Preprint, forthcoming in special issue (BIPOC Europe) of Meridians: feminism, race, transnationalism in 2023

Is Reindeer the New Buffalo? Climate Change, The Green Shift and Manifest Destiny in Sápmi Rauna Kuokkanen

Keywords: climate change, settler colonialism, Green Deals, wind industry, reindeer herding, Sápmi

Abstract

In the nineteenth century prairies, the buffalo was nearly exterminated as the result of the European economic and ecological invasion. Today in Scandinavia, reindeer is being threatened by the renewable energy transition, also known as the Green Shift. The Green Shift has led to an explosion of wind industry in many countries, including Norway. Many of the onshore wind development projects have been built in areas central to reindeer herding. This article asks whether reindeer has become the new buffalo that is being sacrificed in the race to building green energies. It considers the history of viewing reindeer herding as a vanishing livelihood and the pervasive colonial discourse of manifest destiny, which sees Indigenous peoples as disappearing in the process of natural selection and progress. The article also examines the Feminist New Green Deal as an example of policy framework calling for a broader intersectional approach that places race, unequal relations of power, and Indigenous rights at the heart of policy-making. It considers whether the FNGD is able to tackle and engage with the trajectories of settler colonialism, including manifest destiny and green colonialism. The article focuses specifically on Norway for its leading role in the energy transition and wind energy development in the Nordic countries.

Introduction

In 2016, well-known Sámi artist Máret Anne Sara, from a reindeer herding family, created an art installation called Pile'o Sápmi with 200 reindeer skulls as a protest against and symbol of the Norwegian government's decision of forced slaughter of reindeer to reduce the size of herds in Finnmark which were considered unsustainable. Pile'o Sápmi references the extermination of the buffalo in North America, where piles of buffalo skulls were a common sight at the height of the buffalo hunting era in the late 19th century. Sara sees similarities between the two countries'

policies; in the United States it was the white settlers' political strategy to destroy Indigenous peoples' source of living in that way, devastate them in order to access their lands (Skum 2021).

In the nineteenth century prairies, the buffalo was nearly exterminated as the result of the European economic and ecological invasion. For Indigenous peoples, the buffalo provided sustenance as the main source of food, and clothing. Tools and weapons made of buffalo bones. The same could be said about the reindeer for the Sámi people. Reindeer herding remains the backbone of Sámi culture even though not all Sámi are reindeer herders or own reindeer. In the past hundred years, the pressure of the settler colonial project of perpetual territorial acquisition has intensified in the Nordic countries. The reindeer pastures have continuously shrunk as reindeer herding as a livelihood is forced to make space to "competing land use practices" or "land use conflicts," as the common euphemisms go. Today, one of the threats to reindeer herding comes from the Green Shift and renewable energy transition, including the European Green Deal (2019) which aims to make Europe climate neutral by 2050. The Green Shift has led to an explosion of wind industry in many countries, including Norway. Many of the onshore wind development projects have been built in areas central to reindeer herding.

With a pledge of "leave no-one behind," the European Green Deal includes mechanisms such as the Just Transition and Social Climate Fund that seek to mitigate the negative effects of the decarbonization in most impacted regions. Generally, these measures fall short, however, on upholding Indigenous peoples' rights to their territories, livelihoods, and resources. Unlike the standard Green Deal proposals, the Feminist New Green Deal makes a number of important, critical interventions by calling for a broader intersectional approach that places race, unequal relations of power, and Indigenous rights at the heart of policy-making. This article examines the strength of the Feminist New Green Deal as an example of feminist climate policy through the case of Sámi reindeer herding in Norway. I argue that a central shortcoming of feminist climate policy is its failure to account for green colonialism; i.e., the development of extractive industries in the name of 'greening' the economy while disregarding the rights and well-being Indigenous peoples and local communities, including the norm of free, prior and informed consent (see Vanclay 2017). To fully grasp the trajectory of green colonialism and recognize just energy transition as a potential form of green colonialism, I consider whether reindeer has become the new buffalo that is being sacrificed in the race to building green energies. My point is not a detailed comparative analysis but instead, I

will limit myself to drawing loose parallels between the 19th century buffalo hunt in the Great Plains and today's reindeer herding in Norway, which will demonstrate the persistence and constancy of settler colonialism's logic elimination across time and space. My focus is on Norway because it is on the forefront of the Green Shift and has been most aggressively pushing for wind energy on reindeer herding territory.

The article begins by providing background on reindeer herding in Sápmi and the Green Deal policy framework. After a discussion of wind energy development and reindeer herding in Norway, I suggest that the current circumstances bear a resemblance to the discourse and policies of Manifest Destiny in the 19th century United States where the destruction of buffalo was a deliberate approach to force Native Americans to the reservation system. This section draws parallels between policies of the two states and demonstrates how reindeer herding has long been viewed and treated as a vanishing livelihood. It suggests that the intersectional feminist analysis of neoliberal, masculinist techno fixes of climate change is pertinent but largely fails to connect the critique of renewable energy with an understanding of historical and ongoing settler colonialism. The article argues that settler colonialism is not only a structure of perpetual disappearance of Indigenous *bodies* (Wolfe 2006) but also of perpetual disappearance of key sources of their physical and cultural *sustenance*.

Scholarship on wind energy on Indigenous peoples' territories is relatively sparse but growing rapidly. Previous research on Sámi reindeer herding and wind industry in Norway and Sweden has focused on the historical continuities of the state's failure to recognize Sámi land rights (Lawrence 2014), Sámi resistance to and representations in the wind industry (Ellingsen 2020; Normann 2021), impacts of wind energy development on reindeer behaviour (Skarin et al. 2015; Skarin et al. 2018), and cumulative effects and inadequate planning processes and impact assessments (Österlin and Raitio 2020). Other research has examined wind energy conflicts globally, including Indigenous defence of their territories in opposing wind development, as a form of civic engagement about the ways in which energy transition ought to occur (Avila 2018). The conflict between wind industry and Indigenous peoples in the coastal Isthmus in Oaxaca, Mexico has been studied through the lens of colonialism and the 'genocide-ecocide' nexus (Dunlap 2017b) and as a distortion of implementing free, prior, and informed consent (Dunlap 2017a).

The Nordic countries have not been conventionally considered settler colonial states but as I have argued elsewhere, not only settler colonialism as a structure of replacement is a historical and contemporary fact in Scandinavia but also settler colonial theory helps to understand the Nordic states' sometimes oppositional policies and procedures that amount to Sámi dispossession (Kuokkanen 2020b, 2020a). An example of settler colonialism's logic of elimination is the historical restructuring of Sámi reindeer herding siida structure (Magga 2018), a process of which has been deeply gendered. The scope of this article does not allow a detailed discussion of settler colonialism in reindeer herding. Suffice to say, the historical drivers in the capitalist mode of production that led to ecological destruction are the same that have caused climate change (cf. Crook and Short 2014, 299).

