Winds of Change

Discourse Collisions and Coalitions in the Fosen Vind Case

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Storheia windfarm, Åfjord, Trøndelag.

Abstract

I 2021 annullerte Høgsterett konsesjonane til to vindparkar på Fosenhalvøya i Trøndelag. Vindparkane blei vurdert som eit brot på dei lokale samiske reindriftssamane sin rett til "å dyrke sin eigen kultur", som er beskytta i artikkel 27 av Internasjonale konvensjon om sivile og politiske rettar. Rettssaka var ein del av ein langvarig konflikt der reindriftssamar, naturvernarar og lokalsamfunn opponerte mot vindkraftutbyggingar i Fosen-regionen. I denne oppgåva utforskar eg konfliktane rundt vindkraft på Fosen, med sikte på å identifisere og analysere dei ulike diskursane i saken.

Gjennom intervju med sentrale aktørar og omfattande analysar av saksdokument, identifiserer oppgåva tre hovuddiskursar i Fosen-saken. Den dominante Vind-vind-diskursen presenterer vindkraft som ei løysing på energi- og klimakrisa, og legg vekt på potensialet for økonomisk vekst og utvikling av næringsliv. Naturverndiskursen framstiller derimot vindkraft som ei årsak til naturøydelegging og tar til orde for redusert energiforbruk som eit berekraftig alternativ. Ein tredje diskurs omhandlar samiske rettar og framstiller vindkraftprosjekta på Fosen som ei form for landran og legg vekt på tilsidesetting av samiske rettar og reindriftskunnskap i konsesjonsprosessane.

Desse alternative diskursane peiker på behovet for å diskutere vindkraftutbygging som meir enn eit teknisk og økonomisk problem. Basert på funna i denne oppgåva argumenterer eg for at vindkraftmotstandarane på Fosenhalvøya bidrar til nødvendig og verdifull kunnskap om potensielle sosiale og økologiske konsekvensar av ei storstilt energiomstilling.

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Contents

1 Introduction

> *Every day since the ruling, we have lost more and more confidence that the rule of law protects the Saami people in practice. The fact that the wind turbines, power lines and construction roads are still standing, prevents the Fosen Saami from practicing reindeer herding in the traditional way for yet another winter. This is urgent! We will not stand to see the state fail to secure the livelihoods of future Sami generations!*

The words cited above were voiced by Elle Nystad (2023), leader of the youth organization of the Norwegian Sámi Association, shortly after a group of young Saami activists and environmentalists had occupied the lobby of the Norwegian Ministry of Petroleum and Energy. The date, 23. February 2023, marked 500 days since the Norwegian Supreme Court had annulled the licences of two wind farms in Fosen, Trøndelag. In the ruling, the construction of the wind farms was deemed a violation of local Saami reindeer herders' right to "enjoy their own culture" as is declared in the International Covenant on Civil and Political Rights, article 27. The demonstrators, intent on staying in the ministry lobby until promises of resolving the case were made from the Prime minister, bore signs with unambiguous messages: "Indigenous rights are not optional!" and "Baajh vaeride årrodh!" ("let the mountains live!"). In the following week, the demonstrations would grow into a large-scale lockdown of multiple ministries, with human rights campaigners and environmentalists chaining themselves to the entrances of government buildings. The protestors did not move until they were removed by police. On Friday, the week after the start of the demonstrations, prime minister Jonas Gahr Støre met with the reindeer herding families of Fosen and admitted that the wind farms constitute an ongoing human rights violation.

The demonstrations in the capitol marked the culmination of a conflict over wind power on the Fosen peninsula which has lasted almost 20 years. The Fosen Vind project consists of six wind farms; together they form the largest land-based wind power project in Norway, and one of the largest in Europe. The project plays an essential role in the Norwegian state's efforts to reduce its greenhouse gas emissions in accordance with international climate policy commitments. Furthermore, it represents a promising new frontier for industrial expansion and economic development. This project, and the social conflicts it has generated, is the central focus of this study.

In the last decade, there has been a "wind rush", with wind power accounting for the vast majority of new energy infrastructure in Norway. Between 2015 and 2021, the installed capacity of wind power has increased manifold, now making up about 10% of the energy production in Norway (Norwegian Ministry of Oil and Energy, 2021). This rapid expansion of wind power in Norway has been met with forceful opposition from local communities and interest organizations who argue that wind power is both harmful and unnecessary. The nature of wind power opposition is varied, with grievances ranging from concerns for local wildlife and biodiversity to complaints about noise pollution. In many cases, local communities have felt overlooked in the licensing processes for wind power projects, feeling that these processes fundamentally favour the interests of wind power developers. Another commonly expressed sentiment is that the wind farms, often dependent on foreign investment, do not benefit local communities. On the whole, a significant portion of the population have lost faith in the dominant narrative of wind power as a viable solution to the climate crisis and a catalyst for economic development (Totland, 2021).

The wind farms in focus in this thesis have also generated conflicts with indigenous Saami reindeer pastoralists. Two of the wind farms in Fosen, Storheia and Roan, are installed in areas that the Fosen Saami have used as reindeer pastures since time immemorial. Since the plans of wind power developments in Fosen were first announced in 2006, the Fosen reindeer herders have expressed worries over the effects the wind turbines will have on their reindeer herds. As alluded to in the opening of this text, Saami reindeer pastoralism is a legally protected form of cultural expression. Thus, when the wind power constructions in Fosen were given approval despite the Fosen Saami's complaints, they chose to take the case to court. After a long court process, in which the construction of the wind farms continued, the Supreme Court ruled the licences for the Storheia and Roan wind farms invalid. At the time of writing this thesis, nothing has been done to follow through the Supreme Court judgement. As a result, the Fosen Saami's struggle against the wind farms in Fosen continues.

In this struggle, the Fosen Saami have been joined by environmentalist organizations and local communities expressing concerns about the destruction of beloved natural landscapes. A broad coalition of wind power opponents has emerged from the Fosen case, challenging the dominant politics of wind power expansion. The resistance against the wind farms in Fosen has fundamentally changed the way wind power is framed. Rather than as a primarily technical and

managerial governance problem, wind power, and energy transitions more broadly, are increasingly discussed as a deeply politically contested issue with potential severe ecological and social consequences. The conflict over wind power in Fosen is not merely a clash of interests; it is a collision of fundamentally different worldviews and different ways of imagining a sustainable future. I have titled this thesis *Winds of Change* to reflect the many conflicting visions of sustainable futures present in the Fosen case. This thesis seeks to navigate these winds of change and explore the power dynamics between them.

1.1 Aims and Research Questions

This thesis takes the conflict over wind power in Fosen as its starting point. The Fosen case is an extraordinary case of wind power opposition leading to a Supreme Court case about human rights. It highlights the potential social and ecological consequences of a continued wind power expansion in Norway. Moreover, it raises important questions about who gets to have a say in policy decisions about energy infrastructure. I believe that researching this case can contribute to important knowledge about social and ecological consequences of low-carbon energy transitions.

The primary research question for this thesis is:

1. How are discourses on wind power development in Fosen, Trøndelag structured, produced, and situated geographically and historically?

What is more, I aim to investigate the relationships between distinct discursive positions and analyse the interplay between language, knowledge, and power in the case. I want to explore how knowledge is translated into power, potentially creating power asymmetries between the actors involved. A secondary research question therefore asks:

2. How are discursive power relations being enforced and challenged by the actors in the Fosen case?

Based on these two research questions the overall aim of this thesis is to identify, discuss and problematize the discourses of the Fosen case. I do so through a combination of different theoretical and methodological approaches. I draw on literature from political ecology, a sub-

discipline of geography, and science and technology studies, an interdisciplinary research field covering the relationship between society and science. This study's basic form is that of an exploratory case study. It asks the question "what is the Fosen case?", while acknowledging that this might mean different things to different groups of people. Through qualitative methods such as narrative and discourse analysis, it looks at how the Fosen case plays out as a battleground between different ways of knowing. These analyses are based on an in depth look at the case documents of the Fosen Vind licensing process as well as interviews with actors involved in the case. A combination of document analysis and interviews provides a broad text base for exploring the discursive structures of the Fosen case.

1.2 Chapter outline

In chapter two I present the background of the Fosen case, contextualizing the recent "wind rush" within Norwegian and international climate policies. I then discuss the increasing opposition to wind power developments in Norway and in Fosen. In the second section, I explain how political ecology literature has framed wind power expansion as potential hotspots for environmental justice issues. Finally, I position the Fosen case in a wider context by looking at some similar conflicts over wind power in other parts of the world.

Chapter three discusses the theoretical foundations of this thesis. I explain the interdisciplinary ambitions of this project and the advantages and limitations of this approach. Furthermore, I present the two bodies of literature that this thesis draws inspiration and insights from: science and technology studies (STS) and political ecology.

In chapter four, I present the research design for this study. I explain what is meant by the 'Fosen case' in this thesis and delimit the boundaries of the research. I then describe and discuss the two primary sources of data for this thesis: case documents and interviews. Next, I discuss the how the data was analysed and how the discourses of the Fosen case were identified. Finally, I reflect on some ethical challenges I have encountered during this project.

Chapter five tackles the primary research question and explores the discursive order of the Fosen case. The chapter is divided into three parts, each representing one of the discourses in the Fosen case. I start by describing the dominant Wind-Wind discourse, with its portrayal of wind power as a "win-win" by both reducing reliance on fossil fuels and providing economic

growth opportunities. I then discuss two counter-discourses that challenge this view, starting with the nature conservation discourse, which emphasizes the ecological downsides of wind farms and their surrounding infrastructure. Finally, I present the Saami rights discourse, framing the wind farms in Fosen as a human rights violation.

In chapter six I discuss the discourses presented in the previous chapter and take a closer look at how discursive power relations are negotiated between the actors in the Fosen case. Next, I consider the question of human rights and their (lack of) impact in Fosen. Finally, I point to the emergence of a powerful 'discourse coalition' between Saami rights campaigners and environmentalists.

2 Background and previous research

In this chapter I place the Fosen case in a broader context. I look at the motivations behind Norway's large-scale investment in wind power infrastructure, and how the rapid development has led to fierce opposition among local communities. Finally, I review political ecology literature on wind power conflicts in order to situate this thesis in a broader field of study.

2.1 The Great Wind Rush

From geopolitical instability to climate change, the crises facing the world today are many. In its sixth assessment report, the International Panel on Climate Change asserts that "[c]limate change is a threat to human well-being and planetary health" and that there is a "rapidly closing window of opportunity to secure a liveable and sustainable future for all" (Intergovernmental Panel on Climate Change, 2023). The urgency expressed in the report's findings cannot be understated. The impacts of a global temperature increase above 1.5 degrees over pre-industrial levels would be catastrophic, contributing to rising sea levels and an increased frequency of extreme weather events such as floods, heatwaves, and droughts. We have entered what Crutzen (2002) has titled the 'Anthropocene': the geological age of mankind.

The recognition of the impact of human activities on the climate system has set off a large-scale global effort to manage the coming crisis. The global energy system, still heavily reliant on fossil fuels, is one of the biggest contributors to greenhouse gas emissions. Fossil fuel burning releases greenhouse gases into the atmosphere which, when accumulated, increase the global temperature, causing dramatic changes to the planet's climate system. As energy consumption continues to rise, predominantly in the Global North, more greenhouse gases are emitted, further exasperating the effects of climate change.

Confronting these concerns, energy technologies such as hydro-, solar-, and wind power have emerged as promising alternatives to traditional fossil fuels like oil, gas, and coal. These technologies promise a stable energy supply without emitting greenhouse gases and without depleting the Earth of its limited fossil resources. The goal of transitioning from fossil fuels to renewable energy sources has therefore become a central piece of global climate mitigation efforts, both in national energy policies and through international cooperation. The idea of a transition to a "green" energy system is signalled in the United Nation's Sustainable

Development Goals, with goal 7 promising "affordable, reliable, sustainable and modern energy for all", and goal 13 assuring "urgent action to combat climate change and its impacts" (United Nations, 2015). Through international collaboration, technological advancement, and vast infrastructural transformations, the path will be paved for a sustainable and clean global energy system.

The Norwegian state has dedicated itself to joining these efforts through a number of international political commitments. Through participation in United Nation treaties such as the Kyoto Protocol (1992) and the Paris Agreement (2015), Norway has sought to position itself as a key player in international climate politics. With its membership in the European Economic Area, Norway is also a part of the European Union's framework for climate action. In a deal made with the EU in 2019, Norway has pledged to reduce national greenhouse gas emissions by 50 to 55 percent from the 1990 baseline within the end of the decade (Miljødirektoratet, 2023).

A key aspect of these transnational agreements is that they are based on a system that only accounts for each member nation's *domestic* emissions (Intergovernmental Panel on Climate Change, 2019). This is of particular significance for Norway, as a major exporter of oil and gas. Norway's contribution to global emissions far exceeds its domestic emissions, but this is not accounted for in the European Union and the United Nation's systems for calculating GHG emissions. Moreover, Norway is heavily reliant on the UN and the EU's system for carbon emissions trading in order to deliver on its carbon neutrality target. Clean Development Mechanisms allow Norway to increase domestic emissions by funding greenhouse gas-reducing projects in other countries. In this way, Norway can maintain its image as an "environmental pioneer" without having to constrain or dismantle the oil and gas sector (Anker, 2020).

The government's commitment to reduce domestic emissions is coupled with a promise of continued economic growth. Norway's Climate Action Plan for 2021-2030 is spearheaded by the headline: "A plan to cut emissions, not economic growth" (Meld. St. 13 (2020–2021)). Renewable energy technologies are heralded as the new frontier for industrial expansion that will allow Norway to "pursue an ambitious climate policy that will make it possible to achieve climate targets and at the same time provide a good framework for more jobs, greater welfare and sustainable growth of the Norwegian economy" (Meld. St. 13 (2020–2021)). Norway's

plan to tackle climate change is fundamentally about doing *more*, reflected in the title of the 2023 assessment by the Energy commission: "More of everything – faster" (NOU 2023: 3). Norway aims to meet its emission reduction targets by investing in development of new technology, rapidly expanding renewable energy infrastructure, and facilitating sustainable economic growth.

Wind power has become a central part of Norway's climate strategy to reduce domestic emissions. Wind power is a cheap, rapidly built and easily accessible renewable energy technology. With its long coastline filled with windy mountain plateaus, Norway's landscape is well-suited for wind power production. Although hydropower remains as the foundation underpinning the Norwegian energy system, wind power is seen as a newcomer offering great potential for increased renewable energy production (Vasstrøm & Lysgård, 2021). In *Energimeldingen* (St.meld. nr. 29 (1998-99)) from 1999, the Bondevik-government announced a modest goal of 3TWh worth of wind power production in Norway. Back then, wind power was considered too expensive and unproductive to warrant large-scale investment (Vasstrøm & Lysgård, 2021). However, the costs of constructing and maintaining a wind power plant has been greatly reduced, dropping nearly 40% between 2012 and 2019 (Skjærseth & Rosendal, 2022). Following Norway's adoption of the European Union's Renewable Energy Directive in 2009, in which Norway committed to increase its share of renewable energy, wind power became the preferred choice in development of new energy infrastructure. After a slow start, wind power production increased manifold between 2015 and 2021, now producing between 7-10% of the total energy production in Norway and accounting for the vast majority of new energy development projects (Norwegian Ministry of Oil and Energy, 2021; NVE, 2023).

The Fosen Vind project is a centrepiece of the Norwegian pursuit of a renewable energy transition. The project consists of six large wind farms in central Norway: Storheia, Roan, Geitfjellet, Hitra II, Kvenndalsfjellet, and Harbaksfjellet. All the wind farms are sited within Trøndelag, the fifth most populous county in Norway. Four of the wind farms, Storheia, Roan, Kvenndalsfjellet and Harbaksfjellet, are located in Fosen, a traditional region on the Fosen peninsula separated from the mainland by Trondheimsfjorden. The Fosen peninsula is home to an indigenous South Saami population, many of whom live off traditional reindeer pastoralist livelihoods.

When constructions were finished in 2020, the Fosen Vind project was the largest onshore wind power project in Europe, adding up to 278 wind turbines. Today, the installed effect of the wind farms is 1057MW, which accounts for about 25% of Norway's total wind power production (NVE, 2023). The wind farms are the result of a joint venture between public and private investors, with shares held by Statkraft (fully owned by the Norwegian state), TrønderEnergi (owned by 19 municipalities in Trøndelag), and a set of private foreign investors. For a full overview of the ownership structure of the wind farms in Fosen, see chapter 4.2.2. The map in Figure 1 shows where the wind farms are installed and that they are connected by a 420kV power line that connects the wind farms to the national grid. Roan wind farm is excluded from the map, as it was separated from the Fosen Vind project and established as an independent company named Roan Vind DA in 2021.

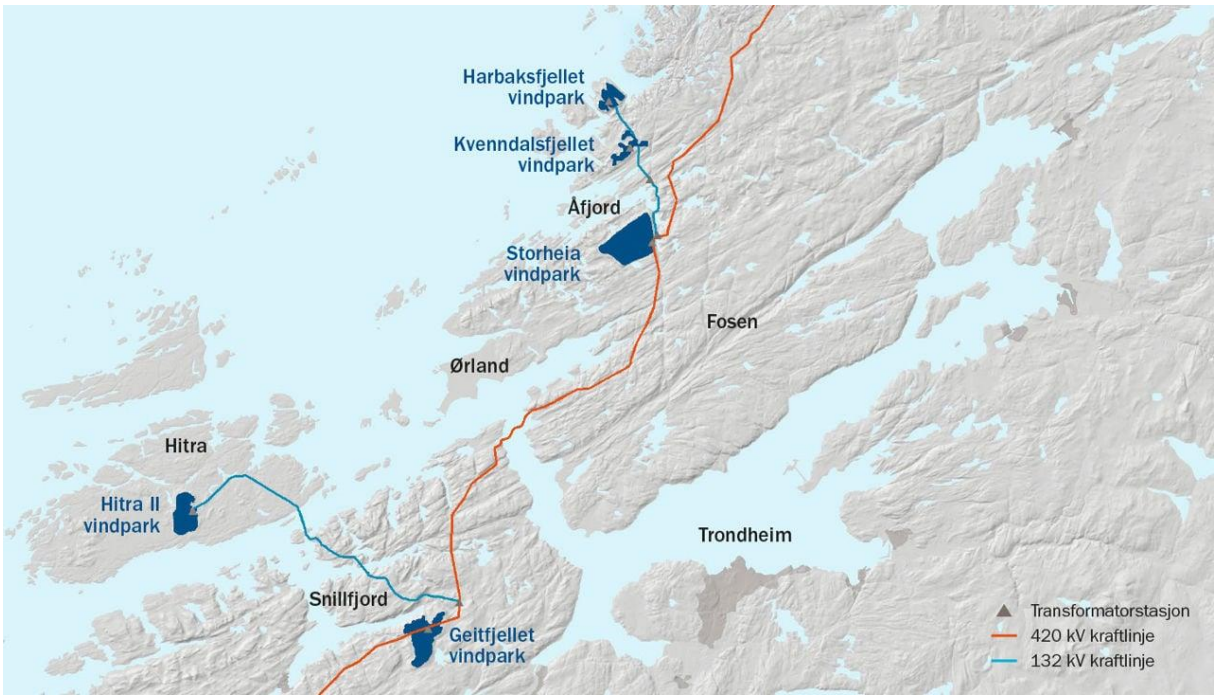

Figure 1: Map over Hitra II, Geitfjellet, Storheia, Kvenndalsfjellet, and Harbaksfjellet wind farms. Retrieved from Fosen Vind (2023)

2.1.1 When the Winds Turn

Since 2021, the 'wind rush' has come to a halt. Almost no new wind power plants have been installed in Norwegian landscapes in the last couple of years (NVE, 2023). This decrease in wind power development is largely due to the massive opposition that the rapid construction of wind farms has been met with. Local communities, municipalities, and interest organizations have complained about exclusive planning processes, feeling overrun by the powerful economic

interests backing rapid wind power development. From 2019 the opposition against wind power has become more organized. This was the year that Motvind, a nationwide organization dedicated to opposing wind power construction in Norway, was established. About a year later, the organization had almost 20000 paying members. Motvind's (2022) statement of intent summarizes the discontent of its members:

> "Motvind Norge works to halt the development of wind power plants in Norway, regardless of planning and development status, and strives to uncover, stop, or limit all consequences of wind power plants for nature, the lives, health, and rights of animals and humans, as well as other societal and commercial interests, the rights of national minorities, indigenous peoples, and reindeer husbandry."

Wind power opponents express a great variety of concerns, ranging from local wildlife and biodiversity to recreational values and wellbeing. What they have in common is a feeling that the views and worries of local communities are not being heard in wind power licensing processes.

According to Totland (2021), the introduction of *Nasjonal ramme for vindkraft* (National framework for wind power) marked the turning point when opposition against wind power skyrocketed. The report was created by The Norwegian Water Resources and Energy Directorate (NVE) on behalf of the Ministry of Petroleum and Energy (OED). It set out to identify the areas of the Norwegian landscape most suited for wind power developments and to contribute to knowledge about wind power and wind power conflicts (Jakobsen et al., 2019). The framework consisted of 21 reports employing combination of technical, economic, ecological, and social analyses, and the result was a map where large chunks of land were identified as suitable for wind power development. The project was, by all accounts, a failure with both wind power advocates and opponents disapproving of it (Totland, 2021). Even though the plan was eventually scrapped, it fuelled the opposition movement in Norway, particularly in regions that had been marked as potential sites for wind power.

As mentioned in the introduction, the Fosen case has introduced a new dimension to wind power opposition in Norway. The wind farms in Fosen were installed in areas that local Saami reindeer herders use as reindeer grazing pastures. Since the plans for wind power development in Fosen were announced in 2006, the Fosen Saami have expressed concerns about the effect the wind

turbines will have on the reindeer herding industry in the area. The turbines, and the accompanying construction roads and power lines, produce noise and physical obstacles that severely hinders traditional grazing practices. Reindeer pastoralism is an essential part of Saami culture, drawing on knowledge and practices that have lasted for hundreds of years. The Saami people's right to enjoy their own culture, in which reindeer pastoralism is a central part, is legally protected in the Norwegian Constitution, article 108, the Reindeer Herding Act, and the International Covenant on Civil and Political Rights, article 27.

Because of this legal protection, the wind power developers in Fosen were forced to compensate the reindeer herders for their loss of reindeer grazing lands. However, the reindeer herders were not interested in monetary compensation, arguing that the wind power developments constitute a human rights violation. If that were found to be the case, any ruling about expropriation of land would be invalid. Thus, when the court process for deciding the compensation amount commenced in 2019, the reindeer herders claimed that the process was invalid as the wind power developments were in violation with Saami rights according to the International Covenant on Civil and Political Rights, article 27. The Norwegian state decided to intervene in the case on behalf of the wind power developers, arguing that no rights violation was occurring in Fosen. Both the district court and the appeal court sided with the state and the wind power developers. The Supreme court, however, sided with the Fosen Saami and the licences for two of the wind farms in Fosen, Storheia and Roan, were deemed invalid. The Supreme court found that the operation of these two wind farms threatens the continued existence of reindeer pastoralism on the Fosen peninsula, and thus constitutes an ongoing human rights violation (HR-2021-1975-S, paragraph 144).

In the aftermath of the Supreme court ruling, the position of the Ministry of Petroleum and Energy has been that more knowledge is needed in order to find "mitigating measures" that can allow for the co-existence of wind power and reindeer pastoralism in the contested areas of the Fosen peninsula (Aasland, 2023b). In other words, the goal of the Ministry is to pass new licences that are in accordance with ICCPR, article 27. The reindeer herders in Fosen, however, have maintained that the Supreme court ruling entails that the wind turbines must be removed and that the landscape should be returned to its original state. I introduced this thesis with description of the demonstrations in Oslo that started on 23. February 2023, 500 days after the Supreme court decision. The demonstrations resulted in official apologies from both minister of petroleum and energy, Terje Aasland, and prime minister Jonas Gahr Støre (Aasen et al.,

2023). However, at the time of writing this thesis, the wind farms in Fosen are still in operation, and it is not clear how the case is going to be resolved.

2.2 The Political Ecology of Wind Power

I have now presented the geographical and political backdrop of the Fosen case. The remainder of this chapter places the Fosen case and this study in an academic context by reviewing political ecology literature on wind power and wind power opposition. I will start by giving attention to how wind power opposition has been framed as a product of 'NIMBYism'. Next, I will introduce the political ecology of wind power as an alternative framing. The recurrent themes of this literature will be made clear through a brief overview of selected case-studies of wind power opposition. The aim here is both to gain understanding of how wind power opposition is framed in critical research and to place the Fosen case in a larger geographical context.

