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“An ill wind which blows nobody good?”
*Rural municipalities’ experiences with wind power in
Norway*

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Cultural Change

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Abstract

In the face of the climate crisis, there is an international push towards lower-carbon sources of energy. As rural areas experience a decline in population and employment, renewable energy projects are often framed as integral for rural development. Despite the rapid rate of renewable energy deployment in rural areas, there has been little research that transcends energy studies and rural studies. This thesis attempts to bridge this research gap by examining the rural dimensions of energy production and the energy dimensions of rurality. This case study focuses on Southwestern Norway. This region has been one of the areas in Norway with the highest rate of wind power deployment since 2017. By drawing upon field visits, interviews, and textual analyses, this thesis explores the financial and ecological implications of hosting wind power for two municipalities in Dalane. Through an empirical analysis of the Tellenes case, this thesis investigates processes of marginalization that are distinctive of rural areas in Norway. I employ in this thesis the term “rural marginalization” to describe these processes. Drawing on the Energy Justice framework, this thesis unpacks how national rural and energy policies are articulated on a municipal scale, how rural municipalities navigate processes of marginalization, and grapple with concepts of justice when negotiating with multinational companies to ensure long-lasting benefits from hosting wind power infrastructures. This thesis also adds to the Energy Justice framework by suggesting that the inclusion of intergenerational justice adds to a richer understanding of rural Norwegian municipalities’ motivations and expectations when hosting wind power plants.

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1.0 Introduction

In this current epoch, often called the Anthropocene, a subset of the human species has reshaped and redefined nature and climate as a consequence of capitalist expansion. The effects of climate change are increasingly shaping the world around us. The extraction, and use, of hydrocarbons, is a leading emitter of GHG (greenhouse gases), leading to global warming. On global, transnational, national, and regional scales, there is a push for increased renewable energy production with lofty aims of reducing greenhouse gas emissions (EU Directive 2018/2001, 2018; IEA, 2020; IRENA, 2018; Olje- og Energidepartementet, 2016; Rogaland fylkeskommune, 2020; UN, n.d.). The expansion of renewable energy development is widely seen as a crucial step for achieving the Sustainable Development Goals (SDGs), as per SDG number 7.2, which explicitly states the goal of increasing the “the share of renewable energy in the global energy mix” by 2030 (UN, n.d.). The Intergovernmental Panel on Climate Change (IPCC) 2018 Special Report also lists wind energy as a central mitigation option in its overview of an overall energy system transition (*IPCC Special Report: Global Warming of 1.5°C*, 2018). UN Climate Change reports that the current emission trajectory is consistent with a “temperature rise by 2.7°C by the end of the century” (UNFCCC, 2021). Following the 2021 IPCC report, UN has redoubled its appeal to decrease fossil fuel extraction and to rapidly expand renewable energy production (UN, 2021).

The rapid expansion of renewable energy has changed the configuration of many spaces, producing “new energy spaces” (Bridge & Gailing, 2020). The reconfiguration of these spaces have led to controversies regarding, but not limited to, questions of land use, land rights, uneven development, and justice (Avila, 2018; Dunlap, 2019b; Normann, 2020; Siamanta, 2019; Zografos & Martínez-Alier, 2009). Simultaneously, the majority of new renewable energy projects and developments are situated in rural areas. Outside of hosting lower-carbon infrastructures, rural areas worldwide are facing drastic changes, such as depopulation and deagrarianization (Bair et al., 2019; Bennike et al., 2020; Hebinck, 2018; Jefferson, 2018; Syssner, 2020a). While the majority of renewable energy expansion takes place in rural areas, the intersection between energy studies and rural studies remains understudied, including in the Global North (Clausen & Rudolph, 2020; Naumann & Rudolph, 2020).

The focal point of this thesis is Norway, sometimes dubbed Europe's "green battery" due to its existing hydropower resources and its potential wind power resources (Gullberg, 2013; Moe et al., 2021). Norway is part of the European Union's internal energy market through the EEA Agreement. Following supranational and national goals of increased energy production from renewable sources, Norway has seen a rapid increase in the development and construction of wind power infrastructures (NVE, 2020b). The vast majority of these structures are located in rural areas along the coast, causing large swaths of land to be converted to energy-producing areas. Simultaneously, onshore wind energy developments have become increasingly controversial in Norway, garnering critical questions regarding the impact on nature and ecosystems (Almås & Fuglestad, 2020; Totland, 2021; Vasstrøm & Lysgård, 2021a). Civil society, including environmental organizations and anti-wind power organizations, has gained traction in raising awareness of and, in some cases, halted wind power developments. In October 2021, the Supreme Court unanimously ruled that the wind power licenses for Storheia and Roan wind power plants in the Fosen peninsula were invalid, as they interfere "with the [Southern Sámi] reindeer herders' right to enjoy their own culture under Article 27 of the International Covenant on Civil and Political Rights (ICCPR)" (Supreme Court of Norway, 2021). What consequences this ruling may have for other wind power infrastructures remains to be seen.

There have also been discussions regarding the financial compensation that host municipalities receive. Since NVE (the Norwegian Water Resources and Energy Directorate) proposed its controversial *National Framework for Onshore Wind Power* (NVE, 2019), there has in effect been a moratorium on wind power licenses in Norway. The National Framework also proved to be so controversial that it was scrapped in the fall of 2019 by the OED (The Norwegian Ministry of Petroleum and Energy) due to negative responses in the hearing process regarding wind energy development. There are also proposed changes to the wind energy taxation system, which includes an excise tax on wind power (Skatteetaten, 2021). The wind energy regime is thus currently at a crossroads (Vasstrøm & Lysgård, 2021a, 2021b).

Simultaneously, there are increasing tensions between rural and urban, peripheral and central parts of the country (Almås & Fuglestad, 2020). While tensions between rural and urban areas

have long been a fixture of Norwegian power dynamics (Brox, 1966; Rokkan, 1987), Almås and Fuglestad contend that this conflict has been revitalized. These tensions where people in rural parts of the country are increasingly mobilizing against centralization and a deprioritization of peripheral areas have particularly been rendered visible through the 2019 local elections (Skogen & Krange, 2021) and in the 2021 national elections. Despite the affluence of the Nordic countries, the welfare benefits that the Nordic Social Model embody are unevenly dispersed, with rural areas seemingly being deprioritized (Aasjord, 2020; Faber et al., 2016; Frisvoll, 2020). With this backdrop, Almås and Fuglestad (2020) contend that there are several “rural rebellions”¹ in Norway.

Tellenes wind farm, the focal point of this thesis, is located in the cultural district of Dalane, in southwestern Norway. Dalane has become one of the “highest pressure areas for windpower development in Norway” (Saglie et al., 2020, p. 150), and Tellenes was, when the wind farm opened in 2017, the largest wind farm in the country with its 50 wind turbines. The Tellenes project garnered national media attention in the fall of 2019 when news broke that the corporation managing the wind farm was registered in tax havens (Figved et al., 2019a; I. Fredriksen et al., 2019b). This thesis will investigate the implications that the wind power plant has had on the host municipalities, Lund and Sokndal.

1.1 Aims and research question

As the title of this thesis, “*An ill wind which blows nobody any good?: Rural municipalities’ experiences with wind power in Norway*”² indicates, the aim is to center on the implications wind power has had on rural municipalities, namely Sokndal and Lund municipalities. Using Tellenes wind park in Rogaland as an empirical case, I will unpack how the changing wind energy regime has opened up for new configurations of institutions that articulate rural areas of Norway and global interests. More specifically, this thesis will examine how the financial and ecological costs and benefits of hosting wind power plants are dispersed on a local scale.

¹ *Distriktsopprør* in Norwegian. All translations by Aggie Handberg unless otherwise noted.

² The proverb, “it’s an ill wind that blows nobody any good”, is defined by the Oxford Dictionary of Proverbs as: “[a] sailing metaphor frequently invoked to explain good luck arising from the source of others’ misfortune” (J. S. Speake, 2015).

The aims of this thesis can be divided into three parts: First and foremost, I wish to examine the financial and ecological impact that wind energy development has had on the municipalities of Lund and Sokndal. As the wind farm is located in an area where there has been little conflict before and during its construction, this allows for a different perspective on the implications that wind power developments may have. Secondly, I want to highlight the rural aspects of wind energy developments in Norway, as this is a topic that tends to be overlooked within academic research. Third, I want to explore the dynamics between national wind power policies, (multi)national actors' involvement in wind power development, and the municipalities in which the wind farms are constructed. Through conducting a qualitative study, I aim to contribute to bridging the gap between energy studies and rural studies within the social sciences.

The main research question that guided the research for this thesis was as follows:

How can the local financial and ecological implications of wind power for Lund and Sokndal municipalities be better understood using an Energy Justice analytical lens?

This question has been divided into three sub-questions, as follows:

1. *What role does the national wind power regime play in rural marginalization in Norway?*
2. *How have the changes in national energy policies impacted rural municipalities?*
3. *How are burdens and benefits of wind power negotiated and distributed among actors involved in wind power development?*

1.2 The contributions of this thesis

This thesis answers the call of Naumann and Rudolph (2020), who urged scholars to “energize rural studies” and to “ruralize energy research”. Therefore, the main contribution of this thesis will be to contribute to the ongoing discussion on how rural and energy studies may intersect. This thesis proposes the usage of the term *rural marginalization* to encompass the spatial aspects of marginalization and the socioeconomic and ecological aspects of peripheralization in the context of rural Norway. Based on empirical findings, this thesis proposes that framing some of the challenges that rural municipalities face as processes of *rural marginalization* allows for a more comprehensive understanding of how the burdens and benefits of energy production are articulated in these areas.

The Energy Justice (EJ) framework is used in this thesis to examine how the “burdens and benefits” of lower-carbon energy production in rural areas are dispersed. This thesis contributes to the EJ framework by adding a decidedly rural dimension. It also suggests, in Chapter 7, that the EJ framework can be expanded to include intergenerational justice to the tenet of distributive justice. As this thesis concludes, the EJ framework benefits from incorporating aspects from rural studies, as well as tenets and elements from other justice frameworks.

The following chapters will shed light on different aspects of rural marginalization and how this can be connected to the existing framework of Energy Justice (EJ). Chapter 2 provides background information regarding onshore power production in Norway and a brief overview of existing research on wind energy in Norway. The following chapter, Chapter 3, provides an overview of the theoretical framework that serves as a basis for the discussions in subsequent chapters. Chapter 4, discusses the methods I have chosen, ethical challenges brought on by doing research in a global pandemic, and the limitations of the methods selected. Chapter 5 outlines some of the central features of Lund and Sokndal municipalities and a brief timeline of how Tellenes wind farm came to be. The main body of this thesis is divided into three empirically-based analytical chapters, each answering parts of the main research question and at least one of the sub-questions. Chapter 6 focuses on the municipalities’ financial benefits from hosting the wind power plant, arguing that they are continuously navigating forms of marginalization that are particular for rural municipalities. The following chapter, Chapter 7, examines other material benefits from the wind farm in the form of community benefits and how the motivations for negotiating these benefits are rooted in forms of experienced marginalization. Chapter 8 discusses some of the ecological consequences of wind power for the municipalities. The conclusion, Chapter 9, summarizes the findings of this thesis and how this thesis has contributed to a more comprehensive understanding of lower-carbon energy production in rural areas.

1.3 Thesis limitations

While this thesis aims to contribute to bridging the gap between energy studies and rural studies, it is not without its limitations. As with most research done during 2020, the scope of research was severely affected by the pandemic. The number of interviews and length of fieldwork were reduced by national and regional restrictions and the attempt to safeguard the health and overall

wellbeing of potential informants and other local residents. As further discussed in Chapter 4, this led to my relying more on secondary sources. However, as Chapter 8, in particular, centers on narratives by non-municipal informants, it would have been beneficial to interview more people to gain further knowledge and provide more nuance to the narratives and discourses presented. A more extended field visit would have provided me with the chance to converse with more people and gain more insight into local customs, culture, and perceptions of the ecological implications of the wind power infrastructures. It would perhaps also have afforded me with a greater understanding of how the two municipalities have attempted to negotiate and govern the Tellenes area differently.

Chapter 6 provides further discussion on the matter of how access has shaped the scope of this thesis. The companies currently involved with the Tellenes project did not want their employees to be interviewed for this thesis. In other words, this limitation was not due to lack of time but rather lack of access. The lack of access to these informants led me to focus on how the municipalities perceived the negotiation processes rather than to attempt to provide a more nuanced portrayal of how different actors have perceived the implications of the wind power plant.

However, despite its limitations, the contributions of this thesis may prove valuable for a richer understanding of how rural municipalities in Norway negotiate the implications of hosting wind power infrastructures.

2.0 Producing energy, producing wealth: Energy in rural Norway and beyond

In recent years, Norway has seen a booming expansion of wind energy structures, particularly in sparsely populated coastal areas. The development of wind power plants in Norway can be viewed as a continuation of its tradition for energy production, primarily hydroelectric power and petroleum. Hydroelectric power allowed for establishing heavy industries centered in small towns and villages in rural Norway, located near the power plants (R. Nilsen, 2014; Thue, 2008; Thue & Rinde, 2001). Since the 1970s, the petroleum sector has been an important factor for domestic economic growth, largely financing the welfare state (Bang & Lahn, 2020; Brigham & Moses, 2021; Mjøset & Cappelen, 2011; OECD, 2007). The petroleum sector is also an important source of employment (Statistisk sentralbyrå, 2019). Hydroelectric power still reigns supreme for domestic energy consumption, accounting for 91% of consumption in 2019, but the rate that stems from wind power is increasing (NVE, 2020b). Additionally, the policies that regulate energy production, including local and national benefits, have undergone a drastic change since hydroelectric power was regulated in the early 20th century. The following sections will give a brief overview of how rural policies have changed during the past fifty years, linking these changes to the transformation and liberalization of energy regulation, before connecting these changes to how wind power is currently regulated.

2.1 Rural policies in Norway

As the majority of wind power infrastructures in Norway are located in rural parts of the country, examining some of the central features of rural and regional policies³ is pertinent for a conceptualization of the rural in a Norwegian context. Norway has, according to Karlsen and Dale, long maintained a “strong political goal of maintaining a dispersed pattern of settlement” aimed at peripheral areas (Karlsen & Dale, 2014, p. 75). However, manifestations of this political goal has changed over time as different ideologies have influenced policymaking

³ Regional and rural policies, or *regionalpolitikk* and *distriktpolitikk* refer to policies aimed at all regions and policies specifically aimed at rural areas. KMD defines *distrikt* as areas “particularly characterized by long distances and sparsely populated areas and dispersed settlements” (my translation) (Kommunal- og moderniseringsdepartementet, 2021a). The term *distrikt* will therefore be translated as *rural** or *countryside* depending on the context.

geared towards rural parts of the country. Additionally, there are current so-called “rural rebellions” that claim that the government has failed rural areas (Almås & Fuglestad, 2020; Teigen, 2020). This has, in part, contributed to the rise of the Center Party and its rhetoric of decentralization in the elections of 2019 and 2021⁴ (Jenssen, 2020; Melås & Blekesaune, 2020).

Conflicts and tensions between the urban centers and the rural peripheries have been a central part in the development of the nation-states in Europe (Kühn, 2015; Rokkan, 1987). However, there are certain features that separate the Norwegian countryside from other rural areas in other countries. One such difference is the existence of the Norwegian welfare state (Haugen & Lysgård, 2006). In addition, there are spatial, cultural, and political differences that have influenced rural and regional policies, research, and the lived experiences of rurality in a Norwegian context. Some of these differences can be attributed to the geographic features and the political history of the country. Yttri posits that some of the features of Norwegian rurality can be ascribed to the following: “1) the elongated Norway has a lot of periphery and a marked center, 2) the country’s geographic location on the outskirts of Europe, and 3) that the central power in historically important periods was in Copenhagen or Stockholm.”⁵ (Yttri, 2019, p. 246). Central to Norwegian political and economic situation throughout modern history is its tradition for resource exploitation.⁶ Norway has long had a position as a resource periphery in the global economy, in the form of fish and forest products (Moore, 2010a, 2010b), hydropower, and petroleum (Karlsson & Dale, 2019; Mjøset & Cappelen, 2011; Thue, 2008) to name some examples. Thue goes as far as dubbing the Norwegian form of capitalism “a resource-based and democratic capitalism” (Thue, 2008, p. 394).

Tensions between center and periphery, urban and rural, are well established in Norway (Jacobsen, 2020; Rokkan, 1987; Solstad & Andrews, 2020; Stein et al., 2019; Teigen, 2019; Yttri, 2019). However, these tensions appear to be increasing. The 2020 book *Distriktsopprør*⁷ (Almås

⁴ The 2019 local elections (municipal and county councils) and the 2021 national elections in which the Center Party became the third largest party in the country, and a part of a Labor-Center coalition government.

⁵ My translation. The third point is a reference to the Dano-Norwegian Realm (1523-1814), and the Swedish-Norwegian union (1814-1905).

⁶ By “modern history”, I refer to the beginning of what Moore refers to as the rise of capitalism, i.e., the 16th century (2010a, 2010b).

⁷ The title could be translated to: *Rural rebellion*

& Fuglestad, 2020) point at several potential causes and manifestations of this friction, arguing that there is not a singular “rural rebellion” but several rebellions that are all founded on the urban-rural/center-periphery dynamic. Several of the articles in the book stress how changes in regional policies have increased geographical inequities between the people residing in rural and urban areas (Aasjord, 2020; Flø, 2020; Jenssen, 2020). Vik et al. point out that these changes have been brought forth by a new kind of state (J. Vik et al., 2020). This state, described as “a greedier state”, is characterized by having “a public sector that pulls itself back, without becoming smaller – a state that is growing, without providing more”⁸ (J. Vik et al., 2020, p. 300). They go on to describe that this new state is not characterized by the typical attributes of the political left nor right, but that it combines the worst aspects of both sides, resulting in a state that is unable or unwilling to decrease geographical inequities (J. Vik et al., 2020). This is a marked departure from earlier eras of regional politics, particularly those of the 1960s and 70s. In Norway, rural and regional politics underwent a substantial change during these two decades (Brox, 1966; Haugen & Lysgård, 2006; Teigen, 2019). Brox’ seminal work on the effects of national modernization strategies on Northern Norway informed both research and, to some extent, policies (Brox, 1966; Teigen, 2019). Increased urbanization was viewed as a challenge that had to be overcome, and regional policies aimed towards regional settlement (Stugu, 2018; Teigen, 2019). The decentralization policies of the 1960s and 70s can thus be understood as a counter-reaction to the modernizing policies of the previous decades, primarily led by the Labor Party (Cruickshank, 2006; Teigen, 2019). Furthermore, the 1970s saw a large sociopolitical change in how the countryside was articulated in both policies and in the public discourse. The rural villages and areas were increasingly posited as both *creating* (material) value through resource extraction and production and also as areas that *possessed* (sociocultural) value as a part of a symbolic national identity (Haugen & Lysgård, 2006; Hidle et al., 2006).

However, according to Hidle et al. (2006), the following decades saw a pronounced shift. During the 1980s, the notion of “the logic of the market” began influencing policies, causing the rural to be subjected to the demands of the market and to “the cultural and economic globalization process” (Hidle et al., 2006, p. 192). Furre goes as far as stating that the 1980s saw the conclusion of “[t]he social democratic order”, which during this decade had lost its position as the ideology

⁸ My translation.

on which policies and governmental morality was founded, paving the way to the individualist views of neoliberalism (1992, p. 488). These ideological changes have since become hegemonic, and this “market turn” signaled the advent of increasingly neoliberal policies (Innset, 2020).

The 1990s saw a continuation of this shift, in which trade and industrial policies became more closely aligned to those of the European Economic Area, of which Norway became a member through EFTA (the European Free Trade Agreement) in 1994. This led to a discontinuation of several policies and subsidies that had previously benefited the rural areas of Norway, such as the opportunity for cheaper electricity, credit agreements, and loans (Teigen, 2019).

This description of the Norwegian state following an increasingly neoliberal manner of governing is echoed in Teigen’s historical analysis of regional politics and policies in Norway, where peripheral areas have experienced increasing centralization in the name of effectivity (Teigen, 2019, 2020). According to the Ministry of Local Government and Regional Development, one of the main goals is to develop “attractive regions and centers for both people and businesses” (Kommunal- og moderniseringsdepartementet, 2018). A large portion of this responsibility falls on the municipality, which is expected to “ensur[e] good living conditions and an equal range of services locally, and must at the same time be a driving force for the development of local community and businesses” (Kommunal- og moderniseringsdepartementet, 2018). Furthermore, the municipality is also expected to combat depopulation by maintaining its existing population and attracting new residents (Kommunal- og moderniseringsdepartementet, 2018, 2020b).

The responsibility for regional development has thus progressively become the responsibility of the municipality rather than the state, and the municipality is expected to innovate and to make itself attractive for new business opportunities and new residents. It therefore appears that the state’s role as a supporter of “the initiatives and ambitions of local communities” (Thue, 2008, p. 395) can be interpreted as less descriptive of the relationship between the state and the municipalities today. This thesis will display how two municipalities have tackled this change, in large part through hosting wind power plants.

2.2 Power production in Norway

The expansion of wind power deployment in Norway is not an isolated phenomenon. The concentration of wind farms in southwestern Norway and in Rogaland County in particular has its origin in regional and national policies, which also correlates to supranational and international goals regarding renewable energy. Norway has signed the UNFCCC (United Nations Framework Convention on Climate Change), the Kyoto Protocol, as well as the Paris Agreement. Through these agreements, Norway has obliged to reduce its emissions. Through its membership in the EEA (European Economic Area), Norway is obliged to contribute to the EU's 2030 Climate Target Plan, which, amongst other things, entails that it must reduce emissions and expand renewable energy production. In the spring of 2021, IEA's roadmap towards reaching net zero by 2050 stated that fossil fuel exploration must end in order to reach this goal (IEA, 2021). Simultaneously, the Norwegian government aims to continue its petroleum extraction (Regjeringen, 2021a), and has recently awarded additional search licenses in the Norwegian Sea and in the Barents Sea (Regjeringen, 2021b).

While Norway has, and continue to extract fossil fuels, this thesis focuses on onshore power production in Norway, more specifically on hydroelectric power and wind power. These two forms of power production are regulated and taxed under vastly different policy regimes. The difference between the two has a direct impact on municipalities' financial benefits from hosting energy production infrastructures. Although the laws have changed during the past century, hydropower has long been and still remains legislated and taxed in a manner that reflects the notion that natural resources such as land and waterways are a common good and that the profits consequently should befall the public (Løding, 2017; Rinde, 2001; Thue, 1996, 2008; Thue & Rinde, 2001). As outlined in the following sections, this is not necessarily the case for other sources of renewable energy, including wind power.

2.2.1 Hydroelectric power – “building the country”

Energy production can be argued to be the catalyst of industrialization and modernization of the country, as well as building the foundation on which the welfare state rests (Olstad, 2020; Stugu, 2018; Thue, 1996). Furthermore, the connection between rural settlements and hydropower in Norway is tightly interwoven. The industrialization of the country from the late 1800s was highly decentralized compared to other countries, largely due to the dispersed nature of hydropower

resources and the power-intensive industries requiring close proximity to the hydropower resources (Hveding, 1992; Løding, 2017; R. Nilsen, 2014; Rinde, 2001; Thue & Rinde, 2001). This created several industry towns, oftentimes one-industry towns, located in various parts of the country (Stugu, 2018; Thue, 2008). While many of these one-industry towns have since experienced a decline as the industries moved abroad or closed down, hydropower was essential for the development and modernization of these towns and the surrounding areas (Hveding, 1992; Slottemo, 2020; Teigen, 2020; Thue & Rinde, 2001).

With the advent of new technological feats and the goal of increasing industrialization in the late 1800s and the early to mid-1900s, the expansion of hydropower was supported and financed through national policies. The Norwegian government started enacting laws from the 1890s onwards that aimed towards mitigating some of the negative consequences from unchecked industrialization (Rinde, 2001; Thue & Rinde, 2001). A prime example is the so-called Panic Acts of 1906-1917. Some of the laws implemented during this stage were created in an attempt to curtail the rapid increase in the foreign purchase of domestic waterfalls and waterways. One such example is the 1909 escheat policies (Rinde, 2001; Thue, 2016). Escheat, *hjemfall* in Norwegian, is a term to describe cases where “property or land reverts to its original owner – usually the state or the crown – free of charge” (Stortinget, 2014). Additionally, hydropower is one of the highest-taxed industries in the country, requiring resource rent tax, natural resource tax, and ground rent, in addition to property tax and license fees. The expansion of hydropower in the 19th and 20th centuries led to increased industrialization and economic development, particularly in the municipalities in which the dams were located (Hveding, 1992; Leknes & Modalsli, 2020; Thue, 1996). This is reflected in the Norwegian colloquial expression *kraftkommune*⁹ which is commonly used to denote the municipalities with hydroelectric power due to their generation of both electricity and income. Historically, municipalities have also constructed hydropower plants themselves as a part of the electrification process, both to support and attract heavy industry and for electrification of private households. The expansion of hydropower allowed for a decentralized manner of industrialization, which strengthened the rural regions – and in particular, the municipalities that hosted these infrastructures.

⁹ Literal translation: *power municipality*.

2.2.2 Wind power in a national and regional context

Wind power policies and wind power deployments are both relatively recent developments in Norway. 1998 saw the launch of a 3 TWh production target by 2010 (Olje- og Energidepartementet, 1999). This target overshoot actual production in 2010 by around 2 TWh (NVE, 2011). The rapid expansion of wind power in Norway is thus a recent turn of events. Since 2002, when one of the first utility-scale wind power plants opened in Smøla, an island north of Kristiansund, there has been an exponential growth in wind farms in Norway. In 2020, the energy production from wind power was 9.9 TWh (NVE, n.d.). By the end of 2020, there was a total of 53 wind farms and 1154 wind turbines in Norway, spanning a total planning area of 493 km² (Gulbrandsen et al., 2021; NVE, n.d.). Although hydroelectric power accounted for 91% of the domestic energy production for domestic consumption in 2019, NVE's projections for 2040 estimate a 19 to 38 TWh increase in wind power generation, depending on technological development, power lines, and the development of offshore wind power (Gogia et al., 2019).

The deployment of wind power plants seen in Southwestern Norway today has been many years in the making. Southwestern Norway and the Dalane region in particular, has been the site of a substantial increase in wind turbines over the past years, turning it into one of the highest-pressure areas for wind energy production in the country (Saglie et al., 2020). This is a recent turn of events, as the first wind farms in the region, Tellenes and Egersund, only started operating in 2017. Since then, four additional wind farms have been constructed, the majority of which are located in Bjerkreim, the northernmost municipality in Dalane. As of February 2021, there are 156 turbines generating a 577 MW output in the region (NVE, n.d.). Additionally, there are several wind farms in the surrounding areas, several of which are visible from parts of Dalane. NVE also received additional license applications for wind power plants both in Dalane and in neighboring regions, indicating that if the licenses are granted, the impact of wind power infrastructures will be even larger in coming years.

