing their own financial independence, and see rare earths as a means to achieve this.

Given that Greenland needs foreign investment to capitalize on its natural wealth, they are incentivized to pursue business relations with China, who appears to be the best poised to offer aid to Greenland. Such overtures have been eagerly welcomed by Greenland, while Denmark and the United States remain wary of China's moves in this direction. While these successful partnerships place China on the road to fulfilling its Arctic dreams and acquiring greater control over the production of rare earths, however, Chinese involvement in Greenland also may have broader implications that tie in to Chinese grand strategy in the form of its

Belt-and-Road Initiative, which also has long-term geopolitical and security implications for the United States.

#### B. Chinese Arctic Policy

China has over the past few years demonstrated an increasingly significant interest in Arctic affairs, having notably been granted permanent observer status in the Arctic Council in 2013. China's recent self-declaration as a "near-Arctic state" and release of an official Arctic Strategy in 2018 -- despite its lack of geographic proximity to Arctic countries -- is also clearly indicative of its plans to expand Chinese influence in the High North. The White Paper released by the State Council in January 2018, which outlined China's Arctic policy indicates a plan to "bring opportunities for parties concerned to jointly build a "Polar Silk Road" and facilitate connectivity and sustainable economic and social development of the Arctic."

China sees Greenland, with its shortage of infrastructure and potential for growth, ripe for investment. China's efforts may be seen in context of its wider Arctic ambitions, playing into a greater narrative wherein China's heavy investment in global infrastructure projects is likely to lead to a spiral of "debt-trap" lending that it hopes will lead to future leverage on the international political stage. In addition to financial capital, China is making use of soft power initiatives to increase its presence in the region by embarking on a variety of scientific research projects in collaboration with Greeland, as well as cultural initiatives such as film festivals in

<sup>&</sup>lt;sup>6</sup> The State Council Information Office of the People's Republic of China. China's Arctic Policy, Beijing, 2018, <a href="http://english.www.gov.cn/archive/white\_paper/2018/01/26/content\_281476026660336.htm">http://english.www.gov.cn/archive/white\_paper/2018/01/26/content\_281476026660336.htm</a>.

Nuuk to export Chinese culture and strengthen relations on a more personal level with the Greenlandic people<sup>7</sup>.

#### III. The Spotlight Shines Bright on Rare Earth Metals

#### A. The Significance of Rare Earth Metals

Rare earth metals have ironically remained largely unknown to the public despite their vital contributions to the global economy. They are a collection of 17 metals that are critical to several ubiquitous technologies that we rely on today -- from our smartphones and television sets, to electric cars and MRI machines, to solar panels and wind turbines. From a defense perspective, rare earth metals are vital for manufacturing high-tech military hardware like lasers, naval sonar systems, nuclear weapons, guided missiles, radars, satellite communications, advanced optical equipment, and combat aircraft. Metals such as the prized neodymium have unique magnetic and electrical properties and are used to create powerful, compact magnets for use in the aforementioned applications<sup>8</sup>.

#### B. Rare Earth Production and Global Supply Chains

Rare earth metals are costly to mine as they are often found in combination with other ores from which they need to be separated. The United States has only one rare earth mine known as the Mountain Pass mine in California, which is the largest known rare earth deposit in

<sup>&</sup>lt;sup>7</sup>Jackie Northam, "Greenland Is Not For Sale. But It Has Rare Earth Minerals America Wants." NPR, November 24, 2019.

 $<sup>\</sup>underline{https://www.npr.org/2019/11/24/781598549/greenland-is-not-for-sale-but-it-has-the-rare-earth-minerals-america-wants.}$ 

<sup>&</sup>lt;sup>8</sup>Adam Isaak, "A Rare Metal Called Neodymium Is in Your Headphones, Cellphone and Electric Cars like Tesla's Model 3 - and China Controls the World's Supply," CNBC, October 23, 2018, www.cnbc.com/2018/10/18/neodymium-china-controls-rare-earth-used-in-phones-electric-cars.html.