2.2.1 Understanding opposition: "Not in my backyard"

As Avila (2017) points out, research on wind power opposition has tended to focus on so called NIMBYism ("Not in my backyard") in the wind power debate. The NIMBY-framing is meant to explain why individual wind power projects face fierce local opposition while wide-ranging surveys show general positivity towards wind power. In short, the NIMBY-view frames opponents to wind power as individualistic and selfish (Zografos & Martínez-Alier, 2009). The NIMBY attitude is selfish in that it expresses unwillingness to take a part of the burden for a "common good" (Petrova, 2013). Importantly, the NIMBY construct sees opposition to wind power as a factor of distance: the NIMBYist would say "I support wind power development, as long as it is not *here*". Within this interpretative frame, opposition is seen as a "problem" that must be overcome to secure the development of wind farms. The overriding benefits of such development are taken as self-evident.

Several studies have scrutinized the adequacy of the NIMBY frame for understanding wind power opposition. Wolsink (2000) finds that cases of people opposing local wind power projects while supporting wind power in general, are rare. Studying a case of opposition to wind power in Catalonia, Zografos and Martínez-Alier (2009) argue that a NIMBY explanation of opposition is largely inadequate, instead highlighting historical centre-periphery conflicts in the region. Petrova (2013: 591) argues that NIMBY fails to grasp the complexities of opposition

and support of wind power developments, citing that “motivations stem from people's perceptions about the impact of facilities on health and safety, the environment, the landscape, economy, community well being, and sense of place”. The consensus seems to be that, while some elements of NIMBYism might be present in opposition to infrastructural development (e.g., wind power), it rarely adequately explains the motivations behind opposition in its entirety.

Why, then, does this flawed concept still appear in policy papers and academic literature on wind power? One explanation could be that many policy makers still prefer NIMBY explanations of the gulf between general support and local opposition towards renewable energy projects (Wolsink, 2007). For planners who are looking to get projects going as soon as possible, NIMBY can function as a rhetorical device to discredit those opposing wind power developments. The interesting question with regards to NIMBY is therefore not merely whether it represents a good explanation of opposition to renewable energy projects. Rather, we should ask how the NIMBY concept is operationalized in public discourse to marginalize alternative viewpoints. In any case, there seems to be a need for moving beyond “testing” the adequacy of NIMBY interpretations on cases of wind power opposition. Indeed, Petrova (2013) calls on social scientists to urge policy makers to abolish the term completely. The task ahead is instead to attempt to explain the complex motivations behind of wind power opposition on a case-by-case basis, taking into account the highly diverse nature of conflicts over wind power siting. This is what the political ecology studies presented in the following chapters have sought out to do.

2.2.2 Emerging narratives of environmental justice

A transition from fossil fuels to renewable energy sources, be it wind- hydro-, solar- or nuclear power, would bring about large-scale infrastructural transformations. These renewable technologies all require large swaths of land, metals from mining, as well as roads, power lines and worker housing during construction. The technologies meant to secure a sustainable energy supply for the future, can have negative impacts on nature, communities, and livelihoods. As we shall see in this chapter, the costs of a low-carbon transition often disproportionally impact marginalized populations. Within the field of sustainable energy transitions, political ecology asks the question: Sustainable for whom?

In a literature review of 198 studies of the political ecology of climate change mitigation, Sovacool (2021) assesses the interlinkages between energy transitions and processes of marginalization and environmental degradation. The literature review makes use of a framework that conceptualizes the political ecology of renewable energy through four processes: enclosure, exclusion, encroachment, and entrenchment. Within Sovacool's framework (2021: 2), "enclosure" refers to "capturing resources or authority", often through privatization of public assets and territorial accumulation. As part of capitals constant drive towards new frontiers, resources, land, and other assets are enclosed as devices of capital accumulation. "Green grabbing" – appropriation of land for environmental purposes – is one such process that has been widely discussed in political ecology literature (Fairhead et al., 2012). The next process in Sovacool's framework is "exclusion", which appears when climate mitigation projects lead to the marginalization of certain stakeholders through unfair planning practices. The central point here is political influence: Whose voices are heard and acted upon? Thirdly, Sovacool brings up the process of "encroachment". Here we move beyond the socio-political to focus on potential detrimental environmental impacts of climate mitigation projects. Typically, this phantoms issues of biodiversity loss and impacts on important ecosystems caused by the vast land-use requirements of energy technologies. The last process in Sovacool's framework is "entrenchment". This refers to how a "[a] climate project may aggravate structural inequalities and the disempowerment of disadvantaged or vulnerable groups" (Sovacool, 2021: 3). This can happen through heightening of inequalities by diverting investments away from poorer communities and minorities. Together, these four processes constitute a framework for political ecology analysis of energy transitions.

Applying this approach on a highly diverse sample of 198 studies (with 288 corresponding cases), Sovacool found that all cases were linked to one or more of the processes of enclosure, exclusion, encroachment, or entrenchment. As the author concludes: "The implication here may be that while issues of inequality and exclusion are extrinsic to a given technology, they are intrinsic to the current regime of low-carbon energy" (Sovacool, 2021: 13). This sentiment especially rings true in the case of wind power; about one third of the cases studied in Sovacool's review were studies of wind power conflicts. The study also finds recurring instances of vulnerable groups suffering disproportionate negative consequences from energy transition projects, ranging from non-human species (animal life, flora etc.) to local households. Most interesting from the perspective of this project, is the large number of instances of indigenous communities being negatively impacted by climate mitigation efforts: Indigenous

peoples' struggles were mentioned in over 35% of the studies reviewed (Sovacool, 2021). This high number speaks to the relevance of studying indigenous resistance to climate mitigation projects, a theme largely unexplored in the Norwegian context.

Another core theme in the political ecology of energy transitions is the emergence of environmental justice narratives. In a review of 20 cases of wind energy conflicts, Avila (2018) finds that opponents of wind power increasingly embrace an environmental justice perspective in their efforts to limit wind energy development. Emerging outside the context of the two traditional "factions" in the wind energy debate (ecological modernization vs environmental conservation), these narratives emphasize the potential unjust social consequences of wind power projects, often in relation to indigenous peoples' rights to land and cultural practice. Of the 20 wind energy conflicts that Avila studied, over half relate to the territorial and cultural rights of indigenous and ethnic groups: "In these cases, land pressures deriving from the wind power expansion are directly translated into the struggles of local communities claiming territorial rights against state and corporate powers" (Avila, 2018: 609). These findings indicate the increasing relevance of a political ecology and environmental justice perspective on the problem of wind power and indigenous peoples' rights.

The emerging narratives of environmental justice question the validity of technocratic solutions to a large-scale wind energy transition (Avila, 2018). They suggest a need to move beyond a problem-solution framing of wind power opposition. In the literature reviewed in this chapter, opposition voices are not seen as expressions of selfish individuality, but rather as politically valuable movements with the potential to reconfigure energy transitions. Jessup (2010) points to how conflicts over wind power give rise to "hybrid coalitions" between a wide array of actors. Such "hybrid coalitions" revolve around narratives (or storylines) that become entrenched in the debate on wind power. Actors with different backgrounds rally around narratives in a common political project despite their distinctive discursive backgrounds and ways of knowing. The alliances that arise from these emerging narratives are a potential source for socio-political reconfigurations of energy transitions (Avila, 2018: 613).

Taken together, the current state of the art of the political ecology of renewable energy suggests that there is great value in research that seeks to expand our understanding of resistance to wind power developments. This is doubly true in instances where such movements include vulnerable groups such as indigenous communities. This project takes its cue from this literature

in its aim to explore the discourses and narratives of the conflict over wind power in Fosen, Norway.

2.2.3 Selected cases of resistance to wind power

During the past couple of decades, conflicts over the development of wind power have surfaced in many places around the world. In order to situate the Fosen case in a wider context, it is useful to study these conflicts and look at the similarities and dissimilarities between them. There is a great variety in the motivations behind mobilization efforts, the tactics employed, the power relations between wind power developers and opposition groups and, not least, in the geographic and socio-cultural contexts in which wind power conflicts arise. The purpose of this last section is to engage with case studies on wind power opposition in different geographical contexts. I will primarily be focusing on cases where there are claims of vulnerable groups being disproportionally harmed by wind power expansion, as this is a core theme in the Fosen case. Note that this overview in no constitutes an expansive list of cases that fall within these parameters; I have selected a limited but geographically diverse sample of cases to reflect the different contexts in which wind power conflicts arise. To best illustrate this diversity, I have chosen four cases from countries in four different continents: India, Mexico, Kenya, and Sweden.

2.2.3.1 Western Ghats, India

The first case that I want to take a closer look at is the opposition to a 113 MW (megawatts) wind farm in the Western Ghats of India. With its rapidly expanding economy, India is increasingly looking to expand its renewable energy sector, with a particular focus on wind energy. The country is the fourth largest producer of wind power in the world (Lakhanpal, 2019). The proposed wind power plant in the Western Ghats is to be placed on a UNESCO world heritage site known for its "outstanding diversity of flora and fauna" (Lakhanpal, 2019: 52). In addition to this threat to biodiversity, local populations have claimed that the wind power project interferes with agricultural practices and threatened the livelihoods of communities that are dependent on the forests in the area. As Lakhanpal's research finds, the wind farm is being built in forested areas as a way to avoid the complicated bureaucratical process of expropriating agricultural land from farmers and turning it into commercial land for wind power developers (Lakhanpal, 2019). Looking back at Sovacool's framework, this case displays processes of both

encroachment and entrenchment: The destruction of forested areas is threatening the area's unique biodiversity as well as adversely impacting vulnerable forest-dependent livelihoods.

Overall, investments in renewable energy are highly incentivized in India, exemplified with the fact that these types of projects are exempt from impact assessment requirements. The governance of renewable energy in India, Lakhanpal finds, tends to enforce an unequal distribution of costs and benefits. In the case of the wind farm in the Western Ghats, private and public actors on regional and national scales benefitted massively while local communities, who expected the project to lead to local development and better employment prospects, were left disappointed. This imbalance is at the centre of arguments made by opponents to the project. Interestingly, Lakhanpal (2019: 58) argues that the environmental justice aspect of these protests "is in sharp contrast to the long-observed NIMBY (Not-in-my-backyard) phenomena in developed countries" and claims that protests toward wind power in developed countries are "mostly attributed to aesthetics, visual appeal and bird hits". In other words, she establishes a sharp contrast between the nature of wind power opposition in the global south and the global north. As discussed above, the NIMBY construct of wind power protests has its problems, also within a global north context. Building on this, one of the tasks of this project is to assess whether NIMBY is an adequate explanation of opposition to the wind parks in the Fosen case.

2.2.3.2 Álvaro Obregón, Mexico

Another country that has seen wind power expansions met with opposition and conflict is Mexico. One example of this is in the Isthmus of Tehuantepec where indigenous communities have protested the development of large-scale wind power projects. Fuelled by neoliberal policies and climate change legislation, the region has seen a "wind rush" where private and public actors increasingly seek to privatize and commodify land for wind power production purposes (Avila, 2017; Dunlap, 2018). As foreign investors marked their interest in developing wind power projects in the area, the Mexican government started dividing the land areas of the Isthmus into plots for energy production. Importantly, this was done without consulting the local landowners or the many indigenous communities who reside in the area (Avila, 2017: 997). The resulting land acquisitions led to the initiation of 17 large-scale wind power projects throughout the Isthmus region. While some of these wind farms are connected to the national grid, most are meant to directly supply national and international private companies like Coca-Cola and Nestlé (Avila, 2017). Such self-supply schemes effectively remove all economic benefits of the wind farms at the local scale, while enclosing energy resources and land for

private companies. This is a key difference between the Isthmus case and that of wind power developments in Fosen, Norway. While private investors are involved in the development of the wind farms in Fosen, all the energy produced is supplied to the national grid.

As mentioned, the wind power expansions in the Isthmus region have led to fierce resistance from local communities. Studying one of these conflicts, Dunlap (2018) tells a story of insurrection, social division and a "low intensity civil war". In the town of Álvaro Obregón, indigenous Zapotec communities have put up powerful protests against a Mareña Renovables wind power project planning to install 102 wind turbines in the area. The ensuing conflict instigated several battles between locals and police forces, as well as causing a social rift within the local community. Dunlap (2018: 123) conceptualizes the processes at play here as a case of "green grabbing" which "transfers the control of land and/or natural resources to powerful actors by various means using an environmental ethic or rationale." Within Sovacool's (2021) framework this would be described as a process of enclosure with land and resources being transferred into private hands.

Importantly, Dunlap notes that these protests towards wind energy "green grabbing" must be viewed as a part of a long-standing conflict between marginalized communities and the Mexican state that has escalated into violent insurrection and repression many times. The resistance towards wind power development in the Isthmus of Tehuantepec cannot be understood without taking the area's high level of cultural diversity and its history of agrarian struggle into account.

2.2.3.3 Lake Turkana, Kenya

Another project that has faced accusations of land grabbing is the Lake Turkana Wind Power project in Kenya, the largest wind-power project in Africa. The project is considered to be the largest public-private investment enterprise in Kenyan history, receiving funding from of several private companies and funds, including Norwegian governmental development funds (Cormack & Kurewa, 2018). As Cormack and Kurewa (2018) note, the project has been met by both support and opposition. On the one hand, politicians and large portions of the local population claim that the project is bringing positive development to the area through economic growth and employment opportunities. On the other hand, critics have pointed to problematic processes of land acquisition and resettling of indigenous communities. As with the Fosen case, the Lake Turkana wind farm is placed on land areas which are traditionally used as grazing

lands by pastoralists. These land areas, and the ways in which the wind power developers acquired the land, is at the heart of the conflict in Lake Turkana. The land was leased from local authorities without any compensation to the local population for loss of land and resources. This, in addition to claims of lacking consultation, did not sit well with parts of the local population, especially pastoralists who claim rights to the land areas in question. As Cormack and Kurewa (2018) write, the wind farm has created tensions between those wanting to seek benefits from the development that the project promises and those who put forward claims of land-grabbing and exclusion.

As with the other cases discussed in this section, this conflict must be interpreted in light of unique historical and place-specific conditions: The wind farm is built in a culturally diverse, historically underdeveloped, and long-marginalized region of Kenya (Cormack & Kurewa, 2018). The desire of locals to take part in the "development" and obtain benefits from the project can be seen in connection with this history of marginalization and lack of development. Despite these unique conditions, parallels can be drawn between this case and opposition to the wind farms in Fosen, Norway. In both cases, indigenous communities argue that the wind power projects interfere with their pastoralist livelihoods as well as claiming rights to the use of the land areas based on cultural and historical attachments. Cormack and Kurewa's study of the Lake Turkana case shows how cultural and ancestral connections to land and nature is an important dynamic to explore when discussing cases of indigenous resistance to land-intensive renewable energy projects.

2.2.3.4 Markbygden , Sweden

Most of the cases and studies I have discussed in this chapter pertain to the Global South. However, there is an increasing number of studies being done about the political ecology of wind power opposition in the Global North. One such case, which bears striking similarities to the Fosen case, is the Markbygden wind farm in Sweden. On track to become one of the largest onshore wind power project in the world, the project has instigated conflicts with the local Saami reindeer herders who use the area as grazing lands (Szpak, 2019). Despite laws that grant Saami communities right to grazing lands in Northern Sweden, the project was approved by the Swedish government and construction is well underway. The concerns of the Saami reindeer herders in Sweden are similar to those voiced against the wind farms in Fosen: Large-scale industrial encroachments on traditional grazing lands will severely impact the future possibilities of Saami pastoralist livelihoods. Loss of grazing areas has long been the largest

threat to the practice of reindeer pastoralism, which has a major cultural significance for the Sámi people (Temper & Shmelev, 2015).

Lawrence (2014) conceptualizes wind power developments in Saami areas in Sweden as a process of "internal colonisation", tracing historical continuities of conflicts between the Swedish state and Saami populations. As with many of the other cases discussed in this section, Saami resistance against wind power developments is rooted in a history of marginalization and colonialism. As Lawrence (2014: 1049) writes, "[t]hese conflicts are embedded in historical conflicts over ownership of land in the North, and draw on long-standing discourses that argue that reindeer herding must necessarily 'give way' to progress and other (read 'civilised') forms of land use." Access to natural resources have always been at the centre of these conflicts. However, industrial encroachments on Saami lands are now being rearticulated through market rationalities and appeals to narratives of "green" development. Lawrence (2014) argues that neoliberal market rationalities "simultaneously reproduce inequalities [between the Saami and the state] and depoliticise the power relations producing those inequalities". This relates to the process of "green grabbing" discussed above: The commodification and private enclosure of historically indigenous lands justified by a green agenda. As Fairhead et al. (2012) points out, green grabbing is only a part of a long-standing history of colonialism and land-grabbing. In much the same way, wind power encroachment on Saami lands is "the latest chapter in a longstanding struggle between Saami reindeer herders and industrial interests", as one Saami representative in Sweden put it (Avila, 2018: 609).

The wind farms in Fosen and Markbygden will be among the largest in Europe, and they both conflict with the cultural and pastoral practices of Saami people. The two cases together highlight the importance of studying the tensions between large-scale power projects and Saami rights.

2.2.4 Conclusion

The purpose of highlighting these cases is both to display the highly diverse nature of wind power conflicts and to identify some recurring themes on a global scale. They show that wind power conflicts are highly contingent on geographical and historical conditions. The cases reveal a wide array of ownership structures, supply-lines, and legal systems that affect how and to which degree resistance is possible. From violent insurrection in Mexico to the supreme court

case in Fosen, resistance to wind power has taken many forms. Some scholars, such as Lakhanpal (2019), argue that there is an evident difference between wind power opposition in the global south and in the global north, with the latter being described as rooted in NIMBY-sentiments. As we have seen, however, several studies have pointed to the inadequacy of the NIMBY-framing, also within a global north context (Petrova, 2013; Wolsink, 2000; Zografos & Martínez-Alier, 2009). Cases such as the Markbygden project in Sweden and the Fosen wind farms in Norway suggest a need to expand research on the political ecology of renewable energy beyond the Global South, particularly in cases where indigenous rights are at stake.

I will end this overview by pointing to some common themes in the cases of wind power resistance reviewed in this chapter. As shown by Sovacool (2021) most cases involve one or more vulnerable groups, whether indigenous communities or endangered non-human species. In many of these cases, contestations over land-use are at the forefront. One the one hand, an international drive to reduce dependence on fossil fuels urges the rapid construction of large-scale renewable energy plants, such as wind farms. Wind power developers are also motivated by economic incentives and opportunities to commodify "untouched" land areas into profit-making enterprises. On the other hand, there is a concerted effort to show that these land areas are, in fact, not "untouched" but rather spaces of vulnerable biodiversity and grounds used to sustain traditional livelihoods. Another recurring theme is complaints about exclusionary development processes, where local communities were not sufficiently consulted and informed before construction started. Related to this is the expectation of local "benefits" from the wind farms; an expectation more than often left unsatisfied. The last theme is that of resistance. In all the cases surveyed by Avila (2018) and Sovacool (2021), the plans of large-scale wind power projects were followed by large-scale mobilisation and resistance from local communities. As Avila (2018) argues, the storylines of environmental justice apparent in these cases have great political value and can enable discussions about alternative, more just, configurations of energy transformations. Taking its cue from this literature, this thesis sets out to identify and advance such narratives of environmental justice in the case of wind power resistance in Fosen, Trøndelag.

3 Theoretical foundations

This thesis draws on two bodies of academic literature to form its theoretical framework: science- and technology studies (STS) and political ecology. In this chapter, I present some of the sources of inspiration for this study and explain the concepts and theoretical approaches I will make use of. In the first section, I present some concepts from STS and reflect on the need for an interdisciplinary approach when analysing complex socio-ecological problems. The second section presents the field of political ecology and explains the environmental discourse analysis approach implemented in this study.

3.1 STS and interdisciplinarity

Science and technology studies (STS) is an interdisciplinary field that examines the relationship between, technology science and society. It is a broad field, and its literature tackles a wide range of techno-social problems. STS scholars share a common an interest in how scientific knowledge and technologies are shaped by cultural, social, and political conditions and in turn, how these shape society.

One significant contributor to science and technology studies is Sheila Jasanoff, who has written extensively about how scientific knowledge and technology both shapes and is shaped by society. In her book *States of knowledge*, Jasanoff introduced the notion of 'co-production'' where the production of scientific and technical knowledge is linked to interactions between scientific and social practices. As Jasanoff (2004: 2-3) explains:

> "Knowledge and its material embodiments are at once products of social work and constitutive of forms of social life; society cannot function without knowledge any more than knowledge can exist without appropriate social supports. Scientific knowledge, in particular, is not a transcendent mirror of reality. It both embeds and is embedded in social practices, identities, norms, conventions, discourses, instruments and institutions – in short, in all the building blocks of what we term the social. The same can be said even more forcefully of technology."

From this point of view, science and technology are fundamentally products of "the social", while at the same time playing a significant role in the construction of societal practices and norms. Elaborating on the notion of co-production, Jasanoff introduced a framework around

‘sociotechnical imaginaries’, defined as “collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology” (Jasanoff & Kim, 2015: 4). Sociotechnical imaginaries are visions of progress that link scientific and technological advancements to social and cultural advancements. As the authors mention, these imaginaries are always juxtaposed with fears of the potential negative impacts of technological evolution – there is a constant interplay between visions of utopia and dystopia. In the context of this thesis, Jasanoff’s ideas about co-production and sociotechnical imaginaries help explain the role of wind power technologies in sustainable development narratives about a ‘green’ energy transition. And, not least, how these narratives are challenged by opposing views of natural landscape degradation and human rights abuses.

STS-scholars have also engaged with questions about public understanding of science. For example, Brian Wynne has explained how scientistic elites tend to frame the public as unable to understand the problems, complexities, and achievements of science. This is what Wynne (1991; 1993) has referred to as the “deficit model of the public uptake of science”. The ‘deficit model’ has similarities to the NIMBY-framing discussed in chapter 2.2.1. However, instead of framing the public as selfish, the deficit model argues that public resistance to technological and scientific progress is a result of ignorance and lacking understanding of science. Wynne’s writings will become important in the discussion about how wind power opposition is construed by elite power in chapter 5.1.

3.1.1 The case for epistemological pluralism

Wind power debates are bundled in contradictions, uncertainties, conflicting interests, and contrasting statements. Decision makers facing these complexities are met with an increasingly loud call for urgent action to stop climate change, contrasted with pleas to halt industrial encroachment on untouched nature. The decision makers are faced with a “post-normal problem”: The stakes are high, values and facts are disputed, and it plays out in an open and complex system of causal chains and conflicting interests (Strand, 2017). The term ‘post-normal problem’ is borrowed from a body of literature by practitioners of ‘post-normal science’ (PNS). Born out of the works of STS-scholars Funtowicz and Ravetz (1990), and a play on Kuhn’s ‘normal science’, post-normal science responds to the ceaseless complexities of the ecological problems of our day, with the aim of producing knowledge fit for purpose.

One of the main distinctions between normal science and post-normal science is that, in PNS, governance problems are understood to have irreducible uncertainties. Where practitioners of normal science would work to eliminate uncertainties (by conducting experiments, fieldwork etc.), PNS advocates managing and communicating uncertainties instead of taking on the impossible task of reaching certain knowledge (Strand, 2017). Therefore, PNS calls for an "extension of the peer communities" and the inclusion of multiple perspectives both within and beyond academia (Strand, 2017). Instead of the "normal" approach of applying scientific methods to find an appropriate technical fix for the problem at hand, PNS suggests a "democratization of expertise" to produce knowledge that is fit for purpose and that can build trust between the general populace and experts. As Strand (2017: 291) puts it, "[t]he definition of the purpose is a matter of the framing of the problem, which is a democratic – deliberative, inclusive and participatory – concern, and consequently the judgement on quality is also, in this particular sense, a democratic concern." In other terms, this could be a seen as a call for interdisciplinary and transacademic research, where the former refers to integration of multiple disciplinary perspectives within academia, and the latter denotes a degree of interaction with the broader society (Öberg, 2011).

This thesis responds to this call in two related ways. First, in tackling the complex issue of wind power resistance, I draw upon a multitude of disciplinary perspectives. This includes theoretical and methodological contributions from political ecology and science and technology studies – both interdisciplinary fields in their own right. Moreover, I make use of works of environmental and Saami history to situate the discourses of the Fosen case in a historical context. In discussing the emergence of wind power technologies in the face of the climate crisis, I also engage with natural sciences like biology, ecology, and climate science. The second way this thesis responds to the call from PNS, is by actively looking for and interacting with narratives, types of knowledge and ways of knowing that are produced and circulated beyond the confines of academia. Even though scientific disciplines such as ecology, climate science, economy and biology contribute greatly to debates on wind power, it is by no means limited to the domain of science. On the contrary, non-academic ways of knowing play a major part in the formation of opposition discourses. Indigenous knowledge and history, local sensibilities of place and heritage, spiritual and ancestral connections to the affected natural landscapes, and alternative visions of sustainable futures all inform the articulation of resistance to wind power in Fosen. Uncovering these 'alternative' discourses and exploring how they relate to the more dominant

technocratic discourse, is a main focus of this thesis. Taking its cue from PNS' call for an extension of the peer-community, 'laypeople' and indigenous communities are considered as both carriers and producers of valuable knowledge.