However, as Vasstrøm and Lysgård accurately point out: “Norwegian wind power policies are at a crossroads” (2021b, p. 9). Since 2019, there has been a moratorium in the licensing process where no new projects have been granted a license (Olje- og Energidepartementet, 2020). Earlier that year, NVE launched the *National Framework for Onshore Wind Power* (NVE, 2019), a plan

which outlined areas and regions that were deemed more and less suitable for wind power deployment. The proposed National Framework proved to be so controversial that it was scrapped in the fall of 2019 by the OED (The Norwegian Ministry of Petroleum and Energy) due to negative responses in the hearing process. In 2020, the OED issued a white paper that proposed ways in which the procedural aspects of the licensing process could be improved (Olje- og Energidepartementet, 2020). Following up on this, in May 2021, the Government issued a press release stating the intention to require a “moderate” production fee on wind power plants starting in 2022 (Finansdepartementet, 2021). The production fee will be distributed to the host municipalities, according to the press release (Finansdepartementet, 2021). Parallel to the aforementioned political processes, there has been an increase in mobilization aimed at influencing, halting – and in some cases – ending wind power developments in Norway (Gulbrandsen et al., 2021; Totland, 2021; Vasstrøm & Lysgård, 2021a, 2021b). One example of the latter are local and national groupings and organizations, such as the national organization *Motvind*.¹⁰ Motvind and other organizations have garnered public support and media attention in their attempt to halt wind power developments, including in the Dalane region (Stavanger Aftenblad, 2020).

While the expansion of hydropower led to economic growth through direct income and the increase of employment in power-intensive industries, the financial effects of wind power have thus far been quite different. In Norway, hydropower and wind power are regulated and taxed under vastly different policy regimes, which affects municipalities’ financial benefits from hosting energy production infrastructures. While large-scale hydropower plants are taxed in ways that provide income to the government, the county, and the municipalities, this has not proven to be the case in the context of wind power.

The Energy Act of 1990 is widely considered a turning point in how energy has been regulated in Norway (Innset, 2020; Løding, 2017; Y. Nilsen, 2006; Rinde, 2001; Thue & Rinde, 2001). The Energy Act regulates all other sources of power production, except for hydroelectric power and petroleum. This Act represents a turning point in that it brought about market reforms and increased liberalization of the energy sector. Based on the developments in the 1990s, Olsen

¹⁰ *Motvind* means “headwind”, but can also be read as a play on words as *mot vind* translates to “against wind”.

describes Norway as having become “a hotbed for market reform of the technically integrated and institutionally complex and locked-in electricity system” (P. I. Olsen, 2000, p. 1). The liberalization of the energy market included opening up for Nordic power exchange and set the stage for an integrated energy system in the EU and EEA (Magnus & Tennbakk, 2020). The creation of the Act and the associated Proposition to the Storting, Ot. prp. 43 (1989-90),¹¹ has been argued to be a microcosm of the introduction of neoliberal market reforms brought on, in part by the Conservative Party and economists, but continued and reinforced by the Labor Party during the late 1980s and throughout the 1990s (Innset, 2020; Løding, 2017; Thue, 1996).

In contrast to Denmark’s early arrays into industrial-scale wind power expansion in the 1970s and 80s, which were largely based on collective ownership, the Norwegian government viewed this as too expensive compared to the relatively little power that the turbines were able to yield at the time (Blindheim, 2013; Buen, 2006). During the 1990s and the first decade of the 21st century, both the private sector and the central government viewed lack of profitability for prospective developers and investors was considered a major factor that restricted the large-scale expansion of wind power, combined with unpredictable policies (Blindheim, 2013; Buen, 2006). Vasstrøm and Lysgård point out that Norwegian wind energy policies have largely been centered around large-scale actors, modeled after the hydropower sector (Vasstrøm & Lysgård, 2021a, 2021b). While renewable energy infrastructures, to a larger degree than fossil fuel infrastructures, open up for new and, perhaps, more democratic and just configurations of power and community ownership (Batel & Rudolph, 2021; Daggett, 2021), this has not been the case for the Norwegian wind power regime.

The changes brought on by the policies of the late 1980s and throughout the 1990s have opened up for privatization of natural resources and the revenues extracted from these resources. An example of the changes that the Energy Act brought on can be seen in the ownership structure of existing hydroelectric plants compared to wind power plants. Nearly 90% of all hydroelectric plants are publicly owned, while only 6% are owned by foreign companies or actors (NVE,

¹¹ A *Proposition to the Storting* is a legislative bill that the Government sends to the Storting for consideration. These were called Proposition to the Odelsting up until 2009, hence the abbreviation “(Ot.prp.)”

2020a). For wind power plants, only 32,9% are publicly owned, while 61,7% are owned by foreign actors (NVE, 2020a). While the rapid increase in hydropower developments led the national government to enact Panic Acts to ensure public ownership, the expansion of wind power has not led to a similar development. Instead, low tax rates and subsidies in the form of Green Certificates have encouraged actors to invest in wind power development in Norway (Boasson, 2014; Boasson & Jevnaker, 2019; Imeland & Solbø, 2020). The Green Certificates was a joint Swedo-Norwegian scheme aimed at increased renewable energy projects in either country by just over 26 TWh from 2012 until 2020, with each country paying for half of this expansion (Boasson, 2014; NVE, 2020c). The boom in license applications and wind power deployment towards the end of the 2010s indicate that these certificates may have been a contributing factor in this increase. The ongoing discussions regarding wind power policy changes (Energi Norge, 2020; Olje- og Energidepartementet, 2020; Skatteetaten, 2021) may then open up for changes in distribution of power and profits.

2.3 Changing perspectives on wind power

As outlined in the introductory chapter, energy production and usage have had a solid impact on humanity, nature, and other non-human entities. Despite this, there has, up until relatively recently, been a lack of research on energy within the social sciences outside the realm of economy (Sovacool, 2014; Van de Graaf et al., 2016). Additionally, as this thesis argues, there has been a decided lack of focus on the rural dimensions of energy production. However, as the expansion of wind power infrastructures has increased, additional perspectives on wind power have emerged. One of the early main narratives, both within and outside of academia, was the so-called NIMBY narrative, which in theory could be useful for understanding the rural dimensions of wind power production as it highlights communities' and individuals' sense of place-attachment, place identity, and perceptions of landscape.

The term *NIMBY*, Not-in-my-backyard, in its essence, signifies that one is positive towards projects as long as it is not close to one's area of residence, i.e., one's literal or figurative backyard (Wolsink, 2000). In the 1980s, during the nascence of large-scale wind energy development, much of the research done was centered around the social acceptance of these projects (Devine-Wright, 2005; Wolsink, 2000). The academic discussion around wind energy in

the social sciences tended to describe sociocultural, economic, and ecological grievances or concerns as rooted in what is referred to as “the NIMBY syndrome”. Although this strand of research on wind power highlighted the importance of landscape and place-attachement, it did not explore the rural dimensions of wind power production (Burningham et al., 2015; Devine-Wright, 2005, 2009; Jones & Eiser, 2010; Wolsink, 1989).

Although the dominant academic discourse regarding how wind farms are perceived has shifted, NIMBYesque rhetoric still exists in public discourse and is, in some cases, employed by developers as a way of discrediting concerns related to the consequences of wind energy projects (Burningham et al., 2015). In the case of wind energy, the interpretation of objections against wind energy as being grounded in a NIMBY response was often equated with selfishness, distrust in policymakers, and parochialism (Devine-Wright, 2005, 2009; McClymont & O’Hare, 2008; Wolsink, 2000).

During the past two decades, in particular, there has been published literature that is critical of reducing concerns and resistance as NIMBYism. A staple of the NIMBY narrative, namely that the local inhabitants are a singular group with homogenous perceptions and opinions, has also largely been disproved (Devine-Wright, 2005; Skogen & Krangle, 2003, 2021). There have been multiple attempts to understand and analyze how wind projects are perceived, particularly focusing on opposition or resistance towards these projects, including comparative analyses. Pasqualetti’s article is particularly useful as it analyzed opposition to four different projects and concludes that there were five commonalities in all the settings (2011). These commonalities, listed as “immobility, the site specificity of the resource; immutability, an expectation of landscape permanence; solidarity, the close relationship between people and the land; imposition, a sense of marginalization; and place identity, a loss of security” (Pasqualetti, 2011, pp. 914–915), all speak to a complexity not covered by the NIMBY explanation. Localized experiences and causes for opposition have also been discussed by others, offering nuanced pictures of particular cases where current conflicts are imbued in historic power imbalances, as well as cultural and social realities (Devine-Wright, 2009; Dunlap, 2019b; Graham et al., 2009; McClymont & O’Hare, 2008; Rygg, 2012; Scherhauser et al., 2017; Zografos & Martínez-Alier, 2009). In short, the academic discourses on wind power have broadened to include historical,

political, social, and cultural contexts that affect different actor's perceptions and attitudes towards wind power projects, which goes beyond the NIMBY narrative. However, the rural aspects tend to largely be overlooked even while it is stated that the communities are small or located far from urban areas (Graham et al., 2009; McClymont & O'Hare, 2008; Rygg, 2012)

2.3.1 Researching wind energy in a Norwegian context

As the expansion of wind power in Norway is a fairly recent phenomenon, research on wind energy is also relatively sparse. In terms of the financial, sociocultural, and ecological impact of energy production for domestic consumption, the majority of academic research thus far has been centered on hydropower (Hveding, 1992; Leknes & Modalsli, 2020; Thue, 1996). Energy governance and research on energy governance also focused on hydropower (Kjærland, 2007; Løding, 2017; Rinde, 2001; Thue, 1996; Thue & Rinde, 2001). Within the past 15 years, there has been some research done on wind power. One question that has been examined has been why the expansion of wind energy has lagged behind in Norway compared to other countries. Buen's analysis focuses on Norway and Denmark, comparing policy instruments implemented in the period between 1975-2002 (Buen, 2006). She found that the policies and measures introduced in Norway were weaker and more unpredictable than in Denmark, while also primarily taking a "large-scale, heavy-industrial approach, based on traditions and actors from Norwegian hydropower and petroleum industries" (Buen, 2006, p. 3894). The latter contrasts with Denmark's power structure, which included more municipal and cooperative ownership of wind power projects and developments (Pettersson et al., 2010). Blindheim argues that the unpredictability of the licensing process has had a profound impact on wind energy projects in Norway due to the financial risk to potential investors (Blindheim, 2013, 2015). Sovacool argues that Norway's energy challenges include the country's continued dependency on oil and gas extraction and export, energy-intensive heavy industry, and a low level of monetization of electricity generated from hydropower (Sovacool, 2017). In short, these articles posit that Norwegian wind energy policies and frameworks are to blame for the lack of domestic wind power deployment.

There has also been some research done on protests against wind power developments. Buen and Blindheim both attribute at least part of the lack of wind power expansion on local protests

against wind power projects (Blindheim, 2015; Buen, 2006). Others have taken a more discursive approach, focusing on arguments used when discussing and protesting wind power developments. Examples include Solli's article examining the hybrid collectives constructed in the effort to prevent the construction of wind farms in two different locations (Solli, 2010), and Rygg's article that examined local communities' arguments supporting and opposing wind farms (Rygg, 2012).

Some articles examine the licensing process focusing on actors and stakeholders. This is a fairly recent development which may, in part, be attributed to the policy changes implemented in 2008. 2008 saw the enactment of the new Planning and Building Act (PBA), where NVE became the main decision-making body, reducing the role of the host municipality to a consultative party (Fauchald, 2018; Gulbrandsen et al., 2021). This meant that, in theory, that NVE may grant a license to a wind energy project opposed by the host municipality. In practice, Gulbrandsen et al., and Inderberg et al. (2021; 2019), have found this to be is a rather rare occurrence. This is further examined by Inderberg et al. (2019), whose article examines how outcomes of wind power licensing processes in Norway are mostly influenced by a few actors. The project developer, the local landowner, the municipality, the NVE (and OED – the Ministry of Petroleum and Energy in the case of appeals) are the main actors, while other stakeholders such as members of the local community and NGOs are marginalized (Inderberg et al., 2019). They further highlight the importance of examining the informal practices in these processes, displaying how host municipalities have *de facto* veto power, but that some municipalities are unaware of this possibility, which leads to a loss of transparency and predictability in these processes (Inderberg et al., 2019). Gulbrandsen et al. (2021) contend that while municipalities have informal veto power during the licensing process, they have little say after NVE or OED has granted a license. Since the changes in the PBA in 2008, NVE has become the land-use planning authority. This, according to Gulbrandsen et al., has led to “host municipalities feel[ing] marginalized” after the license is granted, as NVE in several cases has approved significant changes in turbine placement and size without the consent of the host municipalities (Gulbrandsen et al., 2021, p. 5).

Keeping to the topic of marginalization of actors and stakeholders, some scholars have focused on wind power development within Sápmi/Sábme/Saepmie,¹² the cultural region of the Sámi, an indigenous people residing primarily in the northern parts of the Fennoscandian peninsula. To date, the largest wind farm complex in Europe¹³ is located in Sápmi, disrupting areas used for reindeer pastoralism. The increasingly threatened practice of reindeer pastoralism is an integral part of Sámi identity, language, cultural practices, and the transmission of these to future generations (Fjellheim, 2013; Jaakkola et al., 2018; Lawrence, 2014; Normann, 2020). Land-use conflicts that concern Sámi reindeer herding areas have been dubbed internal green colonialism and is a continuation of state-sanctioned violence against the Sámi (Lawrence, 2014; Normann, 2020; Nygaard et al., 2007). While outside the scope of this thesis, as Lund and Sokndal municipalities are located outside of Sápmi, this remains an essential part of wind energy scholarship in Norway.

More recently, in particular, through the ongoing research project WINDPLAN based in southern Norway, there has been a larger diversity of academic research on wind power. In particular, Vasstrøm and Lysgård examine the historical development of wind power in Norway and the opposition to wind power while utilizing justice theory to analyze areas of contention (Vasstrøm & Lysgård, 2021a, 2021b). This attempt to reconcile environmental and energy justice can also be seen in Saglie et al.'s article which focuses on municipalities' perceptions of procedural and distributive fairness in relation to wind power (Saglie et al., 2020).

2.3.2 Renewable energy production in rural areas

The production of renewable or lower-carbon energy, including wind, requires a large spatial footprint which causes renewable energy infrastructures to tend to be situated in less populated areas (Huber & McCarthy, 2017). This development has led to rural spaces being reconfigured as a spatial resource that provides energy and revenue for a larger area (Bridge et al., 2013; Naumann & Rudolph, 2020). In comparison, fossil fuel extraction has a smaller spatial footprint and is generally limited to subterranean extraction where these particular resources are located

¹² The names of this area in the three official Sámi languages in Norway (North Sámi, Lule Sámi, and South Sámi). Elsewhere, I will use Sápmi to denote this area.

¹³ The Fosen Vind complex, located in Trøndelag. In total, there are 277 wind turbines, and the wind farm complex is estimated to generate 3.6 TWh per year, according to www.fosenvind.no

(Huber & McCarthy, 2017). In short, while the renewable energy sources themselves may be limitless, physical space is finite. The energy produced in these areas is often intended to power urban areas or industries, which does not necessarily provide a direct benefit for the inhabitants in the selfsame rural areas (Zografos & Martínez-Alier, 2009). Conflicts regarding industrial, large-scale wind energy developments are thus often related to land use and land acquisition (Avila, 2018). Despite this, Naumann and Rudolph argue that academics studying energy production and consumption tend to merely hint at conceptions of the rural and rurality, while those within rural studies tend to underestimate or ignore the impact of energy production and consumption on rural areas and communities (2020).

There are some notable exceptions, including Woods' article that explores different factions' discursive and social constructions of nature and the rural in the context of a prospective wind farm in Wales (Woods, 2003). Woods concludes that while both proponents and opponents of the project agreed that the area was indeed rural, the conflict could not "be separated from an understanding of the conflicting approaches to rurality that they also embody" (Woods, 2003, p. 284). Analyzing the arguments of pro-, and anti-wind energy coalitions in Ireland, Lennon and Scott contend "that disagreement is an inevitable component of the planning process when debating rural futures in a post-carbon transition" especially through the groups' weighing of different spatial referents, either highlighting the local or the national/international aspects (Lennon & Scott, 2017). Drawing on Woods (2003), Phadke focuses on the constitution of what she refers to as "rural landscape identities" amidst protests against large-scale wind energy industrialization in Nevada, USA (2011). She further argues that "[w]ind energy opposition politics are essentially battles over rural space; over who controls the productive and consumptive qualities of rural landscapes" (Phadke, 2011, p. 756). To summarize, while there exists academic literature that focuses on the intersection between renewable energy and rurality, these are fairly limited in scope. Additionally, these studies emphasize the importance of researchers including a spatial perspective that explicitly examines the rural dimensions of (wind) energy or the energy dimensions of rurality. This is precisely what this thesis will do.

2.3.3 Wind power in rural Norway

Although the vast majority of wind power plants in Norway are located in rural areas, the effect of deployment of wind power plants on *rural* communities and municipalities has not been the center of attention. Instead, the rural dimension tends to be hinted at or taken for granted. Rygg examines arguments for and against wind energy developments in 13 Norwegian municipalities and highlights that the municipalities, with the exception of one, all have a population under 6000 (Rygg, 2012). The potential significance of this is, curiously enough, not expanded upon in the article. According to Statistics Norway, the vast majority of the 13 municipalities in Rygg's study are categorized as "least central" or "second least central" (Statistisk sentralbyrå, 2020). This indicates that these municipalities can indeed be classified as rural. Instead, Rygg focuses on the arguments used by the municipalities. The main arguments used to support wind energy projects in the local communities were primarily related to financial benefits and increased employment (Rygg, 2012). Although Rygg hints at a rural perspective through her discussion of the importance of employment and financial benefits for the communities in question, her focus remains on contesting the NIMBY narrative through analyzing the arguments used by actors within the communities (Rygg, 2012). Saglie et al., and Inderberg et al., also briefly mention the financial precarity experienced by many of the smaller municipalities. Both articles state that financial compensation - either through property taxes or compensation agreements that are made between the project developer and the municipalities - are important factors for the municipalities to agree to wind power deployment and to experience the process and the compensations as fair (Inderberg et al., 2019; Saglie et al., 2020).

While these articles all acknowledge that there are some perspectives that are more important for rural communities and municipalities, these are not the main focal points. Financial motivations are present in all three studies, indicating that this is an important factor when examining rural municipalities' experiences with wind power. The articles do, to little extent, factor in rural or regional policies in their discussions of the municipalities' experiences with wind power. Additionally, they do not engage with the rural dimensions of energy production in their analyses of the municipalities' perceptions of procedural or distributive fairness. This thesis thus aims to do precisely so.

3.0 Theorizing “the rural”

3.1 Defining and delimiting “the rural”

While the rural dimensions of wind power have largely been overlooked, the usage of terms such as *rural*, *periphery*, and the pertaining verbs *ruralization* and *peripheralization* are not without inherent complications. Research on *the rural* in the Global North was long centered in and on the British countryside (Cloke, 2006; Halfacree, 1993; Shucksmith, 2018; Woods, 2012). There have even been some discussions on whether *the rural* as an academic concept should be done away with as it has often been used in an undifferentiated manner (Hoggart, 1990). There are also discursive issues that arise when using terms that contain associations related to the challenges that many rural areas face. The term *peripheralization* may be viewed as a stigmatizing discourse that must be problematized (Willett, 2020). Despite this, concepts such as *rurality*, *rural*, and *periphery* remain valuable analytical and discursive tools to grasp better socio-spatial processes and situations (Cloke, 2006; Haugen & Lysgård, 2006; Woods, 2006, 2012). The terms *rural*, *rurality*, and *periphery* are understood and used in this thesis as useful tools to discuss and analyze sociocultural and economic differences and inequities that are connected to spatiality (Haugen & Lysgård, 2006; Rokkan, 1987; Woods, 2005, 2006).

Outside of the academic context, similar terms are used to categorize Norwegian municipalities and regions. Terms like the aforementioned *distrikt* and *distriktskommune* are used to describe areas and municipalities with a “low level of centrality” based on relative distance to services compared to Oslo, the nation’s capital (Bull et al., 2020; Kommunal- og moderniseringsdepartementet, 2020b; Statistisk sentralbyrå, 2020). The term *distrikt* is thus primarily used to describe spatiality and geographical distance. The municipalities that SSB defines as the least and second least central municipalities encompass 72% of Norway, but a mere 14% of its inhabitants live in these municipalities (Statistisk sentralbyrå, 2020).

According to the Ministry of Local Government and Regional Development (KMD), the rural areas of Norway face three major challenges: depopulation, an aging population, and dispersed settlements (Kommunal- og moderniseringsdepartementet, 2020b). These challenges are not unique to Norway, but rather a central part of discussions regarding the future of rural and peripheral areas in large parts of the world (Faber et al., 2016; OECD, 2016; Woods, 2007).

Additionally, words like *bygd* and *bygda*¹⁴ are commonly used to describe villages and other settlements in rural areas and ‘the rural’ as a category (Berg & Lysgård, 2004; Haugen & Lysgård, 2006). The concept of ‘the rural’ thus often coincides with the peripheral, and terms such as ‘rural’, ‘rurality’, and ‘periphery’ are often used in a largely interchangeable manner (Carlsson et al., 2014; Østerud, 2005; Salvatore et al., 2018; Wanhill, 1997). However, these terms are contextual rather than absolute. There are different degrees of rurality and peripherality within the municipalities of Lund and Sokndal. In Statistics Norway’s (SSB) most recent index, both Lund and Sokndal municipalities were grouped in the “second least central” category (Statistisk sentralbyrå, 2020). A municipal center in a small municipality situated far from the closest city or large urban area, may thus still be the local center in relation to *more* rural areas, while simultaneously being peripheral in relation to the regional center or the country’s capital (Knudsen, 2018). An example of this is Norway’s historical position as a resource periphery in relation to European, and later, global trade networks (Moore, 2010a, 2010b), while there were – and still are - different levels or degrees of peripheralization within the country (Østerud, 2005; Stugu, 2018). Rokkan also argued that the Norwegian peripheries belonged to different categories, with the coastal areas along the western coast (from Agder to Northern Møre, which includes the coastal parts of Dalane) being categorized as an “egalitarian coastal periphery” (Rokkan, 1987, pp. 223–224). Rurality and periphery must then be understood as contextual and mutable rather than as fixed or absolute.

Globalization and global processes are central to debates and theorizations revolving around the rural, as exemplified by the concept “the global rural” (Rignall & Atia, 2017) and “the global countryside” (Woods, 2007). Central to these terms is the notion that although rural areas are distinct and have contextual differences, there are still several key similarities between rural or peripheral areas throughout the world, which can and should be examined closely. Additionally, many rural areas are undergoing processes of agrarian transformation, and as is the case in Norway, of deagrarianization and depeasantization (Bair et al., 2019; Hebinck, 2018; M. L. Vik et al., 2010; Woods, 2006, 2007). In a Nordic setting, Faber et al. postulate that rural areas in the so-called “Nordic peripheries” tend to face common challenges, despite national goals and

¹⁴ While *bygd* means “village” and *bygda* “the village”, these terms – in various conjugations and constellations – are commonly used in everyday discourse when talking about the countryside and rural areas.

policies that aim towards social equality in urban and rural spaces (Faber et al., 2016). While Bair et al. focus on the Italian region of Calabria, their findings appear to be relevant for other areas: Drawing on Arrighi's work, they found that there are multiple pathways to capitalism even within a small geographical area (Bair et al., 2019). These pathways are dependent on historical and geographical contexts, including rural aspects (Bair et al., 2019). Although the turbines in Tellenes wind farm are located in the rural municipalities of Sokndal and Lund, they are embedded in a larger network of actors and capital. The wind farm is owned by funds registered in Ireland and in the Cayman Islands, while the multi-national corporation Google has entered a 12-year power purchase agreement with the owner of the wind farm. Furthermore, the wind farm is operated by a Swedish company, and seemingly managed by BlackRock, a global investment management fund. In this sense, the municipalities can truly be categorized as a part of "the global rural" described by Rignall and Attia. However, a more accurate description would perhaps be to characterize Lund and Sokndal municipalities as a part of the "globalized rural" as globalization is a process rather than a fixed state.

3.2 Rural marginalization

The contribution of this thesis in the discussion of lower-carbon energy production in rural areas is to theorize it as a part of a *rural marginalization* process. An important part of this theorization is differentiating between *marginalization* and *peripheralization*. Starting with the latter term, *peripheralization* has been used to denote socio-spatial inequalities. This conception of peripheralization has its roots in the world-systems theory, which bases itself on understanding the processes in which the core exploits the periphery in a capitalist world economy (Wallerstein, 2004). Peripheralization, according to Fischer-Tahir and Naumann, thus "refers to a spatially organized inequality of power relations and access to material and symbolic goods that constructs and perpetuates the precedence of the centres over areas that are marginalized" (Fischer-Tahir & Naumann, 2013, p. 18). Blowers and Leroy suggested a set of indicators that could identify peripheral communities: these communities tend to be remote, economically marginal, politically powerless, culturally defensive, and environmentally degraded (Blowers & Leroy, 1994). The spatial aspect is also central to Kühn's understanding of peripheralization, which he describes as "the dynamic processes through which peripheries actually emerge" (Kühn, 2015, p. 368). Kühn goes on to argue that any spatial type may be peripheralized, indicating that these processes are

political, economic, and social - rather than primarily spatial (Kühn, 2015). In other words, the periphery (as in the areas on the outskirts of a defined center) is commonly peripheralized. At the same time, areas located within the center such as inner-city neighborhoods may also experience processes of peripheralization. Given this, areas located in *spatial* peripheries are not inherently peripheralized. Norway has historically been a good example of this. The periphery and – more specifically – municipalities in the periphery have been able to exert power to a much greater extent than what has been the case for most European countries, and have also had a higher level of self-governance (Baldersheim, 2014; Baldersheim & Fimreite, 2005; Teigen, 2019). These factors indicate that being situated in a spatial periphery does not necessarily result in marginalization nor peripheralization. In other words, peripheralization is a process that has a spatial aspect, but not necessarily a *rural* one (Danson & Souza, 2012). In addition, processes of peripheralization are dynamic and may change over time.

Marginalization on the other hand, refers to the social exclusion of groups or individuals, denying someone rights or resources and/or blocking them from participating in society (Robbins, 2012; Trudeau & McMorran, 2011). People living in the periphery may also be marginalized, and vice versa, however this should not be considered a given due to gender, class, ethnicity, and additional factors (Danson & Souza, 2012; Kühn, 2015; Skogen & Krange, 2021). In contrast, Trudeau and McMorran theorize marginalization as inherently spatial, defining marginalization as “a process of becoming peripheral” that follows “a center-edge analogy, in which actors at the edge are disempowered in comparison to actors at the center, who are privileged and socially dominant” (Trudeau & McMorran, 2011, p. 438). Additionally, processes of marginalization and environmental degradation often coincide. There is a multitude of possible reasons for this, most of which are contextual and demand closer examination of the particular case - as co-occurrence in itself does not speak towards causality (Robbins, 2012). Furthermore, marginalized areas may experience loss of self-governance compared to the central government or other actors. An example of such a situation can be seen in Vik et al.’s article where marginalization is one of two narratives used by local farmers in Geiranger¹⁵ (M. L. Vik et al., 2010). Central to this narrative was the notion that the central government has marginalized the farmers through policies that promote tourism at the cost of farming (M. L. Vik et al., 2010).

