

10. The Arctic: last frontier for energy and mineral exploitation?

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1. INTRODUCTION

Historically, the Arctic has been imagined as the last frontier to conquer, tightly connected to ideas of manhood, adventure, and survival of the fittest. In the last decades, the Arctic has caught new interest as a resource frontier for tourism, trade, energy, and minerals. Climate change has both opened new waterways in the Arctic Ocean and altered living conditions drastically for Arctic communities. On the one hand the Arctic is a region undergoing rapid and dramatic changes and in need of climate adaptation strategies, on the other the Arctic thaw is seen as providing business opportunities for states and multinational companies alike. Imaginaries of undiscovered reserves of hydrocarbons, minerals to satisfy increased global demand and consumption of electronic gadgets and electric vehicles, and renewable or “green” energy such as wind and hydropower compete and simultaneously complement romantic notions of the Arctic as a place of untouched nature and vanishing yet still preserved traditional Indigenous lifestyles. Consequently, the Arctic is imagined as

an unexplored, spacious, and undeveloped frontier. Multinational companies that come to explore for oil, gas, minerals, and wind power, tend to receive the blessing of the nation on which territory the resources are located. Indigenous peoples who have occupied these lands since before the existence of these nation-states are yet again exoticised, displaced, or see their land appropriated for industrial purposes. Infrastructure associated with “development” often displaces current land use that utilises the region’s resources in a non-invasive manner. Ideas of a “win-win” situation for development and the environment, then, are as contested today as in the aftermath of the Stockholm Conference in 1972. This chapter focuses on the impacts of such expansions and expropriations in one area of the Indigenous Arctic, in the Western part of Sápmi, and calls for attention both to what a sustainable land use in Arctic regions is, and who should set the terms of development decisions. In a region heavily marked by assimilation policies of Indigenous and ethnic minorities, such questions are both complex and important to discuss.

2. DEFINING THE ARCTIC

“The” Arctic per se is not a fixed geographic location but is an imagined space with a multitude of definitions and meanings. The Arctic Circle is most commonly seen as the border that defines which regions are included in “the Arctic”. The Arctic Circle is an imaginary line at 66° 34' N, which marks the latitude above which the sun does not set on summer solstice and does not rise on the winter solstice. Arctic regions can also be defined by ecological and climatical markers, such as the Arctic tree line, north of which the landscape is characterised by the presence of shrubs and lichen. Other defining ecological features are the presence of permafrost (i.e., soil that stays frozen for at least two consecutive years), and high latitude regions with an average monthly temperature below 10° Celsius. Climate change, however, is rapidly changing the living conditions in the Arctic, including ecological and climatical markers. With thawing permafrost, the Arctic is indeed shrinking, if not vanishing, if defined by climate and ecology alone. The Arctic can also be culturally or politically