There are certain limitations to this approach, and the degree of interdisciplinarity and epistemological pluralism can certainly be discussed. Öberg (2011: 43) points to the importance of scrutinizing the "inter" of work with interdisciplinary aspirations. Doing interdisciplinary research by oneself may seem contradictory. I have my own specific academic background and have been trained in a certain way of thinking and doing things. While I have experience from both the humanities and social sciences, I have limited to no experience with natural scientific research. My academic training comes exclusively from one side of "the two cultures", as Öberg (2011) describes the gap between the social sciences and humanities on the one hand, and the natural sciences and technology on the other. One could certainly argue that a true interdisciplinary study of wind power conflicts would need to be performed by a team consisting of researchers from both natural and social sciences and including both qualitative and quantitative methods. Despite these limitations, this thesis maintains modest interdisciplinary ambitions, aiming to produce "socially robust knowledge" (Öberg, 2011: 8).

As illustrated in this chapter, the field of science and technology studies provides an important footing for this thesis. It provides important insights on the interactions between science, technology and society and highlights the importance of acknowledging non-academic actors as legitimate producers and carriers of knowledge. In the next chapter, I will explain how these ideas are complemented by insights from political ecology.

3.2 Political ecology

It is common to make a distinction between the 'social' and the 'natural', as if what happens in human societies is entirely independent of what happens in nature. As I alluded to above, this distinction is the basis for how we organize our academic institutions, with the social sciences and humanities studying society and arts and the natural sciences seeking to unravel the objective truths of nature. While this distinction is common and used in both academic and daily-life situations, it is also commonplace to challenge it. Political ecology, a sub-discipline of geography, poses one such challenge to the human-nature dichotomy. Political ecology builds upon a long-standing tradition of exploring the deeply entangled relationship between

the human practices and the natural environment in geographical literature (Neumann, 2005). In the following I will give some historical context of the emergence of political ecology as a field of study to give an idea of what political ecology is and why I think its unique perspectives on socio-environmental problems are relevant to the topic of wind power conflicts.

3.2.1 A brief history of political ecology

The long-standing interest in socio-environmental problems within geographical studies has taken many forms. From classical Greek, Roman and Arab geographers in ancient times to the emergence of sub-fields such as human- and cultural ecology, the ways human societies impact the natural environment, and vice versa, has remained a key interest. Through a few foundational texts written in the 1980s, political ecology surfaced as a novel perspective on these socio-environmental relations. Tracing the genealogy of political ecology is complicated, as many of the texts that are now considered essential for its emergence were written before there had been any attempts to explicitly articulate its contents or even give it a name. Several of these proto-political ecology texts were building upon, and critiquing, current trends within socio-environmental research (Neumann, 2005).

Among these texts was Michael Watts' (1983b) *Silent Violence: Food, Famine and the peasantry in Northern Nigeria*, which was both a study of the famines that plagued the West African Sahel in the 1970s and an epistemological critique of hazards research and cultural ecology. In *Silent Violence* (1983b), the famines in the Sahel were not seen as a failure of "adaption" to environmental conditions. Rather, the food shortages, that had earlier been ameliorated through pre-capitalist systems of reciprocity (Robbins, 2020b: 92), were now intensified through the integration of these local systems into a global and colonial capitalist economy. In the essay "On the Poverty of Theory", Watts (1983a) further criticized the ways in which research on environmental issues "naturalized" inherently social problems, such as famines and droughts. Watts' critique was a "wrecking ball" (Neumann, 2005) to the epistemological foundations of contemporary socio-ecological research, and it provided the footing for a novel *political* ecology that would always maintain the importance of analysis of the political economy at multiple scales.

Across the Atlantic Ocean, similar critiques were expressed by geographer Piers Blaikie. In *The Political Ecology of Soil Erosion in Developing* Countries, Blaikie (1985) sought to explain

why government approaches to solve issues of soil erosion tend to fail. Combining approaches from the natural and social sciences, Blaikie explained that the causes of soil erosion could not be confined to the afflicted area but must be seen in relation to a broader political economy. He rejected the "colonial model" in which "the problem of soil erosion is seen primarily as an environmental one, rather than a complex 'socio-environmental' problem" and that "lays the blame on land-users themselves" (Blaikie, 1985: 4). Instead, Blaikie suggested a bottom-up approach (which would later be developed into the "chain of explanation"), starting from local environmental conditions and land-management practices, and ending at the scale of the global political economy. The goal was to turn the focus to "where power lies and how it is used" (Blaikie, 1985: 6). Blaikie's critique was not so much directed towards cultural ecology but rather neo-classical economics and neo-Malthusian approaches to land-use problems. Still, like Watts, Blaikie emphasized what he perceived of as a lack of attention to politico-economic factors in environmental studies. They both stressed the importance of questioning who wins and who loses from implementation of environmental policies.

In 1987, Piers Blaikie, this time joined by Harold Brookfield, made the first concerted effort to explicitly define political ecology in their book *Land Degradation and Society*: "[Political ecology] combines the concerns of ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources, and also within classes and groups within society itself" (Blaikie & Brookfield, 1987/1991: 19). This dialectical view of the relationship between environmental conditions and societal issues remains at the centre of political ecological research today. Blaikie and Brookfield's emphasis of dialectics also highlights the influence Marxist political thought had on both early and contemporary political ecology. The Marxist view of power as mediated through historically produced material and social structures is still a heavy influence on political ecological research. However, as we shall see in the next chapter, this materialist view is increasingly being challenged by (or supplemented with) a constructivist discursive theory of power.

3.2.2 Discourse, hegemony, power

As Neumann (2005: 32) points out, the works of Watts, Blaikie and Brookfield were part of a larger paradigm shift within social scientific research on socio-ecological relations. Across several disciplines, scholars started paying closer attention to how environmental issues were

tied up in global processes of capital accumulation. After political ecology's initial consolidation as a field of study, another paradigm shift would significantly alter and diversify its contents. Influenced by post-structuralist thinkers Michel Foucault and Roland Barthes (who rarely used the term 'post-structuralism' themselves), political ecologists became increasingly concerned with the ways in which power is mediated through language and knowledge (Benjaminsen & Svarstad, 2021). In particular, discourse analysis became a prominent analytical tool for examining relations between power and knowledge. This turn towards constructivism is both a break and a continuation of the early political ecology research discussed above. While early political ecologists were primarily concerned with material power imbalances and processes of marginalization, they also problematized how environmental problems were defined and perceived. For example, Blaikie (1985: 149) emphasized how the problem of soil erosion is imbued by "ideology": "all approaches to soil erosion and conservation are ideological". Today, political ecology includes both realist and constructivist approaches or, as Robbins (2020b: 97) puts it, "claims about the state of nature and claims about claims about the state of nature". In the following, I will describe how concepts from post-structural political ecology can aid in answering the research questions of this thesis.

In the article "Advancing a Political Ecology of Global Environmental Discourses", Adger et al. (2001: 683) broadly define 'discourse' as "a shared meaning of a phenomenon" and adds that discourses contain "a corpus of expressions in which we can find homogeneity in message as well as in expressive means". *Homogenity in message* refers to how expressions within the same discourse tend to convey the same beliefs and ideas about causes of problems and their solutions. These beliefs are communicated through similar *expressive means*, such as shared narratives and rhetorical devices (Adger et al., 2001). This is the basic definition of discourse I will use to mark out the discourses of the Fosen case.

In addition, I will be drawing on Maarten Hajer's (1996) work *The Politics of Environmental Discourse.* Two concepts are fundamental to Hajer's framework: Story-lines and discourse coalitions. Story-lines are narratives that structure reality, assigning roles to actors and simplifying and "clustering knowledge" (Hajer, 1996: 63). The process of simplification and reduction is seen as essential in understanding how knowledge is translated and reproduced between discursive domains: Story-lines bring *discursive closure* in that they create simplified representations of complex problems that can be understood across discourses. They thus create *discourse coalitions* where actors who might perceive of a certain problem in widely different

ways endorse the same solutions to a problem. As Hajer (1996: 65). puts it: "Discourse-coalitions are formed if previously independent practises are being actively related to one another, if a common discourse is created in which several practices get a meaning in a common political project". The actors within a discourse-coalition do not necessarily share the same political interests. Rather, they share forms of linguistic expression and construct similar story-lines wherein they position themselves in relation to each other. Discourse-coalitions, then, is a broader category than traditional political alliances, and allows for analysis of politics in spaces that are typically considered apolitical.

Both Adger et al. (2001) and Hajer (1996) place an important emphasis on the role of narratives in exerting discursive power. In this thesis, I will primarily be using the term 'narrative' instead of 'story-line' as it has a broader use-base and highlights the term's lineage to narratology. In this narratological approach to discourse analysis, the goal is to identify use of literary tropes and explore if and how actors are presented as literary archetypes such as heroes, villains, and victims. Identifying a 'cast' of actors in a narrative and the relations between them can make explicit perceptions of power and justice. Narrative analysis is therefore seen as an embedded part of the process of discourse analysis employed in this thesis.

In the political ecology of environmental discourses, it is not sufficient to delineate and describe the discourses present in a given case. Equally important is analysing how discursive power is being exerted and defining the power relations between different discourses or discourse coalitions. The task here is marking out which discourses are dominant, or even hegemonic, and which are deemed "alternative" (Adger et al., 2001). This idea of hegemonic discourses can be traced back to Antonio Gramsci's (1992) theory of *cultural hegemony*, in which the ruling classes are seen as exerting power over subaltern classes through cultural and ideological domination. As Stoddart (2007: 201) puts it, "[h]egemony appears as the "common sense" that guides our everyday, mundane understanding of the world". However, hegemony is not an unwavering constant, but is subject to social action and contestation. Indeed, the manifestation of a discursive hegemony relies on the existence of a counter-hegemony (Stoddart, 2007); it needs something to label as "alternative", "radical" or even "extreme".

Following (Hajer, 1996: 59) this thesis understands the practice of politics as a "struggle for discursive hegemony", where actors, through argumentation, narrative-building and other strategies fight for discursive power. Discursive power is exerted by convincing other actors

that a given representation of reality is the correct one, as well as getting others to contribute to and reproduce this representation (Svarstad et al., 2018: 356). Importantly, discursive power is closely related to power emanating from economic, legal, and institutional structures. Such material power structures impact discursive power structures, and vice versa. And, while the focus of this thesis is on the workings of discursive power, the discourses at play in the Fosen case have material consequences. It is therefore also a study of how the discourses present in this case are manifested and concretized into institutional and material power asymmetries.

There are certain limitations to the constructivist theoretical approach outlined above. Post structural political ecology has been criticized for being too relativizing and foregoing realist analyses of material power structures (Gomez-Baggethun, 2022; Gómez-Baggethun, 2020). To be sure, it is important to not lose track of how power, both discursive and material, affect vulnerable groups and natural environments, and to not succumb to a nihilistic moral relativism. Indeed, part of what makes political ecology *political* is in it being explicitly normative (Robbins, 2020b). As I see it, however, post-structural political ecology maintains the early political ecologists' goal of exploring "where power lies and how it is used" (Blaikie, 1985: 6). The goal of a constructivist political ecology is not only to deconstruct and critique established narratives but also to contribute to the discussion with new interpretations and explicit propositions for change. This dual ambition of deconstruction and construction can be illustrated by the often-invoked metaphor of the *hatchet* and the *seed*: The analyst employs the hatchet of intellectual critique to make way for the planting of new seeds in the form of new ideas for a more just and sustainable way of doing things (Cavanagh, 2021). Not least, this approach encourages constant critical self-examination, repeatedly putting one's own presumptions under the hatchet blade.

As illustrated in this chapter, political ecology plays a central role in the theoretical framework of this thesis. A common point in both the science and technology literature and political ecology literature is an emphasis on legitimizing non-elite forms of knowledge. The question of *what* knowledge and *whose* knowledge matters in the governance of environmental problems is a central issue in both disciplines. Furthermore, the environmental discourse analysis approach outlined here bears similarities to the concept of socio-technical imaginaries discussed by Jasanoff and Kim (2015). The former emphasizes narrative-building and asymmetrical power relations between discourses. The latter draws attention to the construction of "futures"

and the important role of techno-science in these futures. Both frameworks inform the following analyses of discourses in the Fosen case.

4 Research design

This thesis is a qualitative case-study of the wind power conflict on the Fosen peninsula in Trøndelag. I am interested in studying linguistic expressions in case documents and interviews and how these reflect broader discourses about wind power and land-use. The study is both inductive and deductive. It is deductive in that it builds upon former research that suggests that there is more to wind power opposition than NIMBYism and ignorance. This body of literature points to the importance of understanding the social and ecological complexities and consequences of wind power projects. That is the starting point for this study of the case of wind power conflicts in Fosen. On the other hand, the study is inductive in that it strives to not presuppose or hypothesize over the actual nature of the Fosen conflict. Rather it employs an exploratory approach to this question, aiming to 'absorb' the case through targeted interviews and analysis of a wide array of documents. It is not limited to the task of 'testing' the validity of NIMBY-interpretations of wind power opposition. Rather, it leans inductive in that it seeks to develop a theory of the Fosen case. This exploratory approach to the case material requires careful considerations of methodology and research ethics. This chapter describes the methodological choices I have taken for this thesis.

I start this chapter by discussing the single case-study approach and attempting to answer the, not too simple, question: What is the Fosen case? Next, I describe the choice of source material and the process of gathering data. To describe the document-based fieldwork approach employed in this thesis, I will be drawing on the practice-oriented document analysis approach outlined by Asdal and Reinertsen (2020) in the book *Hvordan gjøre dokumentanalyse.* The next section discusses how the data material was analysed to identify the linguistic expressions and narrative that make up the discourses that I intended to study. Finally, I reflect on my own positionality to the case and discuss the ethical complications of doing research in indigenous spaces.

4.1 What is the Fosen case?

Hardwick (2016) explains the case study approach as "the study of a single instance or a small number of instances of a particular phenomenon in order to explore the relationships and contextual influences on that phenomenon". Yin (2014: 50) describes four different types of case studies: single case-studies (holistic or embedded) and multiple case-studies (holistic or embedded). This thesis takes the holistic single-case study approach, seeking to explore one

case in depth, and at multiple levels. The Fosen case is selected as the object of study as it represents an *unusual case* (Yin, 2014: 52) of wind power opposition. It is the first time wind power developments have been discussed as a violation of indigenous rights in Norway, prompting both a Supreme court case and a series of protests and acts of civil disobedience in Oslo. The case raises interesting questions about the potential social and ecological consequences of a large-scale transition to renewable energy.

A basic assumption for this thesis is that the *Fosen case* is not one singular object or issue. Within the constructivist approach employed here, the Fosen case is seen as a fleeting object that is framed in different ways by different actors. Just as much as this study is about exploring the controversies around the wind power projects in Fosen, it is about exploring these different understandings and framings *of* the Fosen case. In this regard, the question of "what is the Fosen case?" could be more precisely formulated as "what is the Fosen case, to whom?". Having said this, the term *Fosen case* is not completely without meaning, at least not analytically. In order to create a manageable empirical base for conducting a case-study, some qualifications and delimitations were needed. If we were to ask the question, then, as (Lund, 2014) suggests, "of what is this a case?", it could be described as a case of local and indigenous resistance to large-scale wind power developments on the Fosen-peninsula. This is, in essence, the "object" that this thesis intends to investigate. However, I again want to emphasize that this is not the only possible framing of the case at hand. On the contrary, as the following chapters will illustrate, the dominant framing of the Fosen case is as a successful economic and industrial endeavour in an all-important green transition to renewable energy. This thesis intends to both explore the conflict itself and the affected actors' framing of the conflict. Therefore, as Asdal and Reinertsen (2020: 106) suggest, the question of "what is the case here?" remained a constant reminder throughout the work on this project.

The *Fosen case*, of course, has its origin in the geographical area of the Fosen peninsula. This is where the wind farms were constructed and where interest organizations and the Fosen Saami took their first stand against the development plans. However, the case is not limited to events and actors within these geographical boundaries. Actors from all over Norway have had their say on the issues in Fosen and one of the most important events, the occupation of the Ministry of Petroleum and Energy, took place in Oslo. The events are unfolding on both a local and a national scale, and this study does not limit itself to analysis on one level. In tackling the multi-scalar nature of the case, I take inspiration from the bottom-up approach discussed in chapter

3.2. Blaikie (1985) described the "chain of explanation" as starting from local landscapes and land-users, going "upwards" via local communities, regional institutions, state institutions and ending at the level of international institutions and finance (Robbins, 2020b). In line with this thinking, I started my research by delving deep into the events that unfolded in Fosen, absorbing and documenting what was being said and done by the actors involved. From there, the research branched out based on issues mentioned in the Fosen case documents and in interviews with affected parties. As I will describe in the next section, this approach has also had a significant impact on the choice of source material.

A common criticism of the case-study approach is the issue of external validity (Gray, 2018): Can the results of the study be generalized to other similar instances of the same phenomenon? This is certainly a limitation of the methodological approach chosen for this thesis. The results produced here will not be readily transferable to other similar cases, nor is that the aim of the study. On the point of external validity, I echo Lincoln and Guba's (2009) argument that case-studies do not need the be "generalizable" in order to produce interesting findings. In fact, as they explain, the goal of generalizability is futile in a study that seeks to contextualize a phenomenon within its specific local conditions. The point of this study is not to produce generalizable results, but to explore the particularities of a case that is interesting in itself.

4.2 Collecting data: Field work with and within documents

The main goal of this study is to identify and explain the discourses of the Fosen case. To accomplish this task, a large data set was necessary. As Gray (2018: 296) explains, the case-study approach opens for a wide array of different data collection methods, and a good case-study tends to make use of multiple sources of data. The methods chosen should be adjusted to the case at hand and the researcher should be flexible and able to adapt plans according to the opportunities that arises. This is what Eisenhardt (1989: 539) calls "controlled opportunism". The primary sources for data in this thesis come from semi-structured interviews with affected parties and a large collection of case documents from the licensing proceedings for the wind farms in Fosen. Importantly, these two methods of collecting data were carried out in tandem; the research process was not divided into one bulk of document analysis and one bulk of fieldwork with interviews. Rather, the two processes informed each other.

The approach to data collection and analysis employed here takes inspiration from the approach outlined by Asdal and Reinertsen (2020) in the book *Hvordan gjøre dokumentanalyse: En praksisorientert metode.* This approach conceptualizes document analysis as a form of field work, where individual documents are thought of as places in a wider document-landscape that the researcher can explore. Here, documents are not only treated as sources of information *about* a given topic, but as a place in itself where important events and practices are enfolding. This approach opens for deep analysis of the intricacies, conflicts, and controversies *within* a single document. In Asdal and Reinertsen's (2020) practice-oriented method, this line of thinking is complemented by an analytical approach that views documents as "instruments" or "technologies". Documents are viewed as instruments that make something happen, that do not merely describe the world outside it, but *shape* it. Viewing documents this way affects both the choice of documents to analyse and the analysis process (discussed in section 4.3). Moreover, these processes are not entirely separate. When navigating the document-landscape, documents must be interpreted and understood in order to find out what to look for next. It is a process of "following the documents" and the actors within them (Asdal & Reinertsen, 2020: 169).

For this thesis, the approach to field work *within* documents is supplemented with a more traditional field work method: interviews. As mentioned above, the two methods of data collection were used in tandem, and they informed each other. I started out by collecting documents from the case proceedings. The process of analysing these case documents highlighted who were the key actors and this again aided the process of choosing participants for the interviews. Vice versa, the interviews were important for pointing out key documents – some of which were not directly related to the Fosen case itself. For example, governmental white papers and NVE's *National framework for wind power* were mentioned and used as arguments in several interviews. Such instances highlighted the multi-scalar nature of this case and the influence of national and international policy on the proceedings "on the ground" in Fosen. In other cases, the interviewees had themselves printed out documents beforehand that they regarded as important to understand the issues in Fosen. In this way the research was constantly branching out, using both interviews and document analysis to attempt to get at the core of the Fosen case. That is the goal of doing field work with and within documents.

Despite the close relationship between these two processes, data collected from case documents and data collected from interviews are fundamentally different, each with their own strengths

and weaknesses. In the following I will describe how I made use of these data collection sources in practice.

4.2.1 Case documents

The choice of data collection methods should be guided by how the data is intended to be used. In this thesis, my aim has been to identify and explain the discourses of the Fosen case. Discourse analyses tend to focus on language and text as the main object of analysis, paying close attention to how meaning is produced (Berg, 2009). To conduct a discourse analysis successfully, a large body of text was therefore needed. I did not want to limit the analysis to one type of text, and thus collected a broad variety of documents. The documents collected included license applications and decisions for the wind farms, hearing statements from affected parties, formal complaints, impact assessments, media statements, court documents, and internal communication between licensing authorities.

An important strategy for sampling the documents was to actively look for the controversies in the case. Instances where opinions came into conflict would help pinpoint the differences between the discourses at play in the case. Documents such as hearing statements, complaints, and court documents are examples of this. Here, different arguments, worldviews, and framings of the Fosen case, were put on display. Another strategy I used was to look for the knowledge and research on which the actors based their claims. After all, one of the aims of this study is to understand how different types of knowledge are used to enforce or challenge established power structures. Impact assessments were particularly important here; they are the battlegrounds where key issues about the nature of the Fosen case were settled. A last strategy was to look for documents that were not directly related to the Fosen case, but that act as a sort of "enabling framework" for the case. These included white papers about energy policy and reports by state institutions. Such documents placed the Fosen case in a larger context – as a piece of a nation-wide energy transition puzzle. Finally, the choice of documents was limited by access. All the case documents described here were publicly available following a freedom of information request to the appropriate organizations. However, some potentially interesting documents – such as internal communications within the wind power companies – are not made publicly available.

There are many benefits to using case documents as a data source. Firstly, analysing documents is unobtrusive – the data is not created and formed by the researcher (Gray, 2018: 530; Yin, 2014: 106). This can greatly reduce bias, as the researcher is not able to affect the data like, for instance, a leading question could in an interview setting. Another benefit of the unobtrusiveness of document analysis is that it allows for research on populations that are sensitive or vulnerable. This is important when doing research in indigenous spaces, something I will get back to in the section about ethical considerations (chapter 4.4). Moreover, case documents are a stable data source that can be viewed and reviewed repeatedly (Yin, 2014: 106). This is important for a discourse analysis where the goal is deep analysis of linguistic expressions. Thirdly, archival documents open up for analysis of how a case has changed over time and how it has been framed in different settings.

With these advantages come some limitations and weaknesses. Firstly, documents can never give a full overview of a case – they are like pieces of a bigger puzzle. This is why Welch (2000: 197) describes archival research as an archaeological process: "it involves the discovery and interpretation of fragmentary evidence". Here, there is potential for bias: Which documents have been stored and which documents have endured over time? This is what Gray (2018: 608) calls deposit bias and survival bias. The incomplete and fragmented nature of a document collection is one of the reasons for why it is often suggested to combine documentary research with other, more interactive, data collection methods (Gray, 2018: 528). In this thesis, the case documents are complemented by data retrieved from interviews.

4.2.2 Interviews

Gray (2018: 409) points out that interviews are appropriate when "[t]he research objectives are based upon understanding experiences, opinions, attitudes, values and processes". Essentially, Interviews can provide insight into people's way of thinking. Moreover, the strengths of the interview approach amend some important drawbacks of using case documents as a data source. Using document analysis and interviews together has provided a broad and rigorous data base suitable for conducting a discourse analysis.

Participants for the interviews were identified by use of *purposive sampling* – seeking to identify participants who would provide important perspectives on the phenomenon of interest (Gray, 2018: 233). As mentioned above, the document analysis process was important for

finding interviewees. First, going through the material highlighted the gaps in the document data. Some important perspectives, like the views of people living close to the wind farms, could not be found in the document collection, which was dominated by hearing statements and complaints by interest organizations. One of the main goals of the interviews was to amend this gap and to get a feel of how the wind farms were perceived "on the ground" Likewise, perspectives from wind power developers were mostly missing from the document material, the exception being the license applications, which at the time of this study were already over 15 years old. Interviews with employees of one of the central owners and operators of the wind farms in Fosen, TrønderEnergi (now ANEO), were conducted to amend these gaps. Another important strategy for choosing interviewees was to speak with actors I had identified through the documents to get them to expand upon their viewpoints. This led to interviews with representatives from, among others, Naturvernforbundet Trøndelag, Trondhjems Turistforening, Motvind, and the central licensing authority for wind power in Norway, NVE. An overview of all interviewees can be found in Appendix 1.