¹⁵ Geiranger is a small village in Western Norway, near the UNESCO World Heritage Site, the Geiranger Fjord.

In a Norwegian scholarly context, the term marginalization is primarily used to describe processes leading to or maintaining socio-economic inequality, such as employment and education (Nylund & Rosvall, 2019; Pihl et al., 2018). Politically, it is used in a wider socio-economic context, encompassing inequalities related to but not limited to poverty, education, and gender. (Kunnskapsdepartementet, 2006, 2016). With few exceptions, the term has not been used to describe spatial or geographical aspects (Gillebo, 1989; Miljøverndepartementet, 2001; M. L. Vik et al., 2010). In other words, while marginalization and peripheralization may overlap, this is not always the case. Additionally, neither concept sufficiently encompass the rural dimensions of peripherality and marginality. In the case of Geiranger as described by Vik et al. (2010), the peripheral location of the community appears to contribute to this sense of marginalization through the manifestation of an urban-rural dichotomy.

I will thus use the term *rural marginalization* in this thesis to denote the spatial dimensions of marginalization. While this term has been used in other contexts, such as by Stull et al. to describe the process in which rural space can be used as “environmental means for marginalizing groups” in the context of upholding environmental Apartheid in South Africa (Stull et al., 2016), the usage in this context is more akin to that of Bock (2016). Bock uses the concept to encompass challenges that marginal areas face, particularly in regards to spatiality and relative remoteness, but she also includes socio-economic factors in her definition (Bock, 2016). By using this term, I contend that there are aspects of marginalization that are unique to or distinctive of rural areas in Norway. As neither marginalization nor peripheralization encompasses the economic, sociocultural, environmental, and spatial processes that produce or reproduce patterns of marginalization in *rural* areas, this term is used as a tool to negotiate these dynamics. The usage of this term will allow for a more precise understanding of the processes that have led to the marginalization of rural municipalities. Simultaneously, using this concept underscores that maintaining the rural dimension is central when analyzing the implications that the wind power plant has had on the municipalities in question.

3.3 And justice for all? – Connecting Energy Justice and Rural Marginalization

This section aims to connect the concept of rural marginalization with the broader framework of Energy Justice (EJ). As described in the previous section, rural marginalization includes both processes of marginalization and peripheralization while highlighting the rural aspects of these processes. Justice theory as a broader theoretical framework has long been used to examine power dynamics and processes of marginalization in decision-making processes, as well as the (mis)distribution of burdens and benefits (Schlosberg, 2007). Environmental justice, in particular, has been used by both scholars and activists to examine, analyze, and criticize the distribution of injustices as they affect marginalized communities in particular (Holifield et al., 2009; Schlosberg, 2007). Initially, the debates on environmental justice were based on and around a particular North American context in which racism, racialization, and environmental inequalities are largely intertwined (Holifield et al., 2009). As environmental justice has gained traction outside of the United States, it has also been used to examine contexts in which injustice is tied to neither race nor class, but rather to spatiality and spatial contexts (Holifield et al., 2009). In Norway, where most wind power infrastructures have been constructed near rural, coastal communities which are largely ethnically homogenous, the notions of justice and injustice cannot easily be tied to racialization or indigeneity – with the exception of wind power plants located within Sápmi, particularly in or near Sámi reindeer herding areas. Focusing on wind power in Norway, Vasstrøm and Lysgård argue that notions of justice have been largely missing in discussions of and implementation of domestic wind power policies (Vasstrøm & Lysgård, 2021a).

As the number of lower-carbon energy infrastructures has increased, so has the need for a framework in which the dissemination of injustices and potential inequities related to energy can be examined. Although there is some disagreement as to which tenets ought to be a part of a EJ framework, a fundamental commonality is the notion of a “just transition”, which McCauley and Heffron describe as “a fair and equitable process of moving towards a post-carbon society” (D. McCauley & Heffron, 2018, p. 2). According to Newell and Mulvaney, there must be a link between what they refer to as “the praxis of the just transition” and the fundamental questions asked in political economy, i.e.:

‘who wins, who loses, how and why’ as they relate to the existing distribution of energy, who lives with the side effects of its sites of extraction, production and generation, and who will bear the social costs of decarbonising energy sources and economies (Newell & Mulvaney, 2013, p. 2).

Overall, both political economy and political ecology provide valuable perspectives to the EJ framework. As Newell and Mulvaney contend, political economy’s propensity for examining power dynamics and the question of *qui bono* emphasizes the political and policy aspects of energy. Sovacool (2016) argues that political economy and political ecology are intertwined, particularly with regard to energy. According to Sovacool, political ecology “in its broadest sense, also focuses on the influence of power relations and structural inequalities, but with a closer link to human processes which degrade the natural environment” (Sovacool, 2016, p. 530). Benjaminsen and Robbins find that political ecology literature is characterized by “common focus on power in environmental governance and the co-production of environment and society within a wider political economy” (Benjaminsen & Robbins, 2015, p. 191). They also argue for the importance of political ecology research in the Nordic countries, in which the rural aspects of power dynamics are also made visible (Benjaminsen & Robbins, 2015). Returning to the connection between EJ frameworks and political ecology and economy, Robbins contends in his introductory book to political ecology that research using political ecology as a theoretical framework “tends to reveal winners and losers, hidden costs, and the differential power that produces social and environmental outcomes” (Robbins, 2012, p. 20). He further argues that in its essence, “[p]olitical ecology stories are stories of justice and injustice” (Robbins, 2012, p. 87), thereby emphasizing the link between (environmental) justice and political ecology. Drawing on political ecology and political economy when considering EJ may thus emphasize the environmental and political aspects as they pertain to power and power dynamics within the rural municipalities themselves and in relation to other actors.

A transition towards lower-carbon or so-called renewable energy sources must integrate social and environmental aspects. While the term energy transition is commonly used, often combined with other buzzwords like “green”, “renewable”, and “clean” (European Commission, n.d.; IEA, n.d.; IRENA, n.d.), whether such a transition is currently taking place is up for discussion. Bonneuil and Fressoz argue that “[t]he history of energy is not one of transitions, but rather of successive *additions* to new sources of primary energy” (2016, p. 101) as they point towards the

increased usage of fossil fuels worldwide – including coal. Others, again, have questioned how “green” lower-carbon energy technologies are, with Dunlap (2021) dubbing these technologies “fossil fuel+”. This thesis will not engage further with the discussions of energy additions or the “green-ness” of lower-carbon energy infrastructures, but acknowledges the importance of these discussions. However, as there has been and – most likely will continue to be – a continued expansion of wind power infrastructures, regardless of a potential discontinuation of fossil fuel extraction and burning, the injustices embedded in the current wind power regime must be addressed. Addressing these injustices may help to minimize potential harm to existing, and future, stakeholders. The EJ framework may thus prove valuable when examining municipalities’ experiences within the current wind power regime.

Sovacool defines EJ as “a global energy system that fairly disseminates both the benefits and costs of energy services and one that has representative and impartial energy decision-making” (2016, p. 548). Jenkins et al. contend that EJ “provides the opportunity to explore where injustices occur, to recognize new sections of society and to develop new processes of avoidance and remediation” (2016, p. 180). EJ consists of several tenets, although there is some discussion on which tenets ought to be included. The following paragraphs thus contain a brief overview of the main tenets.

Distributive justice focuses on what goods are distributed and between whom (Fuller, 2019), including broader discussions regarding modes of distribution. Additionally, distributive justice centers on discussions on the distribution of harm and benefits from energy production and consumption, as well as equitable access to energy services (Jenkins et al., 2016; Sovacool, 2016; Sovacool & Dworkin, 2015). This dimension tends to focus on the fair and equitable distribution of burdens and benefits (Sovacool, 2016).

Recognition justice and **procedural justice** may be described as intertwined as both tenets focus on participation and recognition, particularly during decision-making and legal processes (D. McCauley & Heffron, 2018; Vasstrøm & Lysgård, 2021). **Procedural justice** centers around participation and recognition during the legal process, focusing on the institutional structures and the inclusion of stakeholders in the licensing process (Bailey & Darkal, 2018; Jenkins et al.,

2017; Sovacool & Dworkin, 2015). For a process to be fair, all stakeholders must be part of the decision-making process throughout, and all stakeholders must have access to full, unbiased information throughout (D. A. McCauley et al., 2013). **Recognition justice** as described by McCauley et al. (2013) and Jenkins et al. (2016), goes beyond the aforementioned requirements for participation, instead focusing on mechanisms of non-recognition and misrecognition. Importantly, non-recognition and misrecognition include disrespect and devaluation of local knowledge, various cultural identities including place identity (Jenkins et al., 2016). This may also include discounting local concerns and perspectives as ‘NIMBY’ism (Jenkins et al., 2016).

Sovacool (2016), on the other hand, suggests the inclusion of **cosmopolitan justice**, in addition to distributive, procedural, and recognition justice. Cosmopolitan justice has a global scope, and consists of the notion that the aforementioned tenets must apply to “all human beings in all nations” (Sovacool, 2016, p. 547). This perspective, and the other tenets of EJ, have been criticized for centering humans over non-human beings and nature (Menton et al., 2020; Sovacool et al., 2017). Kopnina and Washington argue that anthropocentrism is a key feature of the prevalent justice frameworks and that there is a dire need for an ecological justice framework (2020), while Sovacool et al. argues for a broader understanding of EJ which encompasses non-Western ontologies and conceptions of justice (Sovacool et al., 2017).

McCauley and Heffron argue that **restorative justice** should be included as the third tenet, replacing recognition justice. Restorative justice includes the notion of a just transition, defined as “a fair and equitable process of moving towards a post-carbon society” (D. McCauley & Heffron, 2018, p. 2). In other words, a shift from fossil fuel dependency towards renewable energy that integrates social and environmental aspects, while ensuring access to energy. The inclusion of this tenet, they argue, “enables researchers to more explicitly reflect upon the intersectionality of environment, climate and energy, assess justice issues from a truly interdisciplinary perspective and ultimately contribute to meaningful long-term solutions” (D. McCauley & Heffron, 2018, p. 5). Related to the criticisms against EJ and its anthropocentric foundation, including perspectives from ecological justice may thus be fruitful when discussing energy projects’ impact on nature and landscapes. *Ecological justice* is defined as “justice for nature”, and encompasses humans, non-human species, and recognizes nature’s intrinsic value

regardless of its use-value for humans (Kopnina & Washington, 2020). A comprehensive energy justice framework should thus include non-human entities in its discussions on process and outcome fairness.

Returning to the Norwegian context, as described in Chapter 2, the research on onshore wind power has long focused on the lack of effective policy planning and has only recently been broadened to include other stakeholders' perspectives. Saglie et al. has built upon the environmental and energy justice frameworks' conceptions of fairness, including what they term *relative fairness* to the established concepts of *outcome* and *procedural fairness* (2020). *Relative fairness* is defined as “perceptions of fairness based on how other and comparable projects, technologies, groups, or individuals are treated” (Saglie et al., 2020, p. 148), and Saglie et al. further argue that “this dimension offers an important perspective for explaining perceived overall fairness” (2020, p. 148). Inderberg et al. (2019), on the other hand, highlight the importance of procedural justice – and the perception of having achieved procedural justice – in their study of stakeholder influence on wind power license processes in Norway. In practice, Vasstrøm and Lysgård argue that the inclusion of EJ theory and perspectives in Norwegian energy policies has hitherto been negligible and call for increased inclusion of local communities in shaping future wind power policies (Vasstrøm & Lysgård, 2021). Sovacool (2017) contends that lacking notions of justice in the energy sector is not unique to Norway, but rather a common feature in the Nordics. He posits that “even though the Nordic low-carbon transition has obvious, tangible benefits, and will create many ‘winners,’ it also has at least some ‘losers’ and negative implications from the perspective of energy justice” (Sovacool, 2017, p. 578). Connecting the EJ framework and the rural marginalization concept may thus shed light on inequities that are inherent in the current wind power regime as experienced by the municipalities.

While the aforementioned articles tend to underscore the importance of including local communities in discussions regarding fairness and justice, the rural dimensions of energy (in)justice have not been central in EJ literature. This seems rather peculiar considering the mechanisms of spatial peripheralization and marginalization which tend to indicate challenges in achieving the forms of justice described earlier in this section. This thesis thus connects aspects of the EJ framework with the concept of rural marginalization. This will be done in an attempt to

reconfigure dimensions of injustice as they relate to forms and processes of marginalization. These processes, I will argue, appear to be specific for rural municipalities hosting wind power infrastructures in Norway.

4.0 Methods

In this chapter, I will present the methodology for this thesis and the methods that I ended up using to examine the financial and ecological implications of wind energy development for Lund and Sokndal municipalities. I briefly outline some of the challenges of doing research in the middle of a global pandemic, the ethical considerations and challenges that presented themselves due to this, and how the pandemic impacted the choice of methods. This chapter will describe how I have gathered and analyzed data using textual analysis, semi-structured in-depth interviews, and field visits. Throughout the chapter, I will discuss the potential limitations of the chosen methods.

4.1 Research design (in a global pandemic)

The COVID-19 pandemic undoubtedly impacted the research design. Before the COVID-19 pandemic hit and the entire country of Norway went on lockdown in March 2020, I was mentally preparing myself for conducting ethnographic research in the field. Already having decided on a topic, I expected to travel to a place in rural Norway and stay there for a minimum of two months, using a more traditional ethnographic methodological approach to data collection. At this point, I envisioned focusing mainly on the decision-making process rather than the consequences, or aftermath, of wind energy projects. However, as time went on, this did not seem like it would be feasible, considering the strict restrictions that were in place at the time. I subsequently decided to rely more on secondary sources and video interviews and focus primarily on the impact of national policies on rural municipalities. However, writing a thesis about ecological consequences and listening to people speak about the impact of the wind farm on a landscape you have not seen is challenging. Additionally, some potential interview participants did not wish to do phone or video interviews. I, therefore, decided to travel to Dalane in December. To reduce the risk of potentially transmitting COVID-19, I chose to rent a car and live in a cabin outside of the more populated areas and reduced the number of interviews I had planned on doing while in Dalane.

Where I had previously envisioned focusing on national policies' local effects, as per the original interview guides and consent forms (see Appendix 3), I decided to shift my focus to the local

scale and to focus more on the rural dimensions of wind power and the local articulations of national energy and regional policies.

4.2 The case study

To explore the local effects of wind energy projects, I chose to focus on a single case study. A case study can be defined as “a method of studying elements of our social fabric through comprehensive description and analysis of a single situation or case” (O’Leary, 2017, p. 215). Rather than an overview of the effects of several wind farms, I wished to focus on details regarding the possible consequences of a specific wind farm. The parameters of this single case study are thus geographically limited to the municipalities in which Tellenes wind farm is located.

The choice of Tellenes as the empirical case for this thesis was almost entirely by chance. In the fall of 2020, browsing NVE’s overview of pending license applications, I stumbled upon the Tellenes case. I was curious why the case was listed as pending, as I knew from national media coverage that the wind farm had previously started its operation. Here I discovered that the application was pending because the owner of the wind farm had applied for an early extension of the operating license.

The wind farm is in an area with an existing industrial extractive industry that has changed parts of the landscape. The Dalane region is one of the regions in Norway that has been most impacted by wind energy developments (Saglie et al., 2020). Unlike other, more contentious projects in Norway, such as Frøya, Fosen, and Haramsøya (Adresseavisen, 2020; Skarrud, 2019; Verdens Gang, 2020), there were few protests against this particular project. There is no reindeer herding or traditional Sámi presence in the area. Additionally, the project had the support of the municipal councils in both Lund and Sokndal. In total, the choice of this particular case may seem to be representative for cases where an expansion of wind energy ‘should’ take place: In areas where there already is heavy industry, where there are no potential conflicts between extractive industries and indigenous groups, and where the local government welcomes renewable energy projects. Furthermore, trans- or international ownership and involvement in local wind energy developments is increasingly common, as exemplified by Tellenes wind farm being owned by

funds registered in Ireland and the Cayman Islands and operated by a Swedish company, while currently under a 12-year power purchase agreement with Google, an American-based multinational technology company.

As previously outlined, a key argument for municipalities saying yes to wind energy is economic compensation (Inderberg et al., 2019; Rygg, 2012; Saglie et al., 2020). Both Sokndal and Lund are, in that regard, somewhat representative in that both municipalities operate with tight budgets and, in some cases, deficits. There are also apparent differences between the municipalities in terms of priorities, and how the wind farm has affected the municipalities. Thus, although focusing on one geographic area, this case study also contains elements from comparative case studies. While this thesis focuses on the Tellenes case, the discussions arising from this particular case may be relevant for other municipalities in Norway and, potentially, for other rural municipalities and communities worldwide.

At first glance it may seem rushed to ask how these municipalities, represented by key actors, view the potential effects of the wind power plant only three years after it was finished. However, due to Tellenes Vindpark AS having applied for an extended operating license for the Tellenes wind farm in early 2020, the municipalities had already started evaluating the project's benefits and drawbacks. The evaluation was significant for the choice of Tellenes as the focal point for this single case study, in that it had taken place regardless of the researcher's involvement. The municipalities had already begun discussing and reflecting upon the effects of the wind farm on the local community. Furthermore, the municipalities had agreed on what demands must be met if they were to recommend an extension of the operating license.

4.3 Interviews

A central part of the data collection for this case study was gathered from eight in-depth semi-structured interviews conducted between October and December 2020. One of the reasons for choosing to use interviews as an integral part of the data collection, in addition to the use of secondary sources, was to include the thoughts, reflections, and experiences of key actors involved in the Tellenes case (Byrne, 2018). Moreover, interviews allowed for narrative answers and descriptions of political and procedural processes not included in reports and minutes.

4.3.1 Selection and sampling

For this project, the initial selection of informants was chosen through reviewing the actors listed in NVE (the Norwegian Water Resources and Energy Directorate) case files on the Tellenes project. The selection of actors can thus be said to consist of so-called “central actors”. As understood by Latour, a central actor is someone who makes a difference or who is important to a specific process (Latour, 2005). Through emailing the listed actors, I was put in contact with individuals who had either worked directly with the case or had a profound knowledge of the case. Some of the interviewees also suggested other people I should get in touch with. This non-random sampling approach thus evolved into a ‘snowballing’ way of sampling (O’Leary, 2017). This method of sampling was chosen due to a wish of gathering expert knowledge but also to represent the multitude of actors involved in this particular case. However, there is a clear limitation regarding the sampling in that I was not able to interview representatives from the current owners and operators of the wind farm. The latter group initially seemed to be interested in participating but were barred from doing so by the former. This will be expanded further in Section 6.4.1. This challenge forced me to focus primarily on the municipalities’ experience with Tellenes wind farm, as representatives from the municipalities, including the mayors, were willing to be interviewed for this thesis. As I will detail later in this chapter, some respondents were not interviewed due to COVID-19 related restrictions and measures that were in place during the fall months of 2020. Here, it is important to note that the individuals interviewed for this thesis are representatives of institutions and governments, are precisely that – individuals that constitute organizations and institutions, with differing opinions, perspectives, and agendas (Syssner, 2020b; Woods & Gardner, 2011). The municipality as a political institution is, therefore, “peopled” (Woods & Gardner, 2011). When this thesis refers to “the municipality” or “the municipal council”, this refers to the joint decisions and priorities of the institutional body rather than the opinions and agendas of the individuals that the institution is comprised of.

4.3.2 Elite and expert interviews

As I wished to explore the experiences of the municipalities rather than local inhabitants in general, it was essential to interview people who either had been or were currently affiliated with the municipalities and municipal decisions that led up to the construction of Tellenes wind farm or that had direct knowledge of its implications. Therefore, I decided to interview people that

possessed different forms of capital that allowed them to exert power in various ways (Bourdieu, 2011). The interview method chosen was inspired by so-called elite and expert interviews. Although there exists a number of conceptions of what the term ‘elite’ might entail, for the purposes of this thesis, I understand ‘elite’ rather broadly as being persons “who hold important social networks, social capital and strategic positions within social structures because they are better able to exert influence” (W. S. Harvey, 2011, p. 433). Most of the interviews I conducted were with people who, in some shape or form, were able to influence processes or public opinion. Additionally, I interviewed experts, which can be defined as people who are “considered knowledgeable of a particular subject and are identified by virtue of their specific knowledge, their community position, or their status” (Döringer, 2020, p. 1). There may also be significant overlap between the two categories, particularly in small municipalities. Examples include key actors such as current and former politicians or municipality officials, project managers, and executive officers who may have had different roles in the past that are in conflict with their current positions. Additionally, I conducted two interviews with local residents who were also defined as stakeholders or key actors by some: a local landowner and a representative from a local hiking group, both with extensive knowledge about local history, nature, and geography.

Open-ended questions were chosen for this thesis as this ensures increases the likelihood of being able to “subtly steer an interview” and “allow for expansions and clarifications” (Madden, 2017, p. 68) by prompting narrative answers. When conducting elite or expert interviews, asking open-ended questions may garner more information (Aberbach & Rockman, 2002; Berry, 2002; W. S. Harvey, 2010), but there is an increased risk of the interview participant attempting to steer the interview or even the research in certain directions, mainly due to the person’s relative power, status, or agenda (Berry, 2002; W. S. Harvey, 2010, 2011). I did not experience the latter, but I did to some extent experience interviewees consciously or unconsciously not answering particular questions, or only providing partial answers. When this happened, depending on the context, I moved to the next topic, or if the topic in hand was of utmost importance for my research topic, I attempted to steer the conversation back to the initial question. Another point that may be distinctive for elite interviews is the importance of “doing one’s homework” (Aberbach & Rockman, 2002; W. S. Harvey, 2011). This was particularly evident when

conducting interviews with locals from Dalane. As a white, young, deaf¹⁶ woman from Oslo with a pronounced eastern Norwegian dialect, I was met with varying degrees of skepticism from some of the informants. While I, personally, did not experience any issues due to ethnicity or gender, this may have impacted how informants viewed me. While I stated in the consent form that I am deaf and that sign language interpreters might be present for the interview,¹⁷ none of the interviewees seemed to have registered this prior to the interview, indicating that the consent form may have not been thoroughly read. I, therefore, took the time to assure that informed consent was given prior to starting the interviews. A clear limitation in the interviews, however, was my dialect. My dialect stood in contrast with the regional Dalane dialect used by the majority of the interviewees, effectively identifying me as an outsider from the largest metropolitan area in the country. One such example is an interview where the person I interviewed gave rather terse answers to the questions at the beginning of the interview. This person immediately became more responsive and welcoming after I asked a question that specifically focused on the difference in property taxes between the two municipalities. Furthermore, I noticed that when I showed knowledge about current local events, either before the interview proper, or as a part of the initial questions, the interviewees seemed more relaxed and talkative while also sharing more in-depth knowledge about local issues.

For this thesis, I chose to conduct semi-structured interviews. Semi-structured interviews are a part of a continuum between structured and unstructured interviews within the qualitative tradition. Semi-structured and unstructured interviews tend to aim towards open-ended questions to encourage narrative and in-depth answers, rather than closed questions following a strict structure as one might see in a standardized survey or a questionnaire (Byrne, 2018). Following this, the answers from qualitative interviews tend not to be suited for statistical rendering as they can rarely be quantified in the same manner as a questionnaire. On the opposite end of the spectrum, unstructured interviews allow for in-depth narrative answers and for the interview subject to take more control of the interview. However, the researcher might find it is difficult to

¹⁶ In this context, the term *deaf* is used to emphasize my cultural and linguistic background rather than referring to my level of hearing. As Hauser et al. (2010) argue, Deaf epistemology is based on a different way of navigating the world than the hearing majority.

¹⁷ I ended up not having sign language interpreters present for the interviews, due to the pandemic severely restricting in-person interpreting opportunities.

gather the necessary data for their research (Brinkmann, 2020; O’Leary, 2017). I chose a semi-structured approach to interviewing to ensure that key questions and core topics were included in all the interviews and that these were phrased similarly. This allowed me to draw comparisons and connections between the interviewees’ responses while still leaving room to follow up interesting conversational paths (O’Leary, 2017). While carrying out these interviews, I relied on a short interview guide made up of topics and key questions, as well additional questions and topics tailored to each specific interview (see Appendix 3).

4.3.3 Video interviews and in-person interviews

The majority of interviews were carried out using video conferencing technologies such as Zoom and Microsoft Teams. One interview consisted of an audio-only conversation through one of the aforementioned video conferencing technologies. Three interviews were conducted in person, two in Dalane, and one in Oslo. Due to the pandemic, as well as the dispersed geography of the informants, several of the people I contacted wished to conduct video interviews. Unlike phone interviews, video conferencing still allows for some face-to-face contact, which facilitates communication through non-verbal cues, depending on the quality of the camera and the connection (Lo Iacono et al., 2016; Seitz, 2016). This, combined with the fact that several of the interviewees were familiar with this mode of communication through several months of home-office from March until the interviews were conducted in the fall, meant that there were few technical issues. Further, Hanna (2012) posits that by using internet technologies for video conferencing “both the researcher and the researched are able to remain in a ‘safe location’ without imposing on each other’s personal space” while still being able to see each other (2012, p. 241). Although Hanna did not refer to the Covid-19 pandemic, his words ring particularly true at this time.

While online interviews may mitigate the geographical distance between the parties involved, it is by no means a perfect replacement for meeting informants in person. Deakin and Wakefield argue that building rapport may be more difficult through video interviews than in an in-person setting (Deakin & Wakefield, 2014), and non-verbal cues such as gestures and body posture may be harder to see if the camera is focused on the interviewee’s face (Lo Iacono et al., 2016). As a visually-oriented person, this proved to be an additional challenge for me. I also found the in-

person interviews to be largely different from the video interviews. The video interviews were conducted during the daytime, most commonly while the interview participants were at work. As the participants had other meetings and obligations after the interview, this limited the time available to do an interview with a masters' student. The video interviews, with the exception of one, all lasted less than an hour. The interviews conducted in person, on the other hand, all lasted well over an hour. There could be several reasons why the in-person interviews were longer: The interviews did not happen during the interview participants' workday, some of the interview participants were retirees, and one of the interviews occurred on a Saturday. The in-person interviews also allowed for more small talk before and after the interview itself, while the video interviews were more to the point. The in-person interviews also allowed for increased use of spatial references, including conversing about and pointing out landmarks and, in one case, the usage of maps as a common reference point during the interview.