described by lifestyles, political authorities, or as the homelands of northern Indigenous populations. About one million people of the total Arctic population of just over 10 million are Indigenous, representing over 40 different ethnic groups (Heleniak 2020, 150; Jungsberg et al. 2019, 8). Neither the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in 2007 nor the International Labour Organization Convention 169 (ILO 169) in 1989 contain a clear universal definition of what it means to be Indigenous, whereas such definitions do exist on a national basis. These are, however, slightly different and often contested across the Arctic states. Contrary to common imaginaries of a wild Arctic, there is a general trend towards urbanisation and a decline in smaller settlements. In 2020, two-thirds of the Arctic population lived in settlements with more than 10,000 inhabitants (Heleniak 2020). All Arctic states are high-income countries except for Russia, which is also the only Arctic country with a significant and steady population decline since the 1990s. Most Arctic states have fertility rates at a below replacement level, immigration as the major source of population increase, and all but Russia have high levels of life expectancy. However, there are substantial demographic differences between the Indigenous and non-Indigenous populations in the Arctic, amongst others being that the Indigenous population has a younger age profile (Heleniak 2020, 138). Politically, the Arctic Council is perhaps the institution that defines which states belong to the Arctic. It includes the eight states of Canada, Denmark, Finland, Iceland, Norway, Sweden, Russia, and the United States, and six Indigenous People's Organizations that are Permanent Participants in the Council: the Aleut International Association; Arctic Athabaskan Council; Gwich'in Council International; Inuit Circumpolar Council; Russian Association of the Indigenous Peoples of the North; and the Saami Council. As a soft-law intergovernmental forum, its working groups on Arctic peoples and ecological factors in the Arctic play a major role in knowledge-creation and agenda setting in and of the Arctic. Reflecting the increasing interest in the Arctic by non-Arctic states, NGOs, and intergovernmental organisations, the number of observers to the Arctic is currently at 38 (of which 13 are nations). Indigenous rights however are different across these Arctic nations. Whilst Norway, Sweden, Finland, and Denmark supported the adoption of the UNDRIP in 2007, Russia abstained whilst Canada and the United States initially rejected the declaration. The latter two have since adopted it. ILO 169 is only signed by two Arctic states, Norway and Denmark. Furthermore, being a signatory to these declarations does not mean the nations concerned always respect Indigenous rights or work sufficiently to support the development of Indigenous culture within their borders.

3. WHAT DO WE MEAN BY "FRONTIER"?

The Arctic, then, is both a vast and diverse region in the Northern Hemisphere, a homeland, and a region that has often been viewed in terms of its resource potential or as a place of adventure and discovery. Theorising topics related to the Arctic in the social sciences, especially resource extraction and Indigenous rights, is often done by looking at the Arctic in terms of the colonial legacy that is still at play, notably displayed in "frontier" thinking. Like "the Arctic", frontier does not have a clear-cut definition. Frontiers are more of an imaginary space than a geographical place, imagined as landscapes that need discovery, exploration, and domestication. In the Arctic such frontiers are often associated with dreams of resources such as oil, gas, and minerals, but are also linked to longer histories of exploration, trade, and exploitation that have transformed Indigenous communities across the region (Nuttall 2010). Frontiers are not seen as homes and can therefore be used and taken into possession or get sacrificed. Rasmussen and Lund (2018, 388) argue that a frontier is not even a space, but that frontiers are taking place in and to space, created by and representing the discovery or invention of new resources. Frontier dynamics unsettle or dissolve property systems, political jurisdiction, rights, and social contracts (ibid.). From the eyes of the state and potential investors, the north is frequently imagined as a place to be developed through the extraction of its resources; places, that is, viewed more as "spaces" than as places in their own right, with the

complex human–non-human relations they entail. Such narratives are amongst the many Arctic imaginaries – competing and constantly evolving ideas of what the Arctic is and should be (Steinberg et al. 2015). Most of the Arctic futures conceptualised in reports and scenarios tend to perceive the driving forces of change in the Arctic as coming from outside the region itself. One study of 50 such scenarios from governments, private organisations, business interests, researchers, and (exclusively male) travelogues found that most such future imaginaries did not involve Arctic people as stake- and rightsholders in the making of the report, and that Arctic peoples remained marginal compared to geopolitical aspects (Arbo et al. 2012). Whilst Indigenous people consistently stress the Arctic regions as home and not as a remote frontier to be exploited, this focus on the geopolitics, resources, and shipping that becomes available with receding ice are frontier imaginaries that bring ideas of development and (global) connection, which indirectly frames Indigenous peoples as past and as part of the natural environment (if they do not become part of the modernising vehicle themselves). Such imaginaries drive continued colonial interactions with Arctic regions. Following Nuttall (2010), certain types of landscapes or geographic areas are more likely to fit into a frontier imaginary than others but are in one way or another seen as remote or peripheral relative to imagined centres and capitals. This dynamic can be seen at play in Norway, where governmental Arctic strategies have coined the term “the High North”, focused on centring the north as important to Norwegian identity and Norway’s place in the world (Steinveg and Medby 2020). Though these strategies always mention the people living in the north, they are mostly narrated from the south (ibid.). Across shifting governments, they remain focused on exploitation of the north’s “natural resources”, oil and gas, minerals, and more recently wind resources. The future in the north is seen as dependent upon industrialisation and exploitation of natural resources as vehicles for development, understood as increased revenue and population growth. An example of the growing policy interest in the Arctic in the last decades is the proliferation of Arctic Conferences, which since the 2000s have taken on a role at the science–policy–business interface (Steinveg 2021). Arctic Conferences are geopolitically significant, not just for policy formation but also for states making claims to be part of the Arctic and as a space of identity-building as Arctic states (Depledge and Dodds 2017). Arctic Frontiers in Tromsø is an example of this identity-building for the Norwegian state, hosted at UiT The Arctic University of Norway with partners from several Norwegian universities, research institutes, the Norwegian research council, and sponsored by major economic players including petroleum companies.¹ In the eyes of critics, the scholarly design of conferences such as Arctic Frontiers greenwashes its main reason: providing a space for businesses that include industries that have a high environmental, social, and cultural impact. The use of “frontiers” in the name speaks for more than just scholarly frontiers of knowledge: It plays into a colonial imagination of the Arctic as a white, adventurous no man’s land and connects it to frontier masculinities.

