



Grant 869580

ArcticHubs

Deliverable title and number: Geopolitical tensions and drivers of different industries in the European Arctic D1.3

Work Package: 1

Type of Deliverable¹: R

Dissemination Level²: PU

Lead Beneficiary: The Norwegian Research Centre NORCE

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R: Document, report (excluding the periodic and final reports)

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EU-SEC: Classified Information: SECRET UE (Commission Decision 2015/444/EC)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 869580.



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Review(s): [1^o/date] [2^o/date]

Reviewer(s): [name(s)] [name(s)]

Delivery: Due date: 31.1.2022 Submission Date: 31/01/2022(M18),
[with revised
Executive
Summary
25/3/2024]

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To cite the project report: Nygaard, Suopajarvi et al. (2022).

Full reference: Nygaard V, Suopajarvi L, Bjerke JW, Elomina J, Engen S, Iversen A, Lidestav G, Kyllönen KM, Leppiaho T, Moiola S, Nojonen M, Rantala O, Bogadóttir R, Edvardsdóttir AG, Koivurova T, Lesser P, Lynge-Pedersen K, Ólafsdóttir R, Paulsen Strugstad M, Rautio P, Skum M, Tuulentie S, Tømmervik H. 2022. Geopolitical tensions and drivers of different industries in the European Arctic. ArcticHubs Project, NORCE.





EXECUTIVE SUMMARY

The project report discusses geopolitical tensions and drivers affecting the development of major industries in the European Arctic, namely, aquaculture, forestry, mining, and tourism. The analysis is based, first, on national Arctic strategies developed by European Arctic states (Finland, Sweden, Norway, Iceland, and Greenland and the Faroe Islands under the Kingdom of Denmark) projecting the future development of different industries. As national strategies play an important role in business development, national industry-specific strategies and relevant EU strategies were examined and reflected on for the purposes of this report. Second, 60 interviews were carried out to explore how geopolitics can affect the development of different industries and how industry informants understand their operations in the European North.

Geopolitics is a concept used in political discussions, media coverage, and various academic disciplines. In this report, we apply two mainstream geopolitical approaches: classical and critical. *Classical geopolitics* refers to the importance of the geographical features and politics of states, with their sovereignty over territories and natural resources. *Critical geopolitics* recognizes that an understanding of the political governance of territories and their natural assets is also constructed through the discourses, ideas, ideologies, and values of different actors, not only by state jurisdictions and international entities.

Based on our analyses we want to raise a couple of themes that affect the development of different industries in the European Arctic.

- **Geopolitical tensions affect all the industries in the European Arctic, but in different ways**

Main industries in the EA, aquaculture, forestry, mining and tourism, operate in the Northern localities, but they are not local industries as such. The markets of all industries are global. International economy is affected by national interests, interstate negotiations, and possible disagreements between different political bodies.

In aquaculture, due to production growth, there is growing pressure to move operations to the open seas, where national interests and disputes as well as inter-state negotiations and agreements play important roles. Open seas are contested and politicized areas shared by diverse maritime actors and sectors, such as traditional fisheries, cruise tourism, energy





production, and the military. International politics comes into play also in the form of trade wars, in which even a Nobel Prize can lock out products from important Chinese markets.

In forestry, the issue at stake is the conflict between EU promoted conservation and Finnish and Swedish national interests seeking to intensify wood-based bioeconomy production for global markets. The politics of these two countries illustrate resource nationalism, a coalition of nation state, industry, and forest owners, who want to keep control over natural resources.

Mineral exploration and mining are expanding in northern Fennoscandia as the European Union intends to be more self-sufficient in minerals and metals, especially the critical ones needed for a sustainable transition to a carbon-free society. Dependence on unstable countries and especially on the superpower China is seen as a threat in the European market.

In tourism, the Covid-19 pandemic has highlighted the challenges of national borders and shown that the tourism industry in the North is vulnerable, as exemplified by the limited cooperation in border restrictions between the states. As security is an important factor affecting willingness to travel, and because northern countries are seen as safe destinations, the militarization of the areas resulting from international political conflicts may also restrict the future growth opportunities of tourism.

- **Peaceful development in the European Arctic is challenged by tensions between supernations and international conflicts**

“Arctic exceptionalism” refers to the dominant rhetoric framing political and economic developments in the Arctic since the 1990s. The European Arctic was considered as a “safe haven”, where international bodies like the Arctic Council (1996) supported cooperation between eight Arctic states, and peacefulness was highlighted generally in political rhetoric. However, already in the advent of the war in Ukraine in 2021, political and economic experts on industrial developments in the EA identified Russia as a wild card. Also, China’s increasing interest in Arctic regions and Arctic matters was recognized. Diverse security and safety risks were listed: military tensions with rearmament, and concerns regarding uncontrolled migration, energy security, cyber security, terrorist actions, e.g., against tourist destinations, and destruction of the marine environment due to irresponsible activities such as oil spills were indeed addressed in the interviews.





- **State policies matter in the economic development of Northern regions even in the era of globalization**

Despite globalization and neoliberalism reducing the influence of states in economic markets, states still have sovereignty over physical space, natural resources, and people within their borders. That is why states still have a say in how different industries develop in the northern regions, especially now in the early 2020s, when all states believe in the growth and intensification of economic activity. In this sense, Arctic regions are once again seen as resource-rich peripheries, “bonanza frontiers” where natural richness and potential are waiting to be commercialized to generate large financial gains. Whether economic growth respectful of the environment and local communities takes place in the northern regions is a matter of state jurisdiction and policy.

- **There are also critical voices speaking out against the intensifying economic activity of various industries in the North**

Critical geopolitics argues that other actors such as international companies, global markets, product end-users, and non-governmental organizations also define the futures of different regions, industries, and nation states. Hence, a wide range of actors with their own discourses and imaginaries politicize physical spaces, the environment, and natural assets. All industries have developed discourses to legitimize their expansion in northern regions and to counter critical voices, especially from northern residents and indigenous people such as the Sámi. Forestry can be cited as an example, with the industry speaking of harvesting “green gold”, enhancing local employment and national wealth, whereas Sámi communities see intensified logging as a serious threat to their traditional livelihood of reindeer herding. Mining areas are destroying nature forever –spoiled nature cannot be regained. Northern people are asking for environmental justice, as the negative impacts on the environment and local ways of life remain among their communities, whereas the products and benefits accrue to southern urbanites. In sum the critical argument is that economic developments do not necessarily support the social sustainability of northern communities.

- **Living conditions in the North are changing**

Classical geopolitics argues that geographical features such as environmental conditions, natural resource distribution, location, and topography set the frame for human societies and the development of, for example, different industries. Indeed, mineral deposits, forests, opportunities for cultivating fish, and northern landscapes attracting tourists from around the





globe are all place-specific. Critical geopolitics argues that physical geography is not a fact-like given. Variations and processes of change in environmental conditions and physical geography do happen, not least due to human-caused climate change. How to balance economic growth potential and long-term sustainability, especially environmental sustainability, is a central theme for the futures of European Arctic industries, regions, and peoples.





Contents

1. Introduction	10
2. Data and method.....	15
3. Classical geopolitics in the European Arctic: states and sectoral industries.....	17
3.1 International cooperation for stable development in the European Arctic	17
3.2 National agency in the Arctic: (geo)political positioning	19
3.3 China on the European Arctic	20
3.4 Classical geopolitics of different industries.....	23
3.4.1 Aquaculture: a new industry growing in the domains of traditional fisheries ...	23
3.4.2 Forestry: EU-level biodiversity concerns challenge national forest commodities..	28
3.4.3 Mining: need to secure European supply security in global mineral markets	30
3.4.4 Tourism: borderless industry within northern nation states	33
3.4.5 Discussion: classical geopolitics of different industries	36
4. Critical geopolitics: the European Arctic in national strategies and different industries.	39
4.1 National imaginaries of the European Arctic	39
4.2 Industrial discourses of the European Arctic: balancing growth and sustainability	41
4.2.1 Aquaculture: clean production and nutrition for global sushi tables.....	42
4.2.2 Forestry: harvesting “green gold” and integrating remote territories.....	44
4.2.3 Mining: necessity for a green transition	46
4.2.4 Tourism: pristine nature as a scarce commodity	47
4.2.5 Discussion: critical geopolitics of different industries	49
5 Conclusions	52
References	55





ANNEX I: List of interviewed organizations 62

ANNEX II: Policy papers 64





1. Introduction

There is no single definition of the *European Arctic* – as we call our research area in the ArcticHubs project – nor is there a single definition of the *Arctic* as a whole. For example, Finland has defined the whole country as part of the Arctic, although the capital of the country is around 800 kilometres south of the Arctic Circle, often seen as the southern border of the Arctic.²⁷ Who defines the Arctic and how is a matter of political, economic, and cultural debate. Definitions are not just words, as they have concrete implications for the physical world, for example, concerning where European Union (EU) funding for developing northern areas is targeted. The ArcticHubs’ definition of the European Arctic follows the definition proposed in the Arctic Human Development Report, according to which the European Arctic comprises the following: Lapland County in Finland; Nordland, Troms, and Finnmark counties in Norway; Norrbotten and Vesterbotten counties in Sweden; and the whole of Iceland, the Faroe Islands, and Greenland.²⁸

ArcticHubs’ research areas in different countries can be called northern peripheries, as they are in many ways under the control of nation states and are subordinate to the authority of southern capital centres. In the system of nation states, “the centre represents the seat of authority, and the periphery those geographical locations at the furthest distance from the centre, but still within the territory controlled from the latter”.²⁹ Peripheries are seen as distant, different, and dependent from the perspective of central areas. On the other hand, such a geographical understanding of areas and places does not seem right to those living in, for example, northern areas in light of their daily lives. A periphery can also be described “as an *opportunity structure*, that is, a space offering several possibilities of action to those people living and working within it”.³⁰

In the ArcticHubs project, hubs are understood as opportunity structures. As defined in the project application, hubs are places or areas acting as sociocultural, economic, and industrial nodes that are interconnected via geographical, infrastructural, and economic networks. They are typically concentrated in historically important areas that have formed organically or were strategically planned according to flows of people, goods, capital, information, organizational activities, and power relations. Each hub also lies at the heart of vast tracts of sparsely

²⁷ Finland’s Strategy for Arctic Policy (2021).

²⁸ Larsen and Fondahl (2015).

²⁹ Rokkan and Urwin (1983, p. 113).

³⁰ *Ibid.*, p. 115.





populated land with different land-use modes. Locations and types of different hubs are shown in Figure 1.

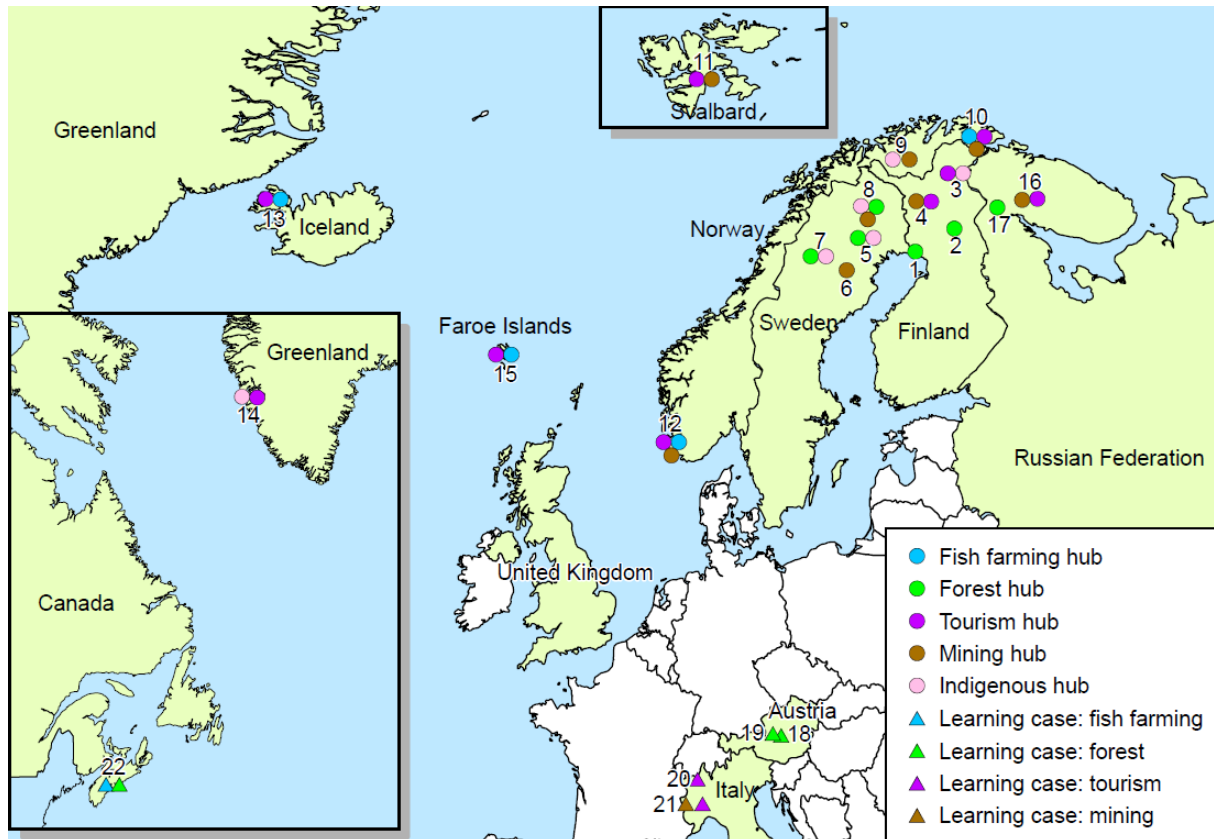


Figure 1. Locations of hubs and learning cases targeted in ArcticHubs. Green indicates countries with consortium members. Numbers in the map refer to the locations of the 33 hubs and seven learning cases: 1. Kemi, 2. Kemijärvi, 3. Inari, 4. Kittilä, 5. Jokkmokk, 6. Kristineberg, 7. Gran Sameby, 8. Gällivare, 9. Kautokeino-Kvalsund, 10. Varangerfjord, 11. Svalbard, 12. Egersund, 13. Westfjords, 14. Nuup Kangerlua, 15. Suđuroy Kommuna, 16. Khibiny mountains, 17. Kovdor, 18. Ennstaler Alpen, 19. Liezen, 20. Alagna Valsesia, 21. Germanasca Valley, and 22. Halifax, Nova Scotia.³¹