Reindeer herding in Sápmi

Approximately a quarter of the population (one million) in the Arctic belong to 40 different Indigenous peoples, half of whom are reindeer herding peoples. In the circumpolar region, there are approximately 2.5 million semi-domesticated reindeer and 100,000 reindeer herders, most of them in Scandinavia and Siberia. In Scandinavia, first wild and later domesticated reindeer has been important source of sustenance since the end of the last ice age. The roots of reindeer herding go back at least 1000 years and in Scandinavia, it has been among the most significant livelihoods at least for 400 years. The social and cultural significance of reindeer herding for the Sámi and many other Arctic Indigenous peoples cannot be overstated. For reindeer herding families, reindeer is their livelihood, way of life, identity, and culture.

In Sápmi, reindeer roam relatively freely in small herds for the most of the year. Reindeer herders' tasks include keeping the herds within their siidas or reindeer herding districts. The siida system is a traditional Sámi social, political and legal institution. The Sámi territory was historically divided into local autonomous territories called siidas that internally governed their own affairs. Gradually this system was eroded and finally superimposed by the state administrative structures such as municipalities. Reindeer herding in the Nordic countries is governed by reindeer herding acts that date back to the late 19th century and are amended periodically. Since the first legislative measures, the states have controlled reindeer herding, often to the contrary to reindeer herding traditions, practices and knowledge. The internal autonomy within reindeer herding has been

incrementally eroded and state control intensified, evident in the ever-increasing and accelerating encroachment of various industries and infrastructure initiatives on to territories central to reindeer herding.¹

In Norway and Sweden, only the Sámi people have right to own reindeer and practice reindeer herding. In each country, there are approximately 200,000 reindeer and 2500-3000 reindeer owners. In some parts of Sápmi, reindeer herding districts continue the traditional practice of annual migration with their herds between winter and summer pastures. Typically, reindeer is rounded up once or twice a year for calf marking, separating herds of different districts and slaughter although regional variations exist. Each reindeer is owned by a reindeer herder and ownership is indicated by a specific ear mark, each being a unique combination of small cuts based on a family line (Näkkäläjärvi 1996). In principle, reindeer is able to find its own food around the year but increasingly reindeer herders have had to provide supplementary feed especially when grazing conditions have deteriorated winter-time due to warming climate. People can control reindeer only to a degree. Herds follow learned migration routes and movement corridors which can be difficult to radically alter (Eira 1994; Oskal and Sara 2001).

In Norway, the reindeer herding region extends from the Finnmark county in the north to Trøndelag county in the south, covering approximately 40% of Norway's landmass. As a result of the cumulative, long-term effects of various forms of development (hydro, forestry, mining, tourism, infrastructure), reindeer grazing areas have been radically reduced and fragmented in the past century. In Norway, reindeer herding districts are today part of the public administrative system created by the Norwegian *Reindeer Herding Act*. The reindeer herding region is divided into 77 districts with set boundaries and boards elected by herders.

Reindeer herding is a highly resilient and adaptive traditional livelihood that extensively draws on highly sophisticated intergenerationally accumulated knowledge of the ecosystems, weather, snow and ice conditions, and animal behaviour. Throughout history, the principal adaptation strategy has been the flexible use of reindeer pastures (Brannlund and Axelsson 2011). At the same time, due to its dependency of large areas of good pastures and grazing conditions,

¹ For examples of similar processes of industry encroachment elsewhere in the reindeer herding region across the Arctic, see for example Degteva and Nellemann (2013), Stammler and Ivanova (2016), and Sidortsov et al. (2016).

reindeer herding is vulnerable to environmental, socioeconomic and land use changes that have been taking place for well over a century, including the loss of authority over traditional Sámi territories and the imposition of state reindeer management regimes in which the Sámi herders have had a limited say (e.g., Laula 1904; Magga 2018; Eira et al. 2018; Labba 2015).

Climate change is seen as particularly threatening to the future of reindeer herding for two main reasons. First, as the climate is warming in the Arctic much faster than the global average, environmental changes in many northern regions have been rapid and extensive, making it difficult to rely on previously acquired skills and knowledge of the land and weather (e.g., Bodenhorn and Ulturgasheva 2017). Second, the global transition from fossil fuels to renewable energies means a growing pressure to expropriate the remaining reindeer pastures for the green development and infrastructure projects. Recent scholarship has focused particularly on examining the impacts of climate change on and resulting challenges to reindeer herding (Jaakkola et al. 2018; Näkkäläjärvi et. al 2020) and resilience, vulnerability and adaptation strategies of reindeer herding practices to changing circumstances (Eira et al. 2020). Others have, however, suggested that the impact of climate change on reindeer pastures is a combination of negative and positive factors, whereas the impact of human intervention is invariably negative (Tyler et al. 2021).

Green New Deals

Solar and wind energy have been presented as a solution for climate change. The European Commission has established a set of policy initiatives aimed at making Europe climate neutral by 2050. Known as the European Green Deal, tabled in 2019 and approved by the European Parliament in 2020, the initiative is considered the roadmap to sustainable and resource-efficient economy. With a motto "Transforming the EU's economy for a sustainable future," it is regarded as a response to climate change and in its own words, "turning an urgent challenge into a unique opportunity" and "a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use" (European Commission 2019, n.p.). To achieve this, the EU needs to radically increase its ability to reduce greenhouse gas emissions, for the existing measures will amount to only 60% by 2050. Currently, 75% of the emissions are produced by the production and use of energy across various

sectors. In the energy transition, renewable sources play a pivotal role and particularly offshore wind production is slated as essential (European Commission 2019).

The US Green New Deal resolution was also introduced in 2019 by Congresswoman Ocasio-Cortez and Senator Markey (Galvin and Healy 2020). An extensive program combining climate change mitigation and reducing economic inequality, it advocates "just transition" that calls for a transition to renewable energy by 2030. Although the resolution was not advanced in the Senate in 2019, the Green New Deal continues to animate climate and domestic policy discourses in the United States. In 2021, in the wake of the racial reckoning and the subsequent resurgence of the Black Lives Matter movement of 2020, the Green New Deal has morphed into a number of initiatives and platforms grounded on intersectionality and calling for racial and climate justice. Among the most well-known is the Feminist New Green Deal (FNGD) that welcomes the basic premise of the New Green Deal but argues for a stronger cross-cutting approach and feminist principles to tackle historical oppressions such as the intergenerational effects of colonialism and anti-Black racism. FNGD calls for the leadership of women, particularly from disadvantaged communities, as well as Indigenous peoples, people with disabilities, LGBTQIAP+ people, people from the Global South, migrant and refugee communities, and youth.