4. WHY FOCUS ON SÁPMI?

Conflicts about industrial development on Indigenous territory are well known all over the world. These conflicts are not necessarily between the Indigenous population and the non-Indigenous governments or industries, as there – as in all communities – at times exist different, and at times opposing, interests also inside Indigenous communities. Reindeer herders in Sápmi are a minority of a minority. The same is true for First Nation, Métis, and Inuit members that still rely to some extent on subsistence activities hunting, fishing, trapping, and gathering in Canada. These activities, however, have a cultural meaning that goes far beyond their economic significance or the number of people who are directly connected to them for subsistence. People continuing these traditional land-use practices are knowledge keepers and often also language keepers for their nations. Any encroachment on the land on which these activities depend are therefore also an encroachment on the material basis of Indigenous culture and language. Whilst most regions belonging to the Arctic are

currently undergoing change in similar ways (marked by climate change, increased geopolitical interest, and the potential for resource extraction, energy production, and tourism), they are also very different. Arctic states are, as mentioned above, different in their politics, legislations, and values. When discussing energy and resource extraction policies of “the Arctic”, it is therefore necessary to differentiate between different parts of the Arctic, and the way in which nation-states and their policies, colonial expansions, and present-day regulations interact with the Arctic regions and their inhabitants, particularly Indigenous groups. In Scandinavian Sápmi; Finland, Norway, and Sweden, there are national Sámi parliaments that differ in structure and political power. The Saami Council organises member organisations from across Sápmi, also including the Russian side where the Sámi people are significantly more marginalised. Unlike in the North American Arctic, the Sámi do not ask for sovereignty over specific territories or reserves, but increased self-determination and proper land rights in the regions that are part of Sápmi. On the Norwegian side, the Finnmark Commission and the Finnmark Estate is part of a decade-long effort to determine land rights in the northernmost part of Norway, but the work has thus far moved slowly. On the Swedish side, reindeer herding is defined as a “national interest”, but in practice several land-use conflicts over mining and forestry in Indigenous areas show that this is no guarantee of protection from impacts of resource extraction. Additionally, other Sámi traditional land-based practices like fishing or berry picking are not legally protected. Therefore, the majority of the Sámi population in Sweden has no access to Indigenous land rights. In Russia, only Indigenous peoples that are under a certain member number, live in certain areas, and practise their livelihoods in specific ways are defined as Indigenous peoples, and the Russian Sámi have not been treated well by the Russian state. The cross-border aspects of Sámi collaboration across Russia and the Nordics have been met with scepticism by Russian authorities, and activism for a Sámi Parliament on the Russian side led to accusations of subversive activities and separatism (Berg-Nordlie 2015). After Russia invaded Ukraine in February 2022, formal relations have been almost entirely wiped out. The Nordic countries are seen as some of the most egalitarian democracies in the world with fair decision-making and due process for infrastructural development. However, Norway, Sweden, and Finland have a history of internal colonialism² that continues in new and different forms today. The three Nordic countries all treated the Sámi population as inferior people who either should be segregated from or assimilated fully into majority society. When Norway gained its independence from Sweden in 1905, the cross-border reindeer herding was made difficult, and many Sámi lost their pasture lands when Sámi that were considered Swedish together with their reindeer herds were forcibly relocated from their summer homes in Northern Norway to Sweden, mostly the areas around Arjeplog, Jokkmokk, and Tärnaby. In all nation-states, the northern regions have been mined, logged, dammed for hydropower, and otherwise exploited for the gain of majority society, often at the expense of land, rights, and livelihoods of the Sámi population. Assimilation policies, displacement of communities, boarding schools, and loss of language were all part of the internal colonisation processes, the effects of which continue to this day. Similar patterns are recognisable across Arctic states, as varieties of colonial thinking continue to permeate imaginaries of the region. In this chapter, we have chosen to focus on cases from the western parts of Sápmi, to demonstrate the patterns, similarities, and differences in frontier thinking and its impacts on land and livelihoods in the north.