the United States. Although the United States used to be the predominant producer of REE in the 1950's, production gradually declined when China entered the market in the 1980's. Due to increasing costs and a lack of national prioritization of rare earth development, the production of REE in the United States fell largely dormant during the 90s and early 2000's, during which China rose to the position of dominant global supplier. Also, due to the fact that China was able to mine these minerals at a fraction of the cost, the United States opted to purchase REEs from China. It is notable that a study done by the Institute for the Analysis of Global Security suggests that China has been able to produce rare earths around two-thirds the cost of its international competitors "largely due to the country's lax environmental standards" as they may pertains to the rare earth industry. On the other hand, environmental regulations have been a major driver of increasing costs of mining rare earths in the United States, and the additional necessary steps to process and refine rare earth metals make their domestic production cumbersome.

# C. Monopolizing REE Supply Chain as a Geopolitical Weapon

China's vast reserves of rare earths and unbeatable prices of production have given rise to a monopoly over the supply chain of these critical minerals. Today, China controls more than

<sup>&</sup>lt;sup>9</sup>Rajive Ganguli and Douglas R. Cook, "Rare Earths: A Review of the Landscape." Cambridge Core, Cambridge University Press, June 26, 2018,

www.cambridge.org/core/journals/mrs-energy-and-sustainability/article/rare-earths-a-review-of-the-landscape/4F69 9CE5A563C492E7E654FDA4D0D78E/core-reader#ref18.

<sup>&</sup>lt;sup>10</sup> Cindy Hurst, "China's Rare Elements Industry - What Can We Learn?" The Institute for the Analysis of Global Security, March 2010, <a href="http://www.iags.org/rareearth0310hurst.pdf">http://www.iags.org/rareearth0310hurst.pdf</a>

90% of the supply of REE<sup>11</sup>. The United States itself imported nearly 80% of its supply of rare earths from China between 2014 and 2017.<sup>12</sup>

It is conceivable that such a hegemony may be used as political leverage by China through decisions to restrict the export quota of rare earths, using them as a bargaining chip or geopolitical weapon. There is precedent for such speculation, given China's threat to pursue a rare earth embargo in 2010<sup>13</sup> in response to skirmishes with Japan in the South China Sea. More recently, China also famously hinted at the possibility of using REEs as leverage against the United States during the two countries' much publicized bilateral trade war in May 2019<sup>14</sup>. At the time, the official newspaper of China's Communist Party, *People's Daily*, also alluded to the possibility of rare earths being used as a counter weapon against the United States.<sup>15</sup>

China ended up losing the WTO case filed by the United States against them in response to the Chinese export quota on rare earths implemented in 2010<sup>16</sup>, and China also opted not to cut off rare earths supply to the United States in 2019. Yet, the significance of the potential damage that such a threat could cause to the national security of the United States cannot be understated.

<sup>&</sup>lt;sup>11</sup> US Geological Survey: *Rare Earths. U.S. Geological Survey, Mineral Commodity Summaries, January 2016* (2017).

<sup>&</sup>lt;sup>12</sup>Grace Hearty, "Rare Earths: Next Element in the Trade War?" CSIS, August 20, 2019, https://www.csis.org/analysis/rare-earths-next-element-trade-war.

<sup>&</sup>lt;sup>13</sup> Keith Bradsher, "Amid Tensions, China Blocks Vital Exports to Japan," New York Times, September 22, 2010, https://www.nytimes.com/2010/09/23/business/global/23rare.html

<sup>&</sup>lt;sup>14</sup>Eric Ng, "China Threatens to Weaponise Rare Earths, Pass Tariffs to US Users." South China Morning Post, August 8, 2019,

www.scmp.com/business/commodities/article/3021947/chinas-rare-earth-producers-say-they-are-ready-weaponise-their?utm\_medium=email&utm\_source=mailchimp&utm\_campaign=enlz-usmorningbrief&utm\_content=20190808&MCUID=951433ab40&MCCampaignID=58af907b69&MCAccountID=3775521f5f542047246d9c827&tc=2.

<sup>&</sup>lt;sup>15</sup>Ben Blanchard et al. "China Ready to Hit Back at U.S. with Rare Earths: Newspapers," Reuters, Thomson Reuters, May 30, 2019, https://www.reuters.com/article/us-usa-trade-china-rareearth-idUSKCN1SZ07V.