FNGD outlines ten principles of engagement ranging from mainstreaming intersectional gender analysis, confronting institutional patriarchy and racism, centering Indigenous rights such as the free prior and informed consent, confronting unsustainable and exploitative systems of production, advancing reproductive justice, promoting local democracy and decision-making, and creating regenerative, feminist economies. The principle 8 calls for rejecting false and harmful responses and solutions to climate change that "fail to address root causes" and enable drivers of climate crisis to keep going while greenwashing their damages. Drivers include carbon trading, capture and storage, biofuels, nuclear power plants, natural gas extraction, mega-dams, geoengineering, and bioenergy. Such "technofixes" permit industries to "pay to pollute," displace smallholder and subsistence farmers, destroy biodiversity, food sovereignty, and livelihoods (Feminist Green New Deal 2019).

Overall, the Feminist Green New Deal's goals are laudable and welcome, considering the deeply ingrained hegemonic masculinity in the dominant climate change discourse, evident in progress narratives of controlling the future, the language of distanced scientific objectivity,

efficiency and performance, and even militaristic "muscle-flexing" (MacGregor 2009). In my view, however, there is a major unaddressed contradiction in FGND. On the one hand, FGND calls for a swift and just energy transition. On the other, it demands "binding legal recognition of Indigenous land rights, real enforcement of the vital framework of Free, Prior and Informed Consent" (Feminist Green New Deal 2019, n.p.).

The recent transition from fossil fuel resources to "clean" or "renewable" energy and investing in environmentally-friendly technologies is commonly known as the Green Shift. Norway has been at the vanguard of this energy transition and Norwegians take pride in being among the most environmentally friendly people in the world. The Norwegian government was among the first to tackle the greening of the transport sector and today, nearly 80% of new cars purchased are electric in Norway (Klesty 2021). The energy transition may decrease the dependency on fossil fuels but it establishes new dependencies on raw materials, such as rare earth metals, needed for electric car batteries, wind turbine rotors, and solar panels. In short, the production of "clean" energy does not eliminate pollution and negative environmental and social impacts but merely relocates them to other regions rendered as "sacrifice zones." This article suggests that reindeer grazing areas in Norway can be considered as such.

Wind Energy Development and Reindeer Herding

Globally, the wind industry has produced electricity for over hundred years, but in Norway it became more common at the end of 1990s. At the time, few reindeer herders knew much about wind industry, marketed as a clean and benign energy source. Initially, impact assessments on reindeer herding were hard to come by, and still today, consultants and others conducting the assessment typically have very little knowledge of reindeer herding, no Sámi language skills and their interaction with reindeer herders is inadequate. To properly assess the impacts requires not only extensive knowledge about the landscape, topography and ecology but about the ways in which reindeer use it (Lund et al. 2020, 17, 33-4). There is also a fundamental problem with legally required impact assessments by the industry-hired consultancy firms: it is not desirable to find reasons *not* to carry out the development project, given that money has already been invested in planning, surveying, etc. Identifying major environmental impacts or discovering valuable ecosystems in need of protection may jeopardize the permit. A number of reindeer herding districts

have reported conflicts with consultants and their inadequate or even incorrect impact assessments. As a recent example, the Norwegian Water Resources and Energy Directorate (NVE, Norges vassdrags- og energidirektorat) had conducted an impact assessment of a mega powerline construction in central Finnmark, one of the main reindeer herding regions in Norway, with minimal consultation of reindeer herders along the route, and by using as the basis of assessment information from *unrelated* cases involving *wild* reindeer in southern Norway and Alaska (Balto 2021). There are also cases where NVE has admitted failures in their assessments and nevertheless provided a permit without requiring a new assessment (Lund et al. 2020, 41).

In 2020, wind energy construction was booming in Norway. Over 100 wind industry initiatives have been granted permits by the government of Norway and nearly half had been constructed. According to a recent report, wind energy construction represents the biggest ever encroachment into the environment in the country's history (Lund et al. 2020, 3). The encroachment has been very rapid with new actors and often unsystematic regulations and procedures. About a half of the wind energy construction in both Norway and Sweden is taking place in the areas central to reindeer herding, largely without the free, prior and informed consent of the Sámi people (cf. Österlin and Raitio 2020). Cases where reindeer herding districts have agreed to wind energy development in their pastures fall in two main categories; those who were first to be confronted with wind industry and did not perceive the full scope of its impacts and those who felt they would not be able stop the entry and would be better off by agreeing to construction rather than going through involuntary expropriation. Many of those who did not know the full impact have regretted later. In a number of cases, the wind development has ended up being considerably larger scale than initially planned. In regions with no previous wind industry, unexpected consequences have arisen that were not foreseen in the assessment process. In others still, many wind energy developments have been given licences to expand their operations (Lund et al. 2020, 24).

Wind energy is not as environmentally friendly as has been commonly suggested, particularly when preserving biodiversity and conserving ecosystems and habitats are considered. This applies both to where raw materials for wind turbines, rotors, cables and generators are extracted and where they are installed. Wind industry on its own is extremely area-intensive. When considering the entire industrial system involved (roads and other infrastructure), the scale is even more sizeable. When installed in remote, previously uninhabited areas, roads and infrastructure

needed to be built to the site damage ecosystems (e.g., draining marshlands) and scar the land. In the Sállir reindeer district of the Troms region, Sámi woman and reindeer herder Risten Turi Aleksandersen points to the energy consumption and the CO2 footprint of the construction of wind energy. During construction, there is a lot of traffic of heavy machinery and detonations creating excessive noise, bright lights and dust. The cement foundations of the average 70-meter-tall towers require several meter deep chambers that are either excavated by diggers or detonated. According to Aleksandersen, the continuous construction traffic (including trucks delivering 50,000 liters of diesel per week) to the site for several months was incredibly disruptive to their livelihood. As 68 wind turbines and a service road have been completed, her family and others in the districts have lost large tracts of their winter pastures and calving areas (Anti 2021).