This project report responds to Task 1.2: *Geopolitical tensions and drivers in the Arctic affecting the development of different industries and Arctic hubs*. This task consists of two subtasks. Subtask 1.2.1: *Identification of EU and national frames in promoting the development of different industries* involves the analysis of key EU and national Arctic policy documents to assess how they frame present and future developments of different industries in the hubs. Subtask 1.2.2: *Geopolitical*

³¹ The map is from the original application. Learning cases in Canada (22), Italy (20 and 21), and Austria (18 and 19) were not included in the study. Hubs in Russia (16 and 17) were reflected on, but are not discussed in this report due to limited data.





tensions affecting the development of different industries and hubs is intended to explore how geopolitical drivers can affect the development of different industries/hubs.

In other words, the main research question addressed in the project report is: What geopolitical drivers are affecting key industries in the European Arctic? By geopolitics we mean the political governance of the area, but also the geographical and locational imaginaries of what constitutes the European Arctic. When applying geopolitical approaches, we first conduct classical geopolitical analyses of industrial development by discussing legal regimes. This includes nation states' interests and legislation, international bodies and collaboration (e.g., via the EU and Arctic Council), and international treaties affecting different industries and their use of natural assets. Another theme is based on critical – or constructivist – geopolitics, which leads to questions of how the European Arctic is narrated, described, known, and therefore actually “made” in the discourses of different industries.³² Classical geopolitics and critical geopolitics are described in more detail in Table 1.

³² Powell and Dodds (2014).





Table 1. Differences between “classical” and “critical” geopolitics and their factors.³³

“Classical” geopolitics:	“Critical” geopolitics:
<p>Traditional and narrow interpretation of “Geo” + “Politics”</p> <p>Reflects exploration, state sovereignty, hegemony, and force</p> <p>Factors: physical space + natural resources, technology, and state power/force (e.g., the resource and technology models)</p> <p>Critical how power transformation happens: 12 times out of 16, war has occurred when a rising power defeats a declining one (Allison, 2017)</p>	<p>Goes beyond Realpolitik and challenges mainstream thinking</p> <p>Reflects sophisticated power and recognizes knowledge as power</p> <p>Factors: In addition to those of classical geopolitics, includes identity/ies, images, knowledge, the “politicization” of physical space (the environment), and, as well as the state, several actors such as people(s) and civil society</p> <p>The movement from classical to critical geopolitics reflects the movement from determined, disciplinary theories to various discourses and interpretations (the “politicization” of physical space), from power politics to knowledge (wicked problems), from centralization to subsidiarity (devolution), from national to local and global (globalism), and from material to immaterial (digitalization)</p>

To sum up, in classical geopolitics states are seen as the main actors and important themes are state sovereignty over physical space and natural resources as well as borders and confrontations between states, including military presence and technological rearmament. Critical geopolitics stresses various definitions, imaginaries, and discourses of place, which can be presented by a wide range of groups

³³ From Heininen (2018, p. 178).





for whom digitalisation, in particular Internet platforms, provides global connectivity. In short, classical geopolitics is about “power over geography”, whereas critical geopolitics focuses on the “geographies of power”.³⁴ These two themes are discussed in their respective chapters, both starting with analyses of national Arctic strategies, in order to reach an overall understanding of how nation states see the current situation in the Arctic and of how these states define the European Arctic.

The report is structured as follows: In the next section, the data and method are described. Classical geopolitics and critical geopolitics are addressed in the main chapters of the report, structured so that, first, the input of national Arctic strategies³⁵ is analysed and, second, the geopolitics of different industries are described. As usual, the paper ends with brief conclusions.

³⁴ Knecht and Kneil (2013, p. 10).

³⁵ China was included in the project as it published its white paper on Arctic policy in 2018 and its role in the European Arctic was debated in the late 2010s.





2. Data and method

The material for this project report consists of three types of data: (1) future-oriented policy papers at the national and EU levels, (2) national industry-specific strategies and industry-relevant EU strategies, and (3) interviews with informants operating as specialists in one of the four examined industries (i.e., aquaculture, forestry, mining, and tourism) and/or having a special interest in the Arctic at the national and international levels. A full listing of the policy papers, industry-specific strategies, and interviewed organizational representatives appears in Annexes 1 and 2. In total, the data consist of 60 interviews and 59 policy papers.

The method used for policy paper and interview analysis was qualitative thematic analysis (TA), as the data corpus was large, comprising hundreds of pages. As the research approach was based on forecasting, we identified and thematized megatrends, trends, weak signals, and wild cards. Other themes treated in the TA were definitions of the Arctic, sustainability and its three pillars, themes related to indigenous people, and Covid-19 as an actual world challenge in the early 2020s.

For the purposes of this project report,³⁶ the data were analysed in line with two geopolitical approaches: classical and critical. In the classical geopolitical approach, all mentions and discourses of nation states operating in the European Arctic, international bodies and collaboration, and international treaties affecting different industries were identified in the interviews. In the critical geopolitical approach, definitions of the European Arctic and discourses describing different industries operating in it were analysed. These main themes were discussed among all researchers collecting and analysing the data to achieve a common understanding of the concepts. In reading the contents of the data in light of these themes, the TA applied an inductive approach in which the analysis proceeded in terms of the data.³⁷

The researchers conducted the interviews, summarized and organized the texts according to the thematic sections described above, and shared them with the research group via the common platform “Tiimeri”. Informant names were not shared via the common platform, which shared only the organizations represented (in a separate list) and interview summaries made by researchers in the thematic sections (i.e., aquaculture, forestry, mining, tourism, and general interviews not presenting a specific industrial field). This is also why the illustrations

³⁶ There are two forthcoming project reports for WP1: *Global drivers of different industries in the European Arctic* (due March 2022) and *Climate change impacts affecting industrial activities in the European Arctic* (due July 2022).

³⁷ Braun and Clarke (2006); Nowell et al. (2017).





of arguments (*in italics* in the text of Section 4) do not refer to the original transcribed interviews but to the concluding summaries in English.

After all the data were available, research groups for different industries were formed based on the participants' fields of interest and expertise. The data were discussed and analysed by the research groups for the different industries, after which the groups gave their input for the report. Lead editors compiled the text; after proofreading, the research groups had a second opportunity to check their parts of the text in January 2022. The project report is thus very much based on the collaborative work of scientists conducting studies in their areas of expertise.





3. Classical geopolitics in the European Arctic: states and sectoral industries

The globalized world is complex, as there have been vertical power shifts from nation states to international bodies such as the EU and NATO, and as states have increasingly decentralized their power to regions and industries in fostering economic development. Related are horizontal power shifts, for example, in the development of various industries, which are increasingly in the hands of multinational companies and influenced by various non-governmental organizations (NGOs). Despite this, nation states are still important players in the development of their northern territories. This idea is discussed in classical geopolitical terms, arguing that the state is still an administrative and geographical entity defined by borders, reserving the ultimate right to exercise military power in its own territory. State sovereignty over physical space and natural resources is still valid. Hence, this traditional geopolitical approach is still relevant in the 2020s as it stresses that nation states are major actors in creating the frame for international governance via various political bodies, regulations, and agreements.³⁸

Before exploring the geopolitics of different industries in greater depth, we first present some general observations based on recent national Arctic strategies, discussing how different states position themselves in the European Arctic.³⁹ Stable and secure development was a prominent theme of the national strategies, and the interviewees also claimed that the European Arctic is peaceful and that negotiations are possible among Arctic countries via the Arctic Council and other fora. On the other hand, the interviewees discussed how the status quo may change, referring to the extension of conflicts originating elsewhere to the European Arctic and often citing Russia's more active military presence in the North as a reason.⁴⁰ This discourse may reinforce itself and lead to a future in which northern states increasingly arm themselves.⁴¹

3.1 International cooperation for stable development in the European Arctic

Politically, the Arctic is characterized by two major themes: widely extended cooperation and its peaceful status. There are various organizations at multiple levels in which states can voice

³⁸ Heininen (2016); Heininen et al. (2019).

³⁹ European Commission (2021a); China's Arctic Policy (2018); The Norwegian Government's Arctic Policy (2020); Sweden's Strategy for the Arctic Region (2020); Finland's Strategy for the Arctic Region 2013 (2013); The Faroe Islands: A Nation in the Arctic (2013); A Parliamentary Resolution on Iceland's Arctic Policy (2011).

⁴⁰ See, e.g., Bye (2021).

⁴¹ See, e.g., Dittmer et al. (2011).





their opinions and political ambitions, for example, the Arctic Council (AC), Barents Euro-Arctic Council (BEAC), Arctic Economic Council (AEC), and Nordic Council of Ministers. Most of the national Arctic strategies analysed here consider these organizations of immense importance and emphasize the significance of conducting political activities via them.⁴² These fora are employed to voice concerns at multiple levels and regarding various aspects, such as environmental protection, maintaining territorial sovereignty, managing labour traffic, and resolving all potential upcoming disputes.

In recent years, interest in the Arctic as a geographical and political region has grown in scope, as states even beyond traditional Arctic borders have expressed an interest in having their voices heard concerning Arctic affairs and decision-making. China, for example, has been a significant newcomer on the Arctic stage. China has taken a more prominent role as an actor in Arctic matters, as signified by the publication of a white paper on Arctic policy in 2018 and by its admittance to the Arctic Council as an observer state in 2013.⁴³ As part of its agency in the Arctic, China defines itself as a “champion for the development”⁴⁴ of the Arctic and as a “responsible major country” with associated responsibilities.

Multiple strategies produced by Arctic states recognize the growing influence of China within the Arctic.⁴⁵ The tone regarding intensified Chinese presence in the Arctic cooperation matrix is mostly positive, as cooperation with China is seen as possibly fruitful in regard to reducing global greenhouse gas emissions and in regard to future economic gains from Northeast Passage marine traffic and consequent investments in the Arctic states.⁴⁶ Yet Sweden, while expressing understandable interest in cooperating with China in, for example, environmental protection, stresses the potential for conflicts arising from China’s intensified focus on Arctic decision-making, while simultaneously expressing concern about China’s possible military ambitions within the Arctic region.⁴⁷ Similarly, Finland recognizes in its 2021 strategy the possibility of “conflicts of interest” within the Arctic due to China’s increasing presence in

⁴² China’s Arctic Policy (2018); The Norwegian Government’s Arctic Policy (2020, pp. 3, 6, 19–23); Sweden’s Strategy for the Arctic Region (2020, pp. 5, 9, 11–12, 14–17); Finland’s Strategy for the Arctic Region 2013 (2013, pp. 7–8, 14, 17, 19, 43–44, 59–60); The Faroe Islands: A Nation in the Arctic (2013, pp. 4, 8–10); A Parliamentary Resolution on Iceland’s Arctic Policy (2011, pp. 1, 5–6).

⁴³ The Norwegian Government’s Arctic Policy (2020, p. 22); Sweden’s Strategy for the Arctic Region (2020, p. 23).

⁴⁴ China’s Arctic Policy (2018).

⁴⁵ Finland’s Strategy for the Arctic Region 2013 (2013, p. 26); A Parliamentary Resolution on Iceland’s Arctic Policy (2011, p. 4); The Norwegian Government’s Arctic Policy (2020, p. 22).

⁴⁶ The Faroe Islands: A Nation in the Arctic (2013, pp. 8, 16); A Parliamentary Resolution on Iceland’s Arctic Policy (2011, p. 4); The Norwegian Government’s Arctic Policy (2020, p. 22); Sweden’s Strategy for the Arctic Region (2020, p. 23).