All but one interview were recorded and subsequently transcribed. The only interview that was not recorded was due to a technological error on my part, where I managed to record only my side of the conversation. However, as this was, in all regards, a phone interview, my notes from this specific interview were more detailed as I did not have to focus on the interviewee's body language nor on providing or interpreting visual cues of attentiveness during the conversation. During the other interviews, I also took notes, but these notes were less extensive. After the interviews, I wrote memos and field notes to include non-auditory data garnered during the interview, as well as data from conversations that took place before and after the interview.

During the writing phase, I translated quotes from interviews and documents from Norwegian to English. This entails that the quotes as presented here do not reflect the informants' own words, but rather my attempt at capturing the essence which I then translated into English. In some cases, Norwegian words and turns of phrases are kept – and explained in footnotes in an attempt to capture and shed light on the Norwegian context. This is also the case for other quotations that were originally in English, including from newspaper articles, white papers, and academic papers.

4.4 Ethical considerations

All the informants that were interviewed for this project were emailed the information letter and consent form (see Appendix 2) at the initial contact in accordance with NSD (the Norwegian Center for Research Data) guidelines. The consent form was filled out and emailed to me by the informant. Before starting the interview, I also made sure to answer any questions about the consent form and the project, as well as confirming consent. The interview participants were also informed, both in writing and during the interview, that consent could be withdrawn at any time. If consent were to be withdrawn, all information and data provided by the informant would be permanently deleted. The audio recording files were coded (ex. A1, A2) and were stored on university servers. The names and other information about the interviews were password-protected and stored separately. The research participants are anonymized in this thesis, except for the individuals who explicitly asked to be named or identified. The majority of the latter group include public figures such as politicians, or experts in their fields. I have chosen to identify these individuals through their professions, rather than their names. This was done to emphasize the *role* that the individuals play or have played, which is the main reason why I chose to interview these particular individuals.

In this section, I will also address some of the additional ethical challenges that the researcher is faced with when conducting research in the midst of a global pandemic. While there are always ethical considerations that must be made, the time period in which the data for this thesis was gathered prompted additional ethical challenges. As one would in a non-pandemic setting, a way to establish rapport and to ensure that the interviewee feels safe is to allow them to decide the interview location (Hanna, 2012). After I had received a positive response from the initial interview query, I followed up by letting the participants choose whether they wished to do the interview in person or via video conferencing software. That way, those who did not feel comfortable with the technology had the opportunity to meet in person if they felt more comfortable doing so. Some of the people I contacted expressed that due to the ongoing pandemic, they had both the knowledge and the equipment to conduct the interview digitally.

Others expressed discomfort regarding conducting online interviews. Most of the apprehensiveness was due to the interview participants' self-proclaimed lack of technological

skills. In these cases, I conducted the interviews face-to-face. One of the interviews took place in Oslo, at the request of the interviewee as they had already planned to travel to Oslo for an unrelated matter. This interview took place in a university meeting room. The two remaining interviews were conducted in Dalane, in places that the interviewees chose. One of the interviews took place in a storage facility for outdoor equipment, while the other took place in the informant's home. During these interviews, measures were taken to ensure that proper physical distance was maintained between the interviewer and the interviewee. Before conducting these interviews, I self-isolated to reduce the risk of potentially transmitting coronavirus to the research participants. For the interviews that took place in Dalane, this was especially important, as Oslo was a "hot spot" for the virus at this time. This also limited the number of interviews that could take place during the limited time I spent there. Ideally, I would have liked to conduct more interviews with locals involved in the political processes, but I unfortunately had to make a selection based on time and availability. This undoubtedly had an impact on the amount of data I was able to gather through interviews.

4.5 Field visit

As briefly outlined earlier in this chapter, the field visit did not take place until December. As the corona-related restrictions prevented me from conducting as many interviews as desired, the majority of the field visit focused on gathering other types of data. Describing and analyzing narratives and documents focusing on ecological changes in the landscape without having seen the landscape in question would not have been possible to this extent without having traveled to the Tellenes area. During the time I spent there, I spent a considerable amount of time hiking and traversing key areas. I hiked through parts of the wind farm area, as well as other popular trails near the wind park site. Several of the trails were recommended to me by informants and other locals. Traversing these areas also allowed me to take part in *friluftsliv*, i.e., outdoor life. This is considered a "core political, social and cultural value in Norway, rooted in the democratic principle of free public access to uncultivated public and private land" (Gurholt & Broch, 2019). Additionally, outdoor life is presented as an important source of income through increased tourism, particularly for rural areas known for pristine nature and landscapes (Klima- og miljødepartementet, 2016). Both municipalities, but Sokndal in particular, use nature and experiences in nature as a selling point for tourism. Engaging in hiking, reading up on and

conversing about the geography, geology, and biological aspects of the area with informants, allowed me to gain further insight into the various meanings and interpretations of landscape and nature. This also provided a starting point for further conversations about ecological changes during the interviews that took place in Sokndal and Lund.

The field visit also included elements from windshield surveys, as my travel partner drove me around in Dalane. This allowed me to gain a first-hand impression of the visual impact that the wind power deployment in Dalane has had on the landscape in recent years. One such example included driving from Egersund to Hauge i Dalane, a short route in which two to three wind farms are visible (depending on weather conditions). Observations from these trips were written down in a notebook or on the note app on my phone, depending on the amount of rain.

4.6 Secondary sources

To complement the interviews, this thesis also draws on various textual secondary sources that were collected before, during, and after the field visit. Secondary data can be defined as data that exists “independent of a research project” (O’Leary, 2017, p. 266) in that the researcher has not created this data for the purpose of the project they are working on. This data is often interpreted or analyzed in a context that is different than what was initially intended (Seale, 2018, pp. 148; 286). The majority of the secondary data used for this thesis can be categorized into three different groups: Documents sent from or to institutions such as NVE, OED, and other official institutions involved in the Tellenes project; municipal documents such as plans for land use, reports, and minutes; news reports and interviews from local newspapers. These sources were used in multiple ways. Some examples include preparing topics and question for interviews, triangulating information garnered from the interviews, and the gathering of additional data. Below is a more detailed overview of the different sources of data and how they were utilized.

Government reports and documents

Using NVE’s webpage and overview of the Tellenes case as a starting point, I gathered documents such as license applications, environmental impact assessments, and various reports and assessments by NVE, OED, and the developers. By using search words such as *wind power*,

Tellenes, Lund, Sokndal, etc. in various combinations, I was able to gather an overview of the internal and external communications regarding this particular project. Additionally, I sourced a number of white papers, documents, reports, and some internal and inter-institutional communications between the developers, governmental institutions, the municipalities, and others through eInnsyn. EInnsyn is a portal where one can gain access to documents sent to and from government institutions, such as NVE and OED. There were a few documents that were not made available to me due to the documents containing sensitive information.

Municipal documents

A similar process was done through the municipalities' websites where meeting agendas and minutes, as well as documents outlining the municipalities' position regarding current and former consultations are available. Where some documents appeared to be missing, I was able to contact the municipalities directly and have the documents emailed to me. Unfortunately, documents from before 2007 are not always digitized, making it more challenging to gain access to these documents. In these digital archives, I used search words such as different varieties of *wind*, *wind power*, *wind energy*, and *Tellenes*, as well as the alternative, and less used, spelling *Tellnes*.

Local newspapers

To keep myself updated on both the *Tellenes* case and other happenings in the municipalities, local newspapers proved to be essential. Both of the local newspapers that cover stories from Lund and Sokndal focus on a wide variety of topics from news, sports, cultural events, in addition to some investigative journalistic articles. The newspapers proved particularly valuable when preparing for the interviews with local politicians, in that I could access recent information about themes and issues both related to the *Tellenes* project, but also after the interviews. After the interviews had taken place and I had gained information about some of the challenges that the municipalities were currently facing, updates on these events were often published in the local newspaper. Examples include the aforementioned complaint to the Ombudsman regarding reduced property taxes, and the potential closure of two schools in Lund municipality. Because my field visit was so short and was limited in scope due to the pandemic, I would not have been able to access this information in the first place or keep myself updated on local topics and issues

through informal conversations and interviews with locals. To summarize, access to information through the local newspapers proved invaluable for this project.

Dalane Tidende is a newspaper that covers events in the Dalane municipalities (Eigersund, Bjerkreim, Lund, and Sokndal). As the newspaper is based in the town of Eigersund, which is the largest town in Dalane as well as the regional center, there appears to be a tendency towards a slight bias towards news from and about Eigersund municipality and the town of Eigersund.

Agder Flekkefjords Tidende, commonly referred to as *Avisen Agder* (The Agder newspaper), is a local newspaper that covers Flekkefjord and surrounding areas. This includes parts of western Agder, as well as eastern Rogaland, namely the municipalities of Lund and Sokndal.

Stavanger Aftenblad, simply referred to as *Aftenbladet*, is the regional paper that covers the greater Stavanger area, as well as other parts of the county of Rogaland, including Dalane.

The use of these newspapers as sources of data included searching for newspaper articles about the Tellenes project through the newspapers' websites. Search words used included *wind power*, *wind*, *energy*, and *Tellenes*.¹⁸ These searches also allowed for information about other wind projects in the region, including in municipalities in both Rogaland and Agder Counties.

4.7 Analyzing data

Qualitative data analysis is a continuous process, which starts from the second one starts collecting data. As O'Leary points out, "it is almost impossible to 'manage' qualitative data without engaging in some level of analysis" (O'Leary, 2017, p. 326). Thus, separating the data analysis section from the data gathering processes described earlier in this chapter is a divide that did not exist in real life. In reality, the data gathering and analyzing processes were constantly intermingled, as they built and expanded upon each other throughout the thesis project.

¹⁸ In Norwegian, the search words included *vindkraft*, *vind*, *energi*, *kraft*, *Tellenes* and *Tellnes*. The same search words were also used when searching within white papers and other documents.

To conduct a thematic content analysis, I used the qualitative data analysis tool NVivo, to engage with the data gathered from documents, the transcribed interviews, and my own notes from the field visit. These texts were coded and analyzed in a similar fashion. In its initial phase, the coding process was abductive, as I started coding documents (see Section 5.6) and interviews based on the themes included in my interview guides (see Appendix 3). These themes were, in turn, based on a preliminary literature review and a thorough reading of documents related to the Tellenes case that were available on NVE's websites. Examples of codes used were 'environmental impact', 'taxation', and 'ownership structure'. As I conducted and transcribed more interviews and read more documents, more codes based on themes emerged. This phase of the data analysis process was both inductive and deductive, as I sought out, added and refined themes in a circular manner. Examples of the codes that emerged through this process includes "hydropower comparison", "auditory and visual impact", "community benefits", and "rural/regional policies". Notes and annotations were made during and after the interviews were digitized and coded in the same manner. Using this circular method of revisiting and refining codes, I was able to sort through the data I had gathered and find common analytical themes. As additional themes and patterns emerged, I also spent time weighing and finding patterns in which topics or themes were highlighted in the textual resources compared to the interviews. Instead of presenting the findings in one chapter, I decided to follow the blueprint laid out in the interview guide and divide the findings thematically, weaving in longer empirical narrations that emerged through the interviews and through the other textual data sources followed up by analyses.

5.0 Lund and Sokndal municipalities and Tellenes wind farm

This chapter provides background information on the municipalities of Lund and Sokndal, intended to provide a concise overview of some central aspects that are particularly important for understanding the context of Tellenes Wind Park and the analyses in the subsequent chapters. The following section is by no means an attempt to portray a comprehensive background on the municipalities, as there are historical, geographical, political, and cultural aspects that cannot be included in this thesis due to its limited scope. Following this, the remainder of the chapter consists of a timeline of how the Tellenes wind farm came to be, and some of the essential features of this particular wind power plant.

5.1 Sokndal and Lund municipalities

Tellenes wind farm is located in Sokndal and Lund municipalities, which belong to the geographical and cultural district of Dalane in Rogaland County. Dalane consists of the municipalities of Eigersund, Bjerkrheim, Lund, and Sokndal. *Figure 1* shows the location of Sokndal and Lund within Rogaland County, Sokndal in light red and Lund in dark red. The coastal municipality of Sokndal is 267 km² and has approximately 3300 inhabitants, most of which reside in the municipal center Hauge i Dalane, locally referred to as *Haua*, i.e., ‘the mound’, and in some other villages such as Sogndalsstrand and Åna-Sira. Sokndal borders on the 354 km² landlocked municipality of Lund in the east and northeast. As in Sokndal, the majority of the *Lunddøl*, the 3200 inhabitants of Lund municipality, live in the municipal center and a few other villages. Most of Moi, the municipal center, is constructed along the river *Moisånå* and the lake *Lundevatn*. The latter lake is connected to the Sira-Kvina hydropower plants. The river *Sira* runs through *Lundevatn* and the village of Åna-Sira, generating power and revenue for both Lund and Sokndal municipalities. Apart from the municipalities themselves, the largest and most important employers in the municipalities are the mining company Titania and NorDan, a door and window manufacturer, in Sokndal and Lund, respectively.

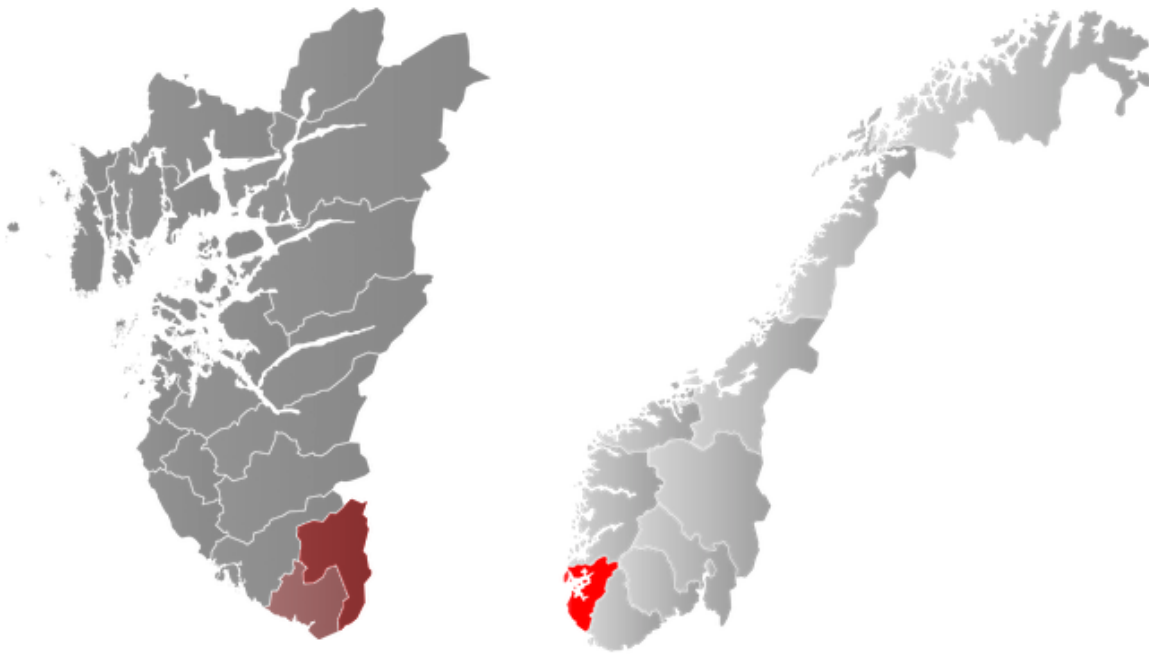


Figure 1: Maps of Sokndal and Lund within Rogaland County on the left, and Rogaland County within Norway on the right. Adapted from (Marmelad, 2007; Sjøby, 2006b, 2006a), via Wikimedia Commons.

5.1.1 Geography and geology

The landscape in Dalane, literally translated to *the valleys*, is characterized by steep hills with an average elevation of 3-500 meters, with visible outcrops, most of which are bare or sparsely vegetated. Between the hills, there are lakes of varying sizes, ranging from smaller pond-like bodies of water to larger lakes. The vegetation mostly consists of flora typical of *kystlynghei* and *fukthei*, coastal heathlands, a cultural landscape type primarily characterized by *Calluna vulgaris*, common heather, as well as more marsh-like vegetation. The latter includes *Gentiana pneumonanthe*, the marsh gentian, a flower listed as vulnerable by the national red list of threatened species (Artsdatabanken, 2015), while coastal heathlands are listed as critically endangered (Artsdatabanken, 2018).

Most parts of Dalane are not well suited for agriculture due to the thin layer of acidic topsoil, but the upland areas have historically been used and are still, to some extent, used for grazing. This places Dalane in stark opposition to Jæren, the geographical area along the coast directly north of Dalane, an area known for its fertile soils and agriculture. Unlike many other parts of the Norwegian coastline, there are no significant islands that shelter the mainland from the harsh

Atlantic winds. Winters tend to be mild with most precipitation in the form of rain in the lower-lying coastal areas and, depending on the temperature, snow in the uplands.

The landscape of Dalane boasts unique geological features and is in its entirety part of the Magma Geopark, a UNESCO Global Geopark. UNESCO geoparks are “single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development” (UNESCO, n.d.). This main feature of this geopark is the prevalence of anorthosite, an igneous rock type more commonly found on the Moon. A mineral often found within anorthosite bodies is ilmenite, a key mineral in the production of titanium dioxide.¹⁹ Mining has been an important part of Sokndal’s history and economy for over a century. The company Titania has had its main extractive production in Tellenes, an area approximately 8 kilometers to the east of the municipal center of Sokndal. Mineral extraction at the ore deposit at Tellenes was established in 1960, and the mine in its current form is one of the world’s largest open-cast ilmenite mines. Surrounding the 1.5 km² quarry are ore dressing facilities, waste rock dumps, and several tailing deposits. Other deposits include sea disposals in the nearby Jøssingfjord and Dyngadjupe that were used from 1960-1984 and 1984-1993, respectively, that have had detrimental effects on local marine ecosystems (Ramirez-Llodra et al., 2015; Schaanning et al., 2019; Trannum et al., 2018).

5.2 Tellenes wind farm

This section provides a brief overview of central features of the wind farm, the process that led to the construction of Tellenes wind farm, the ownership structure, leading up to the situation as of March 2021. This section serves as a backdrop for the discussions and analyses in Chapters 6-8. In September 2017, the Tellenes wind farm, which surrounds Titania’s ilmenite mine, started production. At the time, it was the largest wind farm in Norway, with its 50 3,2 MW turbines, each with a hub height of 92.5 meters and a rotor diameter of 113 meters (Zephyr AS, n.d.-b). The estimated average yearly output is around 550 GWh which, according to the developer Zephyr, is enough to power approximately 227.500 households (Zephyr AS, n.d.-b). The main entrance to the Tellenes wind farm is located on the same plateau as the entrance to Titania’s

¹⁹ Titanium dioxide is commonly used as a white pigment in paint, plastic, toothpaste, and cosmetics, etc.

ilmenite mine in Sokndal, next to a car-racing track that is projected to open in mid-2021. Within the approximately 16 km² wind park area, 40 kilometers of internal service roads connect the turbines, electric substations and transformers, etc. These dirt roads are partially constructed with waste rock from the mine, requiring periodic maintenance (Zephyr AS & Norsk Vind Energi AS, 2015). While the wind park area is closed off for cars with road barriers, it is possible to walk and bike on these roads, with some exceptions: The road that connects the north section and the east section of the wind farm is closed as it traverses the northern part of the mine. Additionally, during the winter, there is a risk of ice throws from the turbines and there are signs near the entrance that advise visitors to be mindful of this.



Figure 2: Example of the dirt roads that connect the turbines. Road cuts is also visible in this photo. Photo: Aggie Handberg

Out of the 50 turbines, 31 are in Sokndal, while the remaining 19 are in Lund municipality. From *Haua*, on clear days, one can see some of the turbines, and after the sun has set, one can see flashing red lights from several of the turbines. Elsewhere in Sokndal, the turbines are particularly visible when one is situated on one of the many hills and mountains, for example

when hiking. Similarly, one of the most popular family-friendly hikes in western Lund to the vantage point atop Voreknuden now overlooks large sections of the Tellenes area, whereas in the past the area looked virtually untouched with views of the North Sea in the distance. As the mine in Sokndal is an open-cut mine, the quarry itself does not obstruct views, but depending on one's position, one may see the rock deposits or the on-land tailings deposits. The turbines are not visible from Moi, unless one hikes atop one of the nearby mountains or hills. On several other popular trails in Sokndal and Lund, including the *Opplev Dalane* and the *Opplev Sokndal*²⁰ trail networks, the turbines may be visible from parts of the trail depending on the weather conditions. There are some residential dwellings, cabins, and vacation houses within close proximity of the turbines, but overall, the wind farm area is sparsely populated.



Figure 3: Overview of Tellenes wind farm with nodes showing the location of the turbines. The grey area located slightly left of the center of the map denotes the location of the ilmenite mine. Map source: Kartverket.

5.2.1 Tellenes wind farm - timeline

This section provides a brief overview of the process that led to the construction of Tellenes wind farm, and how BlackRock, one of the world's largest asset managers, became involved in the wind farm. The final paragraph outlines the events that occurred after the opening of the wind farm, including how the ownership structure became public knowledge.

²⁰ *Experience Dalane/Sokndal*

In April of 2005, NVE (the Norwegian Water Resources and Energy Directorate) received two different notifications regarding license applications for projects in the same area in Dalane. In Norway, all energy production projects over 1 MW require a license from NVE, and those over 10MW have a more complex application process with more requirements, including comprehensive EIAs (Environmental Impact Assessments) following set guidelines in the Planning and Building Act. In 2005, Hydro (now Norsk Hydro ASA) and Norsk Vind Energi AS (*Norwegian Wind Energy*) were the two applicants. Hydro is a partially government-owned fully integrated aluminum company that, as the name implies, has been involved in hydropower in Norway, and at the time were interested in diversifying into wind power. In 2005, Hydro’s notification stated the intent to construct up to five wind parks located in the Tellnes and Helleheia area, around Titania’s mining sites. Having already had initial conversations with local landowners, including Titania, Hydro wished to construct 50-80 wind turbines, generating 150 MW output (Hydro, 2005). Norsk Vind Energi AS (*Norwegian Wind Energy AS*), founded in 1996, sent in their notification regarding the construction of Helleheia Wind Park that partly overlapped with the prospective Tellenes project. In the initial document, the company proposed a 60 MW output from 12-30 turbines (Norsk Vind Energi AS, 2005). The following year, Hydro officially applied for a license (Hydro, 2006). In this application, Hydro estimated a yearly output of up to 170 MW.

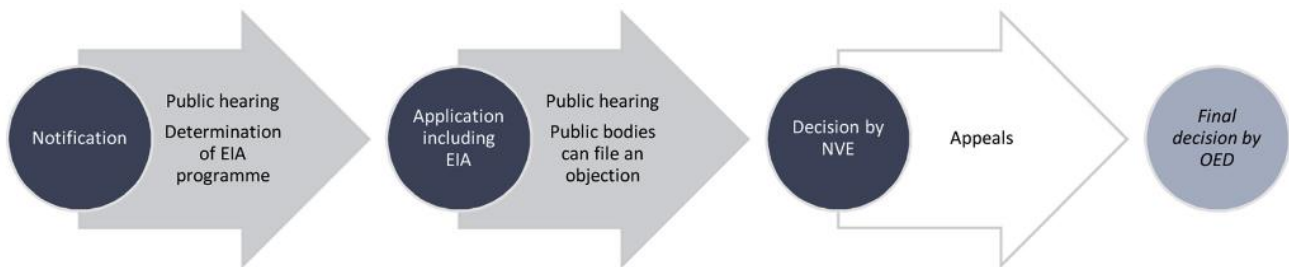


Figure 4: Simplified overview of the licensing process, from Inderberg et al. (2019, p. 184)

As there was some overlap between the Tellenes and the Helleheia projects, and overall proximity between the proposed siting of turbines and other infrastructure, NVE arranged a joint public meeting in May 2005 where the companies presented their projects. According to Dalane Tidende, the local newspaper, most of the questions raised by the participants at this meeting

were related to the wind power plants' potential impact on nature and wildlife; in addition, some questions were related to the potential for new roads connecting the two municipalities (Bredeli, 2005). The following year, during the official licensing process, the municipal councils in both Sokndal and Lund decided that they were supportive of NVE granting the projects a license.

After this, not much happened until 2010, when Zephyr, a Norwegian wind energy company, bought the project from Hydro/Statoil.²¹ The same year Zephyr and Norsk Vind Energi AS entered a formal partnership and created the company Tellenes Vindpark DA that owned both of the projects, effectively merging the projects (Zephyr AS, n.d.-a). In December 2011, NVE received an updated application that included both the previous Helleheia and Tellenes projects.

In 2012, after having received an EIA as per the Planning and Building Act in March, NVE approved the license application in November. During this time, a second public meeting also took place, this time around with fifty attendees, including representatives from NMF, Norges Miljøvernforbund.²² In October 2012, the municipal council in Sokndal unanimously decided that it supported a license being given to Zephyr and Norsk Vind Energi's projects in Tellenes, with some caveats. In Lund municipality, the vote was much closer, but the majority voted in favor of NVE potentially granting a license for the Tellenes project. At this point, Norwegian municipalities did not have a legal right to veto the project, however, very few projects are approved by the NVE without the consent of the municipality, constituting a *de facto* veto right (Inderberg et al., 2019).

In 2013, two landowners and NMF sent in their appeals to OED (the Ministry of Petroleum and Energy),²³ arguing that the wind farm would have a detrimental impact on local biodiversity and wildlife, including the Eurasian eagle-owl (*Bubo bubo*) (Olje- og Energidepartementet, 2014). The appeals were rejected by OED in March 2014, and in July 2015, Tellenes vindpark DA

²¹ The oil and gas section of Norsk Hydro merged with Statoil, the national O&G company. The state-owned energy company renamed itself *Equinor* in 2018. Norsk Hydro is still heavily invested in aluminum production, hydropower, and in 2016 the company signed a power-purchase agreement in Fosen, Trøndelag (Norsk Hydro, 2016).

²² The Green Warriors of Norway.

²³ Any appeals to NVE's decisions are decided by the OED, as shown in figure 4.

(TVDA)²⁴ applied for approval of their new Environment, Transport, and Construction plan (MTA plan). This was approved by NVE in October, and in December, the final license was granted the project. The same year, both Lund and Sokndal municipalities entered a formal agreement with Zephyr, which included mitigating measures such as a minimum number of jobs, the construction of electric vehicle charging stations, etc.

According to Zephyr, during the spring of 2016, Zephyr signed an agreement with BlackRock, an American international investment fund and asset manager, in which funds managed by BlackRock would acquire Tellenes wind park after its completion (T. Fredriksen, 2019).²⁵ A 12-year power-purchase agreement with Google was also entered around this time. Through these two deals, Zephyr and TVAS were able to finance the construction of the wind farm, which started in June of 2016. Later that year, an operations management agreement with Swedish company Arise was signed.