<sup>&</sup>lt;sup>16</sup> China to Nix Rare Earth Export Restrictions Following WTO Ruling," International Centre for Trade and Sustainable Development, June 15, 2014,

www.ictsd.org/bridges-news/biores/news/china-to-nix-rare-earth-export-restrictions-following-wto-ruling.

Were China to use their monopoly over rare earths as a bargaining chip, forcing the United States to weather a sudden disruption in their supply chain of REE, this could have the power to slow or halt production on a number of critical fronts and cause serious damage to United States industry and defense that rely on these critical elements.

#### IV. Rare Earths in Greenland: A Viable Alternative to Chinese Dominance?

As mentioned earlier, rare earths, with their promise of helping to power the global economy, are the centerpiece of growing geopolitical competition between the United States and China. The town of Narsaq in Southern Greenland holds some of the largest deposits of rare earths, including neodymium, praseodymium, dysprosium, and terbium in addition to reserves of uranium and ferrous metals.

#### A. Chinese Investments in the REE Industry in Greenland

Given China's dual interest in the Arctic and in maintaining dominance over the global supply chain of rare earths, it is not surprising to see a significant Chinese investment in rare earth mining projects in Greenland. The Kvanefjeld project in the town of Narsaq offers one such promising opportunity, an area believed to have a quarter of the world's REE reserves<sup>17</sup>. The site is currently owned by Greenland Minerals and Energy (GME), an Australian company who acquired it in 2007 and has spent approximately US\$60 million developing the project to its

https://www.npr.org/2019/11/24/781598549/greenland-is-not-for-sale-but-it-has-the-rare-earth-minerals-america-wants.

<sup>&</sup>lt;sup>17</sup>Jackie Northam, "Greenland Is Not For Sale. But It Has Rare Earth Minerals America Wants." NPR, November 24, 2019,

current advanced stage<sup>18</sup>, whereas Chinese producer Shenghe Resources is notbaly the largest shareholder of the company. This is one of several projects that comprise the staggering proportion of Chinese FDI in Greenland, accounting for 11.6 percent of Greenland's GDP in 2017<sup>19</sup>.

#### B. Environmental Concerns and Preserving the Inuit Way of Life

Mining operations are accompanied by the potential to disrupt the serenity and pristine environment enjoyed by the indigenous inhabitants of Greenland. The environmental damage that is a necessary byproduct of open-pit mining is likely to significantly affect the lives of the Inuit communities that call Greenland home. While there is a division of opinion within Greenland regarding whether the costs of production are equivalent in value to the economic yield, efforts to conduct mining operations by foreign companies should take these environmental concerns into consideration while attempting to gain local support. The people of Greenland, who have the power to make decisions regarding the issuance of mining licenses, are likely to give companies the green light if they can demonstrate their intention and efforts to minimize disruption to the natural landscape and traditional way of life that may accompany mining developments. Companies should focus on developing a proposal that secures the sustainability of natural habitats and ensures livelihoods of the local people of Greenland while promising them investments that will benefit the local economy. Alternatively, given the

<sup>&</sup>lt;sup>18</sup>Michael Oneal, "Greenland Needs Money. Is a Uranium Mine the Answer?" The Washington Post, February 10, 2017, www.washingtonpost.com/sf/world/2017/02/10/greenland-needs-money-is-a-uranium-mine-the-answer/.

<sup>&</sup>lt;sup>19</sup> Mark E. Rosen and Cara B. Thuringer, "Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security", CNA Analysis and Solution, November 2017, https://www.cna.org/cna\_files/pdf/COP-2017-U-015944-1Rev.pdf

applicability of rare earths in solar panels and wind turbines, transforming these rare earths into green technology solutions is another option to address this issue that may be worth further exploration.