I predominantly made use of in-depth *semi-structured interviews*: non-standardized interviews where the interviewer has a rough outline and some questions prepared but is open for digressions and alternative conversation topics (Gray, 2018). This interview type allowed me to prepare some questions for each interviewee to keep the conversation going, while leaving a lot of room open for exploring and probing views and opinions (see Appendix 2 and 3 for the interview guides I used during the semi-structured interviews). These interviews were pre-planned and most often conducted in an office space or via digital communication. I also used *informal conversational interviews* (Gray, 2018: 412) with some participants in more spontaneous situations. This interview type was mostly used in conversations with residents in Åfjord during my stay there. Interviews of this type allowed me to stay flexible and interview people in non-formal situations. As Yin (2014: 110) explains, interviews where the stream of questions is fluid rather than rigid, are very well suited for qualitative case-study research. After all, the aim of the interviews was to get the interviewees to expand upon and talk freely about their own perspectives. My own inputs in the interviews were mostly there to 1) keep the conversation going and 2) make sure that the interview followed the general topic of the research project.

There are several advantages to using in-depth and fluid interviews as a data collection method. Interviews can provide perspectives that are consciously left out from the public sphere. In

anonymized interviews, participants might be more comfortable expressing opinions and viewpoints that they would not want to express publicly. Interviews with certain actors can be a good way to gather perspectives that have been marginalized and suppressed in public discourse. Moreover, interviews can produce novel and interesting findings that are not readily available from documentary research. The potential for unique insight is the interview's greatest strength (Yin, 2014: 106).

One of the dangers of relying on data from interviews is the problem of bias. Interviews are interactive and the interviewer will always play a role in how the final data is constructed and reported. For example, closed and leading questions can steer the interview in a certain direction, leaving little room for the interviewee's actual perspectives and opinions. This 'interviewer effect' (Gray, 2018: 414) is a particular problem in non-standardized interviews. In the interview's conducted for this thesis, I tried to let the interviewees speak their own mind as much as possible, not wanting to affect their answers with my own preconceptions about the case. However, this is difficult when the interviews are of a conversational nature. The risk of bias is therefore a limitation to the material gathered from interviews that must be acknowledged. Another drawback of using interviews as a data collection method is the fact that it can be difficult to recall exactly what was being said. For the majority of the interviews conducted for this thesis, this limitation was remedied by the use of voice recordings. In some settings, however, this was not appropriate, and I had to rely on my own notes. Inevitably, some of the data was lost in this process.

Overall, the data collected from case documents and supplemental interviews provided a broad collection of data suitable for discourse analysis. This analysis is the topic for the next section.

4.3 Doing discourse analysis

As explained in chapter 3, this thesis employs a discourse analysis approach grounded in post-structural political ecology literature (Adger et al., 2001). Discourse analysis, however, can mean many different things in practice. There is no clear set of instructions for *how* to conduct a discourse analysis. Defining the actual process of discourse analysis is challenging, as the whole endeavour challenges positivist notions of what a scientific 'analysis' should be. As Potter and Wetherell (1994: 53) explain, "[o]ne of the difficulties in writing about the process of discourse analysis is that the very category 'analysis' comes from a discourse developed for

quantitative, positivist methodologies such as experiments and surveys." Despite these difficulties, this section seeks to explain how I approached the task of analysing the discourses of the Fosen case, drawing upon the strategies laid out by Waitt (2005).

I started the analysis process by familiarising myself with the case material (both case documents and interviews), while attempting to examine the texts with "fresh eyes and ears" (Waitt, 2005: 181). Hegemonic discourses can only be identified if the analysts can set aside pre-existing categories (Berg, 2009: 219). A complete suspension of preconceptions is, of course, not possible. Rather, it is something that should be strived for. Having become familiar with the texts, the next step was to "code" the data into different thematic categories. In the coding process I used the qualitative analysis program NVivo. This program allowed me to sort statements from the data material into different categories. The categories arose organically from reading and rereading the data material. At the end, I ended up with six main categories:

- Climate change mitigation
- Natural landscape destruction
- Indigenous rights
- Democracy
- Economic development (both local and national)
- The (European) energy market

Coding the data material into these categories allowed me to have a clearer look at the components of the Fosen case and how they were discussed by the different actors. Within these categories, I tried to identify the different perspectives. The central question was: What is the primary 'regime of truth' in the case, and how is it contested by counter-perspectives? Moreover, I paid particular attention to how truth-statements were backed up by different types of knowledge. Overall, this strategy for analysis helped distinguish the main discourses in the Fosen case, as well as exploring the role of knowledge in the power-dynamics between actors.

As explained in chapter 3.2.2, narratives play a central role in how this thesis conceptualizes discourses and discourse coalitions (see Adger et al. (2001) and Hajer (1996)). A central focus of the discourse analysis process was therefore to actively look for narrative structures. In doing so, questions like "what is the central conflict?" and "what is the proposed resolution?" were helpful. These questions helped recognize narrative structures and their beginnings, turning points and ends. After identifying a narrative structure, I looked for narratological character

archetypes like *heroes*, *victims*, and *villains* and how these role portrayals were used to advance a certain argument or worldview. Questions like "who are the main actors" and "what roles do they play?" and "how do they affect the proposed outcome of the conflict?" helped distinguish such archetypes. Lastly, I actively looked for how narratives connected the past to the present and the present to the future. This is important since, as this study hopes to explain, the Fosen case accentuates conflicting histories and contradictory future imaginaries.

4.4 Ethical considerations

As with any study there were a number of ethical considerations that had to be addressed before and during the research process for this thesis. As mentioned above, I, as a researcher, am affected by certain discourses that can influence how I perceive and draw conclusions from the case material. Assessing my role as a researcher is particularly important when carrying out research and field work in indigenous spaces. This chapter highlights some of these challenges.

4.4.1 Doing research in Saepmie

My initial plan for this study was to include interviews with the Saami reindeer herders who have protested the wind farms on the Fosen-peninsula. However, the Fosen Saami have been put under a lot of pressure for the last couple of years, both from researchers, media, and authorities involved in the conflict. In all these instances, the Fosen Saami have been open to tell their story, without seeing a significant change in their situation in Fosen. Normann (2021: 84), who conducted field work within South Saami communities, writes:

> "There has been an increasing interest in the wind energy conflicts among researchers, and especially master students and journalists, and I can sense exhaustion from research participants when it comes to offering accounts of their lived tragedy and struggle, perhaps without seeing that researchers have contributed to their case."

Given the extensive media and research pressure put on the reindeer herding families, I therefore had to ask if interviews with the Fosen Saami were necessary to give a satisfying answer to the research questions posed for this thesis. After conferring with researchers familiar with the situation, and getting an overview of the source material, I concluded that such interviews would not be necessary. Saami perspectives are well-represented in the case

documents and there was also the possibility of drawing upon data collected by other researchers who had conducted interviews with the Fosen reindeer herders.

When doing research on Saami issues, one cannot ignore the role of research in the history of colonialism in Saepmie (Fjellheim, 2020). As a non-Saami ethnic Norwegian, it is important to recognize that I will always be limited in my efforts to grasp Saami cultural practices and Saami knowledge. Therefore, this is not primarily a study of the workings of Saami practices and ways of knowing. Rather, its focus is on illustrating how alternative discourses (including, but not limited to, Saami perspectives) are being marginalized and delegitimized by elite power. Indeed, the difficulties of understanding indigenous practices and ways of knowing from an outside perspective is one of the core sources of conflict in the Fosen case (see chapter 6.1). However, this recognition of the ultimate inadequacy of attempts to understand Saami knowledge as an outsider, must not mean a total disregard of the Saami perspective when discussing the Fosen case. These perspectives are integral to the case, and an analysis would not be complete without them. The challenge has been to include the Saami perspective in the analysis without misappropriating a painful experience that I myself have not been part of.

Ultimately, the story of the Saami experience in Fosen should be told by the Fosen Saami themselves. Such counter-stories are important and can be powerful act of resistance (Fjellheim, 2020). Instead of telling the Fosen Saami's story on their behalf, this study seeks to explore some of the mechanisms that are preventing indigenous and local perspectives from having a meaningful impact on wind power development decisions. As far as descriptions of Saami practices go, I have therefore relied on secondary data, written statements from the Saami reindeer herders themselves, and literature from researchers with experience from research in indigenous spaces.

4.4.2 Informed consent, privacy, and translations

Another ethical challenge faced during the work on this thesis was how to secure the informed consent and anonymity of the research participants. Several measures were taken to ensure ethical data collection and safe storage of data. An application, including a data collection plan and several interview guides, was sent to NSD (Norwegian Centre for Research Data), who approved the research plans before prior to commencing field work. When conducting interviews, all participants received an information letter and were asked to give written consent

to the interview material being used in the master's thesis (see Appendix 4). When using voice recordings, I made sure that the interviewees were aware and informed. The audio files, interview notes, and interview transcripts were kept on a secure desktop, only accessible by me. Any information that could be traced back to the interviewees, was deleted. In writing the analysis, I only refer to the organizations the participants represented and, at times, their roles within them. Following the conclusion of this project, all data collected from the interviews will be deleted.

All interviews for this thesis were conducted in Norwegian. Most, if not all, of the case documents and reports that have entered into the analysis was also written in Norwegian. When citing interviews and case documents in this text, I have therefore had to rely on my own translations. Some nuances will always be lost in this translation process, and word-for-word translations are not always the best way to stay truthful to the original statement. As far as possible, I have tried to keep the translations as true to the original statements as possible.

Finally, it should be mentioned that there are several Saami languages spoken within Saepmie – the traditional Saami territories spanning across Norway, Sweden, and Finland. When using Saami terms in this thesis, I have chosen spellings that closest resemble the South Saami language, as this is the language spoken by the Saami in Trøndelag.

5 Wind power, nature, and Saami rights: The discourses of the Fosen case

The day I arrived in Trondheim to start my field work, 28th November 2022, four activists from "Stopp Oljeletinga" (the Norwegian equivalent of "Just Stop Oil") were taken in by the police for blocking traffic in an intersection just outside the city centre. The protest took place outside the headquarters of ANEO, one of the wind power developers and owners of several wind farms in Fosen, and representatives of which I would meet with the following day. In the face of the challenge posed by the activists, ANEO presents a possible solution: In order to stop oil, we need more renewable energy production. The day after, stepping out into the cold soon-to-be winter air, I was met with the sight of a large police escort. Inside one of the black vans with tinted windscreens, sat Aleksandar Vučić, the president of Serbia. During his stay in Trondheim, the president was to meet with NTNU and SINTEF to discuss modern renewable energy solutions, before having lunch with representatives from the energy- and technology sector. As it appeared, the promise of a 'green transition' based on technological innovation and international cooperation, was in full swing.

In the following week I immersed myself in the controversies surrounding the wind farms in Fosen and met with representatives from wind power developers, licensing authorities, interest organizations, and residents living close to the wind farms. The atmosphere in Åfjord, the small town I stayed in a few hours north of Trondheim, was very different than in the city. Initially talkative locals would tense up as I explained the theme of my project, with many walking away at the first mention of wind power. From those who agreed to chat, it became clear that the wind farms enveloping the town both to the north and south, were highly divisive. During the course of the field work, introduced to the plights of Åfjord residents, nature conservationists and Saami reindeer herders, it became more and more evident that the challenge of "just stop oil" also includes the far more complicated challenge of finding a *just way* to stop oil.

Figure 2: Graffiti on the streets of Trondheim by the activist group "Stopp Oljeletinga", demanding a halt to Norwegian oil exploration. Photo: Harry Lewis Lawford, 2022.

During the fieldwork it became apparent that, while some narratives dominate the conversation, no discourse enjoys unchallenged hegemony in the case of wind power in Fosen. Instead, we can see a struggle for hegemony between two distinct environmentalist discourses (one promoting "green growth" and one concerned with the conservation of untouched nature), with a third discursive level introduced in the form of increased attention to the struggles of Saami reindeer herders. Importantly, the 'Fosen case' is not one agreed upon issue. For some it is a case of natural landscape destruction, for some it is a case of securing energy supply and kicking of a renewable energy transition. For others yet, it is a case of preserving cultural practices in the face of industrial expansion on traditional lands. Therefore, the task of uncovering the discourses in the Fosen case is also the task of identifying what the Fosen case is, and how it is framed by the many actors involved.

The following chapter is divided into three parallel sections, each one representing one of the main discourses in the conflict over wind power on the Fosen peninsula. I have split them into separate sections here to illustrate the differences in how they give meaning to wind power and the multitude of narratives used to justify certain actions or lack of actions. However, it is

important to keep in mind that such a distinction is not absolute; in reality, these discursive positions flow into each other in a web of meaning from which actors can pick and choose to further their own will. Table 1 gives an overview of the three discourses.

Table 1: Overview of the discourses of the Fosen case

Discourse	Wind-Wind	Nature Conservation	Saami Rights
Main narrative	From crisis to opportunity Wind power as a solution to the climate crisis and driver of economic growth	Capital encroachment on nature Wind power as a driver of environmental degradation	Green colonization Wind power as indigenous rights-infringement
Modus Operandi	"GO!" – We must do more Increase the supply of renewable energy!	"STOP!" – We must do less Reduce the demand of energy!	"SURVIVE!" – Green energy expansion must not come at the expense of Saami cultural practices
Scale	Mainly national/global	Mainly local/regional	Non-national, Saepmie
Ways of knowing	Climate science, neoliberal economics, ecomodernism, solutionism, engineering, Europeanism	Local knowledge, ecology, deep ecology, environmental economics,	Indigenous knowledge, reindeer husbandry knowledge, human rights-law
Values	Technological progress, innovation, economic growth, international cooperation, climate change mitigation	Nature conservation, cultural heritage, local community, local democracy	Cultural heritage, human rights, local community, nature conservation
Associated actors and institutions	**Wind power developers/operators:** Statkraft, TrønderEnergi, Sarepta Energi **Foreign investors:** Nordic Wind Power DA (Credit Suisse, BKW Energie AG), Energy Infrastructure Partners, Stadtwerke Munchen **Licensing authorities:** The Norwegian Water Resources and Energy Directorate (NVE), Ministry of Petroleum and Energy (OED) **Policymakers:** The Norwegian state, Åfjord municipality, Ørland municipality **Interest organisations:** NORWEA, Fornybar Norge, WindEurope, ZERO, Norsk Klimastiftelse	**Local communities:** Ørland, Indre Fosen, Åfjord, Osen **Interest organisations:** Naturvernforbundet, Fosen Naturvernforening, Natur og Ungdom, Motvind, Trondhjems Turistforening, Vern Fosenhalvøya, Birdlife Norway **State institutions:** Riksantikvaren, Miljødepartementet	**Local Saami reindeer herders:** Sør-Fosen Sijte, Nord-Fosen Siida **Saami organisations:** Sametinget, Norske reindriftssamers landsforbund (NRL), Norske samers riksforbund (NSR) **State institutions:** Norway's institution for human rights (NIM), The thruth and reconcilitation commission

5.1 Wind-Wind: From crisis to opportunity

In *Energimeldingen* (St.meld. nr. 29 (1998-99)), the Bondevik-led government described wind power as "unprofitable" and suggested a modest increase in wind power development on account of its potential as a future energy technology. Wind power remained on the margins of the Norwegian energy sector until in 2016 when wind energy production started to dramatically increase, going from 2,1 TWh to 9,9 TWh yearly production in a matter of five years. The change in attitude towards wind power can be seen in the rising dominance of a discourse that sees wind power as furthering the dual goals of securing economic growth and development and providing new "green" energy in a world facing a looming climate crisis and impending energy shortage. In this thesis, I will call this the "Wind-Wind" discourse (WW). Although challenged by alternative narratives of environmental justice, this discourse remains dominant in the Fosen case. The WW discourse is fundamentally progressive and forward-looking. It has its starting point in the dual threat of looming climate change and impending energy shortage, but it views both these as opportunities for technological progress and economic growth. Looking into the future, its *modus operandi* is "GO!" and "do *more*".

The Wind-Wind discourse can be understood as a geographically specific articulation of a global ecomodernist discourse dedicated to technological innovation and green industry expansion as the solution to the problem of climate change. It is grounded in, and is a producer of, a specific configuration of scientific, financial, and technical knowledge. At its core is a promise of a better future, and wind power technologies play a central role in fulfilling this promise. As such, it is deeply immersed in a socio-technical imaginary (Jasanoff & Kim, 2015) that manifests itself in a rapid expansion of wind power technologies.

The central narrative in the WW discourse is one that moves from crisis to opportunity. In this narrative the hero is portrayed as the assemblage of actors that make the green transition happen: the wind power developers, the politicians, the national and international institutions, the innovators, the engineers, and, in a sense, the wind power technology itself. It is a tale of triumph against a common threat by means of science, technology, and market-based mechanisms. The antagonists, on the other hand, are those who oppose renewable energy development projects and thus slow down the green transition. Opposition, whether based on biodiversity concerns or concerns for indigenous rights, is in this narrative an obstacle that needs to be overcome, a problem that needs solving, to secure a future with a secure supply of

green energy. The necessity of such a transition, and the market- and technology-based mechanisms for achieving it, is taken as self-evident. As the name "Wind-Wind" alludes to, it portrays wind power development as a win-win situation: It is part of the solution to the dual crises of climate change and energy shortage while it provides economic development opportunities and technological advances at both the national and local level. In the following, I will describe the central narrative that structure the WW discourse and give examples of how it is articulated in key white papers, case documents and my own interviews relating to the wind farms in Fosen.

5.1.1 A double threat: Climate change and the security of supply

As mentioned, the Wind-Wind discourse centres around two crises: One concerning the looming threat of global warming and one warning of an impending energy shortage in Norway. In narratives on wind power, these crises are the catalysts of a green transition. They underlie most of the statements expressed about wind power within this discourse, whether explicitly or implied through key phrases such as "green transition", "green energy", and "supply security". With the problems of climate change and energy shortage as its basis, argumentation within this discourse is almost always prefaced by pointing to the need for *more renewable energy*. Thus, the WW discourse sees wind power as (at least a part of) the solution to the dual crises of global warming and energy shortage, as well as promising economic growth and development at both a local and national scale.

In the case of the wind farms in Fosen, the global crisis of climate change and the regional crisis of a forthcoming power deficit in central Norway were major drivers for wind power development from the very start of the planning process. For example, the dual threat of climate change and energy shortage is greatly emphasized in the preface Statkraft's (2008: 7) licence application for Storheia wind farm:

> "The energy sector in Norway and the rest of Europe is facing major challenges in the coming years. A fundamental challenge is that *energy consumption is increasing and is expected to increase for decades to come*. To ensure consumers have stable and safe access to electricity at relatively reasonable prices, new production capacity must therefore be built. New electricity production must take care of several important

considerations, and of these, environmental considerations, and *especially consideration of climate change*, are among the most important."

The application also makes direct reference to the Intergovernmental Panel on Climate Change, and the need to reduce human emissions. The key to reduce emissions is not reducing consumption all-together, but rather replacing fossil-fuel based energy production with renewable energy solutions such as wind power (Statkraft, 2008: 7):

> "The UN's climate panel (IPCC) concluded in its main report from 2007 that it is "very likely" that human emissions of greenhouse gases have caused most of the observed global temperature increase since the mid-1900s the number. Emissions related to energy use are one of the biggest contributors. To reduce these emissions, a larger part of the energy consumption must be covered by renewable, emission-free energy sources, and wind power appears to be one of the most attractive alternatives."

These two paragraphs are typical of the narrative structure on which the argument of the necessity of more renewable energy production is based within the WW discourse. The two crises of climate change and energy shortage are often mentioned in succession in order to drive home the point that urgent action is needed. Arguments structured similar to this can be found all throughout the case documents of the Fosen case. I found similar tendencies in the interviews I held with representatives from ANEO. When asked about the importance of wind power, the double crisis of energy shortage in central Norway and the climate challenge was brought up. They were further referenced implicitly throughout the conversation through phrases such as "securing energy supply", "power deficit", and "the importance of renewable energy in the green transition". On the whole, the idea of the "green transition", at least as it appears in wind power discourses in Fosen, is fundamentally about producing *more*; it will not be possible to phase out fossil fuels without a massive influx of renewable energy supply.

The importance of securing energy supply in the region and increasing renewable energy production is not only reflected in statements by the wind power developers. In NVE's (2010: 149) decision to approve the licences for the wind farms, the concerns for supply security and renewable energy ultimately outweigh the concerns for natural landscapes, reindeer husbandry, recreation, noise pollution etc.:

> "NVE believes that the negative consequences of such a development [construction of Storheia wind farm] are overall acceptable compared to the beneficial effects the development represents in the form of new production in a deficit region, increased security of supply at Fosen and in central Norway and to be able to fulfil the political objectives of establishment of new renewable energy in Norway."

Some of the resident I interviewed in Åfjord echoed this line of thinking. When asked what they thought of the wind farms surrounding the town, one interviewee said: "I do not like them very much, but I understand the importance of more wind power, because of the climate crisis." Another from the same group added: "The most important thing is that we stop searching for more oil". They were also concerned with how electricity prices had risen a lot nationally but remained relatively stable in central Norway: "As long as we don't have to pay sky-high electricity prices". For these interviewees, the wind farms were a sort of necessary evil, a price they were willing to pay for a solution to the climate crisis and to avoid the dramatic increase in electricity prices that has happened in other parts of the country.

Overall, the power of these crisis narratives of climate change and energy shortage lies in that, even when not articulated explicitly, they are always tacitly laying out the premises of all conversations on wind power. That wind power is part of the solution to these crises is presupposed and taken for granted. Thus, any potential negative effects arising *from* wind power development must always be measured against the importance of responding to these two challenges. And, importantly, within this discourse, "responding" means taking action, not refraining from potentially detrimental actions. In the next section we shall see how this sense of urgency translates into a vision of green economic growth led by technological innovation and advancement.

5.1.2 Green growth and development

As mentioned earlier, the central narrative within the WW discourse on wind power involves a movement from *crisis* to *opportunity.* The green transition is not only about cutting emissions and avoiding energy shortage in Norway, but also about creating value, increasing employment, and securing economic profitability in the energy sector. This idea of wind power development heralding growth and development is important both in the Fosen case and in a broader national discourse on wind power.

In the Fosen case, the question of local economic benefits is particularly important. In the hearing statements made by the municipalities affected by the Fosen projects, the promise of local economic growth and increase in employment was brought up repeatedly. For example, when NVE decided to grant licence to the Storheia wind farm only under the conditions that the number of windmills would be reduced, Bjugn municipality's mayor, Arnfinn Astad (2010), complained in a letter to NVE that this would lead to less local benefits for the municipality. He further warned:

> "If the County Governor's objection, or other complaints that may have been submitted, will cause developments to get further reduced, this will have major consequences for Bjugn municipality in the form of reductions in property tax, other compensations, employment and local sales of goods and services and other matters. Somewhere or other there is a limit for what a small local community will accept to get in return for providing land for wind power development within its areas."

For the local politicians of Bjugn municipality, local economic development opportunities were seen a kind of compensation for "providing land" for the wind farms. So much so that the plans to reduce the number of windmills in the wind farm played a significant role in changing the local politicians' view on the whole project. As Astad (2010) continues in his letter:

> "[T]he reduction is so great that the disadvantages such a wind farm will have for the municipality, the municipality's residents, the local natural environment and outdoor life, will quickly exceed the compensations the municipality can expect to achieve with the development."

This idea of the wind power inducing growth and local development was echoed by one of the residents I spoke to in Åfjord. While explaining that he had friends who worked as engineers in Storheia wind farm he said: "It is good that the wind farms bring work opportunities to the area – and that more people will want to move here." The same line of argumentation was decisive in NVE's decision to grant licences for Storheia wind farm. Here, the economic aspect of wind power developments is brought up as one of the main positives that weigh in favour of allowing development: "A wind power plant can have positive social effects through increased activity (buying and selling of goods and services), increased employment, increased tax

revenue for the municipality and increased utilization of outdoor resources" (NVE, 2010). As these examples indicate, the prospect of local benefits from wind power development was crucial for gaining local political acceptance for the construction of the wind farms in Fosen.

Economic benefits of wind power developments are also brought up at the national level. For example, in 2020 the Solberg government issued a white paper on the regulation of land-based wind power (Meld. St. 28 (2019–2020)):

> "[T]he wind power industry creates economic ripple effects locally, regionally and nationally in both the construction and operational phases. A significant part of the ripple effects accrues to the local communities. Indirectly, the development and operation of wind power plants lead to demand for external deliveries of goods and services."