5. GREEN COLONIALISM AND EXTRACTIVISM IN THE ARCTIC

A new term that has recently gained prominence in research focusing on Sámi rights in the Scandinavian part of Sápmi is “green colonialism”. It was coined by Sámi activists and politicians before it was taken up in academia, most prominently by Eva Maria Fjellheim (forthcoming PhD thesis) and Susanne Normann (2021). Aili Keskitalo, former president of the Sámi parliament in Norway, refers to policies and practices around large-scale wind power facilities, mining for minerals

that are needed for the so-called “green shift”, and the planned “Arctic railway” as green colonialism. She has described green colonialism as “when colonialism has dressed up in nice green finery and we are told to give up our territories and our livelihoods to save the world because of climate change” (The Arctic Circle 2020). Like other colonial processes, Indigenous lands, rights, and livelihoods important for cultural continuity are taken, minimised, or endangered. The difference is that in the circumstances of green colonialism, this happens under the moral imperative of common good, namely, to fight climate change that threatens the world as we know it. The areas in question become “green sacrifice zones” (Zografos and Robbins 2020), where acts of violence are “erased, trivialized, naturalized, justified and rendered as innocuous or necessary” (Reinert 2018, 598). These mechanisms of constructing prettifying narratives continue a pattern of colonial Arctic history where forced displacement and domestication of Arctic Indigenous peoples, Indian residential schools, and large-scale environmental destruction for oil and gas extraction are all justified by narratives of the common good like the improvement of life conditions, education, or energy security. Knowledge gaps and misconceptions in majority society about Sámi reindeer herding leads to misunderstandings, seeing Sámi concerns about their further existence as reindeer herders as greed for compensation or an unwillingness to contribute to a “greener” future (Normann 2021). The colonial aspect of dispossession is made visible by several artists’ work in recent years, including Máret Anne Sara and Anders Sunna who both critique the Norwegian and Swedish states’ colonial policies in the 21st century in their art, and explore alternative strategies and alliances for Indigenous future-making. While the physical, social, mental, and cultural tolls of constantly increasing extractivism³ in so-called resource frontiers are by now well known all over the world (Kröger 2016), the effects of green colonialism are still under-researched and given less publicity. Using the need for sustainability as an argument against Indigenous livelihoods is, however, not new: a common trope in Norway is that there are “too many reindeer” on the tundra and that reindeer herding is unsustainably practised, which is used as a justification for forced reduction policies – even when the methods and data these decisions are based upon, and their inbuilt preconceptions, have been heavily critiqued (see e.g., Benjaminsen et al. 2015). Simultaneously, reindeer herders face increased encroachment from industrial developments, cabins, roads, and other infra structure, which comes in addition to the added stress of climate change adaptation (Skarin et al. 2015, Skarin and Åhman 2014). We now turn to examples of some of these industrial developments, and how they impact land use and Indigenous livelihoods in different ways.