#### C. Opportunity for the United States

The vulnerabilities in the domestic supply chain of rare earths has caught the attention of the United States government of late, which has taken measures to prioritize the domestic production of rare earths, declaring such production capability as "essential to the national defense<sup>20</sup> in July 2019. A number of measures indicate that the Trump administration is taking this matter seriously, including the issuance of an executive order<sup>21</sup> to develop a strategy to diversify our supply of critical minerals detailed through the Federal Report on Critical Minerals. This document recognizes that "the assured supply of critical minerals and the resiliency of their supply chains are essential to the economic prosperity and national defense of the United States." <sup>22</sup> These efforts are further reflected in steps taken to revive the Mountain Pass mine, the only rare earth mine that exists in the United States. MP Materials, the company that currently owns the mine, was awarded a DoD contract last month to support the production and processing of REE<sup>23</sup>. Although the Mountain Pass mine opens the door for the United States to resume its

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<sup>&</sup>lt;sup>20</sup>The White House, "Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended," July 22, 2019,

 $<sup>\</sup>frac{https://www.whitehouse.gov/presidential-actions/presidential-determination-pursuant-section-303-defense-production-act-1950-amended-3/$ 

<sup>&</sup>lt;sup>21</sup> U.S. Department of Commerce, "A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals," <a href="https://www.commerce.gov/sites/default/files/2020-01/Critical\_Minerals\_Strategy\_Final.pdf">https://www.commerce.gov/sites/default/files/2020-01/Critical\_Minerals\_Strategy\_Final.pdf</a>

<sup>&</sup>lt;sup>22</sup> U.S. Department of Commerce, "A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals," https://www.commerce.gov/sites/default/files/2020-01/Critical Minerals Strategy Final.pdf

<sup>&</sup>lt;sup>23</sup>"MP Materials, North America's Only Rare Earths Producer, Awarded Contract From DoD To Accelerate U.S. Production Of Critical Materials To Support National Defense." PR Newswire, April 22,. 2020,

production of rare earths, it will be a long and painstaking path to profitability. A majority of the mined extracts are shipped to China for processing and downstream refinement, which significantly eats into the profitability of this fledgling industry. Efforts to support domestic mining through MP Materials, the only company with the capacity to do so in the United States, should be supplemented by efforts to find alternate supply chains in countries with which the United States maintains a strong relationship. Greenland therefore remains an alluring destination beckoning for greater engagement and promising greater possibility.

# D. Countering Chinese Influence in Greenland

The U.S. may leverage its relationship with Denmark to increase its presence in Greenland and stave off Chinese regional ambitions. Examples of efforts to thwart growing Chinese influence in Greenland can be seen in the decision made by the Danish government in 2016 to turn down an offer by a Chinese company to buy an abandoned naval base in the south of Greenland.<sup>24</sup> Not only this, but the Danish government also recently pulled a Chinese construction bid by the state-owned Chinese Communication Construction Company to help build new airports in Nuuk and Ilulissat<sup>25</sup>. While these measures hint at the possibility of creating

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 $<sup>\</sup>underline{www.prnewswire.com/news-releases/mp-materials-north-americas-only-rare-earths-producer-awarded-contract-fro}\\ \underline{m-dod-to-accelerate-us-production-of-critical-materials-to-support-national-defense-301045761.html}.$ 

<sup>&</sup>lt;sup>24</sup> Erik Matzen, "Denmark spurned Chinese offer for Greenland base over security: sources", Thomson Reuters, April 6, 2017,

 $<sup>\</sup>frac{https://www.reuters.com/article/us-denmark-china-greenland-base/denmark-spurned-chinese-offer-for-greenland-base/denmark-spurned-chinese-offer-greenland-base/denmark-spurned-chines$ 

<sup>&</sup>lt;sup>25</sup> Jacob Gronholt-Pedersen, "China withdraws bid for Greenland airport projects: Sermitsiaq newspaper," Thomson Reuters, June 4, 2019,

https://www.reuters.com/article/us-china-silkroad-greenland/china-withdraws-bid-for-greenland-airport-projects-ser mitsiaq-newspaper-idUSKCN1T5191

a strong working relationship between the United States and Greenland, more engagement will be needed to boost American national security and leadership on the global stage.