⁴⁷ Sweden’s Strategy for the Arctic Region (2020, p. 23).





the Arctic region and in Arctic matters and, by extension, due to the intensification of relationships and tensions between the “great powers”.⁴⁸ Sweden and Finland have so far been the only parties in the Arctic cooperation nexus to voice concerns at the strategy and policy levels regarding risks related to Chinese presence and to potential political conflicts regarding China’s military cooperation with Russia and their ambitions in the Arctic region. This could be because Sweden (in 2020) and Finland (in 2021), in addition to Norway (in 2020), have drafted Arctic strategies since 2018, when China published its own white paper, constituting a strategic channel for these states to voice their concerns and reactions regarding China’s intensified ambitions in the Arctic.

3.2 National agency in the Arctic: (geo)political positioning

Each state, in its Arctic strategy, describes its ambitions regarding building its presence within the Arctic region as a legitimate actor. This would suggest an interpretation of the Arctic as a stage where one is not simply in a state of being, but in a state of acting and agency, where “being-in” is characterized through actions, agendas, and performance.

Finland⁴⁹ defines itself as a leader in sustainable development and sustainable practices within the Arctic region as a whole, while relying heavily on the international cooperation matrix. Finland’s 2013 strategy for the Arctic region greatly emphasizes Finnish expertise in Arctic conditions, stressing livelihoods and industrial development. This emphasis is less prevalent in Finland’s 2021 strategy, in which climate change and environmental protection are more emphasized than in the 2013 strategy.

The Faroe Islands⁵⁰ highlight their integral location near various new and lucrative business opportunities related to new and opening shipping routes and commercial fishing locations. Unsurprisingly, the Faroese strategy emphasizes becoming a “hub” for marine industry for international actors.

Iceland’s⁵¹ resolution expresses a strong message (more prominently than do the other analysed documents) regarding the role and importance of international law and conventions within the Arctic region and cooperation matrix. Iceland also stresses the importance of

⁴⁸ Finland’s Strategy for Arctic Policy (2021, p. 18).

⁴⁹ Finland’s Strategy for the Arctic Region 2013 (2013).

⁵⁰ The Faroe Islands: A Nation in the Arctic (2013).

⁵¹ A Parliamentary Resolution on Iceland’s Arctic Policy (2011).





remaining a recognized littoral state within the Arctic, which could in turn be a response to the decision by the so-called Arctic Five (i.e., Canada, Denmark, Norway, Russia, and the United States of America) to exclude Iceland from littoral state cooperation. Also noteworthy is the emphasis Iceland places on matters of indigenous peoples of the Arctic, even though it has no recognized endemic indigenous populations of its own.

Norway, in its most recent Arctic strategy,⁵² emphasizes the significance of maintaining Arctic “peace, stability and predictability” through international cooperation and upholding international law. In a separate white paper on Svalbard,⁵³ this emphasis on upholding international law is further emphasized, while the importance of preserving permanent Norwegian habitation of Svalbardian territory is also stressed. The Norwegian paper from 2017 posits an important notion regarding Arctic politics, namely, that “Arctic policy is also ocean policy”.⁵⁴

Sweden, in its most recent Arctic strategy,⁵⁵ positions itself as a pioneer of sustainable development of the Arctic region, a leader of international cooperation, and a guardian of international law and social sustainability in the Arctic.

3.3 China on the European Arctic

In addition to “traditional” Arctic states, China produced its own white paper on Arctic policy in 2018. It posits China as a “near-Arctic state”, signifying a new positioning regarding “Arctic-ness”, as a “champion for the development of a community with a shared future for mankind”, and as a “responsible major country”. This white paper signifies the beginning of a shift in the Arctic paradigm: China is “here” to stay, and is ready to act according to its interests.⁵⁶

How Beijing perceives the Arctic region is perhaps more importantly expressed in the Polar Silk Road white paper of 2017, although the matter is discussed only in terms of broad principles and ideal development and policy goals. In October 2017, President Xi Jinping added the Polar Silk Road (PSR) to the Belt and Road Initiative (BRI), originating in 2013, constituting one of several “sub-platforms” such as the Health Silk Road and Digital Silk

⁵² The Norwegian Government’s Arctic Policy (2020).

⁵³ Norwegian Ministry of Justice and Public Security (2016).

⁵⁴ Norway’s Arctic Strategy (2017, p. 9).

⁵⁵ Sweden’s Strategy for the Arctic Region (2020).

⁵⁶ China’s Arctic Policy (2018).





Road.⁵⁷ The BRI is the world's most ambiguous infrastructure development framework and is actually a Chinese international investment project for domestic companies. In addition, in December 2017, the Chinese Ministry of Foreign Trade and Commerce published a legally binding “opinion” that included a positive (to be enhanced) and negative (to be restricted) list of overseas direct investments. Highest on the positive list were BRI-related investments.⁵⁸ In practical terms, this means that various governmental and semi-governmental financial institutions should facilitate otherwise burdensome approval processes for transferring investments across China's national borders for BRI projects. Notably, on average it takes two years for a Chinese state-owned enterprise (SOE) to gain rights to transfer capital abroad. Many potentially international-calibre Chinese companies have to stay onshore as they lack resources as well as legal and technical expertise to successfully negotiate the mazes of bureaucracy in applying for licenses to invest abroad.⁵⁹

In 2017, the BRI was given the highest possible policy profile: it was included in the Constitution of the Chinese Communist Party, and President Xi Jinping urged companies to rely on BRI when investing abroad. Yet, this biggest investment initiative in world history lacked a governing body and an institutionalized or centralized regulatory framework. As a result, provinces, other local-level administrations, and many companies “self-labelled” their investments as BRI investments without actually obtaining official approval from the Party or state, as there in fact was no BRI body scrutinizing these projects.

As a result, thousands of delegations from all over China were travelling on a monthly basis all around the world proclaiming themselves representatives of the “official” BRI. While it is generally known that the BRI is the flagship project of President Xi Jinping, few people in recipient countries are aware that there is no centralized BRI body scrutinizing these projects and giving them the official BRI stamp. On the contrary, as the general belief is that Chinese political–economic decision-making is centralized and well coordinated, the recipient party easily jumps to the conclusion that the project under negotiation enjoys the political support of central government or even Xi Jinping himself.

This feverish behaviour was unexpectedly halted by the Covid-19 pandemic, which inhibited and eventually altered BRI policies, regulations, and practices. As early as the end of February 2020, the Ministry of Commerce of the People's Republic of China (MOFCOM) and the China Development Bank (i.e., the ministry-level development bank) issued the

⁵⁷ Kopra and Nojonen (2020).

⁵⁸ Ibid.

⁵⁹ Ylönen (2019).





“Notice on the Development of Financial Services in Support of the New Corona Pneumonia Epidemic to Support High-Quality Co-construction of the Belt and Road Projects and Enterprises”.⁶⁰ The purpose was “winning a double victory” of containing the epidemic and continuing to develop BRI projects without losing economic momentum.⁶¹ Importantly and revealing is that, in this key rescue plan for the flagship BRI initiative, neither the Arctic nor the Polar Silk Road is mentioned once.

Simultaneously, the Communist Party of China launched an additional strategy activating other “sub-platforms” of the BRI – i.e., the Health Silk Road (HSR) and Digital Silk Road (DSR) initiatives. The HSR is a joint platform between the BRI and WHO established in 2017.⁶² The DSR was launched in 2015 to enhance the development of global logistical chains, information and communication technology, and the sophisticated usage of “big data” in supply-management processes.⁶³ HSR activities included concrete measures to contain the epidemic in Chinese infrastructure projects abroad and also provided critical resources for China’s “mask diplomacy” of sending coronavirus-related medical help and equipment to more than 90 nations.⁶⁴ While the Party’s own rescue strategy activated these BRI “sub-platforms”, i.e., the HSR and DSR, the Arctic region or Polar Silk Road have not been prominent, nor even mentioned.

To conclude, China’s BRI institutional structure (or lack thereof), the practical implications of changes in BRI policies in 2017, subsequent local- and company-level “BRI fever”, eventual BRI rescue strategies during the Covid-19 outbreak, and the apparent absence of the Arctic and Polar Silk Road from relevant documents suggest that the importance of the Arctic is still limited in comparison with the overall overseas interests of the Chinese party-state. The Arctic has essentially disappeared behind the horizon as party-state leadership concentrates on rescuing more immediate and core overseas interests.

However, Chinese discussion of and engagement in the Arctic region cannot be ignored. One essential approach is to follow the actual Arctic policies and decisions of the party-state and to interpret them in the context of broader Chinese strategic discussion. Based on analyses of discussions with Chinese representatives and on analyses of the policy decisions and actual strategies guiding Chinese investment trajectories, it seems that the leaders of the party-state have directed their attention elsewhere than on planning to gain a strategic upper hand in the

⁶⁰ Shangwubu, Ministry of Commerce of PRC (2020).

⁶¹ Ibid.

⁶² Beg (2020).

⁶³ Wheeler (2020).

⁶⁴ RMHB (2020); Escobar (2020); Beg (2020).





Arctic region. Nevertheless, it is obvious that even comparatively small Chinese investment in what is a rather desolate but critical region or sector could play a huge role in the Arctic region. Likewise, there must be awareness that the cumulative impact of small separate Chinese investments could generate potentially dangerous dependency on China.

3.4 Classical geopolitics of different industries

Globalization is not a single, uniform phenomenon but includes various global cultural, political, and economic processes. International trade and financial markets are globally networked, and transnational corporations lead the way in many industries. This global networking is reinforced by digitalization, making businesses operate 24/7. On the other hand, there are also global concerns, such as climate change, that are being raised by, among others, supranational NGOs.⁶⁵ Despite these developments, interstate negotiations and national jurisdictions, via factors such as “hard” security, border control, and sovereignty over space and natural assets, still affect various industries, as discussed in the following industry-specific subsections.

3.4.1 Aquaculture: a new industry growing in the domains of traditional fisheries

Future industrial development is a contentious issue for individual nation states, and is one that might lead to even more contention and uncertainty in international waters. The development of aquaculture is of geopolitical interest for several reasons. Due to ocean warming in the Northeast Atlantic, optimal temperatures will be found farther north in the future, causing more salmon aquaculture to move into the European Arctic. Increased pressure on coastal sea space has made offshore salmon farming appear more promising, intensifying existing conflicts with traditional fisheries activities. A growing salmon farming industry has also been the subject of several trade policy measures. Finally, the increased aquaculture activity in the North might benefit from new transport solutions requiring international cooperation. These subjects will all be treated in this section.

⁶⁵ Beck (2000).





Aquaculture is growing, and over the last 40 years it has become the “fastest expanding global production system”.⁶⁶ Although representing a fairly small proportion of the world’s aquaculture production in volume, salmon is the second most important species in value after shrimp. Salmon aquaculture is a vital part of a farming revolution that has become crucial for the world’s food supply, as in many dimensions it is leading in terms of knowledge and technology development. Globally, all growth in seafood supply over the last 30 years has come from increased aquaculture production, which now supplies roughly half of all available seafood, and the contribution of aquaculture to global *fish* production reached 46.0% in 2018, up from 25.7% in 2000. Farmed Atlantic salmon is sold in global markets, being exported to around 150 countries.⁶⁷

In the three countries with aquaculture industries in the ArcticHubs project, i.e., Norway, Faroe Islands, and Iceland, the expansion in salmon aquaculture has been rapid: in Norway, salmon production increased from 150,000 tonnes in 1990 to 1,650,000 in 2021, in the Faroes it increased from under 10,000 tonnes in 1990 to over 70,000 tonnes in 2020,⁶⁸ and in Iceland it grew from 5,000 tonnes in 2010 to 55,000 tonnes in 2021.⁶⁹

With rapid expansion of the aquaculture industry around the world, concerns about its environmental, economic, social, and cultural impacts are growing, and these must be addressed for the industry to live up to its goal of being a sustainable industry.⁷⁰ The rapid growth of aquaculture, together with its increasing need for access to the coastal zone in areas historically dependent on wild-caught fish, has led to political debate in the involved countries on how to manage this rapid growth. Conflict between stakeholders has risen as the aquaculture companies compete over valuable coastal zones.

Even with high value creation and ripple effects in the periphery, the industry’s growth opportunities are challenged by carrying capacity restrictions, disease, increasing parasite incidence, as well as escapes, which may influence wild fish stocks. The industry is increasingly looking to new suitable open sea spaces to promote growth, exacerbating competition over these spaces and deepening conflicts among users of the marine environment. Both environmental impact and the increased demand for coastal areas will affect traditional fisheries.⁷¹

⁶⁶ Bush and Marschke (2014).

⁶⁷ Asche and Smith (2018); FAO (2020); Garlock et al. (2019); Kumar and Engle (2016); Smith et al. (2010).