6. MINERAL EXTRACTION IN NORWEGIAN AND SWEDISH SÁPMI

Since the early 2000s, there has been an increase of mining activities or proposed mining projects all over Sápmi. The most well-known cases are the iron ore mining of LKAB in Giron (Kiruna) and the proposed copper mine by Nussir ASA that will deposit the tailings in the fjord in Riehppuvuotna (Repparfjord). Another, less-known, case which can illustrate some of the reoccurring features in conflicts surrounding mining projects in Sápmi is the Násávárre case.⁴ In 2004, Elkem, a Chinese-owned company, applied for a concession to mine quartz at Násávárre. The border between Sweden and Norway crosses Násávárre, and the whole area is in use for reindeer herding by both Swedish and Norwegian Sámi reindeer herding units. Quartz as a raw material is needed for the metallurgical production of ferrosilicon and silicon metal, materials that are needed for solar cells, batteries, and more. It is therefore a raw material necessary for a “green shift”. The quartz found in Násávárre is amongst the purest in the world, which makes refining less energy-intensive. There is a refinery not far from the proposed extraction site, which cuts down transportation costs and related environmental impacts, even though there is no access road to the site of the proposed location of the mine.

However, Násávárre is also an important reindeer grazing area and on traditional Sámi reindeer herding territory. The proposed location for the mine is in an area that is used for both winter and summer pasture, as well as calving ground. The calving period is one of the most sensitive times of the year where reindeer herds are extremely vulnerable to disturbance. There are no eligible alternative grazing pastures for the herders, and if the mine is realised it will mean a major risk for the mixing of herds with neighbouring districts, decline of animal well-being and health, or losing reindeer that get away from their herds. Even with mitigation measures like building fences and pausing extraction for some weeks during calving season, Sámi reindeer herders expect that the mine is not compatible with reindeer herding at Násávárre, and that at least one community would be forced to discontinue reindeer herding. Due to a disputed municipal land regulation process and contested environmental impact assessments (EIA), the basis for consent-based decision-making was not given. The conflict between Sámi land right holders and Elkem peaked in 2017 when Elkem threatened to file an expropriation motion, whilst simultaneously promising further funding for EIAs if consent was given in advance. When the reindeer herding communities did not agree and insisted on their right to free, prior, and informed consent (FPIC), Elkem indeed asked for expropriation. As at the time of writing, March 2023, the decision is still pending. Násávárre is in many aspects an in-between place, which is a typical characteristic of frontier spaces (Rasmussen and Lund 2018, 390). It is, as mentioned, a border area between Sweden and Norway, and since the early 2000s, cross-border reindeer herding between these two countries is not clearly legally regulated. The former Reindeer Grazing Convention, which had been in force since 1972, expired in 2002. Sweden and Norway could not agree on the terms of a new convention before 2009, but this new convention was never ratified by the Swedish Parliament. The legal status of reindeer herders in the cross-border area of Norway and Sweden is thus a legal grey space, at the same time as it is highly regulated by both national and international laws. As is typical for (Arctic) environmental and natural resource regulations on Indigenous territories, Násávárre and its surrounding area is in a multi-level governance situation that can be hard to navigate for reindeer herders and local bureaucrats alike. Raitio et al. discuss this complexity in the context of Sweden, identifying the following regulations: international law on Indigenous peoples' rights; national law on Sámi and reindeer herding rights; national law on mining and permits related to the environment; and implementation and bureaucratic practices by public authorities (Raitio et al. 2020, 2). Historically, the making of nation-states, drawing of borders, and related conventions that controlled border crossing have been colonial tools all over the Arctic and other colonised Indigenous territories. The Reindeer Grazing Convention of 1919 between Sweden and Norway that specifically regulated the access to the regions of Troms fylke and Nordlands fylke in Norway and Norrbotten län, Västerbottens län, and Jämtlands län in Sweden, for example, led to the forced migration of several Swedish Sámi communities in the 1930s. On the Norwegian side, the municipality holds an important role through the Planning and Building Act, where they can set aside areas for certain purposes. What is often not appreciated in full is the limitations of their power at later stages in a process: a "yes" to an impact assessment often means a "yes" to the mine itself, as the decisions at the later stages after the EIAs are done happens at a higher level of governance (Dannevig and Dale 2018). Furthermore, the lack of political representation of migrating reindeer herders on the municipal level means they have less of a say in the democratic processes at the local level (Nygaard 2016). As herders have pastures in several municipalities, and as in the Násávárre case at times in several nation-states, this poses a problem for due recognition of their rights and continued use of the areas they depend on (Dale and Dannevig 2023). Consultation with stake and rightsholders and "interests" is a legal requirement, but in both the Nussir and the Násávárre case we see that practitioners of Indigenous livelihoods have not been