Wind turbines emit distinctive noise, generated by the machinery and rotation of the blades through the air. The turbines also emit low frequency infrasound, the effects of which on human or animal health are yet to be systematically studied. According to a study from Finland, 15% of residents living in the vicinity of wind turbines (within 2.5 km) reported symptoms with infrasound. The cause for the symptoms, however, have not been conclusively established (Turunen et al. 2021). Counter to industry arguments of the co-existence of reindeer and wind industry, studies show that wind turbines in operation frighten the reindeer – whether the sound, movement or shadows of the turbines on the terrain – and that the roads present an impediment for movement. When reindeer see moving blades, they usually turn away which means that pastures on the other sides of the development are not used, putting more pressure on diminishing pastures (Skarin et al. 2018). Wind turbines are also expensive to operate and last shorter than many other energy generators. The turbines occasionally break or are set in fire. Once in operation, the 50-meter-long rotating blades kill birds and insects. In winter, the blades may freeze, followed by loosening of ice that pose danger to wildlife and humans alike. Regulations regarding the disposal or recycling of rotors and other materials after their lifespan are lacking. This has led to simply leaving discarded blades laying on the ground (Lund et al. 2020, 18; Pérez and Pitron 2020).

The intrusion of various forms of development has resulted in the loss of pastures and/or closure of migration routes. Restrictions and closures of migration routes may result in the loss of reindeer, particularly during the spring migration before calving. With the diminishing pastures, there is a greater likelihood of herds moving to pastures belonging to the neighbouring districts and

merging with other herds. This in turn leads to increased work for reindeer herders and interference on the land such as additional roundups, additional herding or erecting fences. It also often leads to increased conflict between different communities and districts (Vistnes and Christian 2001; Skarin et al. 2015).

There are several court cases brought by Sámi reindeer herding districts against wind industry in Norway. Most well-known, a South Sámi community of Fovsen Njaarke in the Trøndelag region has been confronted with nearly 30 wind industry projects, considerably more than other districts. The first wind development was approved in the north of the district by Sámi herders under the impression that it will also be the last. In the west of the district, herders have ceaselessly opposed any construction and have criticized the impact assessments as flawed. They have appealed licences given to a number of wind initiatives, including to the UN Committee against Racial Discrimination which requested to halt construction until the case have gone through the court system but the Norwegian authorities turned blind eye. The construction was completed and the wind plant was opened in May 2020. Six plants in the region make up together an initiative known as Fosen Vind, the largest wind development in Norway (Nelleman 2017; Lund et al. 2020, 25-26).

Somewhat unexpectedly, the Fovsen Njaarke reindeer district won in October 2021 their case against Fosen Vind energy company in the Norwegian Supreme Court, which unanimously concluded that the expropriation of reindeer grazing areas by the energy firm and licenses granted by the state in 2013 were against the law. Specifically, the expropriation violated the right of the Sámi people to enjoy their culture under the Article 27 of the International Convention of the Civil and Political Rights.² As the Sámi demand the demolition of the wind turbines, the company plans to apply for new permits, and the government is unwilling to follow the Supreme Court decision. At the time of writing, it is unclear what will happen to the 151 wind turbines already in operation in the region.

Another court case involves a neighbouring South Sámi community and reindeer herding district, Jillen Njaarke which has filed a lawsuit against the Øyfjellet wind industry initiative that is

² For the main national and international legal frameworks and consultation requirements in Norway regarding wind industry vis-à-vis reindeer herding, see Ellingsen (2020).

in the process of constructing of a 72 turbine development in the Nordland region. In Norway, the Reindeer Husbandry Act provides the protection of migration routes. The Jillen Njaarke district argues that Øyfjellet violates the *Reindeer Husbandry Act* by disrupting the biannual migration and blocking a migration route. Without access to their winter pastures, the reindeer herders are forced to reduce the size of their herds, making reindeer herding not viable for some reindeer herders.

The two key points Sámi reindeer herders emphasize repeatedly include compensation and cumulative impact. It is not possible to compensate the lost pastures because money cannot buy new ones for there are no "extra" land or available pastures. The cumulative impact of multiple resource developments amount to a "death by thousand cuts": in the Jillen Njaarke case, the closure of the only remaining migration route by the wind development *after* all the others already have been destroyed by previous developments such as mining, hydro industry or forestry. Finally, the pivotal cultural significance of reindeer herding is rarely taken into consideration in impact assessments. Besides a livelihood, reindeer herding is the backbone of Sámi culture, inseparable from the language preservation especially in the South Sámi region such as Fovsen and Jillen Njaarke where the history of colonization and state assimilation policies have operated the longest and radically reduced the number of Sámi language speakers.

For Indigenous peoples, environmental harm frequently causes cultural harm, yet courts seldom recognize this (Tsosie 2007). For this reason, the Norwegian Supreme Court decision in the Fosen Vind case came as a surprise to all parties. Cultural harm refers to circumstances where Indigenous peoples' access to their culture and practices is prevented. Moreover, the loss of opportunity to practice one's culture is not compensable, another issue not well understood by courts (Tsosie 2007). Cultural harm is closely connected to the psychological impact of the continuous and growing threat to one's livelihood. Particularly in southern regions of Sápmi, suicide among younger reindeer herders has been on the rise for some time, due in part to the insecurity of the future prospects of reindeer herding (Nelleman 2017; Kaiser 2011).

Buffalo, Reindeer, and Manifest Destiny

For a long time, the Sámi were considered a primitive people destined to disappear through explicit and implicit assimilation policies and practices targeting the Sámi language and cultural practices. Concomitantly, reindeer herding was seen as an antiquated practice not viable in modern

society and economy and also fated to dissipate. From the late 19th century until the 1970s, the Norwegian state viewed reindeer herding as a vanishing livelihood and way of life. This period was called the "cession of reindeer herding" and coincided with the formal assimilation policies toward the Sámi. According to the policy, evident in court decisions, in conflicts between reindeer herding and other livelihoods in terms of land use, reindeer herding was required to give way to other forms of land use. No other livelihood was treated this way by the state (Lund et al. 2020, 42).

The first *Reindeer Herding Act* in Norway was passed in 1933 to manage land-use conflicts between reindeer herders and farmers by regulating pastures (Bjørklund 2016). The key objective of the 1978 *Reindeer Herding Act* was to "rationalize" reindeer herding by "optimizing meat production and increasing the income and welfare of pastoralists" (Johnsen et al. 2017, n.p.). By further entrenching the division into reindeer herding districts, established in 1933, the new legislation radically undermined the Sámi social organization, norms, and practises based on the siida system (Labba 2015). The 1978 Act also introduced controls to the number of herders and reindeer in each reindeer herding region and established national administration to educate and advice herders on "best practices" (Landbruksdepartementet 1976). Since its establishment, the reindeer herding administration has employed detailed studies and mathematical models that correlate reindeer weight and density of pastures for optimizing meat production and setting targets for optimal numbers. These targets must be met in order to qualify for subsidies and/or avoid fines (Johnsen et al. 2017).