⁶⁸ Umhvörvis-og vinnuáráðið (2020).

⁶⁹ Radarinn (2022).

⁷⁰ Clarke and Bostock (2015); Lane et al. (2014); Tiller et al. (2014).

⁷¹ Hersoug et al. (2021); Johnsen et al. (2021); Krause and Mikkelsen (2017); Troell et al. (2017).





Due to limited access to new sea space in fjords in Norway, the Faroes, and Iceland, aquaculture firms are looking for other possibilities for their operations, resulting in increased interest in land- and offshore-based aquaculture. Open sea areas are attractive and competition for the best such commercial areas has intensified. Although Norway, Iceland, and the Faroe Islands have large sea areas, they must prepare for difficult trade-offs and more conflicts in the future. The informants suggested that one idea for easing the pressure on particularly desirable areas, and thus preventing conflicts of interest, would be to physically locate a range of offshore business activity (e.g., energy, aquaculture, and tourism) in the same area, which may trigger synergies and thereby increase value creation. The concentration of activities would free sea space for other activities or for marine protected areas.

While salmon production started in Norway, it soon expanded to other countries with similar conditions, such as the Faroe Islands, Iceland, Scotland, Canada, the USA, and Chile. The expansion was led by a handful of mostly Norwegian companies, which eventually became transnational corporations.⁷² Few restrictions were found in regulations about salmon companies' foreign ownership, and the Faroese, Iceland and Norway did not want to impose any restrictions, but welcomed foreign investments. The result is that in Iceland today, most aquaculture is owned by Norwegian companies. In Norway, around one third of the industry is partly or wholly foreign owned. In the Faroe Islands, where two of the three salmon producers are now majority foreign owned, restrictions on foreign ownership have now been introduced.

On the other hand, some traditional fishery companies have moved on to practice aquaculture. Icelandic informants said that recently at least two major Icelandic companies, Samherji and Hraðfrystihúsið Gunnvör (HG), have established themselves in the aquaculture industry: Samherji is focusing on land-based facilities in southern and northern Iceland for raising Arctic char and salmon, while HG has been granted a licence to raise salmon in open-sea cages in the Westfjords. With the recent development of aquaculture in Iceland, it is expected that in the next 10 years, aquaculture's export value will surpass that of traditional fisheries.⁷³ As more companies are moving into the aquaculture industry, the demand for locations has

⁷² Iversen (2004).

⁷³ See also Ingvásson (2022).





increased. More coastal areas are being investigated to find suitable locations for aquaculture, including areas farther north in the Arctic.

In 2010, a protracted dispute between Norway and Russia over areas in the Barents Sea was resolved.⁷⁴ However, there are still large and disputed international waters closer to the North Pole between Norwegian, Icelandic, and Greenlandic waters. These are rich fishing areas, particularly for pelagic species, but also for whitefish. International cooperation in matters of marine jurisdiction is clearly needed to manage shared fisheries, but also to develop successful coexistence between new industries, such as aquaculture, and fisheries.

An illustrative case of national interests in oceans and aquaculture is that of Svalbard, which, because of warming waters, is becoming of commercial interest for both aquaculture and fisheries (e.g., salmon and cod farming, and crab fishery and processing). Svalbard has a special status, making it of particular geopolitical interest. In 1920, Norway was granted sovereignty over the archipelago by the Svalbard Treaty (“Treaty Concerning the Archipelago of Spitsbergen”), but its territory and surrounding waters are subject to shared international rights. The Svalbard Treaty is an international agreement that ensures Norway’s “full and unrestricted” sovereignty over Svalbard. At the same time, the treaty stipulates conditions that Norway must fulfil in managing the area, including equal treatment of citizens and companies from all countries that have acceded to the agreement and restrictions on use for certain military purposes.⁷⁵ The Svalbard Treaty states that citizens of all countries have an equal right to fish and exploit marine resources in Svalbard’s waters. Norway’s claim to exclusive rights over the continental shelf surrounding the Arctic Archipelago of Svalbard is controversial, partly due to the unclear scope of the Svalbard Treaty, rendering the controversy an international political issue rather than a judicial matter.⁷⁶ The “fish protection zone” around Svalbard is a 200-nautical-mile zone where Norway claims the right to manage fishing to conserve fishery resources. This zone was established in 1977 based on the Norwegian Economic Zone Act. Based on historical rights, vessels from Norway, Russia, the EU, and the Faroe Islands have been granted access to fish for cod in the protection zone. The regulation of shrimp fishing is also based on the principle of traditional fishing for a given

⁷⁴ Treaty between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation (2010).

⁷⁵ Store norske leksikon (2020).

⁷⁶ Pedersen (2006).





period, and means that only vessels from Norway, Russia, Canada, the EU, Greenland, the Faroe Islands, and Iceland can participate.

The introduction of new species into an area can become a national and international political issue. Snow crab (*Chionoecetes opilio*), commercially harvested since 2013, has gradually extended its range. This presented nations in the Northeast Atlantic with a new challenge: How should this resource be managed? If the snow crab was to be managed as a fish, harvest would be managed bilaterally between Norway and Russia or through the Northeast Atlantic Fisheries Commission (NEAFC), in which four coastal jurisdictions, i.e., Norway, Russia, Iceland, and Denmark on behalf of Greenland and the Faroe Islands, as well as the EU cooperate in managing stocks migrating into the international waters of the Northeast Atlantic. If the research community was to define the crab as sedentary, the coastal states of Norway and Russia would have both the right to fish and the duty to manage the snow crab in the Barents Sea; third parties (in practice the EU) would not have the right to fish for the snow crab. Both political and economic interests would be affected by whether or not the crab was considered sedentary. The snow crab became Norwegian and Russian property through the mobilization of public administration tools, such as research, political processes, and jurisdictions.⁷⁷

The trade policy of the involved states has played an important role in shaping aquaculture in the Northern Atlantic. For example, for Norway and the Faroe Islands, the most important product is salmon, whereas for Iceland it is growing in importance, and four related trade conflicts can be cited to illustrate the geopolitical tensions affecting the market for this fish, but with different consequences for the three nations. All four cases illustrate the detrimental effect of trade wars on industries relying on international trade. About 95% of Norwegian seafood is exported, with similar proportions for the Faroe Islands and Iceland as well, making fisheries and aquaculture in these countries extremely vulnerable to the whims of international politics.

In 1991, the United States, then the single largest market for Norwegian salmon, placed a 25% tariff on whole salmon from Norway after allegations of dumping. The tariff was removed in 2012, leading to a six-fold increase in sales over six years. From 1989 to 2006, allegations of the dumping of Norwegian salmon were also made by the EU. The EU has always been the main market for Norwegian salmon, taking around two thirds of Norwegian production. As such, it has also been the main price-setting market for Atlantic salmon. In

⁷⁷ See Kvalvik (2021).





August 2014, salmon sales from Norway to Russia were effectively stopped by an import ban on Norwegian goods, in retaliation for Norway joining the EU sanctions on Russia after the annexation of Crimea. By 2013, Russia had grown to become the single largest market for Norwegian seafood, but since August 2014, exports to Russia have been close to zero. The flip side is of course the opening, or growth, of a new market for the Faroe Islands and Iceland. For the Faroe Islands, Russia became an important market for salmon, while both the Faroe Islands and Iceland could now sell more whitefish and pelagic species to Russia. A similar effect could be seen when China banned imports of Norwegian salmon after Liu Xiaobo received the Nobel Peace Prize in 2010. The ban effectively stopped rapidly growing exports of Norwegian seafood to China, which then recovered sharply when the ban was lifted in 2017.⁷⁸

With aquaculture moving North and offshore, into shared waters also used for fisheries, transportation, and other activities, aquaculture potential has added to the increased interest in the Arctic as a resource-based territory, which may in different ways lead to geopolitical tensions between the eight states (i.e., the USA, Finland, Iceland, Canada, Denmark, Norway, Russia, and Sweden) that have jurisdiction over the Arctic area. Up to the early 2020s, the Arctic Council states agreed that the Arctic should be a no-war zone where the focus is on sustainable development cooperation, with indigenous people's active participation. The informants hoped that the states would continue to work together with sustainable development in mind, as conflicts about territory or resources between the states might have severe consequences for the Arctic and its people.

3.4.2 Forestry: EU-level biodiversity concerns challenge national forest commodities

Forestry-related issues have gradually become incorporated, formalized, and institutionalized in the EU, and with the accession of Finland, Sweden, and Austria in 1995, forest issues took on a new meaning. To start with, the EU's forest area doubled: the Union became self-sufficient in wood products and, moreover, became the third largest exporter of forest products globally. The economic importance of the forestry industry was something new for the EU, which also meant that forestry issues were given greater priority within the Union and globally. Through EU enlargement, the EU's responsibility for the sustainable development of the forestry sector as a whole increased to involve political, economic, social, and

⁷⁸ See Iversen (2021).





ecological aspects. Also apparent is a shift from seeing the forest and forestry as associated with agriculture to instead associating them with environmental issues.⁷⁹ At the end of 2021, this EU-level interest in more sustainable forestry clashed with the national interests of Finland and Sweden, where forests are seen as important national assets, when EU Member States voted and accepted forestry taxonomy as a criterion for sustainable funding.⁸⁰

A non-binding forestry strategy has been in place since 1998 (updated in 2013), and in 2021 a new forest strategy was announced by the EU Commission. The strategy is rooted in the European Green Deal and the EU's biodiversity strategy for 2030. Furthermore, it states that forests will continue to play a crucial role in viable societies in the future, as a means of combating climate change and achieving a climate-neutral EU by 2050. Given the increasing and sometimes competing demands on forests, the amount of wood slated for consumption must stay within the limits of sustainability and be optimally used in line with a circular economy approach.⁸¹ However, the perception of what is optimal varies between stakeholders associated with forest use and forestry (e.g., the forest industry), reindeer husbandry, tourism, and recreational interests. Most interviewees agreed on the importance of the diversified use of forest land as well as on the need to respect different interests according to democratic principles, and some also raised the question of the political level at which decisions and trade-offs should be made. If those are made at the EU level, adaptation to what constitutes a proper balance may be limited in areas such as Lapland, where a main consideration is to ensure that industrial forestry has a future in the European North as well.

Concerns have also been raised by, for example, the Swedish Government regarding some of the initiatives and proposals in the strategy that entail increased detailed regulation, increased centralization, and increased supranational elements. Sweden considers forests a profile issue in international cooperation, while also strengthening export and investment promotion. Sweden aims to safeguard the right to self-determination over forest resources and to deepen inter-sectoral dialogue, in parallel with UN goals and the 2030 Agenda. This indicates that the role of the state will remain significant in the North, a finding supported by the informants.

Forestry-sector informants argue that northern Finland and Sweden already have many protected forest areas, so to meet the nature conservation objectives (e.g., biodiversity) of the new EU Forest Strategy, further conservation should take place in other parts of the countries. Furthermore, it is crucial that the accounting of what forests are considered protected should

⁷⁹ Andersson (2007).

⁸⁰ Muilu (2021).

⁸¹ European Commission (2013a).





be the same in all Member States. At present, Sweden and Finland report only formally protected forest, while other Member States include all forests not used for timber production.

The proper balance between protection and production is also problematic because of the increased global demand for forest-based products, and if such production is not done in Finland or Sweden, it will simply be done somewhere else. In this sense, developments in Russia and China are regarded as wild cards. Russia has been an important trading partner for Finland, and timber has also been imported from Russia to Finland. Russia's political unpredictability was identified as a problem in interviews; as well, the future impacts of the energy transition on the relationship and trade policy between the EU and Russia could create challenges for the trade partnership between Finland and Russia. On the other hand, power politics also affect Finland. China invests in raw materials abroad, and it is uncertain how much China will develop its own forest industry production. At present, pulp is exported to China, but the development of China's own pulp production and changes in future demand in different production categories on Chinese markets are uncertainties. Aside from China, other countries such as India, Brazil, and South Africa are also growing markets offering opportunities to export low-grade forest products.

3.4.3 Mining: need to secure European supply security in global mineral markets

Viewing the mining sector from a classical geopolitical perspective, the most prominent theme in the interviews was the need to secure European supplies of the rare earth elements (REEs), other critical minerals (e.g., cobalt, lithium, and tellurium), and metals needed for the green transition in general. In this respect, China is seen as a threat or even as a “villain” in mineral economics. As respondents often argued, China has almost a monopoly on the REEs needed for the batteries of hybrid and electric cars. This is supported by the literature, which claims that China provides 85–95% of the world's REEs.⁸² China has large resource potential in its own land area and has also acquired control over overseas mineral deposits and mines, for example, in developing countries in Africa. The critical mineral cobalt is one such example: mainly produced in the Congo, it is increasingly under Chinese ownership.⁸³ China also manufactures wind turbines and solar panels containing multiple minerals, and often controls the value chain leading to the final product.

⁸² USGS (2014).

⁸³ New York Times (2021, November 20).