In the fall of 2016, the construction of Tellenes was briefly halted after some residents in Sokndal municipality, and later, the municipality itself raised concerns regarding the proximity of some of the wind turbines to Sokndal's drinking water source, Guddalsvatn, and the back-up source. The concern was later dismissed by the Norwegian Food Safety Authority, on the grounds of the low likelihood of oil spillage from the turbines affecting the water quality. A year later, in September of 2017, the wind farm opened, and TVAS assumed ownership on behalf of unknown investors.

In November of 2019, TV 2, a national broadcasting and media company, published a story on the ownership structure of the wind park. As a part of the investigation, the journalists uncovered that because the funds that own Tellenes wind farm are registered in tax havens such as the Cayman Islands and Ireland, more than 90% of the total yearly revenues from Tellenes can be exported without paying other taxes than municipal property taxes. The permissive tax planning conducted caused uproar locally and garnered attention nationally (Figved et al., 2019a; Johansen et al., 2019c). Parallel to this, news broke that TVAS had filed a complaint against Sokndal municipality, demanding a 336.000 NOK yearly reduction in property taxes (Avisen Agder,

²⁴ Newer documents list Tellenes Vindpark AS (TVAS) as the owner of the wind farm.

²⁵ See Section 6.4.1 and Appendix 1 for a more detailed overview of the ownership structure.

2019b; Stavanger Aftenblad, 2019c). The following March, Zephyr, on behalf of Tellenes Vindpark AS, applied for a five-year extension of the existing license. An approval would allow Tellenes wind farm to operate until 2047, instead of 2042. In a letter sent to NVE in September 2020, the municipalities stated that an extension could be approved under certain conditions, requiring a renegotiation of the contract from 2015.

6.0 “Buttons and scraps”: Financial benefits from wind power

Building on the previous chapters, in addition to my empirical findings, in this chapter, I will begin to address the research questions. The following chapter aims to answer the main research question by examining aspects of two of the sub-questions described in Chapter 1:

“What role does the national wind power regime play in rural marginalization in Norway?” and *“How have the changes in national energy policies impacted rural municipalities?”*

Using a theoretical framework that utilizes Energy Justice and the concept of rural marginalization, I will argue that the current wind energy regime effectively marginalizes small, rural municipalities in several ways.

This chapter first provides empirical examples of how rural and regional policies are articulated in the municipalities of Lund and Sokndal, focusing on some of the challenges that rural municipalities and communities face. I will then unpack how hosting wind power plants have not manifested itself as the budgetary reprieve that the municipalities had originally envisioned. I will argue that this discrepancy between expectations and reality is largely due to a lack of policies that ensure distributive fairness. Instead of host municipalities receiving an equitable share of the profits from wind power production, companies registered in tax havens receive both profits and tax reductions. I will then examine how combining the theoretical framework of energy justice and the concept of rural marginalization sheds light on how rural municipalities experience marginalization in several ways through the current wind power regime, and through the current inception of regional and rural policies.

6.1 Setting the stage: Financial and demographic precarity in rural municipalities

Both Sokndal and Lund municipalities can, as previously outlined, be classified as rural municipalities. A common feature for many rural municipalities is an interwoven financial and demographic insecurity (Bull et al., 2020; Kommunal- og moderniseringsdepartementet, 2015; Syssner, 2020b). Historically, a common feature for many Norwegian towns and communities is that they have been organized around one central industry, which directly or indirectly employed

the majority of the inhabitants (Karlsen & Dale, 2014; R. Nilsen, 2014; Steen & Karlsen, 2014; Stugu, 2018). Both Sokndal and Lund fall in this category, with Titania and NorDan, respectively, being the main industries. Only having one industry as the main employer in the municipality puts the municipalities in a vulnerable position as the municipality's ability to provide welfare services for its inhabitants is largely dependent on tax revenue from employment. As many central industries and businesses in rural municipalities have moved abroad, this could make the municipalities more vulnerable to marginalization. For example, Sokndal experienced a crisis in the late 1990s when Titania, the ilmenite mine now surrounded by Tellenes wind farm, lost a large contract to an Australian company, leading to more than 100 people losing their jobs. Following this, around 200 people moved away from the municipality. For a small municipality, reducing the total population from 3500 to 3300 was a shift that reverberated throughout the entire community (Holmen, 2006). According to SSB, the population of Sokndal has hovered around 3300 ever since. In 2019, Titania furloughed more than 200 employees for around four months due to a fire in a Finnish factory that uses ilmenite from Titania (Barbøl, 2019; Stavanger Aftenblad, 2019a). In other words, when the largest company in the municipality does well, the municipality does as well. The following paragraphs will delve further into how and in what ways a marked decrease in population is particularly challenging for small, rural municipalities and how this change can be conceptualized as a form of rural marginalization.

One of the largest public discussions in Lund during the fall of 2020 also illustrates the financial precarity that municipalities may experience. As in Lund municipality's case, this precarity may then highlight the importance for (rural) municipalities to seek out and ensure alternate sources of revenue, such as allowing the construction of wind energy facilities. Although I had seen the headlines, it was not until I interviewed the current mayor of Lund that I started to realize the gravity of the situation. When asked what she perceived as the biggest challenge for the municipality, she answered that the biggest challenge was the financial situation that might lead to the closure of two of the three primary schools in Lund. Amidst a rather eventful period, where the previous mayor of Lund municipality had just resigned from his position due to health issues, and the new mayor was constituted, another, more serious issue arose: A sharp increase in spending related to child protective services combined with the closure of the asylum reception center in Lund led to ballooning expenditures. As the municipality receives funding from the

government for hosting asylum reception centers and per number of students and children in local schools and preschools, this led to a revision in the proposed municipal budget for 2021 that came on top of spending cuts for 2020 and the existing budget deficits (Gudmestad, 2020b; Larsen, 2020a). The municipal budget for 2021 suggested that there would be a budget deficit, and the municipal director, which is the head of the municipal administration, recommended closing two of the three schools in the municipality. Doing so would have reduced the deficit by around 6 million NOK. As the educational system is highly decentralized, the decision regarding a potential closure lies within the municipal council (Aasland & Sørholt, 2020), and the director's suggestion had the support of some local political representatives. Lund municipality currently has three primary schools: Nygård, which is the largest school, offers both elementary and lower secondary school, i.e., grades 1-10. Nygård school is located in Moi, the municipality center. In 2020, the school had over 200 students, which is a reduction from previous years. The two other schools are so-called *grendeskoler*, village schools. Heskestad is located approximately 20 kilometers north-west of Moi, in the village of Ualand, while Kiellands Minde is located in the Hovsherad area 10 kilometers to the north of Moi. The two schools only offer grades 1-7 and have 30-60 students each. As is typical of village schools, the students are divided into larger groups that, depending on the number of students in each year, do not necessarily have to adhere to traditional grade division. The proposed closure caused an uproar amongst Lund's inhabitants, in particular those residing in and near the affected villages. The mayor, a member of the Center Party,²⁶ stated in an interview that:

Yes, but it *is* dramatic - and it is dramatic for those who live and who have chosen to invest in living in the two villages because it's not just about closing down a school, but it's about closing down the village, and then there'll be so much transport because of the free time²⁷ that - you simply cannot bear it for long to live like that with families with many children. And at least, it completely stops development, because you cannot get people to move to the village if the school is closed.²⁸

²⁶ One of the Center Party's main talking points is the importance of maintaining dispersed, decentralized settlements, which includes providing services such as schools close to where people live. Representatives from several other parties in Lund municipality were open to shutting down the schools for financial reasons.

²⁷ *Fritida*, referring to after-school activities.

²⁸ Interview, 19.11.20

Much like the mayor suggests, it can be argued that schools are vital for the continued existence of rural communities, with Woods going as far as dubbing rural schools “the heart of the community” and as a catalysator for grassroots movements if the local school is perceived to be threatened by closure (Woods, 2006, p. 587). Beach et al. argue that rural schools in the Nordic countries teach and promote “local values, history, traditions and labour markets” (Beach et al., 2018, p. 10) and that these schools thus may be considered vital for “producing and maintaining social and cultural capital for the communities of which they are a part” (Beach et al., 2018, p. 10). The closure of schools is not an issue unique to Lund. Neoliberal austerity policies, the reversal of previous decentralization policies, and varying degrees of rural depopulation have led to the closure of many schools in the Nordic peripheries, causing many students in rural areas to travel long distances to and from their closest school (Aasland & Søholt, 2020; Beach et al., 2018; Kvalsund, 2019; Šūpule & Søholt, 2019). In Norway, the county normally pays for transportation to and from the school if the distance between school and home for students in Grades 1-10 exceeds four kilometers²⁹ (Utdanningsdirektoratet, 2019), securing the right to “primary education regardless of economic background, physical conditions, place of residence and geography” (Utdanningsdirektoratet, 2019). There is thus a notion that access to education – and other services – should be equitable regardless of where one lives. Soja (2010) refers to this as spatial justice. Spatial justice entails an understanding that (in)equitable distribution of services and resources is often linked to lack of access due to geography, which is a human rights issue (Soja, 2010). Long distances between the home and the school may negatively impact grades and the educational completion rate (Paulgaard, 2017), which may not be remedied by publicly funded transport to and from the school.

The closure of the two village schools in Lund was averted in 2020 due to the usage of extra funding from the government to cover some of the financial losses from COVID-19. However, the long-term future of the schools remains uncertain. Policies that directly or indirectly contribute to the closure of village schools and other schools in rural areas can be framed as a contributing factor in processes of rural marginalization. School closures can thus be conceptualized as a part of a rural marginalization process in that the closure of the school contributes to depopulation, loss of place-attachment and place identity among school-age

²⁹ 2 kilometers for Grade 1 students.

children, in addition to the loss of jobs that the schools provide. Closing a school in a rural community can therefore equate to “closing down the village”, as stated by the mayor. In turn, reduced employment opportunities and depopulation threaten the municipality’s opportunity to collect taxes and revenues. Subsequently, it becomes more difficult for the municipality to fund law-mandated services for its inhabitants.

Conceptualizing fluctuating employment opportunities and school closures as a form of marginality specific to small, rural communities and municipalities allows for more precise articulations of the precarity experienced by the selfsame communities. The possible implications of (relatively) small changes in population or employment, combined with the existing rural and regional policies described in Chapter 2, are constant threats to the continued existence of communities within the municipalities. It is of particular importance to note that the more peripheral communities within the municipalities appear to be most vulnerable, underlining the importance of emphasizing the spatial aspect of marginalization. In turn, this indicates the existence of differing degrees of spatial (in)justice.

6.2 Renewable energy as a source of revenue

As demonstrated above, the financial situation in rural municipalities remains uncertain and dependent on factors that the municipality may not be able to control. Unforeseen business closures and crises of varying scales may affect the municipal budget directly and indirectly. One way of decreasing the likelihood of unforeseen budget deficits is through energy production. Recent research suggests that municipalities tend to accept renewable energy development applications because of the financial benefits, particularly concerning property taxes (Inderberg et al., 2019; Rygg, 2012; Saglie et al., 2020). The belief that hosting a wind farm would provide the municipalities with a steady income to mitigate potential marginalization may thus be a motivating factor for rural municipalities. Indeed, when the municipal councils in both Sokndal and Lund voted to support the construction of Tellenes during the hearing process, an important factor was the potential income that Tellenes would bring to the municipalities. Both municipalities also receive some earnings from hydropower, mostly from the hydropower plants along the Sira river on the border between Agder and Rogaland, but these figures are fairly low, and there is little chance of new large-scale hydropower expansion within the municipalities. As

evidenced by the construction of the Tellenes wind farm, the potential earnings from new wind energy developments are higher than that of hydropower. However, there are ongoing local and national discussions regarding the taxation of wind power compared to hydropower (see Chapter 9 for more on the pending changes). Some of these suggestions would decrease the differences between the two, making the current wind energy tax regime more similar to the hydropower tax regime to ensure that municipalities get a more equitable share of the profits generated by the wind power plants and that they receive compensation for allocating land to meet national and international energy production goals.

6.2.1 How wind power is taxed

The development of wind energy may provide municipalities with a much-needed budgetary reprieve. However, the way wind power installations are taxed compared to hydropower has resulted in a much lower rate of revenue for the municipalities in question. The majority of interviewees for this thesis considered the current energy tax regime to be unjust. As of 2020, wind energy developments can be taxed directly in two separate ways: corporation taxes and property taxes. The national government collects corporation taxes, while the municipality decides over and collects property taxes. Therefore, this section will briefly summarize the main features of the corporation tax, while the next section will focus more extensively on property taxes and the latter's impact on municipal finances.

The corporation tax, *selskapsskatt*, is a tax that is calculated based on a corporation's profits. The tax rate is currently at 22%, which also applies to owners of wind energy developments. The *Storting*, the Norwegian Parliament, decides changes in the property tax rate. However, there are additional tax benefits, particularly for wind farms that will start operating before the end of 2021, as a part of the Swedish-Norwegian electricity certificate system (NVE, 2020c). These wind farms received additional write-offs during this time due to the implementation of a linear depreciation rate, reducing the effective tax rate (Olje- og Energidepartementet, 2020). Additionally, if the company owning the wind farm has a high loan-to-value or debt ratio, the effective tax rate will be even lower (Olje- og Energidepartementet, 2020; Tax Justice Network - Norge, 2021; Vasstrøm & Lysgård, 2021a). Thus, while the tax rate is at 22%, in reality, many

wind power plants generate less income tax due to generous write-off and depreciation policies (Tax Justice Network - Norge, 2021).

The other form of taxation that wind energy is subject to is the municipal property tax. This stands in contrast with hydroelectric power, which generates other forms of taxation, in addition to corporation and property taxes. Hydropower plants³⁰ require resource rent tax, natural resource tax, and ground rent. As I will describe in more detail in the following section, property tax is the only guaranteed source of direct income from wind power for municipalities that host wind power infrastructures, although this may be subject to change following the ongoing discussions regarding changes in national wind power policies (Energi Norge, 2020; Olje- og Energidepartementet, 2020; Skatteetaten, 2021).

The municipalities' income from hosting wind power infrastructures was a topic of discussion in all the interviews, including interviews with non-municipal actors. Several of the interviewees compared the lack of financial benefits from the wind farm with the higher earnings from hydropower, contextualizing it as a lack of compensation based on the burden of power production. The mayor of Sokndal stated that:

[...] and it is frustrating when we are dealing with – well – hydropower schemes that there are also quite a few of within the municipality, but it is the municipality and the local community that is compensated for the burden of having power production in one's own municipality. And there are many similarities [to] hydropower.³¹

He mentioned the low number of people directly employed in the hydropower sector in the municipalities as a key similarity. Several other interviewees compared the encroachments on nature from hydroelectric power production and wind power. During a conversation on taxation, a former politician said:

But that being said, I very much agree that you should really equate hydropower and windmill power³² with regard to local compensation because

³⁰ More specifically, hydropower plants that have generators over 10 MVA.

³¹ Interview, 13.10.20

³² *Vindmøllekraft*, lit. translated “windmill power”. This is a colloquialism used by several of the interviewees, referring to wind power or wind energy.

both are measures are encroachments in nature that the local community should get compensated for in terms of financial resources.³³

The majority of interviewees had a shared frustration regarding the perceived lack of fair compensation under the current tax regime. The overall impression was that the municipalities perceive that the social and ecological costs of hosting wind power have been higher than the financial benefits. This disparity becomes apparent when comparing the income from wind power to the much more beneficial hydropower tax regime. In other words, one of the main issues for the municipalities is the inequitable distribution of costs and benefits related to hosting wind power. In an interview with a representative from the developer, he suggested that increased financial compensation for host municipalities would lead to less contention between developers and local communities in rural areas, and increase wind power deployment. This is in line with the recommendations listed in a joint letter from a wide coalition that included organizations representing the energy industry, wind power industry, and municipalities (Energi Norge, 2020). This letter states that “[t]he advantages of wind power are global and national, while the disadvantages to a large degree are local” (Energi Norge, 2020). In other words, there is a consensus that hosting wind power plants is a burden for which the local community and the municipality should be compensated. The following section examines the importance of the only guaranteed source of income from wind power plants: property taxation.

6.2.2 Financial precarity in small municipalities

As illustrated in Section 6.1, small, rural municipalities are especially susceptible to sudden demographic and financial changes from business or school closures. Introducing property taxes may alleviate some of the vulnerabilities described in Section 6.1 in that it provides a fairly predictable source of income (Jacobsen, 2020). In Norway, the implementation of municipal property taxes is voluntary and decided by the municipality in question. *Eigedomsskattelova*, the Property Tax Act, regulates municipal property taxes. Pursuant to this Act, the municipality council can tax properties located within the municipality’s borders. The municipality may also introduce differentiated tax rates for properties within several categories, including primary dwellings, vacation homes, industrial installations, and power stations and installations. In most cases, property taxes are the main source of profits from wind energy developments for

³³ Interview, 14.12.20

municipalities (Inderberg et al., 2019). Saglie et al. highlight that this form of economic compensation is crucial for municipalities' acceptance of wind power plants and their evaluation of distributive fairness (2020).

The importance of municipalities' opportunity to collect property taxes from wind power installations was highlighted in 2015 when OED presented a short-lived proposal removing municipalities' ability to tax these installations. This proposal was met with numerous complaints from municipalities in the hearing process, with some municipalities describing this as an attempted "breach of social contract" between the state and the local government, "as the municipality had surrendered local natural values in order for national energy goals to be achieved" (Saglie et al., 2020, p. 154). As property taxes are the only guaranteed source of income from hosting wind power plants, this proposal could be viewed as an attempt to drastically reduce rural communities' opportunities for financial reimbursement from wind energy development under the current wind power tax regime.

For most municipalities, the largest source of income is funds allocated from the national government. While this is adjusted so that smaller or poorer municipalities receive more funds, municipalities still have to seek other forms of revenue to ensure that they can provide services mandated by law (Kommunal- og moderniseringsdepartementet, 2021b). As there are large differences between the municipalities, such as population size, revenues from tourism, income- and property taxes, including hydropower, the income system is adjusted to ensure income equalization. However, allocations to municipalities and counties are limited – and decreasing (Teigen, 2019).³⁴ This development is in line with the "market turn" described by Innset (2020) and its impact on regional policies, which during the past decade has resulted in a gradual reduction in government allocated funds to the municipalities (Teigen, 2019, 2020). Idsø et al. found that the income equalization system decreases the disparities in income per inhabitant and provides more predictability for the municipalities (Idsø et al., 2018). Municipalities with increasing expenses can choose to reduce their expenses or attempt to increase their revenues. Municipalities and regions that struggle may qualify for regional restructuring programs

³⁴ This does not include the so-called COVID funds that were allocated to municipalities in 2020 and 2021 to cover some of the financial costs and losses due to the pandemic.

(Carlsson et al., 2014; Jakobsen & Høvig, 2014; Karlsen & Dale, 2014). Dalane was the site for one of these restructuring programs, from 1997-2003, which aimed to increase accommodation for increased business activity through various measures, including an expansion of high-speed internet, etc. (Christensen, 2005). For municipalities in dire financial trouble, the government may temporarily seize control of local financial decisions through the ROBЕК register,³⁵ which most likely entails a decrease of expenditures – including in health care and educational services (Haraldsvik et al., 2018; Kommunal- og moderniseringsdepartementet, 2020a). In short, municipalities, and small, rural municipalities, in particular, must attempt to increase their revenues relative to their expenditures to avoid being included in the ROBЕК register. One way of doing so is by attracting new businesses and business opportunities to the municipality. This is in line with regional policy goals set by the KMD. KMD’s policy aims include “develop[ing] attractive regions and centers for both people and businesses” (Kommunal- og moderniseringsdepartementet, 2018). As described in Chapter 2, municipalities are in large parts responsible for doing so. In line with these policies, the central government expects that the municipalities actively seek new business opportunities and attempt to innovate in order to have enough capital to provide services for inhabitants.

Simultaneously, there has been an increase in demands placed upon the municipalities related to the services the municipality must provide to its inhabitants, such as primary health care, primary education, child protective services, and local infrastructure (Kommunal- og moderniseringsdepartementet, 2015). Perhaps it is then more correct to talk about the *welfare municipality* rather than the *welfare state* in that it is ultimately the municipality that is responsible for providing the majority of services to its inhabitants (Frisvoll, 2020; T. Olsen, 2020). The cost of financing these essential services is higher in rural communities than in larger, more central municipalities. More accurately, the *per capita* costs of these essential welfare services are higher in rural communities (Kommunal- og moderniseringsdepartementet, 2015; Syssner, 2020a). This has been used as an argument to increase centralization efforts. In a report on behalf of the Ministry of Local Government and Regional Development, it was argued that municipalities should have at least 15-20,000 inhabitants to ensure increased financial and

³⁵ Register om betinget godkjenning og kontroll (ROBЕК), i.e. “The register for governmental approval of financial obligations”.

demographic stability (Kommunal- og moderniseringsdepartementet, 2014). Even after the most recent local government reform, where the number of municipalities was reduced from 428 to 356 in a centralization effort, the average population of a municipality is around 15,000 (Jacobsen, 2020; Statistisk sentralbyrå, n.d.). However, the median population remains just over 5000. Sokndal and Lund each have around 3200 to 3300 inhabitants, significantly lower than the median population. As seen throughout this chapter, the two municipalities are constantly navigating the significant risk of financial and demographic instability, which seem to reinforce each other. As many other municipalities in Norway are both small in population and rural, it is likely that the challenges Lund and Sokndal face are not unique to these two municipalities but rather specific examples of the vulnerability experienced by many municipalities. The following section examines one of the ways the two municipalities in question have attempted to secure income through hosting wind power infrastructure.

6.3 Property taxes in Lund and Sokndal

Property taxes are a key factor for municipalities' perceptions of distributive fairness when hosting wind power plants. Therefore, this section examines the local implications of property tax income from the Tellenes wind farm. In the 2020-2023 and 2021-2024 municipal budgets for Sokndal and Lund, respectively, both municipalities underline the importance of property taxes. In Lund's approved municipal budget, it is stated that "[t]he municipality's ability to influence its financial position is mainly limited to apply to savings in the forms of reductions on the expenditure side. There is only one source of income that the municipality may have direct control over - the income from property tax" (Lund kommune, 2020b, p. 7). Sokndal municipality contends that "[p]roperty tax is an important source of income for the municipality and is absolutely necessary for the budget to be in balance" (Sokndal kommune, 2020b, p. 29). Although both municipalities stress the importance of property taxes, there has been a marked discrepancy in the tax rates decided by the municipal councils. Sokndal has had a 0.7% municipal tax rate on commercial real estate since before the construction of Tellenes. In comparison, Lund did not implement property taxes at all until the fiscal year of 2015, for reasons which will be discussed further in section 6.3.1 As of 2021, Sokndal municipality has a 0.2% tax rate on housing and a 0.7% tax rate on commercial real estate, while Lund taxes housing at 0.3% and recently raised the general property tax rate, i.e., all non-housing properties, to 0.4% in 2021.

Although there are some differences between what is taxed in Lund and in the category of “commercial real estate” in Sokndal, ultimately, this means that as of 2021, wind energy installations are taxed at 0.7% in Sokndal and at 0.4% in Lund. In 2020, Lund’s municipality council decided to increase the property tax on all non-residential properties by the legal limit of 0.1% per year until it reaches the maximum limit of 0.7% in 2024 (Lund kommune, 2020b). The following paragraphs will examine some of the critical differences in taxation and the potential causes for this disparity while also reviewing how, and to which degree, the municipalities have profited financially from hosting Tellenes wind farm.

For both Lund and Sokndal municipalities, the income generated from property taxes in general and from Tellenes wind farm, in particular, is not only welcome but absolutely necessary. The mayor of Sokndal said to Dalane Tidende in December 2020, after the municipal council had approved the 2021 municipal budget, that he was worried about the municipality’s finances, stating that “[...] we would have been in a very demanding situation without the profits from the wind park at Tellenes” (Walderhaug, 2020b). A politician in Lund municipality stated: “Well, we must be honest and say that even though we do not get more than 1.8 million in property taxes, it is ‘good money’³⁶ to take into an almost empty municipal coffer.”³⁷ This remark indicates that the aforementioned financial precarity is a factor that has a large impact on the municipalities’ financial decisions and planning.

Several interviewees highlighted the difference in tax rates, particularly focusing on the aforementioned differences in property tax rates. As previously mentioned, Sokndal had already implemented a 0.7% property tax rate on industrial installations, including power installations, before the construction of the wind farm, while Lund implemented property taxes as recently as 2015. Even with a 0.7% tax rate, Lund would have benefited less than Sokndal due to only 19 out of the 50 turbines being located within its borders. Even so, the low property tax rates have meant that the municipality has consistently only received around 1 million NOK per year. This is a sharp contrast when compared to Sokndal’s 6-7 million NOK per year. The *Sokndølings* that were interviewed for this thesis both highlighted the economic disparity between the

³⁶ Lit. translation of *gode penger*.

³⁷ Interview, 19.11.20

municipalities' earnings, reminiscent of what Saglie et al. refer to as "relative fairness" (2020). Relative fairness refers to "perceptions of fairness based on how other and comparable projects, technologies, groups, or individuals are treated" (Saglie et al., 2020, p. 148). Here, Saglie et al. primarily focus on municipalities' perceptions of fairness regarding benefits from wind power projects compared to hydropower.

Although this observation was present in several of the interviews done for this thesis, what stood out in the interviews with research participants from Sokndal was the concern for Lund's lack of financial benefits. More specifically, based on the interviews, it became apparent that the municipal representatives from Sokndal perceived Lund's smaller financial benefits from the wind power plant as unjust *relative* to the benefits that Sokndal had received.

As one informant, a politician in Sokndal stated:

And in Lund, it's even more - they have none of the jobs, [those] are in Sokndal municipality, [...] and the property tax rate is only at 2 per mille, so that they get just below a million [NOK] even though there are almost as many turbines in their municipality as here.³⁸

While the Head of Economic Development in Sokndal stated that:

[...] Sokndal has seven per mille in property taxes and Lund only has two per mille, so that they get a lot less. [...] and it's not fair either that one of the municipalities gets seven million and Lund doesn't get more than around a million.³⁹

As detailed further in chapters 7 and 8, the municipalities are two separate entities with different priorities and perceptions. Despite this, the interviewees expressed a sense of solidarity with the neighboring municipality, to the point that Sokndal municipality proposed adding a clause in the attempted renegotiation with the owners of Tellenes wind farm that Lund should receive financial benefits from the wind farm equal to 0.7% of the property tax rate. This difference appears to be in stark contrast to the core of regional (and rural) policies: innovation - and competition. While national policies geared towards regional development encourage innovation, this also requires competition. For a region or a municipality to be "attractive" to foreign investment or other business opportunities, they have to compete with other potential hosts. This includes other sites

³⁸ Interview, 13.10.20

³⁹ Interview, 23.11.20

in other countries but also other Norwegian municipalities. An example of this was Sokndal's bid to host a battery factory in the Tellenes area, in which the municipality competed against 11 other Norwegian municipalities (E24, 2021; Løvland, 2020a). This can be viewed as a zero-sum game in which only one municipality ends up the victor as the host of industrial facilities that bring tax revenues and employment to the municipality.