given a final say in a yes or no to the mining project as they would if the framework of FPIC was followed.

7. HYDROCARBONS IN THE NORWEGIAN ARCTIC

Compared to other Arctic states, petroleum exploration in the Norwegian Arctic is happening in a more temperate environment due to the presence of the Gulf Stream. Exploration activities in the southern parts of the Barents Sea were first initiated in the 1980s but concerns over a vulnerable (local) environment in the oceans and a political will to regulate the pace of exploration on the Norwegian continental shelf led to a pause of nearly 30 years (Ryggvik and Smith-Solbakken 1997). Distance to existing infrastructure has also been an important reason for this late development, with no pipelines for gas stretching this far north. With new areas becoming available for petroleum exploration, the Norwegian government's renewed interest and expansion of petroleum exploration has been termed "opportunistic adaptation" to a changing climate, seeking to profit on the opportunities created by receding ice (Kristoffersen 2015). The first petroleum project to be approved in the Barents Sea was the gas project Snøhvit, with Equinor as operator. As the first field in the Barents Sea, its approval was rife with controversies. Concerns over climate change and local environmental impact led to protests from Nature and Youth and other environmental NGOs, as it was approved before the new regulations in the Integrated Management Plan of the Barents Sea and Lofoten areas, which was in process at the time. The Norwegian government and the petroleum company Equinor (formerly Statoil) turned the environmental discourse on its head by arguing that Norway with its stringent environmental regulations should drill before Russia started in the Barents Sea, to set a responsible environmental standard (Jensen 2011). Snøhvit was approved in 2001, as an LNG facility located just outside the town of Hammerfest. Its construction turned the city into a boom town for petroleum in the north, which was followed by the oil field Goliat operated by Eni Norge (now Vår Energi), which was approved in 2009 and started production in 2016. Since then, the 23rd licensing round opened new and previously unexplored areas in the Barents Sea South East (BSSE) in 2016 and was subject to a lawsuit by environmental NGOs Greenpeace and Nature and Youth, who claimed the licences were invalid. The state won this case in the Supreme Court in 2020, but six youths took the case to the European Court of Human Rights in 2021, where it is still pending at the time of writing. Whilst no viable fields have been discovered in the BSSE, two new fields outside West Finnmark are planned, both of which will be operated by Equinor as many other companies have pulled out of the region. Whilst petroleum developments are largely located offshore, the onshore elements of such operations bring with them numerous onshore impacts. For the municipality in Hammerfest, the property tax has led to a boost in yearly income, which the municipality has channelled into infrastructure for the town's inhabitants; schools, kindergartens, and a landmark cultural centre. It has also generated optimism in the town, but for the surrounding regions the petroleum developments have been a disappointment as the activity is centred around Hammerfest and does not ripple out into neighbouring municipalities in a way that they had hoped when the industry entered two decades ago (Dale 2018). The onshore activity means land has been set aside which was formerly used for reindeer herding. Increased traffic leads to disturbances for the herders whose summer pastures are on the Fåla island. A power grid with capacity to electrify the LNG production will further encroach on reindeer pastures in larger parts of Finnmark, whilst plans for a blue hydrogen facility will claim important coastal pastureland. Cumulatively, petroleum development and other related industries encroach on areas important for traditional livelihoods and cultural practices in the West Finnmark region, as predicted in a report commissioned by the International Centre for Reindeer Husbandry during the development of Snøhvit (Vistnes et al. 2009). Furthermore, the tone in public debate is harsh, with reindeer herders frequently accused of standing in the way of development and prosperity. Those who oppose or are critical of industrial