As the need for critical raw materials is going to grow in coming decades, a claim supported by the literature,⁸⁴ how these supply chains are controlled is an issue of global stability and security. One informant referred to “resource wars” – perhaps not military but economic ones – in global markets for critical raw materials.

Norwegian informants especially claimed that China also wants to invest in European Arctic minerals and industry and is already a player in some European Arctic countries. Elkem is one example, with a substantial supply chain and owned by the state-owned China National Bluestar Group. The company develops silicones, silicon products, and carbon solutions by combining natural raw materials, renewable energy, and human ingenuity, according to the company’s website.⁸⁵ In northern Norway, the company owns two opencast quartzite mines (Tana-Varanger in Finnmark and Mårnes in Nordland) and two industrial facilities in Nordland (Salten and Mo i Rana). Elkem is also planning a new opencast quartzite mine at Nasafjell (Saltfjellet), which will conflict with reindeer herding.⁸⁶

On the other hand, there is a “dilemma of dependency” in the mineral sector and related markets, and China cannot be excluded. For example, mobile phones require small amounts of several REEs, many of which are dependent on Chinese production, whether in China or Africa. The problem was already identified in the European Commission’s raw material initiative in 2008:

There are three main reasons why some of these materials, such as platinum and indium, are particularly critical: first, they have a significant economic importance for key sectors, second, the EU is faced with a high supply risks [sic], associated with e.g. very high import dependence and a high level of concentration in particular countries, and third, there is currently a lack of substitutes. The EU already experienced a supply crisis in 2000, when the boom in mobile phones has led to a sudden demand for tantalum. Such events can be expected to occur more frequently due to the multiple uses of these materials, and temporary supply bottlenecks can no longer be excluded.⁸⁷

On the other hand, the EU is seen as a double-edged sword with its sectoral developments. The EU is striving for more self-sufficient mineral production, with a significant focus on increased extraction in Northern Europe; at the same time, the EU is developing a sustainability taxonomy, which some interviewees saw as a possible challenge for mining, as

⁸⁴ Ragnarsdóttir (2008); Svedrup et al. (2017).

⁸⁵ Elkem (2022).

⁸⁶ Nasafjell is the summer grazing area for Gran Sameby, whose representatives are partners in ArcticHubs where they lead the research on indigenous issues.

⁸⁷ European Commission (2008, p. 3).





it might make the industry less attractive for investments. In general, environmental legislation and regulation are tightening around Europe, which is generally seen as a “good thing”. Nevertheless, changes in national legislative frameworks for mining, scheduled for Norway and Finland, will entail some uncertainty for mining investments as their final outcome is uncertain.

In addition to increased self-sufficiency in Europe, resource nationalism was a theme in some mining interviews – i.e., mining should be developed in national territories under domestic ownership, which then could secure the supply chain. This theme is evident, for example, in the first (2010–2013) national mining strategies in Scandinavia.⁸⁸ Some interviewees believed that it is easier to gain social acceptance for a mining project if the involved company is domestically owned. However, mining developments need vast amounts of capital investment that are lacking in the Nordic countries, which, for example, in Finland has led to recent larger mining projects mainly being owned by international mining companies.⁸⁹ International companies and funding are seen as prerequisites for developing mining, but there are also voices critical of foreign ownership in Finland. How political discussions and sentiments among the general public will develop and how possible changes will affect foreign investments are open questions.

Mines in the Congo were used as a metaphor among industry representatives when raising global justice issues and legitimizing mining in the Global North. Many developing countries are dependent on mining, whereas, for example, Scandinavian countries may choose to leave discovered resources in the ground. At the same time, countries such as the Congo have much lower standards of workplace health and safety, child labour is used, and there is weaker environmental protection. According to proponents of the Nordic mining industry, it is better to increase mineral production in the European North as a response to a responsibility for global justice, although it hardly helps Congolese miners.

In national contexts, rural areas are seen as resource regions. As one Finnish informant stated, “When talking about the future of the Finnish mining industry, it is almost the same as talking about Lapland’s future”. Mineral exploration and mining expansion are fostered by the EU’s Green Deal and the drive for a carbon-neutral Europe in a few decades. A question especially raised by Sámi informants on behalf of indigenous people without their own state was: “Whose deal is the Green Deal?” Among these informants, mining is seen as a critical threat

⁸⁸ Geological Survey of Finland (2010); Norwegian Ministry of Trade and Industry (2013); Swedish Ministry of Enterprise, Energy and Communications (2013).

⁸⁹ The state-owned Suomen Malmijalostus Oy (Finnish Minerals Group) has taken the lead in Terrafame (former Talvivaara) in Eastern Finland and in the Sokli mine in Finnish Lapland.





to traditional livelihoods and ways of life – in short, a threat to the whole Sámi culture. Despite their small numbers, the Sámi people, living in northern Sweden, Norway, Finland, and Russia, have gained considerable power to postpone mining projects, but they still struggle to influence the national policies needed to protect the continuation of their traditional livelihood of reindeer herding on indigenous land. Indigenous cooperation at the international level in the UN, Arctic Council, and Sámi Council has also strengthened indigenous bargaining power in conflicts with mining interests.

3.4.4 Tourism: borderless industry within northern nation states

Arctic tourism is regarded as an important source of economic development in European Arctic countries. This interest is demonstrated, for example, by the fact that almost all Arctic Council member states have developed some kind of tourism strategy.⁹⁰ Tourism also has political and geopolitical implications for international political and economic relationships, border management, risk, treaties and regulations, infrastructure development, and power struggles in disputed territories.⁹¹

Starting with governance issues, the Arctic geographical area is divided among many state jurisdictions. There is an ongoing lack of a comprehensive and consistent policy of industrial development, although such a policy might be needed, for example, as such development has impacts on the environment and indigenous people's rights that are not limited by state borders.⁹² In particular, a shared tourism policy is missing: the Arctic Council, which has indeed developed important documents and guidelines about sustainable development and tourism, has failed to be effective in their implementation, so individual national strategies and regulations remain dominant. A crucial consequence of the lack of shared tourism policies and a shared regulatory framework is the absence of clarity in allocating responsibility, for example, when it comes to cruise tourism and negative environmental externalities such as oil leaks and wildlife disturbance from ships or search and rescue actions.⁹³

Other significant actors in Arctic governance are the EU and UN, which have treaties with indigenous people, for example, but neither of them addresses Arctic tourism directly.⁹⁴

⁹⁰ Hall and Saarinen (2010).

⁹¹ Hall (2017); Laine (2017); Zelenskaya (2018).

⁹² Horejsova and Paris (2013); Zelenskaya (2018).

⁹³ Horejsova and Paris (2013).

⁹⁴ Ibid.





Finally, as often stressed by the interviewees, local authorities should play a central role in tourism planning and development, since they represent the local communities' immediate institutional level. To obtain sustainable tourism, local people must be involved in order to accrue a fair share of the benefits and revenues, to allow for participative decision-making about how and what should be included in tourism products, and to avoid disruptive impacts on resources and livelihoods.

Second, the Arctic is becoming a hotspot for international interest. Competition for Arctic natural resources and for strategic control over important new Arctic sea routes may exacerbate geopolitical tensions, which may manifest in the form of militarization. This may have important impacts on tourism. Increased militarization of the area is further important in relation to the “geopolitical risk” factor. Tourism suffers greatly from the real or perceived presence of geopolitical risk in destinations, since travellers avoid visiting places perceived as risky.⁹⁵ This is highly relevant according to many interviewees because, together with pristine nature and traditional livelihoods, security and stability are two of the most appealing aspects of Arctic tourism. Tourism development and initiatives can be used as part of wider strategies for asserting national presence and jurisdiction over disputed areas and for promoting state power. Tourism development can overlap with new military infrastructure development. Militarization can also lead to stricter access regulation and restriction, for example, through visa requirements, making the possibility of actually conducting tourism activities uncertain and costly.⁹⁶

Third is the issue of borders. Tourism is described as embodying freedom of movement, but this freedom must deal with the geopolitical structure that shapes the opportunities for and kinds of movement actually available for tourists. The data show that the Covid-19 pandemic has been eye opening in this regard: states often decided autonomously, even in the EU, how to manage the inbound and outbound mobility of travellers, and this has deeply affected the flow of both tourists and workers, putting serious pressure on the tourism industry. However, the Covid-19 pandemic is only one boundary-shaping process: friendly or hostile international relationships and power dynamics are another main factor to be considered, as both the literature and interviews underlined. Some interesting insights arise from different visa policies, which can expand or restrict tourist flows from particular countries and/or towards specific destinations. For example, Denmark has created a fast-track procedure for issuing

⁹⁵ Neacșu et al. (2018); Demir et al. (2019).

⁹⁶ Zelenskaya (2018).





tourist visas to Chinese travellers; in contrast, China excluded Norway from a 72-hour visa-free travel scheme after the Nobel Prize was awarded to Chinese dissident Liu Xiaobo.⁹⁷

Another interesting example is how border tourism between Finland and Russia has evolved over time, increasing considerably in both directions after WWII and acting as a means to strengthen cooperation. After the Soviet Union's collapse, the flow of tourists continued expanding until the Ukraine crisis, which caused a significant shift in the EU's (and also Finland's) perception of Russia, now seen as an unpredictable threat.⁹⁸ As could be deduced from the interviews, potential and unpredicted protectionist political turns, such as those presented by the Trump administration or Brexit, can modify border enforcement and have a significant impact on tourism too.

Furthermore, regulation is relevant not only when it comes to border management. There are various ways in which legislation could have an impact on the tourism industry, as the interviews and national strategies demonstrated. There is the case, for example, of the ban on heavy fuel oil that is predicted to stop older cruise ships arriving at Svalbard, and the restriction on cruises around the archipelago due to limited rescue capabilities. Another example is a hypothetical tax on airlines that would increase the cost of air travel, affecting Arctic destinations with limited, if any, other transport means. Finally, land purchase by foreign companies is a critical geopolitical issue. It allows or denies the assertion of property rights and control over land and resources, highlighting one way in which tourism can be used as a means of power projection and affirmation, opening the way for access to other strategic assets, even at a military level.⁹⁹

At the same time, infrastructure is crucial to providing opportunities for local development and international investments – with all their ambiguities and strategic connotations – and is often critical to realizing them. This is the case, for example, with the Arctic Railway from Rovaniemi to Kirkenes and, as reported in the interviews, the new international airport in Nuuk, for the construction of which a Chinese company offered significant funds, later instead provided by the Danish government, under US pressure.¹⁰⁰

Finally, there are also references to China-related issues in the literature and in official documents such as national tourism strategies. Chinese tourists are becoming a major group of travellers in the Arctic in terms of both number of visitors and spending, representing an

⁹⁷ Bennett and Iaquinto (2021).

⁹⁸ See also Laine (2017).

⁹⁹ Huijbens and Alessio (2015).

¹⁰⁰ Bennett and Iaquinto (2021).





important target for the industry in the region. At the same time, as the previous examples showed, huge investments in tourism development projects by Chinese companies are regarded with a certain degree of caution by other political actors, as they are considered a geopolitical tool with which to expand Chinese influence on national and international affairs far beyond the tourism sector.¹⁰¹ Nevertheless, in the early 2020s, China's role in tourism investments in the European Arctic is still very limited.¹⁰²

3.4.5 Discussion: classical geopolitics of different industries

The starting point of classical geopolitics is that physical geography, i.e., environmental conditions, the distribution of natural resources, and location and topography, greatly affect the fate of communities and the opportunities and obstacles for humans.¹⁰³ In all studied industries natural assets are at the core. In Finland and Sweden, forestry is a traditional and nationally important industry, the existence of which would not have been possible without the vast forests of the northern regions. Aquaculture is a rapidly growing industry due to the availability of large coastal and sea areas for raising fish in the European Arctic, although the sufficiency of operating locations became contested in early 2020s. The glaciers of Greenland and Iceland, the mountains of Norway, and the fells of Finland are attractions in the North that tourists come to admire and experience. Mineral exploration and mining in Scandinavia in the 2000s and expectations of a growing mining industry in Greenland would not be possible without the mineral richness of these areas. In the mineral sector, an often-repeated fact is that although mining is a global business, deposits are always place specific and local: they cannot be moved elsewhere. Although classical geopolitics is criticized for being a deterministic and near-permanent approach to natural and environmental conditions,¹⁰⁴ physical geographical facts remain relevant even in the early 2020s, because the seas, forests, ores, and beautiful natural scenery are resources on which various industries are building.

¹⁰¹ See also *ibid.*

¹⁰² Koivurova et al. (2019).

¹⁰³ For example Scholvin (2016); Wegge and Geil (2018).

¹⁰⁴ Dodds et al. (2022).