However, in the case of Tellenes, it appears as though Sokndal municipality does not regard Lund as a potential competitor for a limited source of income. On the contrary, the attempt to ensure that Lund gets a more equitable share of the profits from the wind power plant can be interpreted as an alliance between two "weaker" actors against a larger company. This interpretation is supported by other forms of collaboration between the municipalities. They are both members of the Dalane regional council, a council comprised of the four municipalities in Dalane, which aims at inter-municipal collaboration. On the other hand, the situation that Lund and Sokndal are in does not point toward a reason for inter-municipal competition, as they are not in direct competition for funds from the wind farm. Instead, they work together to attempt to secure additional funds for both municipalities – but particularly for the municipality that has historically received the least compensation for hosting this wind farm. Although the term was not used in any of the interviews, the conversations with representatives from Sokndal and the municipal council's actions in attempting to increase Lund's revenues from the wind farm indicate the existence of the aforementioned notions of relative fairness and distributive justice. By trying to secure more funding for Lund municipality, Sokndal municipality demonstrates a form of solidarity with its neighbor – especially as Sokndal has received the additional benefit of the small number of jobs from the wind farm.

6.3.1 Shielding local industries: Different property tax rates and implications

The relationships between the municipalities and the largest companies in each municipality are fundamental for understanding not only the difference in tax rates between Sokndal and Lund but also the municipalities' relationship with the owners and developers of Tellenes wind farm. Lund municipality's property tax policy led to Lund missing out on around 2 million NOK per year in tax revenue from the wind farm. Whether a municipality chooses to implement property taxes may correlate to which political parties hold power in the municipal council. Fiva et al. found that

a municipal council with more members affiliated with the political left had a higher propensity towards implementing property taxes than municipal councils with more conservative or right-leaning representatives (Fiva et al., 2018). This finding does not appear to apply to Lund. The municipality councils and mayors that have governed Lund since 2003 have been majority left- and center-leaning.⁴⁰ Despite this, the municipality council in Lund did not vote to implement property taxes until 2015. Thus, it appears that party affiliation may not be sufficient to explain the lower property tax rate in Lund. Instead, what appears to have been a more important factor for the lack of property taxation up until 2015 is the role of local businesses.

As demonstrated, interview participants from Sokndal expressed concern regarding the discrepancy in tax rates and Lund's lack of financial benefits. The issue of property taxation was also an important part of the interviews with persons from Lund municipality. When asked about the discrepancy in tax rates, a former politician in Lund expressed that he perceived it as an important balancing act for the municipality, between having sufficient funds to provide services for the *Lunddøls* while simultaneously shielding local businesses from what was portrayed as excessive taxation:

Yes, well, it's clear that we didn't want to be unreasonable when it comes to businesses. That has probably been something that has influenced our standpoint with regard to taking property taxes on the industry or industrial installations. So we have been "kind", so to speak. Especially, we wanted to shield important local actors like NorDan window factory. It is a large and important cornerstone business⁴¹ that provides not only jobs, but it also gives a lot back to the local community.⁴²

For the municipality, an important goal had thus been to strike a balance between protecting local businesses, NorDan in particular, due to the perceived community benefits that the company provides. NorDan has more than 200 employees in Lund, the majority of which also live in Lund. Additionally, the family that owns NorDan also resides in Lund, thereby contributing to the municipality through income and wealth taxes. In 2019, after the government funds, income and

⁴⁰ I chose 2003 as the cut-off date as the municipal council elected in 2003 was the one that was involved in conversations with and about the wind farm in 2005. Note: The mayors since 2003 have represented the Labor Party and the Christian Democratic Party, with the following exceptions: In 2019- September 2020, the then-mayor represented the Conservative Party. The current mayor represents the Center Party.

⁴¹ *Hjørnesteinsbedrift* in Norwegian.

⁴² Interview, 14.12.20

wealth taxes were the largest sources of income for Lund (Lund kommune, 2020a). In spite of this, the 2019 annual accounts revealed a 5.5 million NOK deficit (Lund kommune, 2020a). Following this, it is apparent that Lund and municipalities in similar situations are in an ongoing struggle to find the balance between garnering enough income to provide the services they are required to do by law while preventing large businesses from simply moving to another municipality or even country.⁴³

For Lund municipality, the role that NorDan has played for the local community and for the municipality must not be understated. Apart from employing around a quarter of the workforce in Lund,⁴⁴ NorDan has also “given back to the community” in several other ways. The company has contributed by partially funding the indoor sports venue *NorDan-hallen*, and more recently, it donated 10 million NOK to the construction of the indoor swimming pool. In 2020, NorDan and the fund also donated over 1 million to the new science museum in Jøssingfjord, which is currently under construction. After the opening of the swimming pool in 2013, the CEO of NorDan was asked about the substantial contributions that the company has made to Lund municipality. He answered:

What we see is probably the difference between local ownership and having an owner that does not have a personal relationship with the municipality where the business is located. NorDan thinks that it is important to give back to the local community. It creates well-being for our employees, we all live here, and it makes it easier for good employees to stay in the village (*Stavanger Aftenblad*, 2013).

However, the generous contributions to the community come with some strings attached. As a precondition for contributing to the swimming pool, NorDan influenced the siting, ensuring its close proximity to the preexisting NorDan sports venue (Aasbø, 2017). The CEO of NorDan was also a part of the building committee for the swimming pool (Stavanger Aftenblad, 2013). Overall, NorDan and the family that owns the company are essential parts of the local community through board memberships. One way this relationship between the municipality and the

⁴³ NorDan has factories in several locations in Norway, in Poland, Sweden, and in Lithuania, with around 1800 employees in total. According to the company website, the company moved its aluminum factory from Moi to Poland in 2016.

⁴⁴ Around 400 people work at NorDan’s facilities in Lund municipality.

company has been formalized is through a “cultural agreement” in which the fund contributes up to 1 million NOK per year to the culture sector in Lund (Holmquist, 2005). The news site *Kommunal Rapport* reported that the agreement, established in 2005, was the first example of a municipality entering a “cultural agreement with a private company” in Norway (Holmquist, 2005). NorDan chalks this up to its social responsibility, stating on their website: “NorDan's role in our communities is just as important as our global impact. This is why we place equal efforts on local initiatives as global challenges in our social responsibility approach” (NorDan Gruppen, n.d.).

While the relationship between the municipality and the company may very well be interpreted as a result of NorDan’s benevolence, this relationship has resulted in partial privatization of welfare. NorDan, as the largest employer, has contributed to funding projects that benefit the community that the municipality would not afford by itself. Through NorDan providing funding for projects, and the municipality giving the gift of not demanding property taxes, it can be argued that the two parties have built a reciprocal relationship founded on mutual benefits (Mauss, 1966). Another example of the reciprocal relationship can be seen in how the company and the municipality have handled the risk of flooding. In late 2015, during the extreme weather event *Synne*, Lund experienced large flooding of the river Moisaån, which runs through Moi. The flooding shut down production at the NorDan factory for several weeks, and after the flood, the CEO of NorDan opened up for the possibility of moving all production out of Lund after the next flood, unless there were flood control projects aimed at preventing possible floods (Stavanger Aftenblad, 2016). Although Lund municipality attempted to secure governmental funding for such a project, NRK reported in 2019 that NVE had decided that it would not prioritize funding this project (NRK, 2019). The newspaper also reported that 70 municipalities had asked for funding for flood control projects, totaling around 2.5 billion NOK (Gjesdal & Evensen, 2018a). The 2020 State budget of Norway allocated a mere 550 million NOK to flood and landslide prevention (Olje- og Energidepartementet, 2019). The flood caused by *Synne* had an adverse effect for both NorDan and Lund: NorDan lost money through material loss in the flooding, causing delayed order fulfillment, while Lund saw a substantial part of its inhabitants being directly and indirectly impacted through NorDan’s employees being furloughed – as well as the other damages from

the flood, which also damaged municipal properties. Due to climate change, there is an increased risk of more frequent floods. After negotiations between the company and the municipality, work started on a scaled-down flood control project in April 2021, mainly funded by NorDan and with some financial contributions from Lund municipality (Larsen Aas, 2021; Lund kommune, 2021). In other words, NorDan and Lund municipality has entered a long-term (more or less) official public-private partnership, in which the company provides the municipality and its residents with “gifts” that the municipality would not afford by itself. In return, the company has long been shielded from paying property taxes, as well as the power to influence political decisions and prioritizations.

Local ownership and the company’s historical roots may have contributed to the role of NorDan in Lund, but its role as co-funder and stakeholder in welfare projects such as the construction of swimming pools and sports venues, also speaks to the lack of governmental support and involvement in peripheral, rural areas. This development appears to be indicative of the type of state described by Vik et al. that features “a public sector that pulls itself back” (J. Vik et al., 2020, p. 300). As the state – and its public sector – withdraws from peripheral areas, other actors’ positions are strengthened. In this power vacuum, NorDan has established itself as a key service provider and as a provider of financial security, both holding the means of production and influencing municipal priorities and decisions. Lund municipality’s acceptance and support of these deals with NorDan can also be seen as indicative of an attempt to follow the stated goal in national regional policies that encourage municipalities to combat depopulation and attract new residents. As the municipality could not afford these welfare projects on its own, bringing in outside capital - in exchange for political influence – allows the municipality to provide services to its citizens. This may potentially increase the likelihood of the inhabitants choosing to stay in the municipality.⁴⁵ It can thus be inferred that not only is there a competition between rural, peripheral municipalities to attract businesses, but also to attract potential residents.

However, Lund municipality is well on its way to increase the property taxes to 0.7% within the next few years due to ballooning expenditures, as the financial situation is too dire to keep the tax

⁴⁵ Including, but not limited to: the aforementioned flood prevention, sports venue and swimming pool, in addition to refurbishment of the local public library and TV screens set up in central locations – such as the town hall – which provides information about activities and happenings in the municipality for residents and visitors alike.

level at a lower rate. While this ensures that the municipality will receive property taxes from NorDan and from the wind farm, the municipality must still navigate the risk of NorDan moving its factory abroad.

Although both municipalities are largely dependent on a single employer, as shown earlier in this chapter, there are some key differences. Unlike Lund, Sokndal has not attempted to shield its “cornerstone business” from paying the maximum amount of property taxes. One key difference between Titania and NorDan is that the former is not owned by local actors. Titania and its sister company in Fredrikstad⁴⁶ are part of Kronos Worldwide, a US-based global TiO₂ producer that owns seven facilities, two in North America and five in Europe. Titania and Kronos make few direct donations or contributions to the local community compared to NorDan. However, there are some exceptions to this. One such exception is an agreement between the municipality and the company where the company contributes 75.000 NOK annual donations to charity (Sokndal kommune, 2020a; Titania A/S, 1992). Therefore, its primary contribution to the local community is directly through taxation and indirectly through providing employment and usage of services in the municipality.

Additionally, while a factory may be shut down and production moved to a location where manufacturing is cheaper than in Sokndal, the ilmenite deposits are spatially fixed. This indicates that the likelihood of ore extraction being moved elsewhere is somewhat low, but – as seen in Section 6.1, extraction may cease if the cost is too high or if there is a decrease in demand. While Sokndal municipality has not attempted to shield Titania from paying property taxes, Titania remains an important actor in the municipality. As Titania is one of the largest landowners in the municipality, the current attempt to diversify and expand business opportunities in parts of the Tellenes area must be approved by Titania (see section 8.1). Dependency can be considered a factor that reduces the likelihood of protests against mining projects (Conde & Le Billon, 2017). The municipality has also attempted to enter agreements with Titania that are beneficial to both parties and which benefit external actors, such as the usage of waste rock from the quarry in the construction of the wind farm.

⁴⁶ Kronos Titan is a factory in eastern Norway that processes titanium dioxide extracted from the mine in Sokndal. It has done so since 1918.

Based on Lund and Sokndal's relationship with, and the benefits they receive from the largest businesses in each municipality, NorDan's CEO's comments made regarding the importance of local ownership seem to ring true. Lund has received more benefits from the company, but the company has also inserted itself in – and has been allowed to, and to some degree, even encouraged to do so by a decrease in government funds to the municipality and the municipality's need to compete for residents and businesses. Sokndal does not receive the same benefits from Titania, but Titania remains an important actor in the municipality, and there is a large degree of collaboration between the parties – in particular regarding land use and business opportunities. Both municipalities are, in large part, satisfied with the relationship they have with Titania and NorDan.

6.4 BlackRock and the struggle for property taxes

In contrast to the relationships between the municipalities and their respective cornerstone businesses, the working relationship with the companies in charge of the wind farm has proven to be more challenging. The municipalities are attempting to increase and diversify their sources of revenue, while the dynamics between the municipalities and the industries that they host have changed – largely due to national and international policies. While NorDan and Titania/Kronos have engaged with and contributed to the municipalities in different ways, the owners of Tellenes have chosen different tactics when dealing with the issue of distribution and payment. These methods of engaging with the municipalities and the local communities reinforce and exacerbate ongoing rural marginalization processes described earlier in this chapter.

In the fall of 2019, news broke of the ownership structure of Tellenes. Around the same time, it also became publicly known that Tellenes Vindpark AS (TVAS), the company that in Norway is registered as the owner of Tellenes wind farm, had filed a complaint against Sokndal to The Parliamentary Ombud.⁴⁷ This complaint was based on Sokndal municipality allegedly receiving excessive funds from property tax from the wind farm, amounting to around 336.000 NOK per year. TVAS' complaint was founded on the claim that the municipality had used the wrong

⁴⁷ The Parliamentary Ombud, *sivilombudet* in Norwegian (bokmål). Appointed by the Norwegian Parliament, the Ombud "investigates complaints from citizens who believe they have suffered an injustice or an error on the part of the public administration", according to <https://www.sivilombudet.no/en>

exchange rate in its valuation and that the municipality had wrongfully included land rent and interests on the construction loan on which the valuation of the property tax is calculated (Johansen et al., 2019c; Stavanger Aftenblad, 2019b, 2019c). Sokndal municipality has conceded on the first allegation but disagrees with the two remaining allegations. According to the mayor of Lund, Lund municipality is in a similar situation as Sokndal. Kirsch contends that litigation, or rather the *threat* of litigation, may qualify as “one of the few sources of regulatory power in a neoliberal world order” (Kirsch, 2014, p. 85). In this instance, filing a complaint with the Ombud is a less expensive option for the owners of the wind farm to ensure that they do not have to pay excess taxes. However, if the Ombud sides with the owner of the wind farm, the municipalities will have to refund what TVAS alleges are excessive property taxes, which will be a financial boon for the municipalities, and potentially further restrict the amount of and quality of services that they can provide for their residents – or increase municipal debts and expenditures.

When TV 2 attempted to get a comment from TVAS regarding this dispute in 2019, BlackRock responded on behalf of the owners of the wind farm. According to TV 2, BlackRock responded that:

In our opinion, all parties involved should welcome such a clarification, once and for all. [...] In the long run, no one will benefit from actors in the wind power [sector] agreeing to pay property taxes that are not in accordance with the law, just to maintain a good relationship with the municipality [they] pay taxes to (Johansen et al., 2019c).

Both the municipalities and the Norwegian branch of the Tax Justice Network (TJNN) have disputed the claim that this complaint was merely intended as a way of clarifying the valuation process.

Instead, BlackRock’s statement is viewed as a clear indication that the aim is not to create a collaborative or “good” relationship with the host municipalities but to ensure that the company does not pay more than the law mandates. This statement is a stark contrast to the reciprocal relationship seen between Lund and NorDan, and to a certain extent, Sokndal and Titania. Instead, the municipalities are left with the impression that wind farm owner aims to extract the maximum amount of profits from the wind farm with nary a concern for the municipalities. In an interview with Aftenbladet, the mayor of Sokndal said that it was “arrogant and petty” of the owners of the wind park to pursue the complaint against the municipality, particularly as this

happened right after TV 2's reveal of BlackRock's attempt at tax planning (Stavanger Aftenblad, 2019b). The mayor further said to TV 2:

On the one hand, you see that there are *storkapitalister*⁴⁸ that have really tried to minimize the tax that they have to pay back to the community.⁴⁹ On the other hand, they are going after a small municipality [based] on what are comparably quite *små verdier*.⁵⁰ (Johansen et al., 2019c).

Corporations' unwillingness to pay taxes does not appear to be unique to the Tellenes case. TJNN's 2021 report on wind power and profit shifting showed that out of the wind power plants currently operating in Norway, 40% of these are owned or funded by companies or funds registered in tax havens (Tax Justice Network - Norge, 2021). Additionally, TJNN point out the following about foreign-owned wind power plants:

[They] have 42 % higher financial costs, which includes payment of interests, per borrowed Krone⁵¹ compared to the Norwegian-owned [wind power plants]. Tax deductions from inflated interest payments are a well-known method of aggressive tax planning (Tax Justice Network - Norge, 2021, p. 4).

TJNN uses BlackRock's involvement in Tellenes as example of an actor that engages in aggressive tax planning (ATP), as the funds that own the wind farm are registered in tax havens (see Section 6.4.1). The European Commission defines *aggressive tax planning* (ATP) as "taking advantage of the technicalities of a tax system or of mismatches between two or more tax systems for the purpose of reducing tax liability" (IHS, 2017, p. 23). Legal tax planning is defined as the use "of tax provisions in the spirit of the law", and is considered a less aggressive form of tax planning than the illegal act of tax evasion (IHS, 2017, p. 23). According to the IHS report, profit shifting through interest payments may result in a lower tax burden for the companies and their subsidiaries, which then affects the target country, i.e., the country that loses corporate tax income through the practice of ATP (IHS, 2017). Although the IHS report on behalf of the European Commission focuses on corporate taxes, the same mechanisms can be applied to potential reductions in property taxation (Tax Justice Network - Norge, 2021). As TVDA, represented by BlackRock, is attempting to reduce the amount of property taxes paid to the

⁴⁸ *Storkapitalister*, lit. "large capitalists".

⁴⁹ *Fellesskapet*. Can be understood as the community or even society as a whole.

⁵⁰ Lit. "small values".

⁵¹ Norwegian Krone is the national currency; in this thesis, the abbreviation NOK is used.

municipalities, this could be seen as an attempt to reduce its tax liabilities, which is a typical feature of ATP.

TVAS' attempts at reducing the property tax rates paid to the municipalities can be interpreted as a strategy to extract as much profit from the wind farm as possible, regardless of whether this would damage the relationship with the municipalities. The municipalities perceived the financial benefits of hosting wind power facilities as small to begin with, but this attempt at reducing these benefits even further was a strong point of contention. Furthermore, the difference in tactics employed by the cornerstone businesses compared to TVAS appears to underscore the municipalities' frustration with TVAS. Tying the municipalities' experiences back to the overarching notion of EJ, the municipalities strive for greater distributive justice. Sokndal's mayor, when he described the situation as "large capitalists" attempting to minimize the already small financial benefits that small municipalities receive, point towards a sense of being exploited. The distribution of benefits from the wind farm were already unequally, and perhaps unfairly, distributed, and TVAS attempts towards further reduce the municipality's "small values" further underscored the municipalities' worries that they would receive an even less equitable share of the financial benefits from the wind farm.

6.4.1 Who owns Tellenes wind farm?

It is necessary to examine how the wind farm is owned to understand the background and some of the frustrations expressed by the municipalities regarding the property tax dispute and the role of the central government in this dispute. The ownership structure of the wind farm in Tellenes is opaque. Triangulation has not led to additional knowledge of the ownership structure nor an official connection to BlackRock that has been sufficiently confirmed by BlackRock.

This section is thus based on journalistic findings from the public broadcasting outlet TV 2 published in the fall of 2019 (Figved et al., 2019a; I. Fredriksen et al., 2019b) and the recent report by TJNN (Tax Justice Network - Norge, 2021). According to both TV 2 and TJNN, Tellenes wind farm is owned by several funds registered in tax havens such as Ireland and the Cayman Islands (Figved et al., 2019a; Tax Justice Network - Norge, 2021). As seen in Appendix

1, there is no direct connection between BlackRock and the Global Renewable Power Funds registered in the Cayman Islands.

However, BlackRock has spoken to news outlets on behalf of TVAS, which indicates a link between the two. Additionally, Zephyr, the developer and previous owner of the Tellenes project, state on their website and in a book that marks the 100th anniversary of one of its parent companies, Østfold Energi⁵² that BlackRock is the owner of the wind farm (T. Fredriksen, 2019; Zephyr AS, n.d.-b). In this book, it is stated that “[t]he sale of Tellenes wind farm to the [asset] manager BlackRock brought in a three-digit number of millions [in NOK]” (T. Fredriksen, 2019, p. 244). In an interview with a Zephyr employee, this employee also referred to BlackRock as the owner of the wind farm, as did the municipalities. Furthermore, representatives from Sokndal municipality stated in interviews that they had a digital meeting with BlackRock’s London office during the spring of 2020 regarding the potential extension of the license agreement. Arise, the current operator of the wind farm, refers to BlackRock as the manager of the funds that own Tellenes wind farm on their website (Arise, 2016). Additionally, the chairperson of Tellenes Vindpark AS, the company listed as the immediate owner of Tellenes wind farm, is listed as a BlackRock employee. During my attempts to secure an interview with Arise and with the Arise employee mentioned by municipality officials as the de facto liaison between the municipalities and BlackRock, Arise stated in the email exchange that they needed to secure permission from BlackRock before agreeing to an interview.

It thus stands to reason to assume through the actions of BlackRock serving as the representative or spokesperson on behalf of these funds both in the media and in conversations with the municipalities, that there is – at the very least - a strong link between the funds that own the wind farm and BlackRock. However, due to Norwegian laws not requiring full knowledge of the ownership structure and the countries that the funds are registered in not requiring or publishing detailed information about the shareholders of these funds, this cannot be fully verified. What can be verified is that the Government Pension Fund of Norway, commonly referred to as “the oil fund” in Norway, has invested in BlackRock stocks (NBIM, n.d.). According to the numbers

⁵² Zephyr’s parent companies are three publicly owned companies: Østfold Energi AS, Vardar AS, and Glitre Energi AS. Østfold Energi is the largest owner, owning 50% while the two other companies each own 25%. Through these companies, over 20 municipalities own Zephyr.

reported by NBIM, Norges Bank Investment Manager, the fund has invested in BlackRock stocks since at least 2010, earning it billions of NOK, and currently holds a 1.34% ownership of BlackRock Inc (as of July 2021) (NBIM, n.d.; Stavanger Aftenblad, 2018).

6.4.2 “A kind of robbery”

The current national wind power regime appears to have done little to prevent profit shifting. Another point of contention for the municipalities and members of the local communities was the inequitable distribution of profits from the wind power plant. While TV 2 reported that several of the residents were surprised and angered by the news that Tellenes wind farm was owned by funds registered in the Cayman Islands and Ireland, the municipalities were made aware fairly early in the process that there would be a need to secure foreign investments if the Tellenes project was to be realized. After Hydro withdrew from the project and Zephyr acquired the license, the municipalities were made aware of Zephyr’s difficulties financing the project and that there were few, if any, Norwegian-owned or –based actors and investors that were willing to take the financial risk of investing in the Tellenes wind farm. A former politician said that during this time, when there were doubts regarding whether this project could be realized, he did not give much thought to what potential foreign ownership might entail. He stated that:

[b]ut I did not see this coming, that there were foreign owners who saw a potential for income here, so it was more like “yes, how can [we] finance this?”– because financing the wind farm was not something we were concerned about, but rather that the installations were built so that we could get some income from the production.⁵³

Thus, it appears as though for the municipalities, the main cause of contention was not the foreign ownership per se but rather the lack of fair income distribution to the municipalities and the potential profit shifting to tax havens. When I asked the current mayor of Lund about her reaction when she first found out about the ownership structure of Tellenes wind farm, she replied:

We feel that this is kind of a robbery - the profits, they are moved out of the country and while - while we just have to sit here with ‘buttons and scraps’.⁵⁴ And it was also the way things are calculated and the way things are taxed, [it]

⁵³ Interview, 14.12.20

⁵⁴ This figure of speech stems from the Norwegian idiom *å arbeide for knapper og glansbilder* which means to work for little to no pay, i.e. without adequate financial payment.

also leads to one being worse off than what one may have thought in the first place, and that is probably because Stortinget was not sufficiently prepared for that situation. So, there were several reasons why there has been a cry for a wind power policy⁵⁵ that takes care of and ensures that we do not get into similar situations. Ownership, whether it is national or international - we cannot influence that because it is the market economy that governs, but what we think is that the Norwegian state must go much heavier in on the ownership side to have management and control.⁵⁶

Her description of the situation can be tied to what Flø describes as “the feeling of robbery”, which he argues has become increasingly common in rural Norway (Flø, 2020). This feeling, Flø posits, is more than a mere figure of speech. Rather, it is a part of a larger narrative in which innovation and foreign investments in rural areas have become a defining feature of regional policies (Flø, 2020). Since its inception, Norwegian wind power policies have focused on large-scale industrial projects rather than implementing policies that encourage community-owned wind power projects (Blindheim, 2013, 2015; Buen, 2006). Unlike the hydropower sector, there have been no policies in place that have enabled projects funded by local or national actors that would ensure local and national ownership. Instead, wind power policies have been directed at actors that could afford to invest in large-scale projects while regional policies increasingly have geared towards municipal innovation, tourism, and rural areas’ fulfillment of other market-driven needs. The feeling of robbery described by both the mayor and by Flø’s informants thus point towards a sense of powerlessness and loss of control over resources. While resource extraction is a central feature of Norwegian history (Moore, 2010a, 2010b; Thue, 2008), the communities from which the resources have been extracted have tended to receive a fair(er) share of the profits (Løding, 2017; Slottemo, 2020; Thue, 2016; Thue & Rinde, 2001). Additionally, the expansion of hydroelectric power provided electricity to both businesses and people (Slottemo, 2020; Thue, 1996; Thue & Rinde, 2001). The expansion of wind power in Norway has largely been used to increase export power to the Nordic and European power markets rather than to serve Norwegian domestic energy deficits (SSB, 2021).

⁵⁵ Referring to Meld. St. 28 (2019-2020) concerning onshore wind power and possible changes in the licensing process.

⁵⁶ Interview, 19.11.20

This has, to a much lesser degree, been the case here. Instead, the municipalities are left with a small amount of the profits – while the tax system in its current inception allows profits to be “moved out of the country” while the municipalities are left with “buttons and scraps”. This can be seen as a form of accumulation by dispossession (D. Harvey, 2004), in which rural municipalities experience being dispossessed of resources and profits at the hands of a financial elite supported by national policies. While the municipalities have “done the right thing” according to regional policies by allowing for business expansion, innovation, and diversification of their financial base, the municipalities are not left with an equitable or even substantial share of the profits. Instead, the current energy regime is structured in a way that allows for, or perhaps even mandates, inequitable distribution of the financial benefits from energy production.