development and the jobs it supposedly will bring are mostly framed as “outsiders”, even when they are from the region in question and some of coastal Sámi heritage themselves (Dale 2019).

8. HYDROPOWER AND WIND POWER IN NORWEGIAN SÁPMI

In Sápmi, hydropower has caused much upheaval and conflict as the damming of rivers have flooded and altered large land areas. Sweden’s development of hydro power in the 1900s led to large-scale displacements of families and herds that still affect families and livelihoods in Sápmi today. On the Norwegian side of Sápmi, struggles over the Alta hydropower development led to one of the biggest political mobilisations in Norwegian environmental history, which came to a head in 1979–82. The aftermath of these events led to a greater recognition of the rights of the Sámi people, including the first Sámi rights committee (Samerettsutvalget), the formation of the Sámi Parliament, and other political processes concerning Indigenous rights to land and culture on the Norwegian side of Sápmi (Minde 2003). Large-scale hydropower development in Norway came to an end after the Alta struggle. More than 90 per cent of Norway’s electricity has been supplied with renewable electricity from hydropower, but a push to develop more renewable energy to meet a projected demand for electrification and export (in the transition from fossil fuels) led to the design of incentive systems and a flurry of project applications in the 2010s. Many of these projects took a long time to develop, and with their construction an increasing controversy around wind power has emerged across Norway (Inderberg et al. 2019). Several wind power plants have been constructed or are proposed in Sámi areas, displacing traditional users of the land and posing a threat to the future of traditional reindeer herding and other traditional land use (cf. Normann 2021). In 2021 the Supreme Court in Norway stated two of the licences for wind power development in the Fosen region, at Storheia and Roan, were invalid. The wind power plants take up land which denies the reindeer herders the right to practise their culture, and therefore breaches Article 27 in the UN Covenant on Civil and Political Rights (Supreme Court judgment, 11 October 2021, HR-2021-1975-S). The judgment has based this conclusion on longer-term research on the impacts of construction and operation phases of wind power plants in Norway and Sweden, and the stress on the reindeer and behaviour of avoidance which means that the grazing land is in practice lost for the herders (ibid.). Though the Fosen region is formally outside the Arctic, the verdict sets an important precedent for traditional land use and human rights for Sámi reindeer herders in Norway. To increase the legitimacy of wind power projects in Norway, the government has proposed revisions to the legal framework which will grant more power to the local communities and ensure the municipality receives a larger share of the returns for giving up parts of their land areas for industrial development. With legislative changes to the licensing process, the municipality’s role and influence over the process will increase. As for mining projects, this is no guarantee that Indigenous land use is recognised, whether for reindeer herding or other forms of nature-based cultural practice (see Nygaard 2016) as it has not yet developed a way to include land use across municipal borders in decision-making. Within some parts of Sápmi, wind power development has been declared unwanted by local municipalities, such as in Narvik in Nordland County. In Finnmark, the situation is different. Finnmark county council has a long-term wind power plan where they aim to develop more of the region’s “wind resources”, possibly linked with hydrogen production and other industries (Finnmark fylkeskommune 2013), and many municipalities in East Finnmark are positive towards wind power development. One of the current wind farms, the Raggovidda wind farm in Berlevåg municipality, was initially seen as a “conflict-free” project in the media with good dialogue between the reindeer herders and the developer before construction, but reindeer herders have experienced difficulties in their work because of the wind turbines and oppose further development in the region (Wormdal and Lieungh 2016). Another example is the Davvi project, which is proposed in a part of Lebesby municipality that is also used by people who live in the neighbouring municipalities of Tana and Porsanger, as well as affecting several