It is in national white papers such as this that the idea of "green growth" really comes to fruition. In 2016, the Solberg government outlined the main priorities for the energy sector towards 2030 in the white paper *Kraft til endring* (Meld. St. 25 (2015–2016)). After explaining the need for more renewable energy production to reduce greenhouse gas emissions, and the great potential for further extraction of Norwegian energy resources, the paper points out the main goals for the future of the energy sector:

> "The energy policy must properly take into account the security of energy supply, the climate challenges, nature and environment, and value-creation. We can replace the use of fossil energy sources in construction, the transport sector, and industry with renewable energy. The government will facilitate an efficient, climate-friendly, and secure energy supply in Norway. The tasks must be solved in ways which provide the most possible value for society, at the lowest possible cost."

While alluding to the threats of climate change and energy shortage, the paper continually emphasizes the economic development opportunities that arise from the prospect of an expansion of the renewable energy sector. This argumentation structure that goes from crisis to opportunity is fundamental in the green growth discourse on wind power. From this point of view, a green transition should be governed by use of a market rationality. For such a transition to be considered successful and realistic, it must be a profitable endeavour.

In addition to being economically viable, the green transition must happen quickly. This sense of urgency is encapsulated in the recent report by the Energy commission appointed by the Støre-government to evaluate the future of the energy sector in Norway, with the telling name *More of everything – Faster* (NOU 2023: 3) The importance of both mitigating climate change and securing a profitable energy industry is encapsulated in this passage: "Without new measures, we will not succeed in reaching the climate targets, we will not succeed in creating new green industry and we will not succeed in securing competitive prices. For that reason, there is a need for new and powerful measures" (NOU 2023: 3). Fundamentally, then, the green growth discourse that prevails both in discussions over wind power in Fosen and in energy politics debates nationally, is about doing *more*: more renewable energy production, more value-creation, more employment, and more growth. In the next section, we will see how this goal of "doing more" is linked to a specific configuration of technical, scientific, and financial knowledge.

5.1.3 Quantifying nature: Resource management and the technology of wind power

As we have seen, the WW discourse rests on a narrative structure that moves from climate- and supply crises to economic development opportunities. Closely related to this is a narrative of continued technological progress and innovation. In this narrative the wind power technology itself appears as the hero and the solution. With increasingly more efficient and larger wind turbines, wind power development becomes financially viable for investors. This is part of what has caused such a large increase in the number of wind farms in Norway the last couple of years. From 2012 to 2019 the costs of constructing and running a land-based wind farm were reduced by about 40%, largely due to an increase in the height of the windmills, performance of the turbines and the length of the rotor blades (Jakobsen et al., 2019). The newer and larger wind turbines are expected to be able to generate power when wind speeds are low. In addition, new rotor blade technologies make it possible for turbines to operate in wind speeds over 25 m/s, while older wind turbines would have to shut down under such conditions. The increase in energy- and cost-efficiency is parallel to an increase in the size of the windmills (Jacobsen et al., 2019: 15).

While larger turbines make wind power financially viable for investors, this size-increase is a major point of contention and has fuelled the opposition movement in Fosen. In 2016, the developers applied to change the original licences in order to make use of the latest and most efficient wind turbines. This was in line with the original licence application where the developers had asked for flexibility so that they would be able to use the newest and most efficient technology when construction started. However, the application to change the type and number of windmills was not sent out on a regular hearing round to all affected parties, causing interest organizations to question the validity of the case proceedings. Indeed, one of the complaints I heard most often from activists and residents was that the windmills were much larger than they had been given an impression of during the early stages of the case. For the wind power developers, larger windmills mean greater profits; for locals and opposition groups it is a cause of further aggravation.

Technical knowledge is also decisive in figuring out where wind power development takes place. The efficiency, and thus profitability, of a wind farm ultimately depends on where it is sited. It all comes down to the question: Where do the wind turbines generate the most power? Thus, the choice of siting for a wind farm becomes a technical issue of mapping out areas with the best wind resources. From this point of view, the "problem of wind power" is a technical problem, thus prompting technical solutions. In both the original licence applications for the wind farms in Fosen, and the many following reports and assessments, the question of siting was essential. Both the wind power developers and the licensing authorities undertook the task of mapping out the technical and financial potential of a given site before weighing this against other potential negative consequences of the given site. Years before the developers officially announced plans for the construction of new wind farms in Fosen, wind measuring masts were raised in several locations. The results of these measurements were used in technical and financial calculations to determine where it would be most beneficial to construct a wind farm in Fosen. Based on these calculations, it was concluded that the mountainous coastal areas of the Fosen peninsula displayed a great potential for wind power development. Such wind resource calculations were crucial for the choice of Storheia as a potential site, despite it being the most important winter pasture for the Saami reindeer herders in Sør-Fosen Sijte (see chapter 5.3.1).

Wind resource calculations was also the main reason behind the choice of Roan as the location of Roan wind farm. In the licence application for Roan wind farm, Sarepta Energi AS (2008: 22) outlined the main factors for choosing an appropriate site for wind farm construction:

> "When choosing locations for the establishment of wind farms, the following criteria are emphasized:
>
> - Wind conditions
> - Municipal plans and county plans
> - Interest from municipalities
> - Infrastructure
> - Environment"

As the application states "the most important criterium for establishing a wind farm is good wind conditions" (Sarepta Energi AS, 2008: 22). Second to that, the developers emphasize harmonization with the plans and interests of local and regional authorities. Thirdly, a wind power plant must be built within a reasonable distance to existing infrastructure, to reduce the costs of road construction, grid extensions and service buildings. The last point the application mentions is "environment": an umbrella term for all the potential environmental and social impacts of a wind farm. As stated in the application, this includes the surrounding natural landscapes, recreational activities, biological diversity, noise, reindeer husbandry and other social effects. In sum, these are the "impacts" that the benefits of extracting the wind resources are balanced against. If a site is considered to have great wind resources, the next question is: "How can we reduce the environmental impacts of wind power development here?"

The purpose here is to highlight the importance of technical and financial analyses in pointing out potential sites for wind power development. These analyses are where the planning process starts: Where can the wind farms generate the most power and, crucially, will operating the wind farms generate profits? After this initial evaluation, it is the task of impact assessors and expert consultants to suggest "mitigating measures" that can alleviate the detrimental effects of the wind power developments. The siting process starts with technical and economic analyses and ends with an assessment of potential environmental and social implications.

These technical-economic analytical tools are also important on a national level. When NVE released the aforementioned *National framework for wind power* it was met by massive national

opposition. The national plans mapped out large chunks of land for potential wind power developments based on "analyses of technical-economic suitability and environmental and societal interests throughout the country" (Jakobsen et al., 2019: 8). As one NVE-operative said during the fieldwork, the release of the national plan was the event that triggered the massive opposition movement against wind power across Norway. NVE faced an uproar from communities who saw their local natural landscapes marked for potential wind power projects. The plan, a top-down project prepared on behalf of the OED, combined GIS-tools (geographic information system), expert knowledge and hearing statements to mark out areas with good wind resources and low level of "conflict potential". The level of "conflict potential" was mapped out in the same ways, and on the same maps, as the technical and financial assessments of wind power resources. As the plan itself points to as a limitation, the top-down approach of the plan could not wholly capture local and regional interests. The valuations for what areas would cause conflict, was based on hearing statements and NVE's own assessments: "These assessments involve an inevitable weighting of different interests and how wind power affects them. The valuation has been carried out through professional judgement" (Jakobsen et al., 2019: 117). In a way, the plan epitomizes how the WW discourse 'knows' nature: As an object for governance and resource extraction. Nature is broken down into analytical pieces, dissected and quantified, and mapped out as a frontier for wind power expansion, backed by state and capital. As I will illustrate later, this way of 'knowing' is at odds with the ways of knowing of opposing voices such as nature conservation activists and local Saami communities.

The problem-solution mode of governance in the WW discourse also affects how it frames opposing voices. It responds to technical challenges such as that of securing optimal energy efficiency in much the same way as it deals with "problem of opposition". The problem of opposition is "solved" by a regime of impact assessments and expert consultations designed to find ways to reduce the level of conflict. As NVE states in the preface to *National framework for wind power*: "Knowledge and analysis contribute to better decisions and can have a conflict-mitigating effect" (Jakobsen et al., 2019). Impact assessments, hearing rounds and expert knowledge are the "political technologies" (Asdal, 2011) that wind power developers and state authorities employ to solve the problem of opposition. With more and better knowledge about the environmental, social, and economic effects of wind power development, the negative effects of wind power can be mitigated, and conflict will be reduced.

The use of such political tools to subdue opposition is illustrated by how OED and the minister of petroleum and energy has responded to the supreme court judgement that rendered the licences for Storheia and Roan wind farm invalid. The ministry's interpretation of the ruling is that the wind farms will cause rights violations against Saami reindeer herders at some point in the future, but that such violations can be avoided through "mitigating measures". To find these somewhat obscure measures, more knowledge is needed. As the minister of oil- and energy Terje Aasland (2023a) stated in February 2023:

> "It is fundamental to this case that the reindeer herders' protection under international law is ensured. The government has said that we will make the changes necessary to put this in place. In order to assess how this can happen and what alternatives exist, *we must have a sufficient knowledge base.*" (my italics)

Through new impact assessments and more knowledge, OED aims to find a way to change the licences so that they fulfil legal requirements without taking down the wind turbines. This is despite the fact that the reindeer herders themselves have, since the initial plans were announced in 2006, said that no such measures will allow the wind farms in Fosen and reindeer husbandry to co-exist. From the point of view of OED, Statkraft, and TrønderEnergi, demolition of the wind farms has never been an option.

The purpose of this section has been to show that the WW discourse is imbedded in a certain knowledge configuration. It hinges on the knowledge of climate science, such as that of the IPCC, to identify the crisis ahead, but its practices, the mode of governance it predicates, is dependent on technical and engineering knowledge to understand how wind power technologies can be implemented successfully, and financial knowledge to assess profitability. These technical-financial analyses are crucial in achieving the targets of mitigating climate change and increasing economic growth. The WW discourse is depoliticized in that it tells a narrative of growth and technological advancement, where there are no clear victims. While it recognizes the costs of wind power developments, these costs can be mitigated through expert knowledge, technological solutions, political tools, and market-based mechanisms. In the Wind-Wind discourse wind power is a win-win for *everyone*.

5.2 Nature conservation: Industrial encroachments and environmental degradation

In the previous section we have seen how the WW discourse is the leading discourse in both the Fosen case and in energy policy documents on a national level. The ideas of the 'green transition', 'green growth' and technological advancement are the main drivers behind the recent expansion of the Norwegian wind power industry. However, as mentioned earlier, the dominating presence of this discourse is increasingly challenged by alternative framings; there is no discursive hegemony in this case (Adger et al., 2001). In the following sections I will outline these alternative discourses. In this case, there are two main alternative framings being advanced by opponents of wind power opponents in Fosen: one concerning the destruction of valued and loved local natural landscapes, and one concerning the dispossession of land from Saami reindeer grazers. Despite their different roots these two framings have a lot in common. The narratives they build upon are structured similarly, with a common 'villain', namely the 'wind power regime' consisting of both public and private actors. They share the conception that monetary interests are, wrongly, taking precedence over concerns for local communities, vulnerable natural landscapes and ecosystems, and indigenous rights. I will start by discussing these two discursive framings separately, pointing out their particularities and how they play out in the Fosen case. Later, I will argue that it is helpful to conceptualize them together as a 'discourse coalition', building on their discursive similarities (chapter 6.3).

In this chapter I will focus on the nature conservation discourse (NC) that plays a big part in the opposition movement against wind power developments in Fosen. Unlike in the previously discussed WW-discourse, where wind power appears as a solution to the climate crisis and energy shortage, the NC-discourse portrays wind power as a cause of another crisis: the continuing destruction of natural landscapes. The central narrative of this discourse is one of economic interests taking precedence over nature and local interests. As opposed to in the WW-discourse, this narrative is highly politicized with clear portrayals of villains, heroes, and victims. The main conflict arises from the continued intrusions caused by wind power developments in Fosen. In this narrative, these intrusions are caused by a myriad of actors forming a kind of "wind-power regime": the developers (Statkraft, TrønderEnergi), the state (NVE, OED, the government), renewable energy lobbyists (Fornybar Norge, Wind Europe), foreign investors, and the European Union energy market. This regime uses its power to further its own interests at the cost of natural landscapes and local communities in Fosen. The

complaints put forth by anti-wind power activists and local communities, who are presented as the heroes in this narrative, are being downplayed by lawmakers, developers, lobbyists, and the media. All this comes at the cost of the story's victims: natural landscapes (and the non-human species inhabiting them) and local communities.

Where the WW-discourse looks to the future and emphasizes development and technological progress, the NC-discourse looks back to how things were before and values feelings of heritage, sentimentality, and historical and cultural connections to the region. It draws attention to the irreversibility of change and warns against advancing on the current path of continued industrial expansion. From the point of view of the NC-discourse, the intertwined crises of global warming and biodiversity-loss are not solved by doing *more.* On the contrary, industrial and economic activity is seen as the root cause of these issues. Thus, the only 'solution' to these crises is doing less, consuming less, and interfering less with natural ecosystems. Where the WW-discourse says "GO!", the NC-discourse calls for a halt to environmentally destructive practices: Its *modus operandi* is "STOP!".

Like the WW-discourse, the NC-discourse draws upon scientific knowledge, in particular from disciplines such as biology, ecology and environmental economics. One of the central arguments put forth by wind power opponents is that wind turbines threaten local ecosystems and biodiversity, especially with respect to large predator birds such as the Eurasian eagle-owl and white-tailed eagle. Biologists and ecologists supply the knowledge about how wind turbines affect such endangered species and vulnerable ecosystems. However, the dominant way of knowing in this discourse is not science-based. Rather, it is a form of local knowledge that builds upon cultural and historical attachments to Fosen as a place. It draws upon the notion of *friluftsliv*, underlining the health benefits of being able to roam freely in uncultivated natural landscapes. This anthropocentric concept of *friluftsliv* is complemented by an eco-centric notion of nature emphasizing the inherent value of *all* life.

Figure 3: Storheia wind farm with connecting construction roads. Photo: Harry Lewis Lawford.

5.2.1 The costs of wind power

Discerning the reasons behind the recent growth of opposition to wind power in Norway is no simple task. Rarely is there one single factor motivating people to protest wind power developments. As one anti-wind power activist said during my fieldwork in Fosen: "The problem with wind power is that there are so many problems with wind power". The complaints put forth by wind-power opponents range from noise-pollution to rising electricity prices to a lack of local development benefits. In the NC-discourse, wind power is not a solution to a crisis but a problem in and of itself. In the following, I will describe how this problem of wind power is articulated in the Fosen case.

The most prevalent and important framing of the problem of wind power in the NC-discourse is that the wind farms lead to a large-scale destruction of previously 'untouched' natural landscapes. Despite wind turbines themselves not taking up much space, wind farms are land intensive. Each turbine requires a large flat area for construction and maintenance purposes, and the turbines are connected by a network of maintenance roads (see Figure 3). In the Storheia wind farm, for example, the maintenance road network amounts to 62 kilometres. Several of

those I interviewed pointed out that construction roads for wind farms are particularly area intensive. The roads have to be a certain width to fit 80-meter-long rotor blades and, as the sites are on top of mountains with great height variations, the terrain needs to be evened out. In addition, it is not advised to go within 200 meters of the turbines when temperatures are below freezing, as there are risks of ice chunks getting thrown from the rotor blades. The fact that wind farms require large swaths of land is not a contentious issue. However, the magnitude of the direct environmental impact from wind power construction is disputed. Whereas NVE (Jakobsen et al., 2019) estimate that direct landscape impacts amount to about 0.75 km^2 per GWh/year, Motvind's analyses (Solem & Røyset, 2019) show a result above five times higher, 3.9 km^2 per GWh/year. Part of the dispute lies in whether landscapes can be considered restored to their natural state after the construction phase. Motvind's report states that: "natural impacts in the form of fillings, blasting remnants, cuttings, drainage and puncturing of bogs etc. cannot be "restored" by hiding it under a layer of peat" (Solem & Røyset, 2019: 16). Several participants I interviewed echoed these concerns, with one Motvind-representative stating that the developers and NVE are "systematically downplaying" the environmental impacts of wind power production.

The concerns of organisations such as Motvind do not only relate to *direct* landscape impacts. A central part of the argument is that wind turbines have a large effect on the landscape beyond the direct impact on the terrain that comes from service roads, construction fundaments, and the wind turbines themselves. These environmental effects come in the form of noise and visual effects such as shadows, constant movement, and flashing lights at night. The argument is that the culminating effect of noise, movement and flashing lights is stress inducing and has a negative effect on the people who live nearby and who use the landscapes as recreational areas. The presence of wind turbines, which are seen as out of place in the natural landscapes, have devalued these areas to such a degree that many people are feeling a sense of loss. Several interviewees echoed such feelings, with one describing it as a form of "eco-grief". As a Motvind-representative explained: "Here in Norway we have a strong connection to nature, so these are not issues that you can just sweep under the carpet; these are things that have great value for people". In some cases, the argument is extended to include health concerns – the culminating effects of wind turbines cause so much stress that it has an impact on the health and quality of life of people living nearby. These effects are talked about as a kind of "pollution" from the wind turbines, often explicitly through terms such as "noise pollution", "visual pollution" and "aesthetic pollution". This focus on the visibility and presence of the windmills

in the landscape, might be part of what has given rise to NIMBY-explanations of wind power opposition. As Trondhjems Turistforening (2010) write in their complaint against the license for the wind farms in Fosen:

> "Many coastal heaths which, for generations, have been used for outdoor life [friluftsliv], recreation and well-being for the local population and visitors are no longer available in the same way as before. It will not be the same nature experience with the recreational and health benefits this provides. This is inconsistent with the government's objectives to get people out into nature for sports and outdoor activities."

The arguments put forth here rely heavily on the notion of *friluftsliv* – a term which literally means "free-air life" but for which there is no fitting English translation. As Gurholt and Broch (2019) write "*friluftsliv* is a core political, social and cultural value in Norway, rooted in the democratic principle of free public access to uncultivated public and private land." The right to free enjoyment of Norway's natural landscapes is legally recognized in *Friluftsloven.* For several of the residents I spoke to in Åfjord, the notion of *friluftsliv* was important in their opposition to the wind farms; one said: "These are mountains that we used to go for walks in several days a week, now it is not the same". Another wind-power opponent emphasized that "people have lost areas that they have hiked in, picked mushrooms and berries, or just gone for a walk to the mountain top to watch the sunset". The *friluftsliv* described here is one where nature is actively used, providing well-being and quality of life for its users. Organizations such as Motvind and Trondhjems Turistforening argue that large-scale wind power development in the area will diminish the attractiveness of practicing *friluftsliv* and thus removes its benefits for physical and mental health.

The conception of nature that appears in these arguments is anthropocentric; it is about how loss of natural landscapes affects residents who have cultural and ancestral attachments to the area and people who come to visit and appreciate the beautiful nature. The NC-discourse also includes an *eco-centric* framing of nature; one that emphasizes the intrinsic value of non-human species and ecosystems. Here, nature, and the life that thrives within it, is not only valued based on the benefits it provides humans, but seen as having great value in itself. In the Fosen case, this discursive position is most clearly represented by conservationist organisations such as Naturvernforbundet, BirdLife Norge, and Vern Fosenhalvøya. This form of nature conservation has deep roots in Norway, going back to the deep-ecology movement developed by a group of

eco-philosophers such as Arne Næss, Sigmund Kvaløy and Nils Faarlund. This eco-philosophy emphasized the intrinsic value of all life, and that humans are only fragments of a greater ecological whole (Anker, 2020: 72). At a lecture held at the University of Tromsø in 1971, Næss described his "ecosophy":

> "[It is] a type of philosophy, which takes an identification with all life as its point of departure in this life-giving environment. It establishes in a way a classless society within the entire biosphere, a democracy in which we can talk about a justice not only for humans, but also for animals, plants, and minerals. And life will not be conceived as an antagonism to death, but as being in interaction with surroundings, the life-giving environment. This represents a very strong emphasis on everything hanging together and the idea that we are only fragments – not even parts." (Næss 1971: 54, translated in Anker 2020: 72)

In the complaints against the wind farms in Fosen, the biodiversity on the Fosen peninsula is described as "unique", "vulnerable" and as containing several endangered species. For example, Naturvernforbundet Sør-Trøndelag (2010) wrote that "with its rich birdlife, of which a significant number are red-listed species, the construction and operation of the wind power plant could have a drastic negative effect". Why is it important to preserve biodiversity and endangered species? Is it not right to sacrifice a few birds in order to ensure a consistent supply of renewable energy? For the conservationists I spoke to in Trøndelag, the disappearance of an endangered bird such as the Hubro, would mean something more. Although such a happening would not affect them directly, it would be experienced as a great loss. This sense of loss builds upon an unquantifiable love for all life, both human and non-human. These ways of knowing nature are fundamentally at odds with the way that the coalition of state and market actors 'sees' nature as a frontier for industrial expansion and resource extraction.

To sum up, the NC-discourse frames the problem of wind power in a fundamentally different way to the WW-discourse. Here, it is not a problem of overcoming the obstacles that slow down the green energy transition, but rather a problem of ceaseless destruction of valued and loved natural landscapes. The NC-discourse is largely founded on a form of local knowledge, emphasizing ancestral and cultural attachments to local natural landscapes, the notion of *friluftsliv* as beneficial for mental and physical health, and a love for life, both human and non-human.

5.2.2 Capital power, Europe, and democracy

The main narrative in the NC-discourse is one where the economic interests of the few takes precedence over natural landscapes and local interests. In this narrative, the powerful economic forces behind the wind-power regime are forcing through environmentally and socially damaging projects without listening to the concerns of residents and interest organizations. Rather than securing energy supply in the face of an impending energy shortage in Trøndelag, wind power is seen as facilitating new power intensive industry and fulfilling the demands of the European Union. While wind power developers and the government claim that more wind power will reduce electricity prices for consumers, several people I interviewed claimed the opposite. As we shall see in this section, the recent increase in wind power production in Norway is seen as inherently tied to integration into the European energy market, which has led to an "import" of continental electricity prices.

To understand these issues, it is essential to understand how wind power functions in the broader energy system. During my fieldwork, several interviewees mentioned the fact that wind power is inherently unstable (its outputs are dependent on variations in wind strength) and must therefore be balanced with alternative stable energy sources to produce a secure supply of energy. As the grid must be able to withstand great peaks in power production, increased reliance on wind power necessitates large-scale investments into the national grid system. The wind power developments in Fosen therefore led to a large-scale development of increased grid capacity, including a 160-kilometer long 420Kv grid cable stretching from Åfjord to Namsos. Expanding and improving the power grid has its own social and economic implications. First, the investments into the grid are funded by increasing the grid rent, a variable fee paid monthly by consumers. Second, the cables that were built were largely above-ground, and thus lead to further land-use conflicts, with several lengths crossing into Saami reindeer pastures.

In Norway, production variations from wind power are largely balanced out by hydro power, as it is possible to regulate the power output of hydroelectric power plants. However, this depends on the water reservoirs being full. With increasing dependence on variable wind power production, other energy sources are also needed to maintain a steady supply of energy in Norway. This, combined with the need to export and sell surplus power, has led to the construction of several cables connecting the Norwegian power market to European countries. With further integration into the European energy market, some interviewees voiced concerns

over the prospect of Norwegian wind power being balanced out by importing European coal-based energy. In addition, the cables connecting the Norwegian power grid to Europe are claimed to lead to an 'import' of European electricity prices, even at times when the Norwegian grid is operating with an energy surplus. As one Motvind-representative put it:

> "When it is very windy, you get peaks in the power production that must be exported. Therefore, cables are built to other countries to sell surplus wind power. We then lose control over electricity prices, because we open a wide door through which European electricity prices can spill over into Norway."

With greatly increasing electricity prices in Europe in the last year, export of Norwegian energy has led to massive profits for owners of wind power companies, both private and public. For wind power opponents, the power cables to the European grid are primarily devices for securing such profits, rather than balancing out variabilities in Norwegian wind power production.