During the era of "cession of reindeer herding," many reindeer herding Sámi were actively discouraged from continuing their family livelihood. Some of them still feel the pain of losing the connection to not only the livelihood but their language and culture. John Einar Eira, now in his sixties, relates how his teachers considered him "too smart" for reindeer herding and convinced his parents that, given there is no future in the livelihood, it would be better for Eira to continue his studies. The decision changed his life at the age of 11, as he had to move to another town away from his family and friends. Nevertheless, his heart has always been in reindeer herding. He still feels deep sorrow for not being able to fulfil his childhood dream of becoming reindeer herder and for the broken connection to his language, culture and reindeer herding skills. At the same time, it has been difficult for him to find his place in life outside reindeer herding (Anti and Anti 2021).

In the United States, white society's perceptions of Native Americans also changed drastically during the 19th century from noble savages living in harmonious, egalitarian societies to an inferior race destined for extinction. The Darwinian ideology of the survival of the fittest provided the settler colonial society with views according to which nature sanctioned the disappearance of the weak, while the real causes – colonialism, racism, and dispossession – resulting in the demise of Native American societies and economies were overlooked and dismissed.

Closely related to the survival of the fittest ideology was the idea of manifest destiny; divinely ordered fate of white settlers to expand and bring "progress" and "civilization" westward across the continent, while Native Americans' lot was to perish in the process of natural selection. These ideologies and representations of disappearance have played a critical role in eliminating Indigenous sovereignty and self-determination (Rifkin 2017, 5). They were also extended to the market. On the Great Plains, the market was heavily regulated in order to "open up the region's natural resources to economic development at the expense of Native Americans" (Isenberg 1992, 234). In this violent process, many Great Plains Indigenous societies switched their main source of living from agriculture to nomadic buffalo hunting, which made the disappearance of bison particularly devastating.

In the late 19th century US plains, Native American and European hunters slaughtered millions of bison for the growing domestic and international markets. The large-scale hunting of bison was greatly facilitated by several factors, including the introduction of the horse and rapidly changing political economy: competition, appropriation of natural resources for economic development, the growth of industrialization, and emergence of global markets. The near-extinction of the bison, however, was not a simple failure of resource management, driven by economic greed. The extermination of the buffalo was a means of domesticating Indigenous nations on the Plains. It was also a punishment for losses in the Sioux wars, such as Colonel Custer's defeat at the Battle of Greasy Grass (Nichols 2020, 2). Andrew C. Isenberg (1992) notes:

The eradication of bison from the Great Plains was not unforeseen, but purposeful. In order to pacify the Plains Indians, the federal government sought to exterminate the buffalo. As early as the 1830s, Indian agents on the upper Missouri River had warned that the numbers of bison were declining precipitously under the pressures of Indian and white hunters. ...

Despite mounting evidence that commercial hunters would soon render the North American

bison extinct, state and federal authorities acting on the recommendations of the Department of Interior and Army did not pass protective legislation until after the number of buffaloes had been reduced to a few hundred – that is, until so few buffaloes remained that nomadic Indians of the Plains abandoned the hunt and surrendered to the reservation system. (227)

Anticolonial writers have pointed out how one of the primary colonial strategies has been to target the women in the process of colonizing non-Western societies. Early colonizers recognized the crucial role of women in reproducing societies, not only through giving birth but as importantly, through collective identity, culture and language. Fanon (1967) noted the constitutive element of gender in the colonial conquest by identifying the strategy of targeting women as a central means in the consolidation of colonial control: "If we want to destroy the structure of Algerian society [and] its capacity for resistance, we must first of all conquer the women" (39). "Conquering the women" as a well-established practice of colonial settlers exposes the fundamentally gendered character of the colonial project from the start. The subjugation of Indigenous peoples sought by ideologies of manifest destiny was also gendered both structurally and in terms of its effects. It created a new set of gendered hierarchies and divisions of labor and redrew private/public distinctions. It particularly domesticated Indigenous women while placing men in dominant political and economic positions that in many cases were previously occupied by women (see Kuokkanen 2011). It also radically restructured traditional livelihoods, including bison hunt and reindeer herding.

In the Plains, the emergence of large-scale bison robe market led to a range of gendered social and cultural changes in Native American societies such as among the Blackfoot, where polygamy became common and the marrying age declined among women who were increasingly needed to prepare bison robes for trade. Buffalo leather was in high demand especially for making belts for industrial machinery (Isenberg 1992). The "modernization" of reindeer herding that began in the 1960s has also meant a growing mechanization and masculinization of the livelihood. In this process, reindeer herding Sámi women have been invisibilized and marginalized. The 1978 legislation eliminated the traditionally held right of ownership of women's own reindeer. Reindeer owning women were registered under their husband's names. This had ramifications ranging from who receives subsidies and grants to the status and recognition of women within the livelihood (Sámi Instituhtta 1979; Sárá 1990-1, 2003; Amft 2002).

Policies that effectively amounted to shutting many women out from reindeer herding has led to a number of women leaving reindeer herding as a viable source of living and moving to other livelihoods and occupations. Moreover, viewing reindeer herding only as a meat industry rather than a traditional livelihood deeply embedded in culture and language reduces women's roles in and contributions to reindeer herding invisible (Joks 2001). This has resulted in a situation where reindeer herding is often regarded as synonymous with men's activities, while in reality, women continue to "stand for much of the production and ... for a versatile management of the resources" (Eikjok 1992, 7; see also Buchanan et al. 2016).

The *Reindeer Herding Act* in Norway was amended in 2007 to reinstate women's status in the livelihood and to increase the internal autonomy and decision-making within reindeer herding districts. At the same time, state control continues to disregard Sámi herders' knowledge and management practices and skills and overlook the Sámi herders' right to be heard and consulted, a minimum standard codified in the legislative and policy framework in Norway (Johnsen et al. 2017; Eira et al. 2020). In 2017, the government's white paper on reindeer herding was strongly criticized by the Sámi Parliament, the National Sámi Reindeer Herders' Association, and a number of districts for actively continuing the assimilation policies that began with the reform in the 1970s (Johnsen et al. 2017).