All studied industries expect the intensification of economic activity and growth. Aquaculture production, especially of salmon, has grown rapidly in different parts of the European Arctic, and, for example, it is estimated that in Iceland aquaculture's export value will exceed that of traditional fisheries in the near future. In Finland and Sweden, forests have traditionally been important natural assets, and the industry expects permanent growth in both countries due to increased global demand for forest-based products. Scandinavian countries and Greenland have displayed growing interest in their mineral reserves, and what has been called a “mining boom” emerged during the first decades of the 21st century. Finally, although Covid-19 paralyzed tourism, northern tourist destinations are not expected to lose their popularity in the future – quite the opposite – and the tourism industry is seen as an important source of economic development in all European Arctic countries. In this sense, history is repeating itself, as in the classical geopolitical approach, Arctic regions have been seen as resource-rich peripheries, “bonanza frontiers” where natural richness and potential are waiting to be commercialized to generate large financial gains.¹⁰⁵

Besides emphasizing physical geography, classical geopolitics stresses the role of state actors. National power, meaning control over territory and natural resources determined by militarily defended state borders, and competition and conflict between different states have been subjects of interest in classical geopolitics.¹⁰⁶ Of all studied industries, aquaculture is the one in which nation states as well as interstate negotiations, agreements, and regulations play the most crucial role. Competition over limited coastal production sites is growing in all countries and the aquaculture industry is increasingly seeking suitable new open sea spaces to promote growth. Open seas are contested and politicized places shared by many maritime actors and sectors, such as traditional fisheries, cruise tourism, energy production, and the military. Forestry in Finland and Sweden, in turn, illustrate resource nationalism, with nation states, the forest industry, and forest owners demanding self-determination and opposing the EU's sustainability taxonomy, which in their opinion will limit the productive use of forests. Reasoning in favour of resource nationalism is also found in the mining sector, where the argument is supply chain security: critical raw materials should be mined and refined in national territories and not in unstable developing countries. The dominance of China and the

¹⁰⁵ Powell and Dodds (2014); Heininen (2014).

¹⁰⁶ For example Heininen (2014); Heininen (2018); Powell and Dodds (2014).





EU's dependency on China were seen as threatening supply chain security and the production of devices such as mobile phones and electric cars. Unlike in forestry, there has been no tension between the EU and northern nation states regarding mining development. The European Green Deal, along with the drive for carbon-free societies and self-sufficiency in critical raw materials for Europe, was supported by national actors in the field, as growth in the mining sector was desired. In tourism, the role of state actors became visible with the spread of the Covid-19 pandemic to northern countries in the spring of 2020. States decided autonomously about border restrictions and coordination, for example, between neighbouring Scandinavian states was lacking. As well, changes in international politics and power dynamics outside the European Arctic may have – and have had – rebound effects also on the tourist flow to the North. As security is an important factor affecting willingness to travel, and because northern countries are seen as safe destinations, the militarization of the area as a result of international political conflicts may also restrict the growth opportunities of tourism in the future.





4. Critical geopolitics: the European Arctic in national strategies and different industries

A constructivist approach to geopolitics is called critical geopolitics and became established in the 1990s. Critical geopolitics argues that spaces and places such as the European Arctic are produced and reproduced in discursive practices. As Anssi Paasi has claimed, a region “is in a state of becoming, assembling, connecting up, centring, and distributing” different kinds of ideas, ideologies, values, and knowledges.¹⁰⁷ Discourses and narratives, for example, about northern places and regions, are produced and continuously re-produced, contested, and negotiated in the wider context of power relations between actors, be they states, international bodies and organizations, private companies, local people, or travellers. Places are coming to be through various discourses and interpretations, and this also means that definitions of places and physical spaces are also changing along with their concrete consequences in the ensuing policies.¹⁰⁸ The next sections discuss, first, how nation states define the Arctic or Arctic-ness and, then, how different industries and their stakeholders define the North or the Arctic as an operational environment with its natural resources.

4.1 National imaginaries of the European Arctic

As an area, the Arctic can be defined through various means. It is simultaneously a region delineated by geographical boundaries, an area defined by environmental factors, a treasure trove of resources, and a conglomeration of shared metaphors and imagery perpetuated by inhabitants and states alike. This multiplicity of definitions regarding the Arctic is conveyed in the Arctic policies and strategies produced by various states. No definition is the same as another, making every “Arctic” portrayed in every paper unique. The lack of a single geographical definition is reflected in the various delineations of the geographic boundaries of the Arctic in the papers and strategies analysed. The most widely used definition was produced by the Arctic Human Development Report (AHDR), which refers to (geo)political demarcations and governmental borders.¹⁰⁹

¹⁰⁷ Paasi (2010, p. 2299).

¹⁰⁸ Heininen (2018).

¹⁰⁹ China’s Arctic Policy (2018); Finland’s Strategy for the Arctic Region 2013 (2013, pp. 8, 18–19); The Faroe Islands: A Nation in the Arctic (2013, p. 7); A Parliamentary Resolution on Iceland’s Arctic Policy (2011, pp. 1, 6–7); Sweden’s Strategy for the Arctic Region (2011, p. 11).





Most of the Arctic states define their “Arctic” on their own, often to reflect individual understandings of the Arctic-ness of their territories. Finland defines its Arctic-ness in terms of Lapland, with southernmost Lapland residing partly below the 66th parallel, whereas Sweden considers its Arctic to begin at Västerbotten (Westrobothnia), on the 63rd parallel. Regarding Finland’s definition of its Arctic territory, a shift has occurred within the paradigm since 2013, as the Finnish strategy of 2021 defines the “entire Finland as an Arctic country” as “Finland’s Arctic interests and Arctic expertise are relevant to the whole country and, on the other hand, the Arctic character of the entire Finland supports and enhances Finland’s international image as an Arctic country in international contexts”.¹¹⁰ In its 2013 strategy, Finland posits Lapland as “an essential projection of Finland’s Arctic image”, whereas the entire country of Finland is said to possess “nationwide interest in the region”.¹¹¹ The point of reference has therefore shifted, from Lapland-oriented projection to nationwide projection.

For Norway, the entirety of Nordland marks the beginning of the Arctic region of continental Norway, whereas Troms and Finnmark as well as Svalbard and Jan Mayen are all defined as entirely in the Arctic.¹¹² Iceland defines its territory to be Arctic in its entirety, although only Grimsey Island to its north lies on the Arctic Circle.¹¹³ The Faroe Islands, in contrast to these four, give no explanation for their claim of Arctic-ness, but rely on the delineation and demarcation produced by Conservation of Arctic Flora and Fauna (CAFF), which includes the Faroe Islands within the Arctic region.¹¹⁴ Notably, and perhaps untraditionally, a definition of the Arctic and Arctic-ness is offered by China in its white paper, in which China defines a class of “near-Arctic” statehood. “Near-Arctic” is, according to China, a state that is not Arctic by conventional definitions, but has close proximity to the Arctic by virtue of both geographic and environmental factors.¹¹⁵

In addition to definitions and delineations of the Arctic as a geographical location, the Arctic is frequently defined in the analysed papers through the use of metaphors and other descriptive figures. The Arctic is often defined as a “special location” or a “unique” environment due to ecological factors¹¹⁶ and expressed through varied metaphorical imagery conveying the notion of uniqueness.¹¹⁷ This imagery is often repeated when referring to

¹¹⁰ Finland’s Strategy for Arctic Policy (2021, p. 12).

¹¹¹ Finland’s Strategy for the Arctic Region 2013 (2013, p. 8).

¹¹² The Norwegian Government’s Arctic Policy (2020, p. 7).

¹¹³ A Parliamentary Resolution on Iceland’s Arctic Policy (2011, p. 6).

¹¹⁴ The Faroe Islands: A Nation in the Arctic (2013).

¹¹⁵ China’s Arctic Policy (2018).

¹¹⁶ *Ibid.*; Sweden’s Strategy for the Arctic Region (2020, pp. 32, 51); Finland’s Strategy for the Arctic Region 2013 (2013, pp. 8, 32).

¹¹⁷ The Faroe Islands: A Nation in the Arctic (2013, p. 16).





industries benefitting from such uniqueness, as is the case with Arctic tourism.¹¹⁸ One key metaphor regarding the Arctic is that it is a “treasure trove” of natural resources, with reference to the vast deposits of valuable natural resources in the region. In this metaphor, the Arctic is defined in terms of its abundance and richness.¹¹⁹ Concurrently with this metaphor, the Arctic is often described through notions of vulnerability and precariousness, related to both its biological and biotic spheres of nature.¹²⁰ Often, notions of abundance – and the exploitation thereof – and vulnerability are communicated in juxtaposition, illustrating a certain dual dynamic of utilization and preservation typical of discourses regarding the Arctic as a region and a source of exploitable resources.¹²¹

4.2 Industrial discourses of the European Arctic: balancing growth and sustainability

Critical geopolitics recognizes the multiple actors involved in defining and producing places or regions such as the “North”, “Scandinavian North”, and “European Arctic”. Certainly, industries are involved in reconstructing, reshaping, and renaming their operational environments in the European Arctic, having a narrative power over places, politics, and governmental constructions.¹²² This is especially clear in tourism, where the metaphors and images of the North are also reshaping how people outside see and understand the Arctic area.

The next subsections discuss how different industries define their operating environments and the natural assets they are using, legitimizing their economic activity in the European Arctic. The industry-specific discourses are contested, mainly by northern residents, indigenous people, and NGOs, whose perspectives are brought to the fore. In general, the dominant theme promoted by all industries is balancing economic growth potentials with sustainability in the European Arctic.

¹¹⁸ Finland’s Strategy for the Arctic Region 2013 (2013, pp. 11, 34); Sweden’s Strategy for the Arctic Region (2011, p. 38).

¹¹⁹ China’s Arctic Policy (2018); The Faroe Islands: A Nation in the Arctic (2013, p. 6); Finland’s Strategy for the Arctic Region 2013 (2013, p. 10); Norway’s Arctic Strategy (2017, p. 2, 9, 23); The Norwegian Government’s Arctic Policy (2020, p. 3); Sweden’s Strategy for the Arctic Region (2011, p. 30).

¹²⁰ China’s Arctic Policy (2018); Sweden’s Strategy for the Arctic Region (2020, p. 31); Finland’s Strategy for the Arctic Region 2013 (2013, p. 31, 38); New Swedish Environmental Policy for the Arctic (2016, p. 1–2).

¹²¹ Finland’s Strategy for the Arctic Region 2013 (2013, p. 38); New Swedish Environmental Policy for the Arctic (2016, p. 1–2).

¹²² Knecht and Keil (2013, p. 11).





4.2.1 Aquaculture: clean production and nutrition for global sushi tables

Over time, the aquaculture industry has developed immensely, as has its self-image and discourses. In its infancy, salmon farming in Norway was promoted as a sideline for agricultural farmers, and licences were to be issued to small, locally owned firms, benefiting coastal communities. In the 1980s, the Law on Aquaculture sought to regulate production capacity according to market growth, and to monitor the industry's environmental footprint, i.e., to prevent pollution, limit disease spread, and ensure that traditional fishing, outdoor life, and other uses of the coastal zone were protected. In the Faroe Islands, salmon farming also started in the seventies, and was again seen as an opportunity for small Faroese communities. Commercial Icelandic aquaculture developed later, after the turn of the century, limited mainly to the Westfjords.

In the early 1990s, several crises struck Norwegian aquaculture, and after the turn of the century, the Faroe Islands were hit even worse, with infectious salmon anaemia wiping out all but three companies. Out of these crises stronger industries emerged in both Norway and the Faroe Islands. At the turn of this century, when Norwegian companies led the globalization of the industry, ownership and social responsibility came up in the discourse. Informants from Iceland and the Faroe Islands brought up foreign ownership and worries about the multi-national companies' responsibility for developing local communities:

When a big global company establishes its operation in fragile communities, it is in a better position to take part in all sorts of things in the development of the communities.

The main discourse in the aquaculture industry concerns the drive for healthy and sustainable food production, with farmed salmon having a strong position in European, Asian, and American markets, benefiting from the global sushi trend and consumers' general preferences for nutritious food and to replace meat with fish. In recent years, the industry has been more widely acknowledged for its sustainability and small-footprint food production, ranking at the top of the Coller Farm Animal Investment Risk and Return (FAIRR) Protein Producer Index¹²³ as the most environmentally friendly producer of protein. The index assesses the world's 60 largest listed meat, dairy, and farmed-fish producers in terms of material environmental, social, and governance (ESG) issues. Of the 60 largest producers, salmon-farming companies from Norway and the Faroe Islands have ranked first, second, and fourth.

¹²³ Farm Animal Investment Risk and Return (FAIRR) Initiative (2021).