Between Trump's offer to buy Greenland in 2019, the signing of a Memorandum of Understanding with Greenland to boost mineral exploration<sup>26</sup>, the grant aid recently promised to Greenland this April in the amount of \$12 million and the plans to open a consulate in Nuuk this summer<sup>27</sup>, it is clear that America is taking note of the long-neglected Arctic island. But is it enough?

# V. Epilogue: Projections of Soft Power in the Aftermath of COVID-19

The current Coronavirus global pandemic is shaping our world in unexpected ways, predictable only in their assurance of disruption to the previous status quo. Soft power competition in the wake of the pandemic is likely to flow into the race to capitalize on resources in Greenland. It would be strategically valuable for the United States to utilize this time to strengthen ties with the people of Greenland through cultural diplomacy efforts, such as through the planned reopening of a consulate in Nuuk. America has many strong incentives to ramp up its soft power engagements in Greenland, engaging in economic and cultural diplomacy to provide a counterweight to Chinese efforts.

The coronavirus pandemic is likely to have a negative ripple effect on the travel and tourism sectors for a long time to come. Development of rare earths holds promise for

<sup>&</sup>lt;sup>26</sup> U.S. Department of State, "Joint Statement on U.S.-Greenland MOU and Hyperspectral Survey," June 6, 2019, https://www.state.gov/joint-statement-on-u-s-greenland-mou-and-hyperspectral-survey/

<sup>&</sup>lt;sup>27</sup>Martin Breum and Krestia DeGeorge, "The US Aid Package to Greenland Marks a New Chapter in a Long, Complex Relationship," ArcticToday, April 30, 2020, www.arctictoday.com/the-us-aid-package-to-greenland-is-a-new-chapter-in-a-long-complex-relationship/.

Greenland, particularly at this time of crisis. Given the importance of diversified supply chains to the global economy and in particular for the national security implications of rare earths, the United States should make the case for a prioritization of development of rare earths in Greenland with the backing of other allies in NATO. It may be able to achieve this through public-private partnerships that can leverage U.S. capital markets to create economic programs that facilitate exploration of rare earth resources. This will achieve the twofold goals of control over rare earth production as well as leadership and engagement in the Arctic, an arena in which the United States has lagged behind thus far.

Finally, increasing the American footprint in Greenland, while of strategic value, should be handled delicately, while taking into consideration the various interests at stake. Although outright "purchase of Greenland" is clearly not an option on the table, Greenland has made clear that it while it is "not for sale, it is open for business<sup>28</sup>" indicating that at the heart of Greenlandic interests in the right to autonomy and financial self-sufficiency. If the United States were to offer a more compelling proposal to native Greenlanders that takes into account the human security of the native Inuit, preserving their heritage while also providing them opportunities for employment, and developing economic operations that reduce harsh environmental impact, this may help create a robust partnership that works to the overall advancement of competition and economic growth, while also securing the national defense of the United States. In order to counter China's commercial diplomacy, the United States will need to not only find ways to offer significant financial support for the development of mining exploration with its allies in

<sup>&</sup>lt;sup>28</sup>Jacob Gronholt-Pedersen, "Greenland Tells Trump It Is Open for Business but Not for Sale." Thomson Reuters, August 16, 2019,

 $<sup>\</sup>underline{www.reuters.com/article/us-usa-trump-greenland/greenland-tells-trump-it-is-open-for-business-but-not-for-sale-idU}\\ \underline{SKCN1V60AQ}.$ 

NATO, but supplement this with cultural diplomacy that promotes American values, increases goodwill and employs tools of soft power effectively to incentivize Greenland to prioritize the United States as a strategic partner, thus taking essential steps towards a long-lasting mutually beneficial relationship that ensures American leadership in the ever-evolving Arctic frontier.