The history of the struggle for Sámi land and resource rights goes back to the late nineteenth and early twentieth centuries. The first national Sámi conference in Tråante (Trondheim) in 1917 was organized largely due to the efforts and vision of Elsa Laula (1877-1930), a midwife from a South Sámi reindeer herding family and who later married a reindeer herder. In 2017, the Sámi gathered again in Tråante to celebrate the centenary of Sámi organizing as well as discuss current challenges, such as shrinking reindeer pastures. A hundred years later, some young Sámi reindeer herders suggest that not much has changed since Laula's times and struggles. Jovsset Ánde Sara (artist Máret Anne Sara's brother from Guovdageaidnu) and Ina Therese Sparrok from Njaarke note the importance to celebrate the hundred years of Sámi resistance but question the achievements: they and their families continue to struggle with the exact same problems than Laula and her contemporaries; that is, the dispossession of their traditional territories (NRK 2017).

As broad policy frameworks, the Green Deals do not explicitly advance manifest destiny ideologies but they also do not reject them. While the Feminist New Green Deal repudiates false or

Preprint, forthcoming in special issue (BIPOC Europe) of Meridians: feminism, race, transnationalism in 2023

harmful climate change responses and solutions and demands binding recognition of Indigenous land rights, including the enforcement of norm of free, prior and informed consent, it nevertheless calls for a "swift and just energy transition." This article has showed the difficulty of squaring the conflicting goals of Indigenous land rights and "swift and just energy transition" in Sámi reindeer herding.

Dispossession through Green Deals?

Henrikke Sæthre Ellingsen (2020) suggests that Norway's policies disenfranchising the Sámi are a result of the state's ignorance of reindeer herding. In my view, the ignorance argument is not only far too benign but also overlooks the basic premise of settler colonialism: the dispossession of Indigenous peoples in the pursuit of the access to the land. Ellingsen does not disregard colonialism in Sápmi; she recognizes how its long existence continues today in the form of green colonialism. She further suggests that a large part of the problem is that there is not "enough knowledge of how the reindeer herding works in the NVE or OED" (Ellingsen 2020, 92-3). It is beyond the scope of this article to assess the degree of reindeer herding knowledge of Norwegian authorities in charge of natural resources but evidently, the question of dispossessing the Sámi of their reindeer pastures is not new. Since Laula's time, there have been countless studies, reports, white papers and other information about reindeer herding circumstances; more than probably nobody is able to keep track of. For this reason alone, it is hard to accept that the dispossession of Sámi territories boils down to ignorance of the key government agencies.

A more plausible explanation is willful disinterest combined with a neoliberal, technocratic cost-benefit calculation involved in all economic development initiatives, including the Green Shift: which is more important, electrifying the Norwegian society in the name of addressing the climate crisis or an Indigenous Sámi livelihood and its accompanying language and culture? Considering the history of viewing reindeer herding as a vanishing livelihood and the pervasive colonial discourse of manifest destiny, it is not difficult to see which one loses in the calculations. What is

³ The Norwegian Water Resources and Energy Directorate, and Ministry of Petroleum and Energy, respectively.

more, the idea that knowledge or facts alone will prompt people or institutions to "do the right thing" has long been debunked in several fields, some suggesting that the core problem is not a deficit of information but power (Kearns 2021, "ClimateOne" 2021).

In the scramble of addressing the climate crisis, reindeer appears to have become the new buffalo. In the 19th century United States, the buffalo was sacrificed for the industrialization of the new nation and for gaining full access to the land the Plains peoples governed. Today, the livelihood of reindeer herding is being sacrificed for the energy transition. Settler colonial ideas of vanishing Indigenous peoples and manifest destiny have never ceased. They have shapeshifted into contemporary expressions of "giving way" and the "price we have to pay" in building a carbonneutral society. The Green Deals, including the FNGD, disregard the reality of conflicting policy objectives and the ways in which that reality is inextricably linked to the past policy making, and racist ideologies that continue to animate contemporary legislators. Such an oversight is not due to ignorance but a combination of refusal and incapability to tackle and engage with settler colonialism and the ways in which it informs the basic premises of contemporary societies and economies.

In the Plains, the buffalo was nearly exterminated because the central authorities deliberately turned blind eye to calls to prevent the slaughter. Extermination was also as a deliberate strategy of undermining Indigenous sovereignty. Today, the authorities in Norway turn blind eye to calls to prevent the elimination of the already fragmented reindeer pastures. Some may argue that the destruction of reindeer herding is not deliberate but "merely" an unfortunate casualty of the green energy development. In both cases, the sacrifice is driven by policies and legislation informed directly or indirectly by manifest destiny, the core ideology of settler colonialism according to which Indigenous peoples and their livelihoods are seen as perpetually disappearing as part the natural law of progress. This process has always been gendered in terms of its structure and effects. Moreover, looking through the prism of multiple trajectories and ideologies of settler colonialism, the difference between a purposeful destruction and "casualty of development" is ultimately not that significant because the end result is the same: the dispossession and the elimination of Indigenous peoples. As this article has argued, settler colonialism is not only a structure of perpetual elimination of Indigenous bodies but also of perpetual elimination of key sources of their material and cultural sustenance.

List of References:

- Amft, Andrea. 2002. Sápmi i förändringens tid. En studie av svenska samers levnadsvillkor under 1900-talet ur ett genus- och etnicitetsperspektiv. Dissertation. Kungälv: Grafikerna Livréna.
- Anti, Ánne Biret. 2021. "Go doarrumis ii leat šat ávki." Ávvir, 1 Feb., 2021.
- Anti, Ánne Biret, and Kila Anti. 2021. "Mu váibmu leamaš boazodoalus ja doppe dat bissu." *Ávvir*, 11 June, 2021, 8-11.
- Avila, Sofia. 2018. "Environmental justice and the expanding geography of wind power conflicts." *Sustainability Science*, 13 (3): 599–616.
- Balto, Alice. 2021. "Kárášjoga gielda hilgu oalát monsterlinjjá huksema: Mearrádusas dehálaš mearkkašupmi." *Ávvir*, 27 May, 2021, 4-5.
- Bjørklund, Ivar. 2016. "Fra formynder til forhandler: om inngrep, konsekvensanalyser og 'balansert sameksistens'." In *Samisk reindrift, norske myter*, edited by T. A. Benjaminsen, I. M. G. Eira and M. N. Sara, 177-193. Bergen: Fagbokforlaget.
- Bodenhorn, Barbara, and Olga Ulturgasheva. 2017. "Climate strategies: Thinking through Arctic examples." *Philosophical transactions of the Royal Society of London. Series A: Mathematical, physical, and engineering sciences* 375 (2095).

 https://doi.org/10.1098/rsta.2016.0363.
- Brannlund, Isabel, and Per Axelsson. 2011. "Reindeer management during the colonization of Sami lands: A long-term perspective of vulnerability and adaptation strategies." *Global Environmental Change-Human and Policy Dimensions* 21 (3): 1095-1105. https://doi.org/10.1016/j.gloenvcha.2011.03.005.
- Buchanan, Astri, Maureen G. Reed, and Gun Lidestav. 2016. "What's counted as a reindeer herder? Gender and the adaptive capacity of Sami reindeer herding communities in Sweden." *Ambio* 45 (3): 352-362. https://doi.org/10.1007/s13280-016-0834-1.
- "ClimateOne," 25 Nov., 2021, in *Rewind finding the heart to talk about climate*, 52:43, https://www.climateone.org/audio/rewind-finding-heart-talk-about-climate.
- Crook, Martin, and Damien Short. 2014. "Marx, Lemkin and the genocide–ecocide nexus." *The International Journal of Human Rights* 18 (3): 298-319. https://doi.org/https://doi.org/10.1080/13642987.2014.914703.