Herein lies one of the essential questions of the NC-discourse: Who really profits from the wind farms in Fosen? As I have discussed above, a central part of the narrative justifying wind power developments in places like Fosen is that it leads to economic growth and employment. The Wind-Wind-discourse posits this as a win-win for everyone involved, also local communities. This view is challenged by those who oppose the wind farms in Fosen, suggesting that the developments mostly benefit a few economically powerful actors. This idea is reinforced by the fact that the wind power industry, like other energy sectors, relies heavily on foreign investments. While Statkraft, a state-owned power company, is the majority shareholder in most of the Fosen wind farms, over 40% of the shares are held by Nordic Wind Power DA. Nordic Wind Power DA is a joint-venture company owned by Energy Infrastructure Partners (EIP), an investment manager of the Swiss bank Credit Suisse, and BKW Energy AG, the power and grid company of the Canton of Bern in Switzerland (See Figure 4). It is not clear whose investments the EIP are managing as they are only listed "institutional and financial investors" on EIP's websites (Energy Infrastructure Partners, 2023). Notably, in 2020, the EIP group also invested in the Markbygden wind power project in Sweden, another site for land-use conflicts with Saami reindeer herders (see chapter 2.2.3).

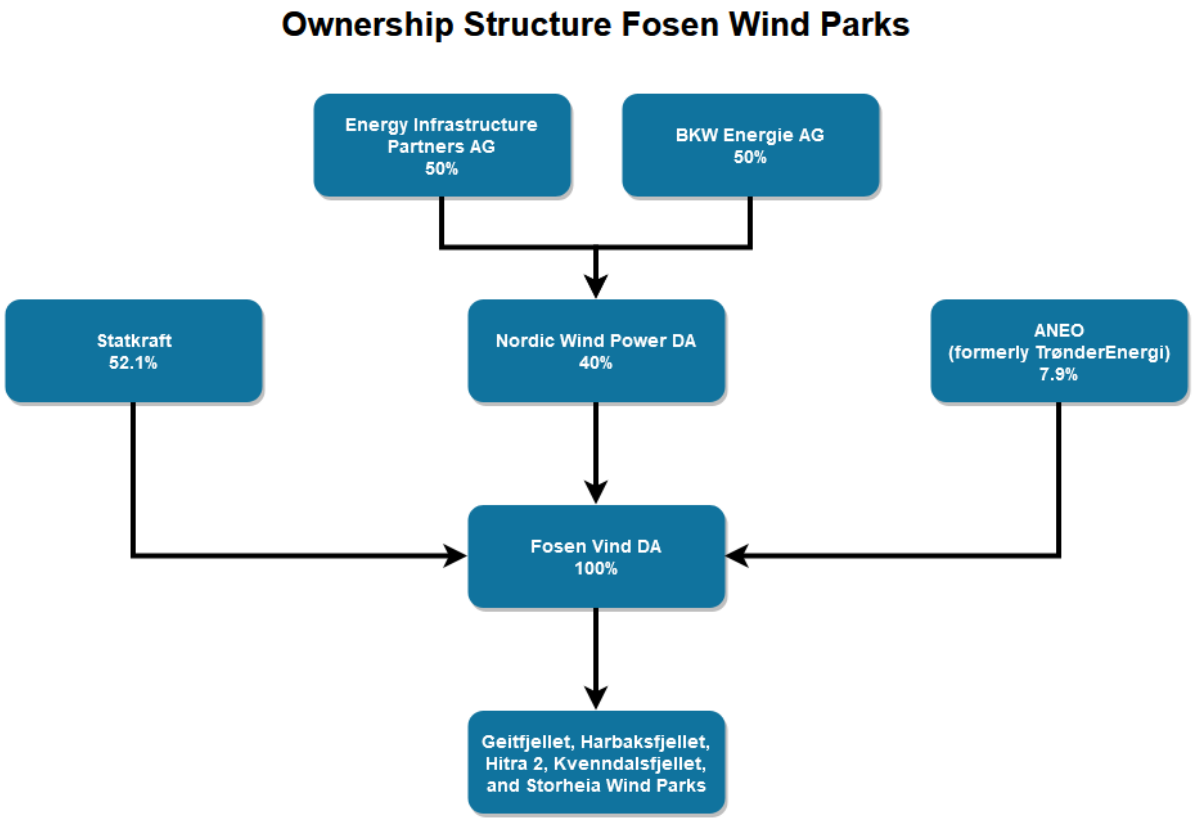

Figure 4: Ownership structure for Kvenndalsfjellet, Geitfjellet, Hitra II, Storheia and Harbaksfjellet wind farms

In 2021, Statkraft sold its shares in Roan wind farm to a joint venture between TrønderEnergi (now ANEO), which is owned by municipalities in Trøndelag, and Stadtwerke München, a German communal company owned by the City of Munich. The new holding company is called ANEO Roan Vind Holding. The reorganizing means that foreign investors own the majority of the shares for Roan wind farm, one of the two wind farms at the centre of the supreme court case against the state.

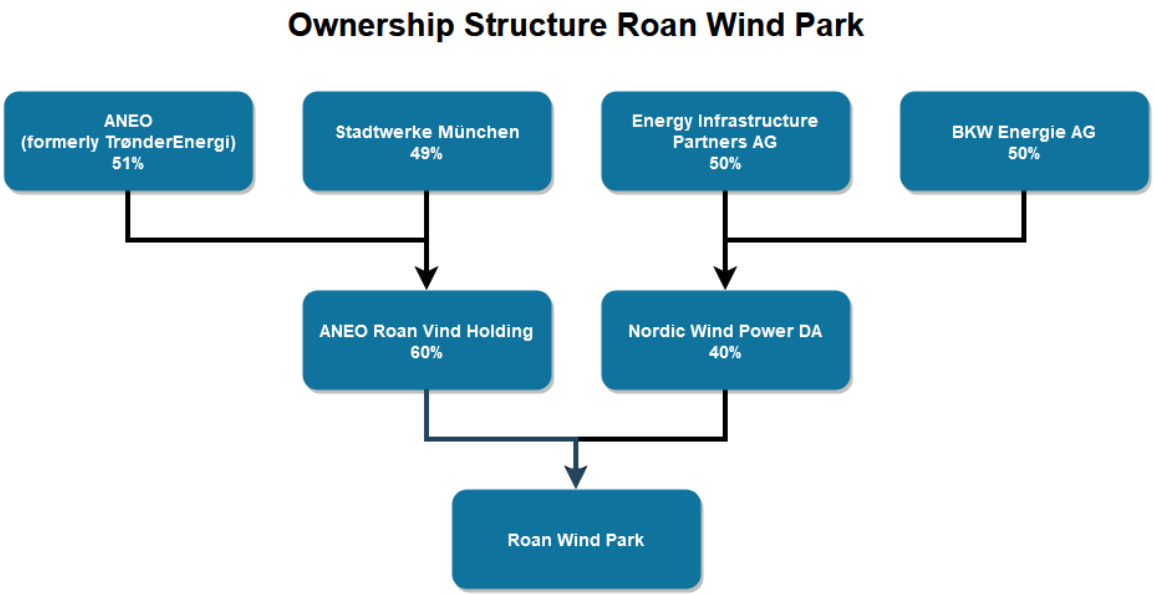

Figure 5: Ownership structure for Roan wind farm

Several participants interviewed during my fieldwork in Fosen, both local residents and members of nature conservation organisations, criticized non-Norwegian private ownership of the wind farms. On top of this, efforts to collectivize and nationalize wind power profits have been met by protest from the wind power industry and its interest organizations. In my interviews with representatives from ANEO, it was made clear that the Støre-government's proposal for a new ground rent tax for wind power, similar to the taxing system in place for the Norwegian hydro power and fossil fuel sectors, would be detrimental to the renewable energy sector in Norway. They claimed that such a tax would greatly discourage private investors from investing into wind power production, and thus slow down an all-important green transition away from fossil fuels. This line of thinking is echoed by other actors in the wind power industry. For example, in March 2023, Fornybar Norge released a report warning that a ground rent tax for wind power would drive away essential private investors and ultimately reduce profits for public investors such as Statkraft as well (Fornybar Norge, 2023). Foreign investors are not uncommon in the energy sector, neither in Norway nor in other countries. Publicly owned Norwegian companies such as Statkraft and Equinor are themselves large-scale investors in energy infrastructure across the globe.

Despite such justifications for private foreign ownership, the large share of private wind power ownership and the wind power industry's forceful lobbying against taxation proposals, fuels growing contempt towards wind power companies. There is a sense that it is not possible to

meaningfully have a say in the licensing process of wind power developments. The Motvind-representative I interviewed complained that "it has proven difficult to influence a good number of our national politicians because there is an enormous lobbying pressure from the industry which we have neither the financial nor the human resources to overcome.". In this view, the immense economic and political power of the industry is marginalizing opposing voices, thus leading to undemocratic processes. The lack of democratic processes is also echoed in Trondhjems Turistforening's (2010) complaint about the wind farms in Fosen:

> "On the surface, there is an extensive process behind such cases, with hearings and public meetings. It is our opinion that these processes favour those who work for development. Counter-perceptions do not come across well enough in the process. We believe that this constitutes a democratic problem, as the information on which local authorities make their decisions is characterized by major deficiencies. There is a clear under-communication of the damaging effects, while at the same time a kind of crisis-perception is created about the power situation in our region. This is not good enough when making decisions with such major consequences for large and important natural areas."

This passage from Trondhjems Turistforening's complaint reflects a common sentiment in the NC-discourse. While public meetings and hearing rounds are carried out, there is the feeling that the real decision is already made and that any interjections against wind power development will fail. Concerns about the destruction of natural landscapes, the importance of *friluftsliv*, and the value of protecting endangered species are ultimately drowned out by the immense and combined power of the energy sector lobby, the state, and the EU. The feeling of not having a meaningful say in these processes, fuels contempt towards the wind power developers and its enablers, NVE, OED, and the government, as well as the energy politics of the European Union. What is ostensibly a necessary infrastructural development project to secure energy supply to a region facing an impending energy shortage, is here framed as a principally profit-seeking enterprise that undermines natural landscapes and local interests.

5.2.3 Counter-narratives of the green transition

In the complaint from Trondhjems Turistforening cited above, the idea of an energy shortage in Trøndelag is questioned. As we saw in the previous section, the energy shortage narrative is

an essential part of how the Wind-Wind discourse justifies the wind power developments on the Fosen peninsula. For many wind power opponents, however, the idea of a shortage is just a construct designed to legitimate unnecessary wind power projects. Several interviewees pointed out that while the prospect of an energy shortage is used to argue the need for more renewable energy production, the opposite is claimed in discussions of development of power-intensive industry. One Naturvernforbundet-representative expressed worry that the coming energy-surplus from the wind farms would lead to the establishment hugely power-intensive data centres, leading to further industrial encroachments on natural areas and reigniting land-use conflicts. This is the case in Jæren, Rogaland, another region in Norway that has seen large-scale wind power construction in recent years. In Jæren, there are plans for a data centre that would consume about 5 Twh per year, almost half of the total wind energy production in Norway (Norconsult, 2020). As the wind power developments in Trøndelag turns energy shortage into energy surplus, nature conservationists worry about the possibility of future industrial expansions such as the ones in Jæren. The counter-narrative expressed here is that wind power developments in Fosen are not a result of regional energy shortage, but rather a scheme to facilitate new digital industries.

Similar to how the idea of regional energy shortage is questioned in the NC-discourse, wind power opponents also expressed doubts about wind power as a solution to the climate crisis. While none of the participants I interviewed doubted the severity of the climate crisis, several expressed their doubts about how 'renewable' and 'green' wind power really is. One Motvind-representative challenged the narrative of wind power as 'green' energy by pointing to what he perceived as a lack of systems-perspective:

> "They look at one piece of the system and say that "this piece looks really good" and then they ignore the externalities."

Expanding on this, he added:

> "If you say that "green" is simply that an energy source does not emit CO2 while producing, then you can certainly say that it [wind power] is a green energy source. But if you include emissions from construction and material extraction, and not least emissions from the fact that you have an unstable and unpredictable energy source that

must constantly be balanced with another stable energy source, wind power is not green energy in any context."

Here, the 'green' image of wind power is scrutinized. The main argument is that it is not sufficient to look at the amount of greenhouse gases emitted during the operational phase of the wind farm; one must consider emissions from extraction of resources, production and construction, and, as mentioned above, the need for a stable energy source to balance out the inherent variability of wind energy. The former point is one that is rarely brought up in discussions on wind power and renewable energy transition in Norway. As the International Energy Agency (2021) suggests in a recent report, a total low-carbon energy transition as promised in the Paris agreement "would mean a quadrupling of mineral requirements". For land-based wind power, copper, zinc, manganese, nickel, and chromium are the most important. As Dunlap (2021) explains, "*every stage* of the mining process, from extraction, processing, manufacturing, transport, construction, to some degree requires a large expenditure of fossil fuels, a fact that is often neglected or minimized in the ecological accounting of wind energy." The manufacturing of wind turbines involves greenhouse gas emissions at every stage of the supply chain. Since the wind turbines are produced abroad, these emissions are not accounted for when assessing Norway's greenhouse gas inventory. Moreover, such extractive practices along the supply chain of wind turbines have their own land-use trade-offs and potential for social conflicts and exploitation. Wind turbines require rare earth elements such as neodymium and dysprosium that are almost exclusively mined in China and Mongolia (Dunlap, 2021). In the Baotou district in China, a massive rare earth mining facility has led to the construction of artificial lakes of radioactive toxic sludge, leading to a dramatic increase in cancer-related deaths in the region (Klinger, 2017). Hence, the social and ecological impacts of Norwegian wind power are not contained to Norway.

Rejecting the idea of wind power as a necessary solution to the climate crisis, the NC-discourse launches its own counter-narrative: Reducing energy *consumption* should be the cornerstone for a low-carbon transition. In interviews conducted for this thesis, representatives from interest organisations such as Naturvernforeningen, Trondhjems Turistforening and Motvind all emphasized the importance of reducing energy consumption and demand rather than increasing the supply of renewable energy. In part, this sentiment can be traced back to a scepticism towards the claims of impending energy shortage in Trøndelag. However, it is also connected

to a farther reaching understanding that correlates the climate crisis and the crisis of nature to ever-increasing consumption. In my interview with Motvind, the interviewee explained that:

> "We must, above all, utilize the biggest energy source we have, which is to improve energy efficiency and reduce our consumption. There is no green future, there is no green progress and no green change without us starting to reduce our consumption. It is absolutely crazy that people and politicians do not understand that the only sustainable future must have as a fundamental principle that we must reduce our consumption of the substances that create greenhouse gas emissions. When we have done that, then we can start talking about new energy."

Similar sentiments were expressed by the representative from Trondhjems Turistforening:

> "I think that people underestimate how important nature is for us, both humans and animals, and for sequestering CO2. Our message is very clear that we cannot save the climate by destroying nature. We must rather work on energy efficiency, other types of renewable energy, we must save more electricity."

The future envisioned here is one where reduction of consumption is the fundamental answer to the tests of global warming and natural landscape degradation. By reducing energy demand, both at the consumer-level and at an industrial level, new energy production, which is potentially socially and ecologically destructive, is not needed. While none of the participants I interviewed mentioned "degrowth" explicitly, the arguments here are reminiscent of degrowth-utopias envisioning ways of life based on less energy and material throughput. As Kallis (2011) explains "[s]ustainable degrowth can be defined from an ecological–economic perspective as a socially sustainable and equitable reduction (and eventually stabilisation) of society's throughput." Degrowth, then, builds on the premise of ecological economics that, under capitalism, economic growth necessitates ever-increasing material consumption to the detriment of the environment and human societies. Therefore, downscaling of growth is essential for a sustainable and equitable future. While expressions in the NC-discourse, such as the one cited above, similarly criticizes the growth-paradigm, they do so without committing fully to the explicitly anti-capitalist tendencies that are common in degrowth-literature. That said, as we have seen in the previous section, the idea of reducing consumption in the NC-discourse is tied in with critiques of foreign capital power and social issues along the wind

power supply chain. In large, the NC-discourse shares the scepticism towards technological solutions to ecological problems that characterizes the degrowth-tradition (Robbins, 2020a). Just as degrowth counters the technology-based imaginaries of ecomodernism, wind power opponents in the NC-discourse envision a green transition based on reducing consumption, that stands in stark contrast to the socio-technical imaginary of the Wind-Wind discourse.

Despite this strong emphasis on energy consumption, and the general scepticism towards wind power technologies, several nature conservationists I interviewed were open to other, less area intensive technologies. Most common was the suggestion of upgrading hydro power plants that are already in operation. Another commonly embraced technological solution is solar panels placed on top of rooftops and existing infrastructure, which is seen as a non-intrusive power production option. This does not, however, account for the non-proximate effects of mineral extraction and manufacturing abroad, which is similar to those discussed for wind power above. One respondent said that lately he had opened up to the idea of nuclear power production in Norway but recognized that this was not a popular view in the Norwegian nature conservation movement. In general, the participants expressed a desire for a more serious discussion around *alternatives* – other ways of configuring the green transition, whether it is based on technological fixes or fundamental economic and social transformations.

In this chapter we have seen how the dominant Wind-Wind discourse is challenged by a nature conservation discourse valuing local community, *friluftsliv* and the inherent value of non-human life. The NC-discourse questions the basic assumptions and narratives of the dominant wind power discourse. This illustrates a broader point: While the NC-discourse has its own historical and geographical origins (local knowledge, nature conservation movement, deep-ecology etc.), it largely exists as a counter-discourse to the dominant Wind Wind-discourse. Expressions within this discourse tend to be dedicated to disproving and challenging the main narratives in the dominant discourse. Ultimately, this underlines the dominance of the WW-discourse – opposing voices form their arguments and counter-narratives in relation to and in response to dominant narratives of climate change mitigation, energy shortage, and economic development.

5.3 Saami resistance: Green grabbing and the struggle for indigenous knowledge

The third discourse in the Fosen case is what really sets this case apart from other conflicts over wind power in Norway, of which there are many. Since the supreme court judgement in 2021, the nature of the "Fosen case" has changed. More and more, it is becoming a case about the rights of south-Saami reindeer herders and the wind farms' violation of these rights. This, of course, does not mean that the struggles of the Saami reindeer herders are something that has come up in recent years – ever since the initial statement of intent to build wind farms on the Fosen peninsula in 2007, the Fosen Saami have protested that such developments are not compatible with reindeer husbandry. That said, the court case, and the following media attention, changed the case from being an example of tensions between national climate policy and local conservation interests, to a case that is primarily about the political and social rights of the Saami people in Norway. Narratives of climate change and natural landscape destruction are still important – they are undercurrents of most discussions on wind power. Increasingly, however, the nature conservationists introduced in the previous section have allied themselves with Saami interest organisations. As we shall see in the next chapter, this "discourse coalition" between conservationists and reindeer herders has been an effective strategy for challenging the hegemonic Wind-Wind discourse on wind power in Fosen. In the following I will describe how the struggles of the Fosen Saami has been articulated through what I call the Saami rights-discourse (SR).

The main narrative in the Saami rights discourse is one that posits land-based wind power as a direct threat to Saami reindeer husbandry and, in extension, Saami culture itself. If the WW discourse has its roots in crisis narratives of global warming and energy shortage, and the NC discourse in the nature crisis, the Saami rights discourse frames the problem of wind power as a crisis of loss of traditional livelihoods and loss of cultural identity. In the face of this crisis, its *modus operandi* is: Resist! The primary concern here is not securing a profitable green energy transition of conserving local *friluftsliv* values. Rather, the problem of wind power is here articulated as a matter of survival – both for the individual reindeer herders in Fosen who depend on the contested lands for sustaining their livelihoods, and for the Saami people as a whole, for whom reindeer husbandry is a vital cultural institution. The SR-discourse is local in that it relates to the particular situation of the Fosen Saami. It is also trans-national or, rather,

non-national, in that it has significance for the whole of Saepmie – the traditional Saami territories spanning across Norway, Sweden and Finland.

Even more so than the NC-discourse discussed in the previous chapter, the Saami rights discourse draws heavily on the past. It is deeply connected to the long history of Saami struggle against oppression and marginalization in Norway. The development of wind power projects on lands that are used for Saami reindeer herding is seen as the latest iteration in a history of land-grabbing and marginalization that goes back several hundred years. As I will discuss below, historical parallels such as the resistance against the hydroelectric power plant in the Alta River in the 1970s and 1980s, are important for establishing the historical moment of the Fosen case in a wider history of Saami oppression and resistance. As in the NC-discourse, there are clear narrative role portrayals, with the Saami reindeer herders being cast as both the victims and the heroes in a story of resistance against land dispossession and cultural marginalization. On the flipside, the Norwegian state is cast as the primary villain, continuing a centuries-long side-lining of Saami interests under the auspices of the green transition. Importantly, the Saami reindeer herders are not passive victims of oppression; they are actors whose actions have had a great impact on how the story of the Fosen case is told. This is as much a story of resistance as it is of oppression.

Hence, wind power developments in Fosen are framed as instances of "green colonialism" or "green grabbing". In a television interview with NRK Sápmi (2022), Sami Parliament representative Maja Kristine Jåma explained:

> "A development for some must not come at the expense of others and existing land-use. We know that the land areas are crucial for safeguarding the Sami language, culture and traditions, and the development of Sami industries. Pushing someone out of their traditional areas of use in the name of the green transition is nothing other than green colonialisation."

This is the main framing of the Fosen case in the Saami rights discourse: The wind power developments are *taking away* land areas that are essential for maintaining traditional Saami livelihoods and preserving Saami cultural heritage. This is a framing that corresponds well to critical literature on renewable energy and indigenous rights, in particular with the phenomenon of 'green grabbing'. Green grabbing is a term for processes that involve "transfers of the control

of land and/or natural resources to powerful actors by various means using an environmental ethic or rational" (Dunlap, 2017: 17) Originating in Critical agrarian studies, literature on green grabbing was mainly focused on land grabs motivated and justified by carbon credit trading scheme, ecotourism and protection of natural landscapes in the Global South (Dunlap & Jakobsen, 2020). With the increasing prevalence of land-use conflicts caused by renewable energy developments (see chapter 2.2), it is helpful to extend this framing to the issue of renewable energy and wind power developments (Siamanta, 2019: 275). Framing the Fosen case as an instance of 'green grabbing' can help highlight the ways in which 'green' rhetoric is used to justify the effects that the wind farms have on reindeer pastoralism. Moreover, such a framing puts the power dynamics between economically powerful and state-backed wind power developers and Saami communities on full display.

This narrative of the Fosen case as 'green' land dispossession is paired with a narrative about the infringement of indigenous peoples' rights and the delegitimization of Saami knowledge. As an indigenous people of Norway, the Saami have the right "to enjoy their own culture", as is stated in the UN's International Covenant on Civil and Political Rights, article 27, which is adopted as Norwegian law. With the number of wind farms installed on the Fosen-peninsula, reindeer pastoralism, a traditional Saami cultural practice, is becoming increasingly difficult to maintain. The reindeer herders claim that co-existence between wind power and reindeer pastoralism is not possible in these areas, and that the wind power developments will ultimately lead to the ruin of reindeer husbandry in Fosen. This claim is disputed by the wind power developers and the impact assessments that formed the basis for the licensing decisions for the wind farms in Fosen. In this way, the Fosen case is an issue about the legitimacy of different types of knowledge. The central question is: *Whose* knowledge matters in licensing processes and policy decisions?

This chapter describes how the plight of the Fosen Saami is articulated through narratives of green grabbing, internal colonialism, and cultural marginalization. First, I will turn to the issue of co-existence: In what ways does wind power get in the way of traditional Saami reindeer pastoralism? Secondly, I discuss how the Fosen case has been portrayed as the latest instance in a long history of marginalization of Saami cultural practices, with a particular emphasis on parallels to the Alta controversy of the 1970-80s. Lastly, I turn to the issue of indigenous rights, and how the legal framework the International Covenant on Civil and Political Rights (ICCPR) has become a central piece of the language of Saami resistance in Fosen.

5.3.1 Reindeer pastoralism and wind power: The question of co-existence

There are two separate reindeer herding groups operating on the Fosen peninsula in Trøndelag: Sør-Fosen *sijte* and Nord-Fosen *siida*. *Sijte* (South Saami) and *siida* (North Saami) are the traditional organizing units of Saami reindeer pastoralism – usually centred around an extended family that together coordinates day-to-day operations, slaughter, and distribution. The *sijte* is flexible and adaptable in order to sustain climatic variations and changing economic conditions (Benjaminsen et al., 2016: 17). In Fosen, each *sijte* consists of around 15 people, making the total number of Saami reindeer herders operating on the peninsula about 30 – although the numbers vary from year to year and season to season based on varying operating conditions. While the two *sijte* in Fosen are separate geographic and economic units, they are often referred to together as *Fovsen Njaarke* – the Fosen reindeer herding district. In total, Fovsen Njaarke oversees around two thousand reindeer, moving from pasture to pasture in an area of around 4000 km^2 (Fylkesmannen i Trøndelag, 2020).