The sustainability focus adds to the industry's growing importance as a producer of "marine protein" for the rest of the world. The overall production of farmed Atlantic salmon has grown from zero to around 3 million tonnes in fifty years, now accounting for 3.7% of the world's farmed aquatic animals.¹²⁴ Informants mentioned difficulties gaining access to new areas for further expansion in the coastal zone, and the scarcity of suitable areas will continue in the future. One informant from the Faroe Islands claimed that aquaculture has expanded as far as it can in the fjords, and that there is now limited potential for growth. Although the industry is generally perceived as sustainable, and many issues have been resolved (e.g., use of antibiotics has been reduced by 99%), it still has some unresolved sustainability issues. Parasites, disease, mortality, and escapes are all quite well monitored, but are problems that remain unresolved. Interviewees raised the matter of feed ingredients, notably the increased proportion of plant-based feed ingredients and the importance of using waste products from animal protein production. Soy-based feed, mostly from Brazil, increases the industry's carbon footprint as it contributes to land-use change in Brazil.

With an even shorter history, the salmon-farming discourse in Iceland is very similar to that in Norway and the Faroe Islands, with a focus on benefits such as increased job opportunities and population growth, which are the effects of local economic growth. While sustainability is an issue that grew over time in Norway and the Faroe Islands, in Iceland it was a prerequisite for growth from the restart of the industry. It seems paradoxical that salmon farming had previously failed in Iceland, as Icelandic waters should be well suited for it. The Icelandic discourse acknowledges the good conditions in the Icelandic fjords, with clean air and pure, cold water. Iceland also has the benefit of geothermal water for land-based salmon farming. In Iceland, the sustainability focus seems to be on environmental and economic sustainability, implying that achieving these will also lead to social sustainability:

Fish farming has a good starting point: protein production with a small footprint.

Fish farming is very important for communities of the High North.

Informants argued that with Arctic warming, more use of the Northern Sea Route is expected, presenting opportunities for faster ship transport to the benefit of the aquaculture industry as well. Today, fish and aquaculture products exported to Asia are either transported frozen, not obtaining the higher prices of fresh products, or as air-freighted fresh (or even live) products.

¹²⁴ Food and Agriculture Organization of the United Nations (2020).





With faster sea transportation, it would be possible to reach markets with fresh products of an acceptable shelf-life, earning the price premiums for fresh fish while reducing the high carbon footprint of air freight and thus increasing the sustainability of both fisheries and aquaculture.

4.2.2 Forestry: harvesting “green gold” and integrating remote territories

Many interviewees observed that a change in values regarding forestry is happening to the point that the acceptability of the industry is declining both at the political level, mainly as a consequence of the new environmental focus of the EU, and in relation to the forest owners’ mindset. More forest owners are, for example, opting for carbon compensation incentives instead of the productive exploitation of their resource, even though they are less profitable. Climate change and the related sustainability narrative are dichotomous in forestry – as was synthesized in one interview:

The effects of climate change depend on whether forestry is seen more as a solution or as a problem. There are more and more expectations associated with forestry and active nature management.

Sustainability is not criticized or opposed per se, but an uneven emphasis on the environmental versus social pillar of sustainability relative to the economic pillar is often noted, and a significant number of actors advocate stronger acknowledgement of the benefits derived from the industry in terms, for example, of employment and wellbeing for local communities. “Climate anxiety” and excessive environmental protections are depicted as unsustainable from an economic perspective.

The forest industry is not the only source of criticism of the mainstream sustainability discourse: even stronger criticisms were expressed by interviewed Sámi representatives. They argued that the official sustainability narrative is often a matter of greenwashing and asked what should actually be considered “green”, exposing the political nature of a seemingly “neutral” discourse:

One claims that forestry is “green” due to the colour of the trees, but what is really “green” in wind turbine plants, forestry, and mining? What are the criteria for classifying something as “green”? One part of this must be that the production is not built at the expense of indigenous culture, in this area reindeer husbandry. It is too





difficult to argue when the intrusion is classified as “green”. There are a lot of politics contained in these discussions.

Sami informants also reported that “sustainability” is often used as a discursive weapon to marginalize and delegitimize traditional livelihoods, facilitating new industrial exploitation of indigenous lands. The criticism was also applied to the wider relationship between North and South: some interviewees argued that a persistent colonial perspective makes northern resources exploitable for southern benefit, since few people live in northern areas, so the dominance dynamic between large cities and rural, peripheral areas is reproduced.

The importance of state control over forests in Sweden and Finland (and the related production of narratives to justify their centralized exploitation) is nothing new.

Consequently, the legal control of forests has been a national interest for centuries, in turn reflected in the circumpolar resource narratives and corresponding state trajectories. For a long time, resource colonialism and nationalism have been central themes of what can be labelled variations of “hinterland narratives”.¹²⁵

The custom of referring to the Fennoscandian forests as “green gold” may seem dubious in light of the contemporary sustainable development meta-discourse, as the extraction of gold typically has extensive environmental impacts. Admittedly, it can be understood as a metaphor for something precious and enduring, but it should also be seen from the historical and geopolitical perspectives. The forestry-specific metaphor of “forests as green gold” has repeatedly been articulated in official policy documents as well as in the communications of forest organizations and companies. For example, Sweden’s National Forest Programme reads: “Forests – our ‘green gold’ – will contribute to creating jobs and sustainable growth throughout the country, and to the development of a growing bioeconomy.”¹²⁶ Similarly, the Finnish Forest Centre claims that “the possibilities for wood as a renewable, recyclable and ecological raw material are boundless. A wood-based bioeconomy and biofuels processed from wood offer sustainable solutions for human well-being and global energy challenges”.¹²⁷ In both countries, the multiple uses of forest products and services are emphasized, while the potential and existing conflicts between different users and interests are often typically overlooked, again framing as generally beneficial and “sustainable” the exploitation of a resource that, on closer examination, appears to be “gold” just for some specific actors.

¹²⁵ Sörlin (2019).

¹²⁶ Regeringskansliet, Government Offices of Sweden (2018).

¹²⁷ Karppinen and Penttinen (2013).





4.2.3 Mining: necessity for a green transition

In the mining industry, a major discursive turn is evident. Industry representatives acknowledge that the industry has had a bad reputation for several reasons: inadequate communication and stakeholder involvement; critical media coverage such as the documentary series “Blood diamonds”; and the image of dirty old industry originating from coal mining – a field closely targeted in building the carbon-free future. Industry informants talked about green minerals, green metals, and green mining, especially as critical raw materials are needed for carbon-free societies.¹²⁸ A respondent from Finland reflected on the situation:

There has been growing interest in mining in Finland. The reason is the energy transition and the need for minerals for solar panels and electric car batteries. If I remember right, the World Bank estimated a couple of years ago that the global need for mineral products will increase tenfold by 2050. Another question is where the electricity for this production is coming from, how it will be produced.

The industry’s message is clear: To tackle climate change, the mining industry is a necessity. Although climate change has raised awareness of the limitations of the globe and of the need for raw materials, the industry is “struggling to get the message out”. Poor communication between the mining industry and society is seen as a weakness and social media fora are seen as difficult to handle.

The industry is developing its capacity for self-regulation regarding sustainability and responsibility. For example, the Canadian “Towards Responsible Mining” standard¹²⁹ is well known and increasingly applied in the industry in all Nordic countries. In Finland, mining companies and their stakeholders founded a national network in 2014, the Finnish Network for Sustainable Mining,¹³⁰ to help major mineral exploration and mining companies develop self-regulatory practices and standards for a more responsible mineral industry. The underlying rationale is that responsibility is also an economic asset and competitive advantage, as end-buyers and consumers are demanding responsible primary production. Several industry interviewees suggested a traceability mechanism for minerals and metals, as the origin of raw materials is of increasing interest to the general public. The adoption of the EU’s Conflict Minerals Regulation in 2021 is an answer to this.¹³¹ However, creating a

¹²⁸ See also, e.g., Smol et al. (2020); Nurmi (2017).

¹²⁹ Mining Association of Canada (2021).

¹³⁰ Finnish Network for Sustainable Mining (2017).

¹³¹ European Commission (2021b).





traceability method is challenging because, for example, electric cars use dozens of different metals and the raw materials in alloys are difficult to specify.

In the industry, mineral production in the European Arctic is described as especially responsible. From the industry perspective, environmental regulation is strong and becoming even stronger, especially when compared with the situation in developing countries.

Companies apply strict health and safety policies, and the mines obviously make no use of child labour. On the other hand, mining-critical interviewees argued that mining can never be sustainable and that even responsibility is challenging, as there are always local adverse impacts. Indigenous Sámi communities have often highlighted that mining challenges traditional reindeer herding:

The truth is that mining and reindeer herding cannot coexist. Industry projects cannot be realized at the expense of the Sámi people and culture People think that Sámi culture and livelihoods are flexible, but they cannot adapt endlessly.

There is still a boom–bust attitude in international mining, meaning that when a mine is empty, there will be very little clean-up or restoration of the mining area by the mining companies. Hence, large areas previously used for traditional northern livelihoods will not be returned to these livelihoods after the ores have been extracted.¹³² For example, according to Norwegian mining law, new mining projects must set aside financial resources for remediation after mining closure, but this does not help remediate all the mines abandoned in the past.

4.2.4 Tourism: pristine nature as a scarce commodity

The main discourse through which the Arctic is marketed as a tourist product stresses the Arctic's remoteness, wilderness, pristine naturalness, quietness, and authentic and exotic cultural heritage, and this discourse can be detected in all the interviews and national strategies. Arctic tourism can be seen to be about seeking difference and exoticness, leading to a power struggle as to who defines the extraordinary.¹³³ As a matter of fact, it is impossible to separate this discourse from the sustainability narrative in relation to Arctic tourism.

Since Arctic tourism is based on nature and indigenous cultures, ecological and social sustainability are crucial for the industry's image. We can see this in a number of contexts and

¹³² Haikola and Anshelm (2020).

¹³³ Urry (2002); Lund et al. (2016); Viken and Müller (2017).





actions, and the tourism industry is trying to promote itself as sustainable through producing eco-labels and promoting its benefits in terms of the social and economic development of local communities. National strategies and the interviewees greatly emphasized the necessity of creating a sustainable tourism industry in the future and/or the industry's already improved ecological and social profile. The importance of sustainability was also stressed by external actors, especially Chinese companies trying to gain trust and credibility as investors.¹³⁴

At the same time, challenges related to environmental sustainability and the carbon footprint were addressed in many interviews. Travel, especially air travel, produces considerable emissions, and “last-chance tourism”, for example, to see melting Arctic ice, is putting further pressure on already fragile ecosystems and species:

Paradoxically, people come here to experience climate change, which tourists contribute to. They want to see polar bears before they are gone and the glaciers before they melt. We have only seen the start of this – I think “last-chance tourism” will increase.

In this regard, it is important to realize that the “pristine nature and cultural authenticity” narrative is an appealing but very fragile market asset. As many interviewees brought to light, interest in nature and environmental awareness often characterizes Arctic tourists, which in turn could lead them to boycott air travel or specific destinations if local practices are perceived as environmentally damaging, as is the case with whaling in Greenland and the Faroe Islands.

High-quality, personalized, and luxury services, selected high-income and highly educated target groups, and avoidance of mass tourism are further elements of the widespread discourse of tourism in the Arctic, in both the national strategies and the interview data. These elements seem to be related to two factors in particular: relatively difficult and expensive travel that makes the Arctic a niche destination, and the strategic decision to preserve a sense of peace and remoteness, avoiding crowds that could threaten major Arctic tourism assets. Many informants saw the growth of tourism as having the potential for over-tourism in the high season. This is already a problem at some Arctic destinations, such as Iceland and Svalbard, mostly because of cruise industry expansion, discussed as follows:

¹³⁴ Huijbens and Alessio (2015); Bennett and Iaquinto (2021).





Sustainable tourism in a local community is also about volume – i.e., how many visitors are acceptable in this community? If the community has 1000 inhabitants and gets 5000 visitors at once, is that sustainable? Tourism in general – if you build up a local industry that needs 1200 employees for a three-month season and 200 the rest of year, is this sustainable?

However, tourism is mainly seen by the interviewees as supporting social sustainability by providing local jobs, increasing income, improving livelihoods, and attracting workers from outside Arctic areas, thereby reducing the depopulation and marginalization of remote and sparsely populated areas. There is also the opposing view that although local and indigenous communities can find jobs and income opportunities in the tourism sector, the wages are usually low and the employment is seasonal. Furthermore, the local and indigenous inhabitants experience land conflict between their traditional livelihoods and tourism infrastructural development, and, furthermore, the commodification of handicrafts and traditions may alter indigenous identities. As some interviewees highlighted, local communities can be distrustful or even hostile towards tourism development, imposing significant limits on accessibility, even if tourism and traditional activities are integrated.

Tourism is often an industry of meeting “otherness”, of seeking new experiences and different cultures, and hence of crossing borders. Borders do not just shape the actual possibility of moving from one place to another but are also cognitive categories that play a central role in the construction of identities, alterities, and attitudes towards specific groups of people and nations.¹³⁵ In this sense, tourism as a border-crossing activity that leads to intercultural interactions is a powerful tool with which states can promote positive images of themselves abroad. Tourism can therefore be included in communication and propaganda strategies, as in China¹³⁶ and Russia,¹³⁷ making tourism an instrument of soft power in geopolitical interactions.