- Degteva, Anna, and Christian Nellemann. 2013. "Nenets migration in the landscape: impacts of industrial development in Yamal peninsula, Russia." *Pastoralism: Research, Policy and Practice* 3 (15). http://www.pastoralismjournal.com/content/3/1/.
- Dunlap, Alexander. 2017a. ""A Bureaucratic Trap:" Free, Prior and Informed Consent (FPIC) and Wind Energy Development in Juchitán, Mexico." *Capitalism Nature Socialism* 29: 1-21. https://doi.org/10.1080/10455752.2017.1334219.
- ---. 2017b. "The 'solution' is now the 'problem:' wind energy, colonisation and the 'genocide-ecocide nexus' in the Isthmus of Tehuantepec, Oaxaca." *The International Journal of Human Rights*: 1-24. https://doi.org/10.1080/13642987.2017.1397633.
- Eikjok, Jorunn. 1992. "The Situation of Men and Women in the Reindeerherding Society." *Diehtogiisá* 1: 7-8.
- Eira, Inger Marie Gaup, Anders Oskal, Inger Hanssen-Bauer, and Svein Disch Mathiesen. 2018.

 "Snow cover and the loss of traditional indigenous knowledge." *Nature Climate Change* 8

 (11): 928-931. https://doi.org/10.1038/s41558-018-0319-2.
- Eira, Inger Marie, Ole Magga, Mathis Bongo, Mikkel Sara, Svein Mathiesen, and Anders Oskal.

 2020. "The Challenges of Arctic Reindeer Herding: The Interface between Reindeer Herders

 Traditional Knowledge and Modern Understanding of the Ecology, Economy, Sociology and

 Management of Sami Reindeer Herding."
- Eira, Nils Isak. 1994. Bohccuid luhtte. Gulahallat ja ollášuhttit siidadoalu. Guovdageaidnu: Dat.
- Ellingsen, Henrikke Sæthre. 2020. "Resistance to Wind Power Development in Norway: Exploring Power, Knowledge Production and Injustice at Fosen and Frøya." MSc Thesis MSc Thesis, Institute of Sociology and Human Geography, University of Oslo.
- European Commission. 2019. Communication from the Commission. The European Green Deal. European Commission (Brussels).
- Fanon, Franz. 1967. "Algeria unveiled." In A dying colonialism, 35-67. New York: Grove Press.
- Feminist Green New Deal. 2019. "A Feminist Agenda for a Green New Deal." http://feministgreennewdeal.com/principles/.
- Galvin, Ray, and Noel Healy. 2020. "The Green New Deal in the United States: What it is and how to pay for it." *Energy Research & Social Science* 67: 101529.

 https://doi.org/https://doi.org/10.1016/j.erss.2020.101529.

- Isenberg, Andrew C. 1992. "Toward a policy of destruction: Buffaloes, law, and the market, 1803-83." *Great Plains Quarterly* 12 (4): 227-241.
- ---. 2000. The Destruction of the Bison: An Environmental History, 1750-1920. Cambridge University Press.
- Jaakkola, Jouni J. K., Suvi Juntunen, and Klemetti Näkkäläjärvi. 2018. "The Holistic Effects of Climate Change on the Culture, Well-Being, and Health of the Saami, the Only Indigenous People in the European Union." *Current Environmental Health Reports*. https://doi.org/10.1007/s40572-018-0211-2. https://doi.org/10.1007/s40572-018-0211-2.
- Johnsen, Kathrine I., Svein D. Mathiesen, and Inger Marie Gaup Eira. 2017. "Sámi reindeer governance in Norway as competing knowledge systems: a participatory study." *Ecology and Society* 22 (4). https://doi.org/10.5751/ES-09786-220433.
- Joks, Solveig. 2001. *Boazosámi nissonolbmot guovddážis báike- ja siidadoalus, muhto vajálduvvon almmolaččat.* Vol. 5.*Diedut.* Guovdageaidnu: Sámi Instituhtta.
- Kaiser, Niclas. 2011. "Mental health problems among the Swedish reindeer-herding Sami population in perspective of intersectionality, organisational culture and acculturation." PhD diss., Department of Clinical Sciences, Division of Psychiatry, Umeå University.
- Kearns, Faith. 2021. Getting to the Heart of Science Communication. A Guide to Effective Engagement. Washington, DC: Island Press.
- Klesty, Victoria. 2021. "With help from Tesla, nearly 80% of Norway's new car sales are electric." reuters.com. Last Modified 4 Oct. https://www.reuters.com/business/autos-transportation/tesla-pushes-norways-ev-sales-new-record-2021-10-01/.
- Kuokkanen, Rauna. 2011. "Indigenous Economies, Theories of Subsistence and Women: Social Economy as a Basis for Indigenous Governance." *American Indian Quarterly* 95 (2): 93-128.
- ---. 2020a. "The Deatnu Agreement: a contemporary wall of settler colonialism." *Settler Colonial Studies* 10 (4): 508-528. https://doi.org/10.1080/2201473X.2020.1794211.
- ---. 2020b. "Reconciliation as a Threat or Structural Change? The Truth and Reconciliation Process and Settler Colonial Policy Making in Finland." *Human Rights Review* 21 (3): 293–312.