The municipalities experience further marginalization as the state withdraws from the peripheries and businesses appear in its wake. This consolidation of power and wealth serves multinational companies and funds – including the Norwegian Pension Fund, while small, rural municipalities compete over comparably small amounts of money through various conceptions of the energy regime. The inequitable distribution of profits from wind power production can be attributed to domestic energy policies only having to “a limited degree considered aspects of energy justice” (Vasstrøm & Lysgård, 2021b, p. 1). This is particularly felt by rural municipalities such as Lund and Sokndal, as “[m]arginalized areas [...] often have no other solution in such a neoliberal order of things to comply with it” (Fuerst-Bjeliš & Leimgruber, 2020, p. 6). The sense of resignation that Fuerst-Bjeliš and Leimgruber describe is echoed in the mayor of Lund’s statement as cited on the previous page, in that it is “the market economy that governs”, but that the state has ultimately failed in safeguarding ownership and management of resources. This exacerbates the existing marginalization of rural areas in that the political apparatus has neglected to include policies that would ensure an equitable share of the profits befalling host municipalities and communities. In turn, the lack of distributive justice puts rural municipalities at risk for further marginalization and peripheralization, as exemplified by the potential closure of village schools in Lund. The potential closure of rural schools may have ramifications for the community and the municipality as a whole, not just for the students who have to commute to the school in the municipal center. The consequences of the state not having included provisions that ensure host municipalities a more equitable share of the (financial) benefits of power production is thus

particularly dire for communities and municipalities in the peripheries that are already marginalized by rural and regional policies.

6.5 Chapter summary

This chapter has examined the financial implications of hosting wind power plants for the rural municipalities of Sokndal and Lund. In particular, this chapter has examined how wind power is regulated and taxed under a vastly different ideological regime than hydropower. Where hydroelectric power generates profits for host municipalities through several forms of taxation, the municipalities' only guaranteed source of income from wind power is through property taxation. Additionally, the relationship between host municipalities and the company that owns the wind farm is fundamentally different. The relationship between the old "cornerstone businesses" and their host municipalities is characterized by reciprocity and cooperation, with the businesses stepping in as private service providers as the state withdraws itself from the peripheries. In contrast, the relationship between the municipalities and the owner of the wind farm contributes to the sense of injustice experienced by the municipalities, effectively reinforcing existing processes of rural marginalization. In this sense, the existing wind power regime can be said to have opened up for new configurations of institutions that articulate rural areas of Norway in relation to global interests.

While Sovacool contends that there needs to be an acceptance of the notion that "there will always be losers" (Sovacool, 2016, p. 552) in policymaking and energy planning, the distribution of burdens and benefits in this particular case showcase that Norwegian policymaking has not sufficiently attempted to avoid the inequitable distribution of burdens and benefits. Rather, the existing policies reinforce the structural inequalities that lead to rural municipalities' financial precarity, which they then are expected to solve through innovative schemes that attract capital and investments.

As shown in this chapter, the existing power imbalances between the host municipalities and the owners of wind power plants are exacerbated by the current wind power policy regime. While hosting wind power was initially portrayed as a way of substantially increasing the municipal budget and gaining more sources of employment, the host municipalities are left with little more than "buttons and scraps". Rural municipalities, and in particular the more peripheral

communities within the municipalities, already experience forms of marginalization caused mainly by financial constraints. The lack of distributional, and to some part, procedural justice exacerbates this sense of marginalization. The combination of spatial peripheralization and processes of economic marginalization can, as I have argued in this chapter, be conceptualized as a form of rural marginalization.

7.0 Great expectations: Community benefits

While the previous chapter focused on the financial benefits from the wind farm in terms of property taxation and monetary value, this chapter focuses on other financial and material implications for the municipalities – namely, community benefits. This chapter focuses on answering the main research question through two of the sub-questions. It continues the previous chapter’s aims of answering how changes in national energy policies impacted rural municipalities. Additionally, it answers the third sub-question: *How are burdens and benefits of wind power negotiated and distributed among actors involved in wind power development?* before examining how national policies aimed at rural areas have done little to strengthen rural municipalities’ overall position.

This chapter shows how the municipalities have attempted to ensure a fairer distribution of benefits from the wind farm through community benefits. The uneven playing field and discrepancy in the available resources for the parties have made it difficult for the municipalities to secure significant community benefits. In turn, this has contributed to a weakened recognition and procedural justice in the (re)negotiation processes.

7.1 Community benefits

Both Lund and Sokndal municipalities initially viewed the Tellenes project as beneficial to the municipalities, in terms of prospective property taxes and, more broadly, rural development. Politicians and many residents assumed that the wind farm would bring about new jobs, business opportunities, and other benefits for the community. In other words, people viewed the project as a way of counteracting or reducing ongoing rural marginalization processes. These kinds of expectations are not uncommon. According to Rygg and Saglie et al., rural municipalities in Norway tend to view the development of wind energy as a way to secure rural development projects that they would not be able to afford on their own (Rygg, 2012; Saglie et al., 2020). Community benefits are often referred to as *mitigating* or *compensating* measures in official documents.⁵⁷ These benefits are often negotiated between the developer or the owner of the wind

⁵⁷ *Avbøtende tiltak* in Norwegian, lit. “mitigating measures”. Oftentimes referred to as compensating measures in English. In this text, I have chosen to use the more literal translation because this translation alludes to the aspect of harm-reduction implicit in the Norwegian term.

farm and the host municipality as a form of distributive or restorative agreement, in which the burdens of hosting energy projects are relieved.

Some of these measures may be mentioned in the EIA and the licensing documents. However, the contracts are ultimately negotiated between the municipalities and the developers, outside the scope of the licensing agreement framework of NVE and OED. Including compensating or mitigating measures may have affected license approval in the sense that municipalities that perceive the project to be more beneficial to the municipality may refrain from using the de facto veto-right described by Inderberg et al. (2019). Not uncontroversial, community benefits can be seen as bribery by the local communities, particularly if the negotiation process is opaque (Aitken, 2010). The provision of benefits may also impact the municipality's perceptions of fairness and acceptance towards wind energy developments (Saglie et al., 2020). The latter, of course, depends on whether the municipalities' expectations or demands are met.

7.2 (Re)negotiating benefits

In the fall of 2020, Lund and Sokndal municipalities' assessed that the prospective community benefits had largely failed to materialize. The political, and to some extent, public debate on the lack of benefits from the wind farm was largely brought on by the possible extension of the existing operating license. In the spring of 2020, Zephyr applied to NVE for a five-year extension on behalf of TVAS. The municipalities of Lund and Sokndal stated in a joint letter to NVE in September 2020 that they would support an extension – albeit under certain terms. These terms included a renegotiation of the current contract, as both municipalities had expressed dissatisfaction with the handling of the current agreement. The municipalities argued that several of the agreed-upon benefits in the original agreement had not been fulfilled to the extent they had hoped or envisioned. The introduction of conditions can be interpreted as the municipalities' attempt to ensure that the distribution of burdens did not outweigh the benefits of hosting the wind power infrastructures. In other words, the municipalities attempted to ensure a deal that would provide more equitable dissemination of costs and benefits of energy production. The following section looks at some of the smaller examples of community benefits, while the subsequent section examines a more extensive, unrealized infrastructure project.

7.2.1 A sense of powerlessness

At the intersection between community benefits, procedural and distributional justice, another source of powerlessness occurs. The developer and the municipalities agreed on some smaller measures intended to benefit the communities. Some of these measures were either not actualized or actualized in a manner that municipal representatives perceived to be not in accordance with the intent of the agreement. This section will first examine some of these measures and how the municipalities experienced the (re)negotiation of these measures before relating this to the overarching themes of rural marginalization and EJ.

The first example of community benefits explored in this section is the promise that the wind farm area would allow for new forms of outdoor recreation in this previously little-used area. The internal service roads in Tellenes wind farm, barring the section that traverses the mining area, were initially intended to remain open for recreational use throughout the year. Initially, the plan was that during the winter, when there is enough snow, the wind farm would be responsible for grooming cross-country skiing trails on the service roads. The skiing trails would ensure that residents in the Dalane region, and Lund and Sokndal in particular, would have access to year-round recreational usage of the wind farm area. However, the EIA showed that large parts of the area surrounding the turbines could be at risk for ice throws during the colder months of the year, endangering potential skiers (Zephyr AS & Norsk Vind Energi AS, 2015). The plans to establish cross-country skiing trails in the area were therefore scrapped. The municipalities were granted an annual fund of 50.000 NOK each to compensate for this, to which local sports teams could apply for funding. While the sum was later increased to 100.000 NOK per year, the municipalities perceived the process of negotiating this increase as overly complicated and time-consuming.

One politician explained the process of dealing with the wind farm when attempting to increase the compensation from 50 to 100.000 NOK in this manner:

A: [H]ow long things will take, for example, when it comes to the renegotiation of this agreement, they have full control over that. We have no opportunities to know whether it will take a short time or a long time, and the initiative also lies with them. [...] So it took a year, I'm pretty sure, before we managed to increase it to 100.000. Yes, it took over a year.

Q: My immediate reaction is that it must be very, very tiring for the municipality?

A: Of course it is, yes, so you are – you are completely at the mercy of, and powerless compared to the other party.⁵⁸

As described by municipality representatives, the negotiation process is as follows: As Arise is merely the operator of the wind farm, they do not have the authority to make decisions on behalf of the owner of the wind farm. However, one of their employees is the municipalities' point of contact. If the municipalities have questions or want to raise a concern regarding the wind farm, they have to contact this person, who then relays the concern to BlackRock. When a decision has been reached, the liaison is contacted, and then information is given to the municipalities. As described by the politician above, this process is largely out of the municipality's control, which creates a sense of powerlessness. The politicians interviewed for this thesis, being the political representatives of the people in Sokndal and Lund, expressed a sense of duty to ensure that hosting the wind farm would lead to actual, tangible benefits for the inhabitants. The attempt to secure long-lasting material benefits indicates that the notion of distributive justice is a motivating factor for these public officials when attempting to ensure a better deal on behalf of the inhabitants. As some of the politicians remarked, 50, or even 100.000 NOK, is less than it would cost to groom and maintain the skiing trails. In other words, the current deal is less beneficial to the municipalities than the original agreement. Despite this, the municipalities did not press this issue further, focusing their time and resources on other areas of disagreement instead.

When small municipalities are about to enter an agreement with large actors such as BlackRock, there is little reason to assume that these negotiations constitute an equal playing field. Experiences from other parts of the world showcase that small communities with limited resources struggle to ensure that agreements are upheld (Cowell, 2010; Dunlap, 2019b; Kirsch, 2014; Munday et al., 2011). While there are clear differences between the communities described by Dunlap and Kirsch and the municipalities of Lund and Sokndal, there are some similarities in that there is an apparent discrepancy between the parties' legal expertise and resources. The municipalities operate with constricted budgets that do not allow for vast expenditures on legal

⁵⁸ Interview 19.11.20

aid to negotiate the terms included in the original agreement, nor do the municipalities have an assembly of legal experts at hand. Drawing further on Kirsch (2014), the corporations in question in the Ok Tedi case and in this particular case both seem to rely on what is referred to as a form of “politics of time” as a political strategy. One of the results of this tactic is that the opponent, so to speak, is outspent and worn down due to the lengthy process (Kirsch, 2014). While the situations in the Ok Tedi case and the Tellenes are distinctly different in many aspects, there is a similarity in how both cases show time being used as a tactic to exhaust the smaller party’s already comparably small resources. As both municipalities did not press the issue of compensation further, the corporation seems to have succeeded.

The powerlessness and the loss of agency when negotiating with the owner of the wind farm that the politician describes above is part of a larger issue of municipal self-determination and power. After the revisions to the Planning and Building Act in 2008, NVE is the land planning authority in the area covered by the wind power license. This entails that NVE has the responsibility to follow up on the fulfilments of the Environment, Transport, and Installations (MTA) plan. After NVE has approved a developer’s EIA and MTA plans, the municipality loses self-determination and control over the area covered by the license - and the authority to ensure that the MTA plans are fulfilled to the municipality’s wishes or standards. The municipality is effectively rendered powerless, without the opportunity to enter agreements with other actors regarding infrastructure within that area or to regulate it further, if needed. The municipalities are thus dependent on the other party upholding its part of the agreement.

Another point of contention is explicitly stated in Sokndal and Lund’s letters to NVE in the fall of 2020 concerns requirements that must be met if the municipalities are to approve an extension. One of these requirements is the construction of a road that connects the public road to Titania with the main entrance to the wind farm. According to the initial agreement, the developer agreed to construct, and actually constructed, a road that led from the public road to the wind farm’s entrance area. The part where the parties disagree is regarding the *standard* of the road. According to Sokndal municipality, the developer has failed to fulfill this part of the agreement, as the road that was constructed does not meet the requirements for a public road. The mayor of Sokndal argued that:

We have clear agreements, [...] and then the wind farm says that “it’s not our responsibility”. Yes, they established a road, but not to the standards that the municipality expects. But now we are in the situation where if we are to have something happen in this industrial park, we have to establish that road, so now one sits with a cost of one to two million [NOK] and we’re not sure who has to foot this bill.⁵⁹

As discussed above, the municipality does not have the power to enforce this agreement but must either hope that the other party accepts this term in the renegotiation process – or that the other party decides to comply with what the municipality contends is the *intent* of the agreement.

The power imbalances between the municipalities and the representatives of the wind farm during these negotiation processes indicate that drawing on procedural justice may be beneficial to engage further with the issues at hand. The tenet of procedural justice is oftentimes used to analyze the inclusion of stakeholders and institutional structures during the licensing process (Bailey & Darkal, 2018; Jenkins et al., 2017; Sovacool & Dworkin, 2015). The renegotiation processes described in this section are not part of the licensing process proper, as agreements regarding community benefits are negotiated outside the official licensing agreement framework. However, as Jenkins et al. contend, the EJ framework is flexible in that it allows us to examine “where injustices occur, to recognize new sections of society and to develop new processes of avoidance and remediation” (2016, p. 180). Framing Sokndal and Lund’s experiences with renegotiating the terms of the agreement as a lack of procedural justice highlights the disparity in power between the stakeholders.

The above examples point towards the municipalities experiencing a lack of procedural and distributive justice, leading to a sense of marginalization. The municipalities perceive that they have received the short end of the stick in the negotiations with representatives from the wind farm and that the negotiation processes are opaque, time-consuming, and the playing field is highly uneven. Procedural justice is based on the inclusion of all stakeholders throughout the entirety of the negotiation process. In this instance, if one includes fulfillment of and negotiation of preexisting agreements, one could argue that, for the municipalities, there is a lack of procedural justice. They are not on equal footing with the owner of the wind farm; instead, they

⁵⁹ Interview 13.10.20

have to spend time and energy attempting to get the other party to fulfill their end of the agreement. Meanwhile, as seen in the previous chapter, the other party is actively attempting to reduce the amount of financial remuneration that the municipalities may receive. Due to the lack of procedural fairness, the municipalities also appear to perceive this situation as an issue of distribution. As the municipalities have the burden of hosting these large-scale infrastructures, they are actively seeking ways in which this situation may be beneficial – or at least less harmful to the local communities. Seeking community benefits as a way to mitigate the burdens of energy production is an opportunity that is important for municipalities (Saglie et al., 2020). However, in this particular case, the agreements have not been fulfilled, thus reducing the municipalities' experience of procedural and distributive fairness. In summary, while community benefits supposedly mitigate the burdens of hosting energy production, these examples show how processes leading to the provision of benefits can be an additional burden for the municipality.

7.3 Expectations shaped by hydropower

Hopes and expectations of Tellenes wind farm contributing to the local communities in Lund and Sokndal were also originally prevalent. As this section will describe, some of these hopes and expectations may be attributed to the history of hydropower in Norway. The previous chapter detailed how NorDan, and to some extent, Titania, have contributed to the local communities in other ways than purely through taxation. The municipalities seemed to expect that hosting a wind farm would - and should - guarantee non-tax-related benefits for the local communities and for the municipalities as a whole. In the original negotiations between Zephyr and the municipalities, the latter parties sought assurances that the developer would ensure or contribute to local infrastructure projects, such as the aforementioned road to the entrance of the wind farm area. Another example, which was of particular importance to Lund municipality, was the potential construction of a public road connecting the southern parts of Lund and Sokndal.

There are currently two public roads that connect the two municipalities. Driving between the two municipal centers takes approximately 40 minutes. There are currently no roads that connect the southern parts of the municipalities, as Fv2, the road that runs along the lake *Lundevatn* terminates before it would reach Åna-Sira. This is a point of contention for several of the people that live along this road, as connecting Fv2 to Fv44 would decrease the travel distance to both *Haua*, but also to the larger towns of Flekkefjord and Egersund. Lund municipality, in particular,

initially viewed the construction of the wind farm's internal service roads as a potential catalyst for a new road connecting the two municipalities. Additionally, it was believed that the wind farm would be a good source of employment and that the new road would ensure that the *Lunddøls* could gain access to these new jobs. During the negotiations with Hydro, Lund attempted to include this as a part of the deal. However, after the project was acquired by Zephyr, this fell through. When asked about what happened, a former politician explained that:

Well, when we were approaching an agreement, then some of our demands sort of disappeared, amongst other reasons because the main office ended up in Sokndal municipality, and then it became more natural that, for example, the road started there too. A great disappointment for us really [...] So, the road that had been such a clear wish for us, disappeared during the process.⁶⁰

While Lund had a vision of increased connectivity to Fv44 and to decrease travel time for the inhabitants and part-time residents in the southern part of Lund to the coastal areas, this did not materialize. According to Saglie et al., this is a common occurrence in discussions regarding compensating agreements: Several of the developers that were interviewed stated that the municipalities had unreasonable expectations regarding the feasibility of such demands (Saglie et al., 2020). This, again, according to Saglie et al., may be “augmented by implicit comparisons with hydropower arrangements” (Saglie et al., 2020, p. 154). The allure of future profits from wind power projects appears to echo that of hydropower, and perhaps to some extent, petroleum extraction in Norway. In Norway, hydropower has historically been regarded as a public or collective good (Løding, 2017; Slottemo, 2020; Thue, 1996, 2016). The expectations of the municipalities regarding future benefits from wind power seem to echo the historical development of hydropower, where benefits from hosting hydropower befallen the nation as a whole through taxation as well as the host municipality. Hydropower municipalities also experienced additional structural transformation and economic growth (Leknes & Modalsli, 2020; Slottemo, 2020).

Indeed, the municipalities' expectations and demands seemed to be based on knowledge of or memories of how hydropower transformed rural communities and municipalities. The interviewees from the municipalities drew unprompted comparisons between hydroelectric power

⁶⁰ Interview 14.12.20

and wind power, particularly with regard to how energy production requires a large spatial footprint and how a changing landscape is a burden that requires sufficient compensation. This indicates the existence of a form of historical or collective memory based on hydroelectric power and its significance for rural Norway, in particular. Despite the changes brought on during the (neo)liberalization of the energy sector through the 1980s and 1990s, the representatives from the municipalities did not regard wind power and hydroelectric power to be sufficiently different from each other to warrant the differences in benefits befalling the municipality. Using the past as a way to justify demands in the present and in the future opens up for a discussion on the current EJ framework.

In its current inception, the EJ framework does not appear to include notions of distributive fairness that are based on past or historical distribution of benefits from power production. Instead, distributive justice appears to focus primarily on the present and the near future as it centers on parties currently affected by modes of distribution – or parties that are assumed to be affected by future or potential energy projects (Jenkins et al., 2016; D. A. McCauley et al., 2013; Sovacool et al., 2019; Sovacool & Dworkin, 2015). Broadening the scale of EJ, Sovacool’s proposed tenet of cosmopolitan justice may seem closer in its comprehensiveness as it encompasses “all beings in all nations” (Sovacool, 2016, p. 547). A revision, adding “across all time”, would then perhaps cover the notions of fairness displayed in this particular case. However, none of the interviewees indicated that their notion of what fairness entails might encompass “all beings in all nations”. The temporal dimension of justice apparent here, therefore, does not necessarily equate fairness on an international or global scale. Rather, several of the informants mentioned national and global benefits in terms of climate change mitigation in passing but tended to focus more on burdens and benefits on a local scale. Inferring from this tendency, it thus seems as the main priority was *local* rather than cosmopolitan justice, rendering Sovacool’s proposed tenet less relevant in this particular case.

Focusing on the distributive aspect of the form of justice described in the previous paragraph, one could perhaps draw on the concept of intergenerational justice. Intergenerational justice entails considering and ensuring equitable transmission to future generations (Barry, 1997; Cunliffe, 1990; Gosseries, 2008). Albeit not a part of the EJ framework, intergenerational justice has

played an important part in discussions regarding justice, and environmental justice in particular (Barry, 1997; Gosseries, 2008; Sovacool & Dworkin, 2014; Vasconcellos Oliveira, 2018). Following the notion of intergenerational justice, the politicians currently govern Lund and Sokndal municipalities would have a responsibility to ensure that future generations of *Lund-* and *Sokndøls* receive an equitable share of the benefits of hosting energy production – or that they are not disproportionately burdened by hosting energy production. The Tellenes project was first discussed by the municipal councils more than fifteen years ago, meaning that when the wind farm is scheduled to end its operation in 2042, nearly 40 years will have passed since the inception of the Tellenes project. The issue of providing lasting benefits seemed particularly important for some of the interviewees, particularly those who were close to retiring age or those who were already retired. The benefits that the public officials were able to, and are currently trying to secure, from the wind farm will not necessarily befall themselves, but rather their children, grandchildren, and their peers – as well as their local community and the municipality as a whole. In this sense, intergenerational justice may be understood as an aspect or dimension of distributive justice that expands the notion of who should be on the receiving end. Returning to the municipalities' attempt to ensure that the construction of the wind farm would also entail new, or improved, roads point to a wish for permanence that will outlast the direct financial benefits from the wind farm. The existence of such a wish indicates that a notion of intergenerational justice has served as a motivator for politicians to ensure that hosting the wind farm would lead to long-lasting benefits for the community.

7.4 A lack of national policies

Even though most wind power infrastructures are located in rural areas, there are no official national rural development schemes that include renewable energy, nor are there renewable energy policies that explicitly focus on rural municipalities or areas. This section will argue that the lack of policies directed at rural areas hosting renewable energy can be viewed as an example of how rural marginalization in Norway can be theorized.

In fact, white papers such as Norwegian Official Reports, Recommendations to the Storting, or resolutions that focus on regional or rural affairs rarely mention renewable energy production. One such example is the Official Norwegian Report NOU 2020: 15 on demographical challenges

that rural areas face, where hydropower is mentioned once, but other types of renewable energy are not mentioned at all (Kommunal- og moderniseringsdepartementet, 2020b). On the other hand, policies and documents regarding wind power and renewable energy, in general, tend to ignore the rural aspect of renewable energy production (Klima- og miljødepartementet, 2021; Olje- og Energidepartementet, 2012, 2016, 2020). It appears thus that the lack of overlap between rural and energy studies within academia resonates with the lack of coordination between rural and energy policies. Rural and regional policies are under the jurisdiction of the Ministry of Local Government and Regional Development, and energy policies are under the responsibility of the Ministry of Petroleum and Energy. There appears to be little to no policy coordination between the ministries to ensure cohesion and (energy) policies that target rural areas. One such example is the Meld. St. 28 (2019-2020) on onshore wind power, where it is stated that:

[P]rofitable production provides benefits for society in the form of income for producers of power, landowners, contractors, municipalities, and the state. The development [of wind power] lays the foundation for employment, development of industry and businesses (*Olje- og Energidepartementet, 2020, p. 5*).

The notion that appears to be implicit here is that renewable energy production will provide benefits for the mentioned actors, despite a lack of targeted policies. The benefits for the municipality, by law, are limited to revenues from property taxes but may still provide other benefits such as employment. This appears to be in sharp contrast to OECD recommendations that national governments introduce “spatially targeted policies and very strong engagement with local communities” to ensure that renewable energy production contributes to development in rural areas (OECD, 2016, p. 193). To summarize, there is a lack of policies that directly encourage or stimulate rural development through (renewable) energy schemes. This may indicate that the expectations for rural development because of renewable energy development, if there are any, are low to non-existent. On the other hand, these expectations may very well be implicit or taken for granted. NVE and OED licensing decisions point towards the latter, in that mitigating measures and community benefits such as employment and financial growth are given weight during the assessment of the license applications. Furthermore, the discrepancy between OECD recommendations and Norwegian regional and energy policies indicates that rural development is regarded by the state as a municipal rather than a national concern.

7.5 Chapter summary

Chapter 7 has answered the main research question by examining how benefits and burdens from hosting the wind power plant have been negotiated and renegotiated between the municipalities and the actors representing the wind farm. Building upon the previous chapter, this chapter has shown how the municipalities have attempted to ensure a fairer distribution of benefits from the wind farm through community benefits. Moreover, this chapter has examined how the lack of distributional and procedural justice is compounded with existing inequalities. The working relationship between the host municipality and the owners and operators of the wind farm is shaped by the municipalities' experience of unfulfilled expectations. As demonstrated here, these expectations are in large part shaped by the benefits that were afforded to municipalities hosting hydroelectric power infrastructure, despite wind power being regulated under a different power regime. In other words, while the municipalities have attempted to maximize the potential benefits from hosting the wind farm, these processes of (re)negotiation appear to be based on notions of distributive justice based on hydropower arrangements.

Furthermore, this chapter has shown that there is a need to expand the EJ framework, and the tenet of distributive justice, in particular. Including the notion of intergenerational justice, more commonly a part of environmental justice frameworks, helped shed light on how politicians in rural municipalities aimed towards securing material benefits from hosting wind power that would outlast the wind farm itself.

When a lack of distributional and procedural fairness is combined with other forms of perceived lack of fairness, such as loss of self-governance, this leads to an aggregation of injustices. The municipalities are already navigating the constant threats of fiscal insecurity and population decrease, which are then compounded with a lack of policies that ensure that hosting wind power infrastructures will provide more substantial financial and material benefits for the host municipalities. Conceptualizing this as a form of rural marginalization adds to the EJ framework by connecting the burdens that the municipalities experience through hosting energy projects with the lack of rural policies that ensure the municipalities a more equitable share of the benefits from these projects.

8.0 “Windmills in all directions”: Negotiating the ecological impact

[...] if you go up to the mountains here then it's 360 degrees - well, except for the sea, there are windmills in all directions.⁶¹

- “Geir”, a local resident.

While the previous chapters focused primarily on the distribution of financial and material benefits from Tellenes wind farm, this chapter will focus on how the municipalities of Sokndal and Lund have negotiated the potential ecological implications of the wind farm. This chapter thus answers the second part of the main research question “*How can the local financial and ecological implications of wind power for Lund and Sokndal municipalities be better understood using an Energy Justice analytical lens?*” through the third sub-question, “*How are burdens and benefits of wind power negotiated and distributed among actors involved in wind power development?*”.

This chapter aims to connect existing contentions related to rural landscape and perceptions of nature with the overarching theme of rural marginalization. By drawing on tenets of EJ, and to some degree, environmental justice, this chapter connects EJ and rural marginalization through the ecological impact the wind farm has had on the Tellenes area. However, neither NVE nor the municipalities have undertaken a cohesive mapping of the environmental or ecological impact that the wind power infrastructures have had on the Tellenes area. This chapter is thus limited in scope, focusing on *perceived* implications.