4.2.5 Discussion: critical geopolitics of different industries

Whereas classical geopolitics stresses the meaning of physical geography as a fairly permanent starting point, critical geopolitics argues about variations in environmental

¹³⁵ Laine (2017).

¹³⁶ Bennett and Iaquinto (2021).

¹³⁷ Laine (2017).





conditions and physical geography. Hence, critical geopolitics stresses processes of change, as illustrated by Klaus Dodds et al.: “the ‘geo’ in geopolitics is warming, thawing, melting, burning and so on”,¹³⁸ with human-caused climate change being the most significant change factor. Climate change is reshaping physical geographies in the North, of which perhaps the most cited illustration is melting sea ice.¹³⁹ Changing natural environments in turn have impacts on the studied industries and on northern communities.¹⁴⁰ Although warming sea waters may pose a problem for aquaculture, the industry also sees opportunities in changing physical conditions. Commercial use of the Northern Sea Route would make it possible to export better-quality fresh fish to Asian markets, which would be more profitable to the industry.

Climate change is indirectly evident in the discourses of other industries as well, in explanations of how environmental change affects political decisions and industry futures. In forestry, climate change impacts and their mitigation are debated, with the industry claiming that “climate anxiety” and seeing forests as carbon sinks are threats to forestry. Protection demanded in the name of climate change endangers profitability – this is the main line of the industry arguments. The mineral sector argues that tackling climate change is impossible without new mines. Critical raw materials and minerals for metals are a necessity if European societies are to become carbon free, as they are needed, for example, in wind turbines, solar panels, and electric cars. In tourism, climate change has generated a specific niche: “last-chance tourism”, i.e., travel to Greenland and Iceland to see melting glaciers and maybe even polar bears –the suffering icon that symbolizes the severe impacts of climate change on natural habitats.

The “critical” aspect of critical geopolitics is mainly directed towards its antecedent classical approach, and state actors are not seen as the only or even as the main actors in political decision-making and future economic development. International companies in different industries, together with their global customers, and NGOs from local to global scale addressing issues such as environmental protection and indigenous people’s rights also define what northern regions are and the meaning and value of their natural assets.

¹³⁸ Dodds et al. (2022); as the book is forthcoming, no exact page number can be cited.

¹³⁹ Dittmer et al. (2011).

¹⁴⁰ Wegge and Keil (2018).





All industries develop their discourses to legitimize their production and expansion in northern areas by defining “Arctic-ness”, “northern-ness”, and the specialness of the natural assets they use in their production. Aquaculture associates itself with clean, cold, and blue waters and nature-friendly production compensating for meat production. Forestry in Sweden and Finland is harvesting “green gold”, bolstered by the argument that logging benefits both local communities and national economies. The mining sector exploits the dichotomy of the developed Global North versus the less-developed Global South in arguing that mining in the North is responsible, as environmental regulations are strong and companies follow strict health and safety policies on a voluntary basis. In tourism, pristine nature and the cultural authenticity of northern communities, and especially the indigenous cultures of the Sámi and Inuit, are marketed as exotic and unique experiences to raise interest in travelling to the North.

There are also critical voices speaking out against intensification of the economic activity of various industries in the North. Forestry and mining are mainly criticized among Scandinavian indigenous people, the Sámi, whose traditional livelihood is reindeer husbandry based on free grazing. Large-scale logging is making pastures more barren and mining areas are destroying nature forever – unspoiled nature cannot be regained. Northern people are asking for environmental justice, as the negative impacts on the environment and local ways of life remain among northern communities, whereas the products and benefits accrue to southern urbanites. In aquaculture, local stakeholders are not criticizing the industry as such, but mainly the change in ownership: globalization has taken over local and traditional politics, as the industry is increasingly in the hands of large, international companies. In tourism, the main concern is uncontrolled and seasonal mass tourism, which does not necessarily benefit local communities and is harming the vulnerable northern environment. In sum, economic benefits are not necessarily supporting the social sustainability of northern communities and are even threatening environmental sustainability in the North.





5 Conclusions

States are the most important actors in global geopolitics as they have the ultimate power in their border-defined territories, a theme upheld by the classical geopolitical approach. Trade wars in aquaculture, protectionism in forestry and mining, and closing the borders to international tourism due to the pandemic all illustrate that, even in an era of globalization, nation states have their own decision-making power and jurisdiction. Another approach, critical geopolitics, understands the political governance of space as also constructed through the discourses, ideas, ideologies, and values of various actors, not only by states and/or international, state-based entities. This approach facilitates discussion of what the Arctic, European Arctic, or Global North actually is, to whom it and its natural resources belong, the different paths to the future in Northern Europe, and how to balance expected economic growth with sustainability.

In the report we have discussed, based on the classical and critical geopolitics theoretical premises, drivers of economic development in the European Arctic and how Arctic states frame their northern areas. Moreover, we have studied four main industries on which economic prosperity, social sustainability, and natural biodiversity in the North ultimately depend.

Different industries have their own geopolitics. In aquaculture, the central theme is continued growth in production and consumption, exerting pressure for production in the open seas instead of national coastal areas. This may lead to disputes between nation states as well as tension with other marine sectors such as cruise tourism, the military, and traditional fisheries. Also, trade policy is used as a tool in political struggles between states, as illustrated by sanctions between the EU and Russia as well as tariffs or banned imports as a result of political tensions between international players such as the EU, Russia, China, or the United States. Despite market disturbances, the aquaculture industry itself expects continuous growth as the consumption of fish is increasing on “global sushi tables”, in the diet of well-to-do people. The industry invokes imaginaries of clean and blue Arctic waters where production occurs, hoping to attract environmentally friendly consumers. From the local perspective, among residents of the coastal areas of littoral states, aquaculture as such is a traditional and accepted industry. However, globalization of the industry challenges local communities as ownership of the companies as well as control over markets is increasingly concentrated in the hands of internationally operating companies.





When Finland, Sweden, and Austria joined the EU in 1995, the EU's forest area doubled and the Union became self-sufficient in wood products. The EU Commission revised its non-binding forest strategy in 2021, seeing forests as essential for combating climate change and achieving a climate-neutral EU by 2050. On the other hand, for Finland and Sweden forests are important natural assets and the forest industry is very important for foreign trade. As a result, EU-level interest in more sustainable forestry according to a sustainability taxonomy has clashed with the national economic interests of Finland and Sweden. Global demand for forest-based production and uncertainties related to the timber trade with Russia, important to Finland, are exerting pressure for production and felling at the same time as the EU is considering forests to be important carbon sinks. What is considered the optimal balance between protection and production also varies between the industry and its stakeholders, such as reindeer husbandry, tourism, and recreational interests at the local level. Local stakeholders, or rights holders, argue that there are persistent colonial power relations in which northern resources and nature are exploited for southern benefit. Forest industry narratives in both Finland and Sweden use the “green gold” metaphor when talking about forestry assets. The industry argues that forestry brings economic activity and work opportunities to often remote northern communities, supporting the social and economic sustainability of the rural North. Industry actors also argue that the wood-based bioeconomy and biofuels processed from wood can serve as sustainable solutions for global energy and raw material needs in different fields of production.

Mineral exploration activity is high in northern Scandinavia, where there are several plans for new mines in the early 2020s. One important underlying reason for this is the EU's protectionist pursuit of self-sufficiency in critical raw materials such as rare earth elements and in minerals such as cobalt, lithium, and tellurium. These are all needed for the green transition, and European industrial production, for example, of smartphones and electric cars, is currently dependent on minerals from developing and often unstable countries. China is seen as a threat or even a “villain” in Europe's mineral economics, as it has a near monopoly in producing critical raw materials such as cobalt and also manufactures final products such as wind turbines and solar panels, controlling supply chains and, potentially, market prices. On the other hand, there is a “dilemma of dependency” in global mineral and metal markets, as many end products need several critical metals, and lack of one may cause production to stop. The EU is conflicted regarding mining in the North, as it supports the sector, on one hand, but wants to build a sustainable mineral sector according to a sustainability taxonomy.





Representatives of the sector consider this EU posture as creating uncertainty that threatens profitable mining, as they see risks in changing national legislation demanding more environmentally and socially responsible mining. In the mining industry, a discursive turn is evident and the industry is striving to get the message out: mining is needed for the green transition in order to tackle climate change and the industry is fostering well-being in a sustainable way for northern resource regions. This discourse is mainly criticized by local rights holders such as property owners, reindeer herders, and tourism entrepreneurs, with indigenous people and environmental organizations claiming that mining always has adverse environmental impacts and can never be truly sustainable, just responsible at best.

The free flow of travellers was stopped by the Covid-19 pandemic starting in spring 2020, including in the European Arctic. Various nation states imposed restrictions on the crossing of national borders, often acting independently, creating uncertainties and imposing lockdowns not only on tourists but also often on seasonal workers in the tourism industry. Besides national pandemic preparedness, hostile international politics and power dynamics can stop tourist flows to the North or between northern states, as already evidenced in the preparatory stages of Russia's war against Ukraine in early 2022. As security and stability are important for Arctic tourism, military tensions and rearmament in northern areas threaten these two important selling points. Also, protectionist political turns such as Brexit may lead to a decline in tourism. In the main discourse of the European Arctic tourism industry, northern regions are described in terms of, for example, remoteness, wilderness, quietness, and pristine naturalness. Indigenous cultures are also widely invoked in the imaginary of the North, illustrating the exoticness of northern destinations. The "pristine nature and cultural authenticity" narrative is an appealing but fragile market asset. Mass tourism threatens fragile ecosystems, and the commodification of traditional livelihoods and handicrafts, for example, may alter local and indigenous identities and cultures, leading to distrustful or even hostile attitudes towards tourism development in and near northern tourist destinations.

A review of geopolitics shows that economic development even in the northernmost parts of the world is dependent on and interconnected with chains of events and sudden incidents around the globe.





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ANNEX I: List of interviewed organizations

Aquaculture

Aquaculture Company in Norway – 1
Aquaculture Company in Norway – 2
Aquaculture company owner in Iceland
Fiskaaling, Aquaculture Research Station in the Faroe Islands
ISFA, the Icelandic Aquaculture Association
Minister of Fisheries and Aquaculture in Iceland
Ministry of Environment, Industry and Trade in the Faroe Islands
Senter for hav og Arktis, Centre for the Ocean and the Arctic, Norway
Troms and Finnmark County Administration, Norway

Forestry

Barents Forest Sector Network (BEAC working group)
Finnish Forest Industries

Maa- ja metsätaloustuottajain Keskusliitto, The Central Union of Agricultural Producers and Forest Owners, Finland
Metsähallitus (State owned forests, Finland)
Metsäkeskus, Finnish Forest Centre
World Forest Forum

Mining

DG Mining, European Commission
ICMM, International Council of Mining and Metals

Industry expert in the committee evaluating the Norwegian Mineral Act
IRMA, The Initiative for Responsible Mining Assurance
Kaivosvastuu, Finnish Network for Sustainable Mining
LO, Norwegian National Labour Union
Ministry of Economic Affairs and Employment, Finland
NGU, Geological Survey of Norway
Norsk Bergindustri, The Association of Norwegian Mineral Industry
Regional geologist, Norway
RMF, Responsible Mining Foundation
WWF Minerals and Metals





Tourism

Business Iceland/Visit Iceland

Greenlandic tourism sector, municipal level representative

Icelandic Tourist Board

Icelandic Travel Industry Association

Joint Working Group on Tourism (BEAC working group)

Ministry for the Environment and Natural Resources, Iceland

Ministry of Environment, Industry and Trade, Faroe Islands

Ministry of Industries and Innovation, Iceland

Tourism companies and authorities in Svalbard (3 interviews)

VFI, Visit Faroe Islands

Indigenous

Sáminuorra, Sámi youth organization

Suoma Sámi Nuorat, Finnish Sámi Youth Organization

Svenska samernas riksförbund, Swedish Sámi Organization

General

Barents Press

BEAC, Barents Euro-Arctic Council

East and North Finland EU office/Northern Sparsely Populated areas

Economic Cooperation (BEAC working group)

EEAS, European External Action Service

Finnish Arctic Association

Ministry for Foreign Affairs, Finland

NATO, North Atlantic Treaty Organization

Nordic Council of Ministers

North Norway EU Office

North Sweden EU Office

POP – Bank Sector, Finland

Regional State Administration Agency in Finland (2 interviews)

SITRA, The Finnish Innovation Fund

WWF Arctic Programme

Total: 60 interviews. In some organizations more than one informant was interviewed.





ANNEX II: Policy papers

AQUACULTURE

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European Commission (2013a) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions: A new EU Forest Strategy: for forests and the forest-based sector*. Brussels.

European Commission (2013b) *Commission Staff Working Document: A Blueprint for the EU Forest-Based Industries (woodworking, furniture, pulp & paper manufacturing and converting, printing)*. Accompanying the document *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. A new EU forest Strategy: for forests and the forest-based sector*. Brussels. SWD (2013) 343 final.

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