reindeer herding districts. Initially a portion of the wind power plant was planned in Tana municipality's area, but as Tana no longer welcomes the development, the company has removed that part of the area from its plans. This means people living in Tana will have to live with the same negative impact on the landscape, but none of the potential monetary compensation that Lebesby's inhabitants will receive if the project is realised. Simultaneously, the reindeer herders affected by the proposed project are mostly registered in Karasjok municipality, and are thus not included in the municipal deliberation process. In both the Raggovidda and Davvi cases, coastal municipalities are hoping for income, jobs, and development based on new industries, but these industries demand land that displaces other livelihoods and cause conflict between majority and minority populations, and sometimes also between minority and minority (coastal and reindeer herding Sámi). Such problems again pose questions of representation and recognition in licensing processes, and of what a just transition is to entail for Indigenous communities (Dale and Dannevig 2023).

9. WHERE TO IN THE FUTURE?

As a growing international interest in the Arctic and a melting of the ice exposing the Northern Sea Route between Asia and Europa is currently underway, new Arctic imaginaries are emerging. China's Arctic White Paper (2018) on a Polar Silk Road for international shipping and trade, and China's positioning as a stakeholder in Arctic affairs, is but one example for this. Furthermore, geopolitical events in Europe, notably Russia's invasion of Ukraine in February 2022, have led to increased focus on long-term decarbonisation in the EU to become independent of Russian gas (but also an internal focus in petroleum-producing Arctic states like Norway and the US to increase production for export). In the medium to long term, technologies like hydrogen production (both from petroleum and renewable energy) are receiving attention, alongside the mining, wind, and petroleum projects discussed in this chapter. There is, then, reason to believe interest in resource extraction and pressure for "development" of the Arctic's resources will increase rather than decrease in the years to come. Conflicts that arise from specific industrial projects, whether mining, petroleum, or "green" energy, need therefore to assess the cumulative impacts, not only the specific project proposed. Any potential project needs to carefully consider what is at stake and for whom, both in the present and in the future, which history/ies have led to the situation, and which competing rights and interests exist, both on a micro and on a macro scale, going from local land users and residents towards

international corporations and nation-states. The projects we have discussed in this chapter, as well as similar studies elsewhere in Sápmi and other parts of the Arctic, call for greater attention from policymakers, academics, journalists, and other members of civil society towards how governance mechanisms work and who holds decision-making power over land and livelihoods in the North. In particular, there is a need to focus on how governance mechanisms can be improved to ensure a fair process of development that includes cumulative impacts and local knowledge (see e.g., Kløcker Larsen et al. 2022). Alongside such a process, the idea of the Arctic as a "frontier" region should be replaced by a focus which centres people and sustainable livelihoods in more than rhetorical terms.

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NOTES

1. For a list of partners see www.arcticfrontiers.com/partners/.
2. For more discussion about the differences and commonalities between overseas and internal colonisation, see for example Coates and Broderstad (2020).
3. Durante, Kröger, and LaFleur define extractivism as “a particular way of thinking and the properties and practices organized towards the goal of maximizing benefit through extraction, which brings in its wake violence and destruction” (2021, 20).
4. Násávárre is the name of the mountain in Lule Sami. Northern Sámi, Pite Sami, and Ume Sami which are all in use of the region have different names. Here we follow Statens Kartverk’s choice of the name. The Norwegian name is Nasafjellet and in English Násávárre is called Nasa-mountain.

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