Reindeer husbandry is pastoral, but not necessarily nomadic – most reindeer herders today are permanently settled. Nevertheless, the practice of reindeer pastoralism necessitates constant movement. Reindeer pastoralism takes place in mountainous tundra areas which are naturally nutrient-poor. The reindeer herd is therefore dependent on relocation from pasture to pasture for nourishment. The chosen pastures vary from year to year based on weather conditions or other operational restraints. Reindeer herders must be able to adapt to rapidly changing conditions throughout the year. They are therefore constantly checking snow- and grazing conditions to make sure that the herd can be sustained (Reinfakta, 2023). The reindeer never go inside and, unlike other forms of pastoralism like sheep grazing, the herding of reindeer is largely based on the animals' natural movements (Nellemann, 2017: 4). Moreover, the herd is dependent on free passage from pasture to pasture by way of "flyttleier" and "trekkleier" – structures in the natural terrain that can be used as relocation routes. During the winter months, when the snow lies thick on most of the Fosen-peninsula, the herd moves to higher altitudes where the wind blows away the snow so that the reindeer can dig down to the lichen under the snow. For the reindeer, the winter is about survival.

The two wind farms at the centre of the Fosen conflict – Storheia and Roan – are located in important winter pastures for South-Fosen *sijte* and Nord-Fosen *siida* respectively. The wind

farms are sited along the mountain ridges; this is a type of terrain where the snow does not settle and thus provides an all-important source of nourishment for the reindeer herd during the winter months. For South-Fosen *sijte,* Storheia is the only pasture that the reindeer move to without active herding (Sør-Fosen Sijte, 2010). Moreover, the wind farms obstruct several relocation passages in and out of the winter pastures. These pastures are particularly important in years with extreme weather, as the snow becomes too thick to dig through and graze on in other areas. Thus, pastures such as those in Storheia and Roan, become even more important in the face of climate change and increasingly extreme weather conditions. The reindeer herders find themselves in a paradoxical situation where the technologies that are supposed to mitigate climate change, are making them more vulnerable to it.

The negative impacts wind farms have on reindeer pastoralism has been a central issue of the Fosen case from the very beginning. When the wind farms were first announced in 2006, the two *sijte* operating in Fosen expressed their worries about how the turbines would scare away the animals and, in effect, make some of the most important pastures unusable. After a while, Fovsen Njaarke succeeded in convincing the wind power developers that a separate and thorough assessment of the consequences of wind power on reindeer pastoralism was needed. The assessment, while acknowledging the fact that the wind power projects will have severe negative impacts on the practice of reindeer pastoralism, claimed that *some* wind power construction would be possible without threatening the future of Saami reindeer pastoralism in Fosen. The importance of the winter pastures in Roan and Storheia is not disputed in the assessment. On the contrary, in the extended report construction in these areas were described as having "great negative" impact on the ability to graze reindeer on these pastures (Colman et al., 2008). Despite this, the report found that a limited development would not obstruct pastoralism on the Fosen-peninsula if mitigating measures are put in place. Based on this assessment, NVE granted the wind power developers licences for the wind farms despite the opposition from Fovsen Njaarke.

In the following complaints on the licences, the reindeer herders disputed the premises of the report on several counts. Both Fosen *siida* claim that the assessment underestimates the effect the wind turbines will have on day-to-day operations of reindeer husbandry. Writing on the effects a construction of Roan wind farm would have, Nord-Fosen *siida* (2010) remarked:

> "A wind farm in the area will encumber both grazing and moving out from the winter pastures when the animals are to be moved to early spring pastures. Both the installations themselves, the surrounding infrastructure, the activity in connection with maintenance and operation and increased traffic from the general public, will cause great inconvenience when gathering and herding in this area. This is in a period when the animals are in the worst condition and must be actively moved as little as possible, both because of animal health considerations and the importance of the animals' condition in relation to calving."

Another important point of contention was that the assessment did not account for the cumulative effect of land encroachments in a period of over 100 years. In the reindeer herders' view, the wind farms are the latest intervention in a long series of land dispossession. As Sør-Fosen *sijte* notes in their complaint on the licences (2010):

> "The major shortcoming of the expert report is that it is not useful as a basis for a decision that will decide whether the overall development will be in breach of international law's protection of indigenous peoples. In that context, earlier encroachments from the time after 1900 must be taken into account. If, after this time, so many interventions have been carried out that the nutritional basis for at least one siida has been lost, the threshold has been exceeded. There can be no doubt that this limit was exceeded before the wind turbine development."

The main point here is that the impact assessment fails to see the wind power projects in Fosen in relation to other encroachments on Saami reindeer pastures. For a long time, the Saami reindeer pastoralists have given up important land areas to road constructions, ecotourism, and industrial purposes. In Sør-Fosen sijte's view, these encroachments constitute a breach of international law on indigenous rights even before the construction of the wind farms. The reindeer herding group also took issue with the assessment's method of categorizing pastures in terms of value:

> "It is untenable to divide the reindeer husbandry pastures into "low value", "medium value" etc. […] For example, when an area is classified as "low value" because it is a reserve winter pasture that is used only in certain years. We believe that such an area could mean "to be or not to be" in the few years of its use." (Sør-Fosen Sijte, 2010)

As mentioned above, reindeer herding practices are traditionally very flexible, making changes to the operations based on weather conditions and the state of the pastures. With repeating use, the most commonly used pastures might become unusable as a result of overgrazing. In such cases, having access to reliable reserve pastures is essential to provide sustenance for the animals. Thus, the categorization of pastures in terms of value, which formed the basis for the decision to grant licenses to the wind farms in Fosen, does not fully take into account this adaptable nature of reindeer herding practices. There is a clear discrepancy between the impact assessors' desire to systematize, categorize and measure the consequences of wind power and the reindeer herders' highly fluid practices. Commenting on the Fosen case, Jon Anders Mortensson (2023) of Svakhen sijte points to the difficulties of incorporating reindeer herding practices in administrative development plans:

> "Interpreting landscapes, reindeer, the reindeer's needs, and behaviour in the natural landscapes is absolutely essential in practical reindeer husbandry, but is difficult to describe, or to outline in a plan. There are many factors and scenarios that can arise that rarely behave exactly the same from time to time. Such knowledge is crucial and must be accepted as a basis for solving challenges with encroachment, traffic and activities in the reindeer herding areas."

The knowledge Mortensson is writing about here is something that has been passed through generations and that the reindeer herders have learned gradually from a very young age. In Saami, this knowledge foundation is referred to as *Máhttovuođđu*, and it encompasses everything from interpreting landscapes and animal behaviour to knowledge about the different *siida* and the broader organizational aspects of reindeer husbandry (Benjaminsen et al., 2016: 38). As Saami parliament member Maja Kristine Jåma (2022) explains, this knowledge is closely tied to the Saami language:

> "Our language is carried by the way we live. We have countless names and descriptions of landscapes, weather conditions and tasks linked to the various seasons and ways of life. Through use of nature, we have gained knowledge about how to live with and manage land areas, so that nature is in at least as good a condition for our descendants."

The nuances of this knowledge, with its close ties to Saami language and ways of life, are impossible to fully incorporate into the State's development plans. Fundamentally, it is a clash

of different ways of *knowing* and managing the natural landscapes. I will get back to these epistemological differences between the State and the reindeer pastoralists in chapter 6.1.

Another reason for the disagreements between the reindeer herders and the wind power developers and NVE stems from the fact that there is no scientific consensus the effects of wind power on reindeer. While NVE claim to account for the experience-based knowledge of reindeer herders, they state that a decision must ultimately be grounded in peer-reviewed science (Jakobsen et al., 2019: 57). However, in the case of wind power and reindeer husbandry, there is no scientific consensus to fall back on when making the final decisions. Thus, the different actors refer to the research that supports their own interests. For example, NORWEA (now Fornybar Norge), the Norwegian wind power industry's interest organization, were invited to comment on the complaint from the Fosen Reindeer herders (Aasheim, 2013). The group pointed out that the decisions should be based on "relevant research", referring to the report *KraftRein og VindRein*, carried out by researchers at the University of Oslo and the Norwegian University of Life Sciences. Based on two long-term research projects, the referenced report found "no negative effects of WPs and power lines on reindeers' area use during operational years" (Colman et al., 2014: 10). The reindeer herders themselves, wary of the importance of "scientific knowledge" in the licensing processes, instead referred to the research carried out by the Norwegian Institute for Nature Research (NINA), which claims that wind turbines affect the behaviour of reindeer in both the construction phase and the operating phase (Strand et al., 2017). In the Fosen case, this scientific uncertainty ended up favouring the developers, with both Storheia and Roan wind farm being granted licences despite the recognition of their importance as winter pastures. Notably, the reindeer herders' own statements about the potential detrimental effects of these projects were only considered as opinions from affected stakeholders, not as part of the formal knowledge base that led to the final decision.

In the end, this is an issue about knowledge: *Whose* knowledge should form the basis for evaluating the impacts of wind power in Saami reindeer husbandry? For the Saami reindeer herders, a big part of the resistance against the wind farms is about legitimising their own knowledge built up through many generations of Saami reindeer herders. Throughout the licensing processes for the wind farms in Fosen, the two Saami sijtes operating in the area have continually asserted that wind power in the area would severely get in the way of daily operations. These assertions, based on generations of reindeer husbandry knowledge, were still

questioned, and made subject to impact assessments from consultancy firms, with the result that some wind power development was possible without destroying the Saami husbandry livelihoods. It is as Mortensson (2023) puts it: "It is absolutely necessary that the Sami knowledge of reindeer husbandry serves as the foundation. Otherwise, there is no future for Sami traditional reindeer husbandry and culture in Fosen." The Saami resistance in Fosen is both a fight *against* land dispossession and a fight *for* the recognition of Saami culture and knowledge production.

5.3.2 The narratives and counter-narratives of South Saami reindeer pastoralism

The Saami rights discourse is historically grounded in a long-lasting struggle for rights for the South Saami minority. It is a struggle on many fronts, fighting against continuous land encroachments on reindeer pastures, the delegitimization of reindeer herding as a sustainable industry, and the portrayal of the South Saami as "less Saami" than their northern counterparts. This chapter deals with how the Saami resistance in Fosen makes use of a long history of oppression, while struggling against the narratives that seek to delegitimize the Saami cause.

In the previous section we saw how state authorities and the reindeer herders themselves disagree on the effects of wind turbines on a reindeer herd. Such disagreements about the nature of reindeer pastoralism are not new. While fighting against encroachments on their pastures and trying to legitimise their reindeer herding knowledge, the Fosen Saami have had to contend against narratives that seek to delegitimise the practice of reindeer herding in a modern world. For a long time, Saami reindeer pastoralism has been described as unsustainable and economically unviable by the Norwegian state and in the media. Since the 1970s the State has taken more and more control over Saami reindeer herding in Norway, introducing quotas, fees and subsidises to manage the herds in a "sustainable" way. This has, among other things, led to upper limits on the legal number of reindeer for each sijte to prevent overgrazing and overstocking, punishing pastoralists who exceed the limits (Benjaminsen et al., 2015). In 2020, for instance, a Saami reindeer herder in Kautokeino was sentenced to 30 days in prison for fraud after not informing the authorities about all the reindeer in his (Aslaksen, 2021). The idea of reindeer pastoralism as ecologically unsustainable is closely tied with its portrayal as an economically unviable industry. It is claimed that there are too many animals and too many herders employed for the practice to be profitable enough in the long run. This idea was brought to the forefront by several commentators in the aftermath of the highly publicized Oslo-protests

about the lack of state-action after the Supreme Court verdict in the Fosen case. For example, editor of Nettavisen, Gunnar Stavrum (2023) claimed that "[t]he biggest threat to Sami culture is not windmills on Fosen, but that the very basis of life – reindeer herding – is an economic nightmare that never ends."

The state's idea of sustainable reindeer pastoralism has its basis in ecological and economic analyses but stands in stark contrast to traditional Saami reindeer herding practices. As Eira et al. (2016: 34, my translation) explain: "the entire field of many different questions is reduced to a question of reindeer quantity and average slaughter weights, and the entire problem complex of ecological and economic sustainability is made subject to the monitoring of a small number of statistical variables". Confronted with these delegitimising claims, the Saami reindeer herders create counternarratives that promote their understanding of reindeer pastoralism as a fundamentally sustainable way of life in step with the natural ecosystems it depends upon. This is an understanding that has its foundation in the generational, experience-based knowledge of the reindeer herders themselves, as discussed in the section above. It values the versatile utilization of marginal natural resources, and has the reindeers' need at its centre (Eira et al., 2016: 35). It is a highly adaptable way of managing reindeer husbandry that has lasted several hundred years without spoiling the landscapes and ecosystems that it depends upon. This is the idea of "sustainable reindeer husbandry" that is upheld in the Saami rights-discourse.

On top of these claims of unsustainable reindeer pastoralism, the South Saami in Fosen must contend with claims that they are not a "real" indigenous population. The questioning of the Saami people's status as an indigenous people of Norway has been a common theme throughout the history of the Saami rights struggle, often seeking to delegitimize demands for cultural and social rights and, not least, claims to land areas (Andresen et al., 2021: 364). This was even more the case for the South Saami, whose claim to a status as an indigenous people of southern Norway was disputed by those who subscribed to the "advancement-theory" developed by historian and geographer Yngvar Nielsen. The theory holds that the Saami people advanced beyond Namdalen *after* the reformation, possibly as late as the 18th century (Andresen et al., 2021: 195). Thus, it claims that it is the Norwegian population who are the *real* indigenous population of Trøndelag. Even though the advancement-theory has today been disproven by several historians (Andresen et al., 2021; Bergstøl, 2008; Bull, 2010; Fjellheim, 2019), it is still being used to discredit the South Saami in Trøndelag. For example, during the Oslo protests,

historian Ole Jørgen Benedictow (2023) commented in *Aftenposten* "[t]he Norwegian inhabitants of Fosen are in principle the indigenous people of Fosen." Benedictow defines indigenous peoples as those who first arrived in a territory. This is, however, in sharp contrast to the ratified definition in the ILO-convention no. 169 art. 1, where indigenous peoples are defined as peoples who inhabited geographical regions "at the time of conquest or colonisation or the establishment of present state boundaries". This definition undoubtedly applies to the South Saami populations of Trøndelag.

While history is being weaponized against the South Saami, it is just as much an important tool for legitimating the Fosen resistance and for placing the Fosen case in a greater historical context. The Fosen case has spawned a multitude of historic parallels to the Alta-case of the 1970s and 1980s. Put shortly, the Alta-case was a series of protests against a hydroelectric plant constructed on the Alta-Kautokeino River that would have severe negative impact on Saami reindeer husbandry in the area. The protests developed into a broad movement, ultimately leading to Saami rights being recognized in the Norwegian constitution and establishment of the Saami parliament (Andresen et al., 2021: 370-387). When activists from Natur og Ungdom and NSR occupied the Ministry of Petroleum and Energy on the 23. February 2023, these historical parallels were strengthened. The slogan "Baajh vaeride årrodh!" (Let the mountains live) echoed the main parole of the Fosen case 50 years earlier: "Ellos eatnu!" (Let the river live). One of the demonstrators and leader of NSR-Nuorat, Elle Nystad (2023), pointed out the clear parallels to the Alta conflict: "It is now 40 years since the Alta action, which should have been the turning point for the Saami's rights. Still, I sit here in Oslo as a next-generation Saami and must campaign against the same type of case, this time with a Supreme Court ruling behind me".

The Fosen case has also reinvigorated demands for reparation and reconciliation after a hundred years of Norwegianization policies from the 1850s to 1950s. The Norwegianization policies were political programs designed to assimilate the Saami population (and other ethnic minorities) into Norwegian culture, by eradicating minority languages and cultural institutions. It was a politics deeply enmeshed in "nationalism and different forms of evolutionary and racist thinking" (Andresen et al., 2021: 157, my translation). In 2018, the government appointed a Truth and conciliation commission to investigate the injustices made against the Saami, Kven and Forest Finn minorities in Norway. The commission are due to release a report later this year (2023), and its members have pointed out the Fosen case, and other land-dispute conflicts with

the Saami reindeer districts, as a setback to the work of conciliation with the Saami population. In a letter addressed to the Ministry of Petroleum and Energy, commission (Høybråten & Ramstad, 2023) expressed their concerns:

> "The truth and reconciliation commissions [asks] for answers on how the ministry will be able to at once look after the state's ownership interests and the state's human rights obligations in the Fosen case in particular, and in future territorial conflicts about industrial development in reindeer herding districts."

Silje Karine Muotka (2023), president of the Saami parliament, expressed similar concerns in a speech addressing the Oslo-protests: "In recent weeks, we have seen that there is a deep crisis of trust between the state and the Sami people. […] Can we talk about reconciliation as long as the Fosen case is unresolved?". From this angle, the Fosen case is a continuation of the process of Norwegianization. By challenging the foundations of Saami reindeer pastoralism, an important cultural institution for the Saami people, the wind power policies are in effect eliminating a central piece of Saami identity. The many references to the Alta case and the Norwegianization policies that this case has spawned, build up under the main narrative for the Saami rights-discourse: The resistance against wind power on the Fosen peninsula is a part of a long struggle for Saami rights.

5.3.3 "Indigenous rights are not optional!"

"In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language." – International Covenant on Civil and Political Rights, article 27

In a way, the results of the Alta case, which granted the Saami people constitutionally protected rights as an indigenous people of Norway, is what sets it apart from the Fosen case. Today, the rights of the Saami people are well articulated and enforced by the constitution and international legal obligations. Thus, a central part of the Saami rights discourse is about these indigenous rights and how their legal content should be interpreted. As mentioned above, the Fosen case has increasingly become a case about the legally protected indigenous rights of the Saami population in Norway. The question of potential indigenous rights infringements from the wind

farms was there from the very beginning. However, this perspective was greatly enforced when the supreme court, on 11. October 2021, unanimously decided that Roan and Storheia wind farms were in violation of ICCPR article 27, as a violation of the Fosen Saami's right to "enjoy their own culture". In the following I will take a brief look at the major points of contention in the supreme court case.

The central issue of the court case was whether the wind farms in Roan and Storheia made the use of these areas as winter pastures impossible and thus denied the Fosen Saami their right to exercise their own culture. The Supreme Court, as the Court of Appeal before it, found that these pastures were essentially lost for the two sijte in Fosen. On the question of whether wind farms have a negative impact on the behaviour of tame reindeer, the courts acknowledged the lack of consensus in the scientific community (see section 5.3.1). However, based on a holistic assessment of several different research reports, GPS data from the reindeer herd in Roan after the construction of the wind farm and, importantly, witness statements from reindeer herders with experience from pastoralism in areas close to wind farms (HR-2021-1975-S, paragraphs 79-92), The Supreme Court concluded that the wind farms in Storheia and Roan would make the pastures unusable for the Reindeer herders.

While disputing the evidence of these negative effects, the wind power developers argued that, while the wind farms cause significant negative consequences for the reindeer herders, these consequences must be balanced against the importance of the green transition: "The reindeer herders have been consulted in the process, while a balancing against other interests of society suggests that no violation has taken place. The significance of "the green shift" is massive" (HR-2021-1975-S, paragraph 53). This argumentation falls in line with the Wind-Wind discourse's narrative of the importance of wind power in the green transition. In the view of the Supreme Court, however, the rights granted by ICCPR article 27 are absolute and non-negotiable. As Justice Bergsjø explained: "I do agree with Fosen Vind that "the green shift" and increased production of renewable energy are crucial considerations. But as mentioned, Article 27 ICCPR does not allow for a balancing of interests" (HR-2021-1975-S, paragraph 143). The exception to this would be if the rights granted by article 27 come into conflict with other basic rights, such as the right to a good and healthy environment, which is also enforced by The Constitution (§ 112). The Supreme Court decided against such a balancing of interests based on the fact that multiple, less important, sites were considered for the wind farms; the destruction of reindeer pastures is not a necessary condition for securing a transition to

renewable energy. Thus, the balancing of interests that were crucial in the process of granting licences for the wind farms, were seen as invalid by from a legal standpoint: The right for indigenous peoples to enjoy their own culture is unconditional.

5.4 Chapter summary

The purpose of this chapter has been to describe and discuss the three main discourses present in the Fosen case. I have shown that the leading discourse, which I have dubbed the Wind-Wind discourse, is one grounded in a forward-looking narrative that moves from a portrayal of imminent crises to possibilities of economic development opportunities. Within this discursive order, decisions of where to site wind farms are based on technical and economic analyses and a weighing of several socio-economic interests. Against this dominant discourse, there exists two alternative framings, each grounded in distinctive historical and geographical conditions. The Nature conservation framing draws attention to the destructive effects of wind power on natural landscapes and proposes a green future based on limiting consumption rather than increasing "green" production. It has its roots in a long history of landscape conservationism in Norway and draws heavily on the notion of *friluftsliv,* a lifestyle dependent on free access to untouched nature. However, the biggest challenge to the current wind power regime is posed by the Saami rights discourse. Here, the Fosen case is framed as a continuation of a long history of land dispossession and marginalization of Saami culture with a new "green" branding. By drawing attention to indigenous rights violations, the Win-Win framing of wind power in Fosen is put into question. The plights of the Fosen Saami show that wind power is a deeply social issue.

While other possible framings of the problem of wind power are certainly possible, these are the three that I have found to be the most prominent through my interviews with affected parties and analyses of a wide array of case documents. The three discourses represent three fundamentally different ways of "seeing" the natural landscapes of Fosen: as an object of governance and resource extraction, as a home to local communities and invaluable biodiversity and, finally, as a vital foundation for traditional Saami livelihoods and culture.

6 Power, knowledge, and the ways of knowing the Fosen landscape

This chapter discusses the findings and conclusions of the previous chapter and asks how discursive power relations are negotiated between the actors in the Fosen case. It employs theoretical concepts such as "legibility" (Scott, 1998) and "imagined publics" (Welsh & Wynne, 2013) to illustrate how discursive power is dispersed in the Fosen case, and how alternative discourses are being misconstrued and delegitimized by elite power. It further shows how novel alliances are being built between different actors through discursive relationships. These "discourse coalitions" (Hajer, 1996) challenge the basic assumptions of the dominant discourse and frame wind power as a deeply social issue.

6.1 Misreading the Fosen landscape

In the previous chapter I have described and discussed the three main discourses in the Fosen case. These three discursive framings represent different ways of "knowing" the Fosen landscape. For the state, the landscape is construed as an object of governance – a place with high potential for extraction of energy resources that are necessary for solving large-scale governance challenges. This mode of governance stands in stark contrast to the two alternative ways of knowing the Fosen landscape I have highlighted: as beloved, vulnerable natural landscapes and as the historical site of Saami cultural practices.

I believe that the discrepancies between these ways of knowing, and the State's (and other powerful actors) inability to overcome them, is one of the main sources of conflict in the Fosen case. Here, James Scott's book *Seeing like a state* (1998) and his concept of 'legibility' is useful. Legibility refers to how standardized and simplifying models are imposed onto complex social realities to make them visible and understandable to the state or other actors in power. Hence, landscapes are made into visible objects that can be effectively governed and from which resources can be effectively extracted. The lens by which landscapes are made legible, is not only interpretive; as Scott (1998: 87) explains, we can speak of the "power of maps to transform as well as merely to summarize the facts that they portray". "Maps" can here be thought of both metaphorically, as reference to the simplifying, standardized ways of "seeing" imposed by elite power, and literally, as the tangible charts and diagrams used to categorize, systemize, and

measure physical landscapes. The imposition of such models on complex landscapes is an act of discursive power – in "mapping" out landscapes, the landscapes are shaped and transformed as social objects.

This relates directly to the way the Fosen landscape was mapped out in terms of which pastures were of low and high value for the reindeer husbandry industry, much to the dismay of the reindeer herders themselves (see chapter 5.3.1). Reindeer practices, based on generations of knowledge of how to adapt to rapidly changing weather conditions, do not fit well into such formulaic and standardized models. In the same vein, Scott (1998: 48) explains: "These state simplifications, like all state simplifications, are always far more static and schematic than the actual social phenomena they presume to typify. The farmer rarely experiences an average crop, an average rainfall, or an average price for his crops." Similarly, the reindeer pastoralist rarely experiences average weather conditions throughout the herding season. The central point here, which the Fosen Saami have emphasised from the very beginning, is that a winter pasture that remains an unused reserve one year could mean be-all and end-all another year. Thus, while maps, models and impact assessments make the Fosen landscape legible as an object of governance and resource extraction for the State, wind power developers and investors, they fail to grasp the complexity and all-important flexibility of reindeer herding practices. On a broader scale, NVE's *National framework for wind power* mapped out the sites most suited for wind power based on a formulaic model with variables such as wind resources, costs, potential profits and, finally, the "conflict potential" of each site. The top-down plan sparked rage among local communities in the whole of Norway. It fundamentally prioritized efficiency and productivity over the needs and preferences of local communities, which inevitably resulted in the marginalization and suppression of local knowledge and practices (see chapter 5.1.3 for a more extensive discussion of the *National framework for wind power*).