- Labba, Kristina. 2015. "The legal organization of Sami reindeer herding and the role of the siida." In *Indigenous Rights in Scandinavia: Autonomous Sami Law*, edited by Christina Allard and Susann Funderud Skogvang, 141-153. Farnham: Ashgate.
- Landbruksdepartementet. 1976. Om lov om reindrift. Oslo: Landbruksdepartementet.
- Laula, Elsa. 1904. *Inför lif eller död? Sanningsord i de lappska förhållandena*. Stockholm: Wilhelmssons boktryckeri.
- Lawrence, Rebecca. 2014. "Internal colonisation and indigenous resource sovereignty: wind power developments on traditional Saami lands." *Environment and Planning D: Society and Space* 32: 1036–1053.
- Lund, Svein, Peer Gaup, and Piera Jovnna Somby. 18 July 2020. *Bieggafápmu vai boazodoallu? Fáddáraporta 3*. Motvind Norge & Ávjovári Luonddugáhttenlihttu (Guovdageaidnu).
- MacGregor, Sherilyn. 2009. "A stranger silence still: the need for feminist social research on climate change." *The Sociological review* 57 (s2): 124-140. https://doi.org/10.1111/j.1467-954X.2010.01889.x.
- Magga, Anne-Maria. 2018. "Ounastunturin terrori ja uudisasutus Enontekiöllä: Saamelainen poronhoito suomalaisen asuttajakolonialismin aikakaudella." *Politiikka* 60 (3): 251-259.
- Näkkäläjärvi, Klemetti. 1996. "Reindeer Earmarks as a Sami Cultural System." In *Awakened Voice. Sami Traditional Knowledge*, edited by Elina Helander, 81-94. Guovdageaidnu: Sami Institute.
- Näkkäläjärvi, Klemetti, Suvi Juntunen, and Jouni J.K. Jaakkola. 2020. *SAAMI Saamelaisten sopeutuminen ilmastonmuutokseen -hankkeen tieteellinen loppuraportti*. Valtioneuvosto (Helsinki).
- Nelleman, Christian. 2017. Utbygging av vindkraft i Fovsen-Njaarke/Fosen reinbeitedistrikt:

 Konsekvenser for reindriften i Sørgruppen. Med intervjuer av reindrift av Peer Gaup og Ol
 Johan Gaup.
- Nichols, Robert. 2020. Theft Is Property! Dispossession & Critical Theory. Duke University Press.
- Normann, Susanne. 2021. "Green colonialism in the Nordic context: Exploring Southern Saami representations of wind energy development." *Journal of Community Psychology* 49 (1): 77-94. https://doi.org/https://doi.org/10.1002/jcop.22422.
- NRK. 2017. Elsa Laula Renberg, kvinnen som samlet Sapmi. NRK.

- Oskal, Nils, and Mikkel Nils Sara. 2001. *Reindriftssamiske sedvaner og rettsoppfatninger om land. Reindriften i Finnmark*. Oslo: Cappelens forlag.
- Österlin, Carl, and Kaisa Raitio. 2020. "Fragmented Landscapes and Planscapes—The Double Pressure of Increasing Natural Resource Exploitation on Indigenous Sámi Lands in Northern Sweden." *Resources* 9 (104). https://doi.org/10.3390/resources9090104.
- Pérez, Jean-Louis, and Guillaume Pitron. 2020. The Dark Side of Green Energies. France.
- Piven, Ben. 2021. "Red Black & Green New Deal: Climate agenda for Black Lives Matter." aljazeera.com. Last Modified 25 May. https://www.aljazeera.com/economy/2021/5/25/red-black-green-new-deal-climate-agenda-for-black-lives-matter.
- Rifkin, Mark. 2017. *Beyond settler time. Temporal sovereignty and Indigenous self-determination.*Durham & London: Duke University Press.
- Sámi Instituhtta. 1979. "Boazosámi æmidiid bargodilálasvuodat. Flyttsamekvinnens arbeidssituasjon. Poronhoitossaamelaisnaisten työtilanteesta." *Diedut* 4.
- Sárá, Máret. 1990-1. "Reindeer herding women are oppressed." *Sáráhkká. Newsletter of Sami Women's Association*.
- ---, ed. 2003. Boazodoalloealáhusa nissonpolitihkalaš seminára. Seminar om kvinnepolitikk in rendriftsnæringen, Raporta/Rapport. 10 Dec. 2002 Romsa/Tromsø. Alta:

 Boazodoallohálddahus.
- Sidortsov, Roman, Aytalina Ivanova, and Florian Stammler. 2016. "Localizing governance of systemic risks: A case study of the Power of Siberia pipeline in Russia." *Energy Research & Social Science*.
- Skarin, A., C. Nellemann, L. Rønnegård, P. Sandstrøm, and H. Lundqvist. 2015. "Wind farm construction impacts reindeer migration and movement corridors." *Landscape Ecology* 30 (8): 1527-1540.
- Skarin, Anna, Per Sandström, and Moudud Alam. 2018. "Out of sight of wind turbines—Reindeer response to wind farms in operation." *Ecology and Evolution* 8 (19): 9906-9919. https://doi.org/https://doi.org/10.1002/ece3.4476.
- Skum, Iselin. 2021. "Čájáhus sáhttá boktit garra dovdduid." Ávvir, 12 Aug., 2021.

- Stammler, Florian, and Aitalina Ivanova. 2016. "Resources, Rights and Communities: Extractive Mega-Projects and Local People in the Russian Arctic." *Europe-Asia Studies* 68 (7): 1220-1244. https://doi.org/10.1080/09668136.2016.1222605.
- Tsosie, Rebecca A. 2007. "Indigenous People and Environmental Justice: The Impact of Climate Change." *University of Colorado Law Review* 78 (4): 1625-1677.
- Turunen, Anu W., Pekka Tiittanen, Tarja Yli-Tuomi, Pekka Taimisto, and Timo Lanki. 2021. "Symptoms intuitively associated with wind turbine infrasound." *Environmental Research* 192: 110360. https://doi.org/https://doi.org/10.1016/j.envres.2020.110360.
- Tyler, Nicholas, Inger Hanssen-Bauer, Eirik Førland, and Christian Nellemann. 2021. "The Shrinking Resource Base of Pastoralism: Saami Reindeer Husbandry in a Climate of Change." *Frontiers in Sustainable Food Systems* 4. https://doi.org/10.3389/fsufs.2020.585685.
- Vanclay, Frank. 2017. "Principles to gain a social licence to operate for green initiatives and biodiversity projects." *Current Opinion in Environmental Sustainability* 29: 48-56. https://doi.org/https://doi.org/10.1016/j.cosust.2017.11.003.
- Vistnes, I., and Nellemann Christian. 2001. "Avoidance of cabins, roads, and power lines by reindeer during calving." *Journal of Wildlife Management* 65: 915-925.
- Wolfe, Patrick. 2006. "Settler Colonialism and the Elimination of the Native." *Journal of Genocide Research* 8 (4): 387-409.