# Bibliography

- Abraham, David S. The Elements of Power: Gadgets, Guns, and the Struggle for a Sustainable Future in the Rare Metal Age. New Haven: Yale University Press, 2015.
- Blanchard, Ben, et al. "China Ready to Hit Back at U.S. with Rare Earths: Newspapers." Reuters, Thomson Reuters, 30 May 2019, <a href="https://www.reuters.com/article/us-usa-trade-china-rareearth-idUSKCN1SZ07V">https://www.reuters.com/article/us-usa-trade-china-rareearth-idUSKCN1SZ07V</a>.
- Bradsher, Keith. "Amid Tension, China Blocks Vital Exports to Japan." The New York Times, The New York Times, 23 Sept. 2010, <a href="https://www.nytimes.com/2010/09/23/business/global/23rare.html">www.nytimes.com/2010/09/23/business/global/23rare.html</a>.
- Breum, Martin, and Krestia DeGeorge. "The US Aid Package to Greenland Marks a New Chapter in a Long, Complex Relationship." ArcticToday, 30 Apr. 2020, <a href="https://www.arctictoday.com/the-us-aid-package-to-greenland-is-a-new-chapter-in-a-long-com-plex-relationship/">https://www.arctictoday.com/the-us-aid-package-to-greenland-is-a-new-chapter-in-a-long-com-plex-relationship/</a>.
- "China to Nix Rare Earth Export Restrictions Following WTO Ruling." International Centre for Trade and Sustainable Development, 15 June 2014, <a href="https://www.ictsd.org/bridges-news/biores/news/china-to-nix-rare-earth-export-restrictions-fol-lowing-wto-ruling">www.ictsd.org/bridges-news/biores/news/china-to-nix-rare-earth-export-restrictions-fol-lowing-wto-ruling</a>.
- "China's Arctic Policy." Accessed May 7, 2020.

  <a href="http://english.www.gov.cn/archive/white\_paper/2018/01/26/content\_281476026660336">http://english.www.gov.cn/archive/white\_paper/2018/01/26/content\_281476026660336</a>

  .htm.
- Filho, Walter Leal. "An Analysis of the Environmental Impacts of the Exploitation of Rare Earth Metals." Rare Earths Industry, Elsevier, 18 Sept. 2015, <a href="https://www.sciencedirect.com/science/article/pii/B9780128023280000176">www.sciencedirect.com/science/article/pii/B9780128023280000176</a>.

- Ganguli, Rajive, and Douglas R. Cook. "Rare Earths: A Review of the Landscape."

  Cambridge Core, Cambridge University Press, 26 June 2018,

  www.cambridge.org/core/journals/mrs-energy-and-sustainability/article/rare-earths-a-re
  view-of-the-landscape/4F699CE5A563C492E7E654FDA4D0D78E/core-reader#ref18.
- Gronholt-Pedersen, Jacob. "Greenland Tells Trump It Is Open for Business but Not for Sale." Reuters, Thomson Reuters, 16 Aug. 2019, <a href="https://www.reuters.com/article/us-usa-trump-greenland/greenland-tells-trump-it-is-open-for-business-but-not-for-sale-idUSKCN1V60AQ">www.reuters.com/article/us-usa-trump-greenland/greenland-tells-trump-it-is-open-for-business-but-not-for-sale-idUSKCN1V60AQ</a>.
- Hearty, Grace. "Rare Earths: Next Element in the Trade War?" CSIS, August 20, 2019. <a href="https://www.csis.org/analysis/rare-earths-next-element-trade-war">https://www.csis.org/analysis/rare-earths-next-element-trade-war</a>.
- Isaak, Adam. "A Rare Metal Called Neodymium Is in Your Headphones, Cellphone and Electric Cars like Tesla's Model 3 and China Controls the World's Supply." CNBC, CNBC, 23 Oct. 2018, <a href="https://www.cnbc.com/2018/10/18/neodymium-china-controls-rare-earth-used-in-phones-electric-cars.html">www.cnbc.com/2018/10/18/neodymium-china-controls-rare-earth-used-in-phones-electric-cars.html</a>.
- Krebs, Damien. "Greenland's Unique Kvanefjeld Multi-Element Rare Earth Project." Johnson Matthey Technology Review, vol. 61, no. 2, 2017, pp. 154–155., doi:10.1595/205651317x695181.
- Müller, Maximilian A., Denis Schweizer, and Volker Seiler. "Wealth Effects of Rare Earth Prices and China's Rare Earth Elements Policy." *Journal of Business Ethics* 138, no. 4 (November 2016): 627–48. https://doi.org/10.1007/s10551-015-2773-3.
- "MP Materials, North America's Only Rare Earths Producer, Awarded Contract From DoD To Accelerate U.S. Production Of Critical Materials To Support National Defense." PR Newswire, 22 Apr. 2020,

  www.prnewswire.com/news-releases/mp-materials-north-americas-only-rare-earths-producer-awarded-contract-from-dod-to-accelerate-us-production-of-critical-materials-to-s upport-national-defense-301045761.html.