Importantly, the "state simplifications" discussed here are that of a *capitalist* state. The Norwegian State is imbued in a capitalist political economy, and its power is dispersed through a number of public and private market actors which it simultaneously serves and relies upon. "Seeing like a state" could, in this case, just as well be "seeing like a wind power company" or "seeing like an international investment fund". These actors, both public and private, enter a "discourse coalition" (Hajer, 1996) of actors who share common ways of knowing and *see* the Fosen landscape in a similar way – that is to say, as a potential site for resource extraction and economic development. The Marxist distinction between "use-value" and "exchange-value"

(Marx, 1904) is useful in understanding the way these state- and market actors relate to the Fosen landscape. Use-value refers to the specific utility a commodity, in this case the land-areas of Fosen, has for the individual user. Exchange value, on the other hand, refers to the value of the commodity in relation to other commodities, i.e., the value of the commodity in a wider market. As it is seen through the lens of the Wind-Wind-discourse, the Fosen landscape is only considered for what it offers in terms of exchange-value. However, for the Saami reindeer herders and local communities who reside in Fosen, the land areas also offer a lot in terms of use-value (Saami cultural expression, *friluftsliv*, sentimental value etc.). The *commodification* of land areas that, for local communities and Saami reindeer herders are valued for their use-value, is at the heart of the Fosen conflict. The science-based market rationality that underlies the way authoritative power sees this case excludes use-values related to cultural expression and historical attachments.

This is, however, not merely a case of the State failing to see the use-value and historical and cultural significance of the Fosen land areas. Opposing discourses and alternative ways of knowing are not simply ignored and misunderstood; they are also misconstrued as lacking, ignorant and, perhaps, dangerous to national security. One way of thinking about this relation is through what Wynne calls "imagined publics". Welsh and Wynne (2013) explain the different ways scientistic elites have imagined the 'public' in post-WWII United Kingdom: first, as passive non-entities; later, as incipient threats with lacking knowledge of science; finally, as highly politicised entities that pose a threat to national security. Overall, the public were cast as "anti-science" and thus, increasingly, a threat to social order. There are similar tendencies at play in the case of the Fosen controversy. Wind power opponents are frequently portrayed as ignorant and uncapable of understanding the importance of wind power for energy security and climate change mitigation. Casting the public as ignorant and lacking in knowledge eliminates the need to engage in serious discussions with opposing voices (see the discussion of the "deficit model" in chapter 3.1). However, as Wynne (1993: 334) argues, "publics enjoy a much greater capacity for such reflexivity in relation to science than is usually recognized". The problem of climate change and energy transition is not a purely techno-scientific issue with a simple technical fix. It is a problem of major ecological and social complexities of which no state, impact assessor or science can get a complete view. Moreover, it is a problem that involves major normative commitments. A recognition of the public as both capable of reflexivity and reflection and as sources of valuable knowledge is therefore essential in any attempt of a

socially robust energy transition. In chapter 6.3 I will get back to how the opposition to the wind farms in Fosen provide valuable insight in alternative pathways of a more just green transition.

6.2 The question of rights

As mentioned in chapter 5.3.3, the language of rights has become increasingly important in the Fosen case, largely as a result of the Supreme Court victory for the Fosen Saami. Before moving on to the final chapter of this text, I want to visit the question of "indigenous rights" and their (lack of) impact in the Fosen case. Article 27 of the ICCPR is ratified into Norwegian law, and Saami cultural practices are protected in the Norwegian constitution; the state has a legal obligation to enforce these rights. Why, then, did the state intervene on behalf of the wind power developers in the supreme court case about the wind farms in Fosen? One would think, and many did (Stranden, 2021), that the state's double role in the case (as part-owner of the wind farms and as legal protector of the rights in question) would deter such intervention. To understand the state's position, it is necessary to look beyond the view of rights as "natural law" – freedoms fundamental to human nature – and explore rights as a product of *power*.

In Foucault's lectures at the Collège de France between 1978 and 1979, he discussed the relationship between liberalism and forms of coercive disciplinary power:

> "Liberalism as I understand it, the liberalism we can describe as the art of government formed in the eighteenth century, entails at its heart a productive/destructive relationship [with] freedom […] Liberalism must produce freedom, but this very act entails the establishment of limitations, controls, forms of coercion, and obligations relying on threats, etcetera." (Foucault, 2008: 64)

In this view, freedom is not something that is gradually expanding in line with more liberal forms of government. Rather, there is a constant negotiation about freedom and rights between those in power and their subjects. Freedom, and rights to freedom, are necessary for state functioning, but it is also something that the state "consumes". Certainly, then, rights are not ahistorical absolutes. As Foucault also remarks: "Freedom is never anything other – but this is already a great deal – than an actual relation between governors and governed, a relation in which the measure of the "too little" existing freedom is given by the "even more" freedom

demanded" (Foucault, 2008: 63). Freedoms and rights are offered, but they are conditional and dependent on other forms of limitation, coercion, and discipline.

The right to cultural enjoyment is also subject to this negotiation process. This includes both the freedom *to* engage in cultural practices and the freedom *from* intervention in such practices. Consider again how the Saami reindeer herding industry is often framed as an unprofitable, unsustainable, and outdated practice. Cast as economically irrational economic actors who contribute little to the national economy, reindeer pastoralists have long been subjected to criticisms of and regulations on their practices (Benjaminsen et al., 2016: 14). For instance, the proclaimed lack of economic sustainability of the reindeer herding industry is the primary justification of the policies aimed at reducing the number of reindeer allowed in each herd (Benjaminsen et al., 2016: 35). Reindeer herding, both a trade and an act of cultural expression, thus becomes subject to state measures seeking to increase productivity and profitability. The increased state intervention in Saami reindeer herding practices is an important backdrop for the discussion of rights in the Fosen case. The Saami people's rights become articulated in such a way that they are contingent on the reindeer pastoralists' productive value to the economy and broader society.

This might be linked to Foucault's notion of "bio-power", referring to how power operates through the management and regulation of biological and social life of large populations. Foucault noted that, from the turn of the eighteenth century, the 'population' emerged "as an object of scientific measurement and government more broadly" (Cavanagh, 2018). For Foucault, bio-power is essential for the functioning of capitalism, which would "not have been possible without the controlled insertion of bodies into the machinery of production, and the adjustment of the phenomena of population to economic processes" (Foucault, 1978/1990: 140-141). When the ordering, monitoring, and optimizing of the population becomes a central matter of governance, the 'untidy' practices of reindeer pastoralists become a problem. In short, the legal right to engage in such practices is subject to limitations through various forms of (bio-)power.

In a way, we can speak of a conflict between multiple "rights". On the one hand, the right of the state to extract resources from its territory and incorporate its subjects into an effective, ordered workforce. On the other, the subjects' right to autonomy and cultural expression. There is a constant struggle about what the rights are and whose rights should prevail, where power

is the ultimate decider. As Marx (1887) wrote in Capital, "between equal rights, force decides". Harvey (2012: preface XV) writes that the struggle of articulating the contents of rights must "proceed concomitantly with the struggle to materialize it." In the Fosen case, both these struggles are still ongoing, and the conclusion is unclear. The Supreme court has ruled in favour of protecting Saami rights, but the State is hesitant in its follow-up. The rights violation has been acknowledged and official apologies have been made, but the roots cause of the rights infringement, the windmills, still stand tall on the Fosen mountains. In the end, the lack of action after the Supreme court judgement raises serious questions about the legitimacy of the state as an enforcer of rights and, not least, about the principle of separation of powers between judiciary and executive branches of government. Rights mean little if a Supreme Court decision does not have the power to enforce them.

6.3 Emerging Coalitions of resistance

In the discussion above, I have wanted to illustrate how forms of discursive power is exerted and dispersed throughout the Fosen case. The dominant discursive position, which I have referred to as the Wind-Wind discourse, greatly influences energy policy both on a local and national scale and offers the primary justification for the wind power developments. Even when not mentioned explicitly, its basic assumptions are implicit in most discussions on wind power. Narratives about the need for more wind power, the prospects of economic development, and the importance of technological advancement, are mostly taken for granted and underlie more explicit articulations on the subject. Despite the power of these narratives, I have consciously refrained from referring to the Wind-Wind discourse as hegemonic. Rather, I have described it as a leading or dominant discourse (Adger et al., 2001). The Wind-Wind discourse is challenged on multiple fronts and its very foundations – that wind power will benefit all - is on shaky grounds when confronted with counter-narratives of green colonialism and marginalization of local communities and knowledge. The Fosen case is also the story of the successes of these counter-discourses. The remainder of this text examines the close ties between the nature conservation movement and the Saami rights movement, and briefly explores the path forward that can be drawn out of this coalition of resistance.

The discursive positions outlined in this study are, of course, simplifications. They are primarily analytical categories: most actors find themselves somewhere between these positions and draw on different types of knowledge to frame their standpoints. Moreover, alliances based on

discursive similarities are being formed between multiple actors. I have already mentioned how this has led to close ties between state authorities and market actors, who both view Fosen as a potential for 'green' development. Similarly, a strong discourse coalition has been formed between nature conservationists and Saami rights activists/Saami reindeer herders. The ties between these two groups are not obvious: Saami reindeer herders and environmental NGO's have long been in conflict over issues such as overgrazing and land management (Benjaminsen et al., 2015; Benjaminsen et al., 2016). In Fosen, however, the groups have formed a tight-knit and politically impactful alliance. The coalition is based on common interests (i.e., protecting the landscapes in Fosen, halting wind power developments), common values (nature conservation, cultural heritage) and, not least, a common narrative about wind power as a profit-seeking enterprise ignoring local values and knowledge. The coalition is made explicit in the political alliance between the reindeer herders in Fosen and Naturvernforbundet. One of the Fosen reindeer pastoralists, Leif Arne Jåma captures the essence of the coalition in a statement to *Natur & Miljø* (Christensen, 2021):

> "We need large and contiguous grazing areas with as little intervention as possible, and this is also a priority for a conservationist. We hope people understand that reindeer herding is nature conservation. […] We have been given a land on loan from our ancestors. We must pass that on to our descendants in as good a condition as we got it."

The challenges from nature conservationists and Saami reindeer herders have had a significant impact in the Fosen case. It is perhaps between young activists that this new alliance is flourishing at its greatest. The protests and acts of civil disobedience in Oslo were co-organized between Natur og Ungdom, the youth organization of Naturvernforbundet, and NSR-Nuorat, the youth organization of the Norwegian Sámi Association. Collectively, they expressed a desire for a radical environmental politics that does not come at the expense of Saami rights and vulnerable nature. The protests fundamentally changed the way the Fosen case is talked about – from a regional planning issue among many others to an example of the 'green transition' gone wrong.

There is potentially great political value residing in broad local mobilizations such as the one that has emerged in Fosen. They act as enablers for a wider discussion on the potential ecological and social consequences of a vast transition to renewable energy. Moreover, they inspire new ways of imagining energy futures that go beyond the technocratic solutionism of

the current governance model. As Avila (2018) puts it “local mobilizations and novel alliances contribute to discuss energy transitions as a societal matter, rather than a technical and managerial issue.” It is very possible, as Sovacool (2021: 13) insists, that the real source of conflict does not lie in the energy technologies themselves, but rather in the current regime of energy politics. This regime is being challenged by movements such as the one in Fosen. They reject the view of the climate challenge as a merely scientific and technical problem, with a corresponding technical fix. Rather, it is being discussed as a deeply social issue with potentially severe social and ecological consequences.

7 Conclusion

The overall aim of this thesis was to identify, discuss and problematize the discourses of the Fosen case. Through a thorough analysis of case documents and data collected through interviews with affected actors, I have identified three key discursive positions:

1. **The Wind-Wind discourse:** This dominant discourse portrays wind power as an unambiguous benefit to Norway and the world. It rests upon a narrative that takes its departure from a state of crisis, where energy shortage and climate catastrophe looms on the horizon. From this state of crisis, it envisions a sustainable future based on the rapid implementation of renewable energy technologies. The Wind-Wind discourse is deeply enmeshed in a techno-scientific imaginary where new, clean technologies like wind power provide a solution to the climate challenge. Moreover, wind power is also seen as an important frontier for industrial expansion and economic growth. The fundamental assumption in this discourse is that the challenges of today are solved by producing *more* renewable energy.
2. **The nature conservation discourse:** Challenging the dominant view, the Nature conservation discourse regards wind power not as a solution to a crisis, but as an agent of crisis. Here, the current wind power regime is criticised for prioritizing profits for foreign investors over nature and local communities. The nature conservation discourse has its roots in a long-standing environmentalist movement in Norway, building upon a form of deep ecology that emphasizes the inherent value of all life. The nature conservation discourse challenges the view of wind power as a renewable energy source, highlighting the increased demand on minerals and rare earth elements. Instead, nature conservationists propose a sustainable future based on consuming *less* energy.
3. **The Saami-rights discourse:** Another important counter-discourse has been posed by Saami reindeer herders in Fosen who have seen highly valued winter pastures turned into sites for wind power production. In the Saami rights discourse, the opposition against the Fosen Vind project is seen as the latest chapter in a long struggle against oppression and marginalization by the Norwegian state. The wind power developments in Fosen a here framed as a form of "green grabbing" – land dispossession with an environmental rational or rhetoric. Moreover, this discourse highlights the importance of local indigenous knowledge and how this has been disregarded in the licensing processes for the wind farms in Fosen.

While many more positions exist, and most actors find themselves somewhere between these three positions, these are the most important discursive framings in the Fosen case. After Identifying the discourses, I explored how the dominant view of the Wind-Wind discourse is manifested through various discursive power mechanisms. I argued that the complex social reality of the Fosen case is simplified and rationalized in order to make it "legible" (Scott, 1998) to those in power. This way of "seeing" the Fosen landscape disregards local practices and ways of knowing. In turn, it makes the landscape visible as an object of governance and as a ground for resource extraction for the state and wind power developers. Furthermore, I explained how opposing views are misconstrued as expressions of selfishness and knowledge deficiency. This "deficit model" (Wynne, 1993) absolves authorities from engaging in earnest discussions about the potential downsides of wind power production where alternative forms of knowledge are appreciated as valuable contributions.

Finally, I explained how the Fosen case has led to the emergence of a broad "discourse coalition" between Saami reindeer herders, local communities, and nature conservationists. I argue that there is a lot of political value in this alliance. It could enable an expansion of the discussion on energy politics that brings in novel perspectives makes space for alternative types of knowledge. A transition away from fossil fuels, whether based on an expansion of renewable energy technologies or an overall reduction in energy consumption, will inevitably bring more land-use and societal challenges. In facing these challenges, opposition voices must be recognized as legitimate contributors of knowledge, not as selfish and science-adverse opponents of necessary change. When the storm is brewing, navigating the winds of change is no easy task. The Fosen case highlights the importance of a democratized knowledge base when determining what direction to set our sails.

8 Literature

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9 Appendix

Appendix 1: List of interviewees and interview types

Interviewee No.	Organization/Role	Interview type
1	Motvind	Semi-structured
2	The Norwegian Water Resources and Energy Directorate (NVE)	Semi-structured
3	ANEO (TrønderEnergi)	Semi-structured
4	ANEO (TrønderEnergi)	Semi-structured
5	Trondhjems Turistforening	Semi-structured
6	Naturvernforbundet Trøndelag	Semi-structured
7	Åfjord resident	Informal
8	Åfjord resident	Informal
9	Åfjord resident	Informal
10	Åfjord resident	Informal
11	Åfjord resident	Informal

Appendix 2: Interview guide – Nature conservationists/Åfjord residents

Bakgrunn

- Hvilken organisasjon tilhører du (om relevant)?
- Hvor lenge har du vært involvert i denne diskusjonen om vindkraft på Fosen?

Utgangspunkt: Tidslinje

- Kan du fortelle meg om hvordan du først hørte om planene for utbygging av vindkraft på Fosen? Hva følte du da?
- Hva skjedde videre? (Fortsett å spørre om tidslinjen)

Vindkraft

- Hvilken rolle spiller vindkraft i det grønne skiftet?
- Hva synes du om Fosen som et sted for vindkraft?
- Fordeler/ulemper

Natur

- Hvordan kan vindkraft påvirke naturen?
- Klimakrise/Naturkrise

    - Hvordan balansere behovet for fornybar energi med et ønske om å bevare naturmangfold og begrense naturinngrep?
- Har det skjedd en splittelse i miljøbevegelsen på dette punktet?

Samarbeid med utbyggerne

- Hvordan opplevde du samarbeidet med vindkraftutbyggerne (Fosen Vind DA)?
- Hvordan opplevde du samarbeidet med myndighetene (NVE, OED)?
- Hvilke plattformer ble benyttet for å holde dialog mellom deres organisasjon og vindkraftutbyggerne?
    - Høringsrunder?
    - Møter?
- Eventuelt: Hvordan ble naturvernorganisasjoners bekymringer ivaretatt i saksbehandlingen?

Samarbeid med reindriften

- Hvordan har dere samarbeidet med reindriften på Fosen?
- Har dere felles interesser?

Høyesterettssaken

- Høyesterett fant at konsesjonene for Storheia og Roan vindpark er ugyldige, hva synes du om det?
- Hvordan ser du for deg vegen videre etter dommen?

Uttrykk/poeng å utforske videre:

- «vi/oss»
    - Hvem mener du når du sier «vi/oss»? Kan du utdype litt om dette?
- «de/dem»
    - Hvem mener du når du sier «de/dem»? Kan du utdype litt om dette?
- «bærekraftig»
    - Hva legger du i ordet «bærekraftig»? Hvordan ser en bærekraftig fremtid ut for deg?
- «grønn»
    - Hva legger du i dette?
- «grønt skifte»
    - Hvordan ser et grønt skifte ut?
- Klimakrise/Naturkrise
    - «Del av samme problem»
- Økonomi/profitt
    - Anser dere vindparkene på Fosen som et profitabelt prosjekt?
    - Hvorfor trekkes utenlandske investorer til vindkraftprosjekter i Norge?
- Strømeksport
    - Strømkrise/Strømpriser
- Teknologi
    - Hvor viktig er teknologisk utvikling i det grønne skiftet?
- Media

    - Hvordan har denne saken vært presentert i media? Hva synes du om denne representasjonen?
- Sentrum/periferi-konfliktlinjer
- Samisk historie
    - Historiske paralleller?
- Menneskerettigheter
    - Kulturell utfoldelse

Appendix 3: Interview guide – Wind power developers

Bakgrunn

- Hvordan har du vært involvert i utviklingen av vindkraft på Fosen?
- Hvor lenge har du vært involvert i denne prosessen?

Utgangspunkt: Tidslinje

- Kan du fortelle meg om hvordan du først hørte om planene for utbygging av vindkraft på Fosen? Hva følte du da?
- Hva skjedde videre? (Fortsett å spørre om tidslinjen)

Vindkraft

- Kan du fortelle litt om bakgrunnen for planene om å bygge vindkraft på Fosen?
    - Hvorfor vindkraft?
    - Hvorfor akkurat Fosen?
- Hvilken rolle spiller vindkraft i det grønne skiftet?
- Hvordan er vindparkene på Fosen finansiert?
-

Utfordringer og motstand

- Hvilke utfordringer har du/dere møtt på i utviklingen av dette vindkraftprosjektet?
    - Naturmangfold
        - Dialog med naturvernorganisasjoner?
        - Hvilke utredelser er gjort?
    - Naboklager
        - Støy, skyggekast osv.
    - Friluftsliv

Samarbeid med reindriften

- Hvordan påvirker vindparkene reindriften på Fosen?
- Finnes det, etter din mening, tiltak som kan muliggjøre både vindkraft og reindrift i disse områdene?
    - I så fall, hvilke tiltak er dette?
- Hvordan opplevde du samarbeidet med reindrifta (Gruppe sør og Gruppe nord)?
- Hvilke plattformer ble benyttet for å holde dialog mellom reindriftsnæringen og vindkraftutbyggerne?
    - Høringsrunder?
    - Møter?

- Eventuelt: Hvordan ble reindriftens bekymringer ivaretatt i saksbehandlingen?

Verdivurderinger

- Hvordan vurderer dere nytteverdien av fornybar energi (fra vindmøller) opp mot disse mulige konsekvensene?
    - Hvilket kunnskapsgrunnlag er denne verdivurderingen basert på?
    - Hvem fatter de endelige beslutningene?

Høyesterettssaken

- Høyesterett fant at konsesjonene for Storheia og Roan vindpark er ugyldige, hva synes du om det?
- Hvordan ser du for deg vegen videre etter dommen?

Uttrykk/poeng å utforske videre:

- «vi/oss»
    - Hvem mener du når du sier «vi/oss»? Kan du utdype litt om dette?
- «de/dem»
    - Hvem mener du når du sier «de/dem»? Kan du utdype litt om dette?
- «bærekraftig»
    - Hva legger du i ordet «bærekraftig»? Hvordan ser en bærekraftig fremtid ut for deg?
- «grønn»
    - Hva legger du i dette?
- «rettferdig grønt skifte»
    - Hvordan ser et grønt skifte ut?
- Økonomi/profitt
    - Anser dere vindparkene på Fosen som et profitabelt prosjekt?
    - Hvorfor trekkes utenlandske investorer til vindkraftprosjekter i Norge?
- Teknologi
    - Hvor viktig er teknologisk utvikling i det grønne skiftet?
- Media
    - Hvordan har denne saken vært presentert i media? Hva synes du om denne representasjonen?
- Sentrum/periferi-konfliktlinjer
- Samisk historie
    - Historiske paralleller?
- Menneskerettigheter
    - Kulturell utfoldelse

Appendix 4: Consent form

Vil du delta i forskningsprosjektet

Vindkraft, Natur og Menneskerettigheter?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å studere motstand mot vindkraft på Fosen, Trøndelag. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Dette prosjektet er en masteroppgave i studieprogrammet Bærekraft ved Universitetet i Bergen. I prosjektet vil jeg gjennomføre en case-studie av vindkraftmotstand på Fosen. Formålet er å kartlegge de ulike posisjonene i diskusjonen om vindparkene, med et særlig søkelys på maktforskjeller mellom ulike aktører. Hvilke perspektiver er mest fremtredende og hvilke synspunkter når ikke frem i beslutningsprosessene?

Hvem er ansvarlig for forskningsprosjektet?

Det humanistiske fakultet ved Universitetet i Bergen er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Målet med disse intervjuene er å samle inn synspunkter fra personer som kan ha særlig interesse i spørsmålet om vindkraftutbygging på Fosen.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du stiller til et intervju. I intervjuet vil du bli spurt om ditt syn på vindparkene på Fosen, og dine erfaringer med behandlingen av saken. Jeg vil ta et lydopptak av intervjuet og på et senere tidspunkt transkribere intervjuet til tekst. Jeg vil også be om noe bakgrunnsinformasjon om deg og din rolle i Fosen-saken. Dette vil kunne inkludere informasjon om etnisk opprinnelse der dette er relevant for sakens innhold.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Jeg vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Jeg behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er bare jeg og min veileder ved universitetet i Bergen som vil ha tilgang til opplysningene under prosjektet. Navnet og kontaktopplysningene dine vil jeg erstatte med en kode som lagres på egen navneliste adskilt fra lydopptak og transkripsjon fra intervjuet. I den endelige publikasjonen av masteroppgaven vil intervjumaterialet kobles opp mot generelle kategorier som ikke kan identifisere deg som enkeltperson. Datamaterialet vil bli lagret på en sikker server hos Universitetet i Bergen.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes juni 2023. Etter prosjektslutt vil datamaterialet med dine personopplysninger anonymiseres, gjennom at listen med navn og kontaktinformasjon slettes.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Bergen har Personverntjenester vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:
innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
å få rettet opplysninger om deg som er feil eller misvisende

å få slettet personopplysninger om deg
å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:
Student: Harry Lewis Lawford (e-post: yak009@uib.no)
Veileder: Kjetil Rommetveit (e-post: kjetil.rommetveit@uib.no)
Vårt personvernombud: Janecke Helene Veim (e-post: Janecke.Veim@uib.no)

Hvis du har spørsmål knyttet til Personverntjenester sin vurdering av prosjektet, kan du ta kontakt med:
Personverntjenester på e-post (personverntjenester@sikt.no) eller på telefon: 53 21 15 00.

Med vennlig hilsen

Kjetil Rommetveit (Veileder) Harry Lewis Lawford (Student)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *Vindkraft, Natur og Menneskerettigheter,* og har fått anledning til å stille spørsmål.

Jeg samtykker til å delta i intervju.
Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

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(Signert av prosjektdeltaker, dato)