- Ng, Eric. "China Threatens to Weaponise Rare Earths, Pass Tariffs to US Users." South China Morning Post, 8 Aug. 2019,

  www.scmp.com/business/commodities/article/3021947/chinas-rare-earth-producers-say

  -they-are-ready-weaponise-their?utm\_medium=email&utm\_source=mailchimp&a

  mp;utm\_campaign=enlz-usmorningbrief&utm\_content=20190808&MCUID=

  951433ab40&MCCampaignID=58af907b69&MCAccountID=3775521f5f542

  047246d9c827&tc=2.
- "North America:: Greenland The World Factbook Central Intelligence Agency," n.d. <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html">https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html</a>.
- Northam, Jackie. "Greenland Is Not For Sale. But It Has Rare Earth Minerals America Wants." NPR, November 24, 2019. https://www.npr.org/2019/11/24/781598549/greenland-is-not-for-sale-but-it-has-the-rar e-earth-minerals-america-wants.
- Oneal, Michael. "Greenland Needs Money. Is a Uranium Mine the Answer?" The Washington Post, 10 Feb. 2017, <a href="https://www.washingtonpost.com/sf/world/2017/02/10/greenland-needs-money-is-a-uranium-mine-the-answer/">www.washingtonpost.com/sf/world/2017/02/10/greenland-needs-money-is-a-uranium-mine-the-answer/</a>.
- Pincus, Rebecca, and Walter A. Berbrick. "Gray Zones in a Blue Arctic: Grappling with China's Growing Influence." War on the Rocks, October 24, 2018. https://warontherocks.com/2018/10/gray-zones-in-a-blue-arctic-grappling-with-chinas-growing-influence/.
- PR Newswire. "MP Materials, North America's Only Rare Earths Producer, Awarded Contract From DoD To Accelerate U.S. Production Of Critical Materials To Support National Defense," April 22, 2020.

  <a href="https://www.prnewswire.com/news-releases/mp-materials-north-americas-only-rare-earths-producer-awarded-contract-from-dod-to-accelerate-us-production-of-critical-materials-to-support-national-defense-301045761.html">https://www.prnewswire.com/news-releases/mp-materials-north-americas-only-rare-earths-producer-awarded-contract-from-dod-to-accelerate-us-production-of-critical-materials-to-support-national-defense-301045761.html</a>.

- "Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as Amended." The White House, The United States Government, <a href="https://www.whitehouse.gov/presidential-actions/presidential-determination-pursuant-section-303-defense-production-act-1950-amended-3/">https://www.whitehouse.gov/presidential-actions/presidential-determination-pursuant-section-303-defense-production-act-1950-amended-3/</a>.
- Tingley, Brett, and Tyler Rogoway. "The U.S. Can't Buy Greenland But Thule Air Base Is Set To Become More Vital Than Ever Before." The Drive, 23 Sept. 2019, <a href="https://www.thedrive.com/the-war-zone/29541/the-u-s-cant-buy-greenland-but-thule-air-base-i-s-set-to-become-more-vital-than-ever-before">www.thedrive.com/the-war-zone/29541/the-u-s-cant-buy-greenland-but-thule-air-base-i-s-set-to-become-more-vital-than-ever-before</a>.
- "U.S. Relations With Denmark United States Department of State." U.S. Department of State, U.S. Department of State, www.state.gov/u-s-relations-with-denmark/.
- "The World Factbook: Greenland." Central Intelligence Agency, Central Intelligence Agency, www.cia.gov/library/publications/the-world-factbook/geos/print\_gl.html