While the previous chapters centered on the municipalities’ and municipal actors’ perceptions and experiences, this chapter also includes the perspectives of other local actors involved in the licensing process and in other attempts to change the impact that the wind farm has had on nature and the landscape. As seen in this chapter, some of these actors have influenced or attempted to influence political processes and decisions. While the focal point of this thesis remains on the municipalities, the policies and decisions made are by elected officials and civil servants, each

⁶¹ Interview, 17.12.20

with a different point of view and experience. Furthermore, the elected officials also represent different political parties with different perspectives and political goals. In other words, municipalities are “peopled” (Syssner, 2020b; Woods & Gardner, 2011). This inclusion has been done to further underscore the importance of not viewing rural communities as homogenous but rather as constellations of institutions, groups, and individuals representing a variety of differing – and oftentimes conflicting - interests, class backgrounds, identities, and priorities (Skogen & Krange, 2003, 2021), as they relate to nature, landscape, and the governance of these. This chapter also examines the role that rural municipalities may play in (re)producing forms of rural marginalization through environmental degradation, primarily when the municipality serves as an intermediary between its residents and the corporations that manage the wind farm.

8.1 A good place for wind power

The impact wind power infrastructures have had on landscapes and nature has played a significant part in the increased contention and conflict level surrounding wind power in Norway during the past couple of years in particular (Gulbrandsen et al., 2021; Vasstrøm & Lysgård, 2021a, 2021b). In contrast, conflicts regarding this particular wind farm have largely been non-existent. The lack of conflict may be attributed to the locality of the wind farm. A common theme in the EIA, and in NVE and OED’s assessment of the license applications, and during the interviews for this thesis was how the Tellenes area was particularly well suited for wind power development. In several documents, the prospective wind farm site was portrayed as heavily industrialized to the extent where additional industrial developments would cause little additional harm to biodiversity and ecosystems. Sweco, the consultancy agency responsible for compiling the EIA on behalf of Zephyr, the developer, described the Tellenes area in this way:

[...] the area is known for its exploitation of natural resources. The wind farm can thus also be experienced as a continuation of this and fit in with a cultural history in which many eras are represented. [...] Titania Mines has its main activities here, and [this] is visible from most parts of the area. The mining activities significantly impact the area, and give the sub-area strong industrial characteristics (*Sweco, 2011, pp. 3; 32*)

When NVE approved the license in 2012, proximity to the mine was a central part of the argument for the construction of the wind farm. NVE concluded that “[t]he wind farm is planned

in an area that is already characterized by industrial activity, and will have relatively small effects on issues such as biodiversity, landscape, and outdoor life” (*Bakgrunn for Vedtak*, 2012, p. 31). These arguments appear to have been undisputed according to municipal documents and minutes in Sokndal municipality. Furthermore, councilmembers employed similar arguments.

At first glance, it thus seems as though there were few, if any, issues regarding the placement of the wind farm and the potential impact it would have on nature. While there were only three complaints filed against the Tellenes project during the licensing process, all three complaints were centered around the wind farm’s potential impact on nature, the local ecosystem, and the landscape.

8.1.1 Resource exploitation as cultural history

Examining how forms of exploitation have impacted the greater Tellenes area is necessary to investigate the claim that the wind farm has had little adverse effect on local ecosystems due to the “cultural history” of resource exploitation. While the view of the Tellenes from the institutional perspective and the political establishment in Sokndal is based on emphasizing the immediate area’s industrial characteristics, there were other conflicting perspectives and discourses. Geographically, the Tellenes area is a single, connected area. Politically, it consists of two contiguous areas, one of which is in Lund municipality. Around 40% of the area affected by the wind power plant infrastructures is in the municipality of Lund. In Lund municipality, parts of the wind farm area have primarily been used for agriculture and recreation. There are also residents in Sokndal who have used the Tellenes area for recreational purposes, including hiking, fishing, and hunting.

As briefly mentioned in Chapter 5, the prime form of resource exploitation in the Tellenes area is mining. Sokndal municipality will therefore remain the focal point for this section due to its history of mining. While there has been some mining in Lund, the scale is not comparable to that of Sokndal.⁶² In Sokndal, many remnants of former mining sites are still visible in the landscape. One such example, and a significant tourist attraction in the municipality, is the old mining site *Blåfjell*, which closed in 1875. In addition to Titania’s current open-pit mine and tailing dams in

⁶² This may be subject to change as there have been discovered mineral resources in Bjerkreim and Eigersund municipalities. These resources extend into northwestern parts of Lund municipality.

the Tellenes area, there are also ore processing facilities and transportation infrastructures that dispatch ore and waste rock to Jøssingfjord, where the ore is shipped out. Around 10 kilometers from Titania's quarry, just outside the village of Rekefjord, there are two additional open-pit mines belonging to the company Rekefjord Stone.

While mining has shaped parts of the natural environment in Sokndal, mining has not been without risk nor free from adverse effects. Open-pit, or open-cut, mining entails transforming a mountain or a large hill into a large burrow from which ore can be extracted. This form of mining not only creates large craters but may also lead to environmental disasters that affect human and non-human entities, leading to ecosystem collapse, particularly through water contaminated by heavy metals (Dunlap, 2019a; Kirsch, 2014). Mining tailings deposits in Sokndal have had a negative impact on local ecosystems. Titania previously deposited tailings in sea disposals in Jøssingfjord and in Dyngadjupet, which were in use from 1960-1984 and 1984-1993, respectively.⁶³ The amount of mine tailings deposited drastically changed the seabed in both sites. In Jøssingfjord, the maximum sea depth in Jøssingfjord was reduced from 85 to 30 meters, and in the basin of Dyngadjupet, the mine tailings raised the sea level by approximately 30-40 meters (Schaanning et al., 2019; Skei, 2010). Although the mining tailings have been evaluated as largely non-toxic to marine life, marine life in the seabed is by no means fully restituted (Schaanning et al., 2019; Skei, 2010; Trannum et al., 2018). The current condition of the seabed is likely at least partly due to the tailings having smothered the existing seabed, considerably slowing down ecosystem restitution (Ramirez-Llodra et al., 2015). In 1994, Titania established an inland tailings deposit dam, which consistently leaches nickel into the fjord through seepage water (Skei, 2010).

Heavy metal seepage is a common feature of onshore tailing deposits, as is weathering of dust and pollution from the tailings dam to nearby areas when the top layer of tailings becomes dry. Several residents in the village of Åna-Sira, close to the mining tailings dam currently in use by Titania, regularly complain of dust and sand blowing downwards from the dam during the summers (Bredeli, 2019; Mydland, 2019a). Although the amount and number of particles are within limits set by the Norwegian Institute of Public Health, one resident lamented that the

⁶³ Norway is one of few countries in the world where submarine tailings disposal remains legal.

institute only measures “the coarse particles. But what about the fine particles? Anyone who blows their nose in Åna-Sira sees that on dry days we are inhaling black dust” (Bredeli, 2019). In this sense, the cultural history of resource exploitation in Sokndal and environmental degradation are interwoven.

However, the current mayor stated that despite this, there is a common understanding of the importance of mining for Sokndal and for the identity of the *Sokndøls*:

[t]here is a feeling too, that – well, that Sokndal municipality is a mining municipality. It is our, let’s say from before the 1900s, it is sort of a part of people’s identity that here there are minerals and mines [...] that we are going to live off of, while wind power is like, new, a little scary.⁶⁴

The environmental impact of mining is thus outweighed by its importance to the municipality and its residents. While previous chapters detailed the financial benefits that have befallen the municipality from allowing large-scale resource exploitation, mining also symbolizes what it means to be a *Sokndøl*. Serving as a visual reminder of, and a symbol of, Sokndal’s mining heritage, the municipality crest consists of three black pickaxes on a yellow background. The crest is a visible part of everyday life in Sokndal and appears on the side of public buildings and areas, including the school and the town hall,⁶⁵ to name a few examples. The cultural history of Sokndal and mining are thus interlinked, with the mine serving as the main source of employment and as a form of exploitation of nature that has shaped ecosystems, substantial parts of the landscape, and the identity of the *Sokndøls*. The argument posited in the EIA that the wind farm serves as a continuation of the cultural history of this area may then appear to hold up.

8.1.2 Expanding an industrialized area

Another way of conceptualizing how Sokndal municipality perceives the Tellenes area is through examining its plans for the plateau that connects the mine and the main entrance to the wind power plant. This area, named *Tellenes næringspark*, Tellenes Business Park, includes both existing and prospective businesses. Apart from Tellenes Wind Farm’s small office building, it also includes a regional motorsport center and a shooting range. In an interview with the

⁶⁴ Interview 13.10.20

⁶⁵ The town hall also serves as the municipality’s movie theater and public meeting hall.

municipality's Head of Economic Development, he explained that Sokndal is in the process of changing the area-zoning plan to allow for additional industrial developments in the area. The municipality aims to accommodate energy-intensive industries such as a data center or a battery factory in this area. The plateau in the Tellenes and Kroheia area can be further expanded using waste rock from the quarry, essentially creating new space for industries. The expansion was portrayed as a win-win situation, where Titania can deposit waste rock in a cost-efficient manner while creating more space for new industrial activity, which, in turn, will benefit the municipality through job creation and taxation. Sokndal is thus aiming towards prospective financial growth through the attempt to maximize and centralize industrial activity in the area surrounding the mine and parts of the wind farm. The centralization of industrial activities to the Tellenes area can then be understood as a way of geographically limiting environmental destruction rather than to have multi-sited industrial developments sprawling across even larger parts of the municipality. This strategy can be understood as a continuation of the cultural history founded on the exploitation of nature described in the EIA and as a way to counteract the forms of (economic) marginalization described in the two previous chapters.

8.2 Nature and landscape as contested notions

While the view of the Tellenes from the institutional perspective and from the political establishment in Sokndal is based on emphasizing the immediate area's industrial characteristics, there were other conflicting perspectives and discourses. The heterogeneity of rural communities became apparent in the interviews when I asked the informants to describe the Tellenes area prior to and after the construction of the wind farm (see Appendix 3). For the informants that lived in the area, the construction of the wind power infrastructures represented a clear disruption of nature and landscape. Additionally, many of the interviewees conflated the terms "nature" and "landscape", in particular when talking about the impact wind power has had on the local area. The following section problematizes the term "untouched nature" and contextualizes it through historical and modern forms of landscape changes before connecting these changes to EJ and environmental justice.



Figure 5: Facing away from the main entrance to Tellenes Wind Farm towards Kroheia. The building in the center of the picture, behind the mound of waste rock, is the office building. Further ahead is the site where the raceway was under construction. Photo: Aggie Handberg

8.2.1 Delimiting the “untouched”

Both nature and landscape are important for rural identity and self-perception (Butler & Sarlöv-Herlin, 2019; Mordue et al., 2020; Woods, 2003). Woods argues that “the protection of nature is a protection of rurality, and vice versa” (2003, p. 272). A term used by several informants was “untouched” or “pristine” nature.⁶⁶ This term was used by interviewees representing Sokndal municipality, NVE, and the developer as a way of describing what the Tellenes area was *not*. For other stakeholders, this term was used to describe the Tellenes area – prior to the construction of the wind farm. Much of the literature on wind farms and wind power in general centers on how landscape changes brought on by this new infrastructure is perceived by different actors, frequently in the context of protests against wind power infrastructures (Mordue et al., 2020; Pasqualetti, 2011; Rygg, 2012; Scherhauser et al., 2017; Zografos & Martínez-Alier, 2009).

⁶⁶ *Urørt natur* in Norwegian. One informant also used the term *jomfruelig mark*, lit. “virginal land” when describing parts of the area.

Actors representing opposing or diverging interests may describe the same area in vastly different terms (Woods, 2003), as seen here.

Utility-scale wind power plants require large swaths of land, and the Tellenes wind farm is no exception. Within a 16-km² area, there are 50 wind turbines and 40 kilometers of roads, leading to extensive changes to the landscape and nature. These changes can be viewed as substantial encroachments on “untouched nature”. In Norway, there has been a drastic decrease in so-called INON-areas (Miljødirektoratet, 2020b).⁶⁷ The Norwegian Environment Agency (NEA) stated that one of the most significant threats to nature is the construction of energy facilities, including wind farms and other related infrastructures (Miljødirektoratet, 2020a, 2020b). Worldwide, nature, including its ecosystems and overall biodiversity, is rapidly deteriorating due to human actions and encroachments (IPBES, 2019). The reduction in INON-areas serves as an indicator of the total domestic impact of the construction of infrastructures in nature (Miljødirektoratet, 2020a). Although the area in which the Tellenes wind farm was constructed was described as industrialized prior to the construction of the wind farm, nearly 10 km² of the 16-km² area was defined as INON zone 2.⁶⁸ The map below shows a visualization of the changes in the Tellenes area.

This map shows that there was a drastic reduction of “unencroached” areas following the wind farm’s construction. While the areas closest to the mine and the pertaining infrastructures saw no loss in INON areas, the areas further away from the mine saw a significant loss in INON-designated areas. These changes indicate that, while the western parts of the wind farm area were previously industrialized, the southern and eastern parts of the wind farm area were, to a much lesser extent, characterized by heavy industrial activities.

⁶⁷ INON is an abbreviation of *inngrepsfrie naturområder i Norge*, i.e., natural areas in Norway without significant encroachments on nature. The term is commonly used by governmental institutions and bodies, and organizations.

⁶⁸ INON Zone 2 indicates areas that are 1-3 kilometers from significant encroachments.

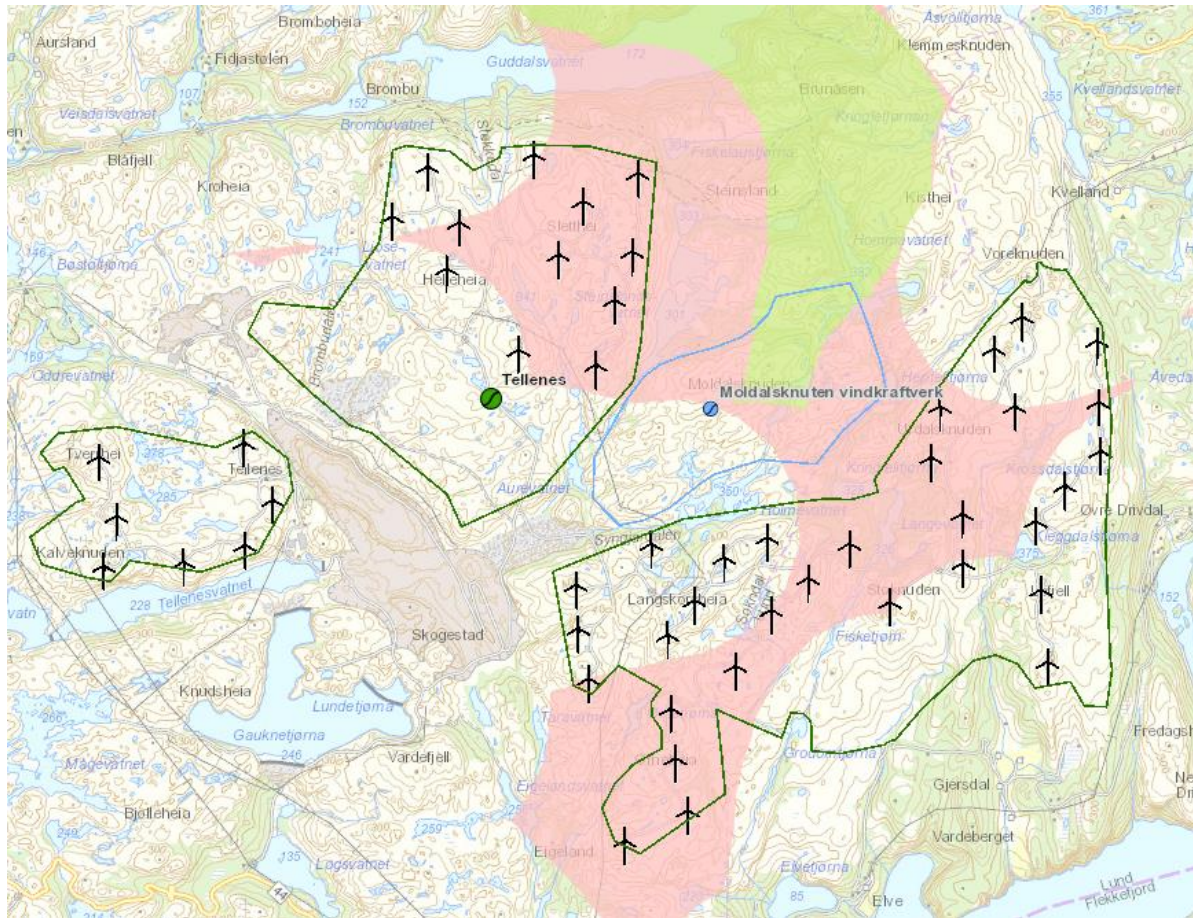


Figure 6: The above map shows changes in INON areas from 2008-2018. The red area shows loss of INON zone 2 areas in the greater Tellenes area, while the green field indicates remaining INON zone 2 areas. Moldalsknuten, the blue area, is an unrealized wind power plant. Adapted from <https://miljoatlas.miljodirektoratet.no/>.

Historically, the southern and eastern parts of the Tellenes area have been used for agriculture. Parts of this area consist of coastal heathlands. While coastal heathlands are one of the oldest types of cultural landscapes in coastal Norway, these areas have become increasingly threatened by regrowth caused by deagrarianization, industrial forestry, increased soil fertilization, nitrogen-rich precipitation, and climate change (Artsdatabanken, 2018; Kaaland & Kvamme, 2013; Klima- og miljødepartementet, 2015). These threats have led to changed ecosystems, which is a threat to several forms of vegetation, wildlife, and cultural practices prevalent in these areas (Artsdatabanken, 2018; Kaaland & Kvamme, 2013). While the changes described here have occurred through decades of changed agricultural practices, several of the interviewees considered the landscape changes brought on by the construction of the wind farm to be different in scope. Informants highlighted both the speed of the changes from when construction started, and the wind turbines were erected, as well as the sheer size and impact of the turbines.

As the main licensing body, NVE has received criticism from environmental organizations and the Norwegian Environment Agency (NEA) for not being sufficiently cognizant of environmental impacts and considerations during the licensing process (Gulbrandsen et al., 2021; Miljødirektoratet, 2015). An essential part of the EJ framework is the notion of securing a transition from fossil fuel dependency to lower carbon alternatives that is “fair and equitable” (D. McCauley & Heffron, 2018, p. 2). For such a transition to occur in the current climate crisis, McCauley and Heffron argue that there must be “an inherently intersectoral dimension” that involves climate, energy, and environmental justice and equity (D. McCauley & Heffron, 2018, p. 1). While it has largely ignored notions of justice (Vasstrøm & Lysgård, 2021a, 2021b), an important part of NVE’s mandate is to balance the local “bads” of lower carbon infrastructures with the global benefits from green energy sources (Gulbrandsen et al., 2021; NVE, 2019). Gulbrandsen et al. found that nature protection tends to be deprioritized in the licensing processes and that political steering from the OED indicates that expansion of wind power should take precedence over the protection of nature (Gulbrandsen et al., 2021). This point of view was largely absent in the EIA and other licensing documents in the Tellenes case, except for in the three complaints filed against the license application. None of the complaints nor the licensing documents included points of view that indicate a more expansive view of the environmental justice framework, namely one that includes more-than-human and non-human entities (Kopnina & Washington, 2020; Schlosberg, 2014). However, in the case of Tellenes, there initially appeared to be a strong consensus amongst most stakeholders that the benefits from constructing the wind farm would outweigh the disadvantages.

8.2.2 Outdoor life and *turglede*

Several of the interviewees, including people that were supportive of the wind farm, commented on the negative effects the wind farm had on recreation in the area, namely *friluftsliv*. *Friluftsliv*, outdoor life, 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” (Gurholt & Broch, 2019). This right is called *Allemannsretten*, “everyman’s right”, and it provides the public with the right to access privately owned land for recreational purposes (Miljødirektoratet, 2021). The importance of outdoor life is reflected in government documents, where it is framed as a source

of health and well-being (Klima- og miljødepartementet, 2001, 2016). Additionally, outdoor life is presented as an important source of income through increased tourism, particularly for rural areas known for pristine nature and landscapes (Klima- og miljødepartementet, 2016). Sokndal municipality uses nature and experiences in nature as a selling point for tourism. Examples include the Magma Geopark, the *Opplev Dalane* trail network, and salmon fishing.

The Tellenes area, prior to the construction of the wind farm, was not among the most-used areas for recreational hiking. However, some local landowners hunted in the area, groups of schoolchildren and other locals occasionally spent the night at a hunting and fishing cabin in the eastern part of the wind farm area. One local resident, Geir, an avid outdoorsman in his sixties, described the changes in the area thus:

[i]t was a beautiful place to walk. Because it, when you get up on that plateau [in the Tellenes area], you have Helleheia and you have Sletthei [...], and Guddalsvatn, [...] it is a very nice area for hiking, but it is – it is destroyed now.⁶⁹

Another local resident, Tor, is a local landowner who has publicly opposed the Tellenes project. His family has owned large areas of land on the Lund side of the border for generations. During the interview and in subsequent conversations, he repeatedly referred to the area, in general, and the parcel of land he owns as “destroyed” or “ruined” by the wind power plant. While the turbines had a negative effect on landscape formations, his main concern was the irreversible changes brought on by the construction of roads and other infrastructure.

Both Geir and Tor objected to and attempted to challenge the notion that the area was inherently industrialized prior to the wind farm. In their opinion, large parts of the area consisted of “untouched nature”, despite documents and institutions that have stated otherwise. For them, the wind farm has deteriorated the landscape value of the area and diminished their *turglede*.⁷⁰ The perception of the area as “pristine” or “untouched” compared to “industrialized” thus appears to depend on the relative distance to the mine and mining facilities. However, some *Sokndøls* also contested the level of industrialization that the Tellenes area was perceived to have prior to the

⁶⁹ Interview, 17.12.20

⁷⁰ *Turglede* is a common Norwegian word that can be translated to ‘the joy of hiking’.

construction of the wind farm. Building on Woods' statement on the connection between rurality and nature, connecting the changes in the wind farm area to broader changes to nature and landscape in Sokndal and Lund is important to understand how different conceptualizations of rurality may be articulated within the selfsame area. The following section will examine how Tor and Geir attempted to address some of their concerns regarding the wind farm's impact on nature.

8.3 Inaction as marginalization

One of the biggest concerns regarding Tellenes wind farm was how the installation and operation of the turbines might affect the lake *Guddalsvatn*, from which most residents in Sokndal get their drinking water.⁷¹ During the evaluation of the EIA for the Tellenes project, NVE expressed some concern regarding the water supply for both Sokndal, Lund and for the internal water sources for Titania. Guddalsvatn is in a valley directly north of the wind farm. Water from the lake runs through several smaller lakes to a river that ultimately traverses through *Haua* and to the sea in Sogndalsstrand.

When Geir discovered that several of the turbines were to be installed in the lake's drainage basin, he became worried and tried to call this into attention. He and a friend worked to spread information to the local community and the municipality through Facebook. They also contacted the municipality directly and did several interviews in local newspapers as a call for action. As described in Chapter 7.2.1, the municipality is not the land planning authority in areas covered by an approved wind farm license. During the fall of 2016, the construction of turbines in the drainage basin of Guddalsvatn was temporarily halted for a few days after the municipality had raised concerns to NVE and to the Food Safety Authority (FSA) regarding the potential risks to the water source. While the FSA assessed that there were risks for drinking water contamination in this instance, they assessed this risk as low to moderate. According to Geir, the FSA did not possess sufficient knowledge about the situation to make a fair risk assessment:

They [the Food Safety Authority] don't know what they're talking about. I think the Food Safety Authority has done a bad - a bad job and impact assessment, because I know the area so well [...]. And there are, I - I think I

⁷¹ The residents of Åna-Sira, which is located on the border between Sokndal and Flekkefjord municipalities, get their drinking water from the lake *Lundevatn*. There have also been issues with their water purification system (Mydland, 2019c).

counted eleven or twelve small and large streams that come from the windmill farm and drain out into the drinking water source. And [some are] even subterranean, but when it rains as much as it has been doing lately you can hear a river running - two places under the ground [...], and they [the streams] run straight down to the drinking water.⁷²

Others have also raised concerns regarding Guddalsvatn and other bodies of water in the Tellenes area. At least one local resident reported to the FSA and to NVE that a pond had changed color immediately after the construction of the nearby service road, calling for immediate action and comprehensive testing of the water for heavy metals and other contaminants. While the FSA's testing did not show a marked increase in pollutants in the water, this situation did showcase other aspects of the current wind power regime that were of concern both for the municipality and for residents. The risk of wind farm infrastructures contaminating groundwater and drinking water is not unique to the case of Tellenes. In Norway, parts of the village of Buvika in Troms and Finnmark County has been without clean drinking water since 2018, since the construction of service roads in the *Kvitfjell/Raudfjell* wind farm area (Lied, 2021; Rypeng & Jensen, 2018b). This example shows that, while the risk of contamination of ground- and drinking water is low, it is not non-existent. For some informants, *Kvitfjell/Raudfjell* was used as proof that their concerns were not unfounded and that the central authorities had unrightfully dismissed their concerns.

For residents, such as Geir, with extensive knowledge about the area, its waterways, and places that are particularly critical for biodiversity, FSA's assessment was experienced as a dismissal of his knowledge. Devaluation of local knowledge is a common feature of non- or misrecognition justice (Jenkins et al., 2016; D. A. McCauley et al., 2013). Additionally, for Geir, this dismissal was viewed as a blatant disregard of the local community's access to safe drinking water. Repeated cases where individuals and groups feel as though they are not sufficiently heard or included in decision-making processes delegitimize these processes and may lead to a loss of trust in institutional processes and procedures (Vasstrøm & Lysgård, 2021a). In Geir and Tor's cases, it certainly has. While they were both skeptical of onshore wind power prior to the licensing process, this process, and the lack of action from the municipalities and central authorities, has led to increased distrust in the current wind power regime and the institutions that

⁷² Interview, 17.12.20

govern it. Furthermore, when they attempted to garner the support of the municipality, they found that the municipalities were unable to effect sufficient change in the licensing and construction processes. Even in instances where NVE or other governing bodies' decisions may have adverse effects on vital resources, such as drinking water, the municipality is limited in its course of action.

While councilmembers and other public officials in Sokndal municipality were worried about the implications that the construction of the turbines in the drainage basin would have on the drinking water, there was little they could do apart from making informal inquiries. In other words, when Geir and other worried *Sokndøls* raised their concerns regarding the potential risks involved in constructing wind power infrastructures in the drainage basin to their main source of drinking water, the municipality did not have sufficient authority to change the placement of the turbines to mitigate the risk of water contamination. The municipality is the provider of drinking water and is therefore responsible for providing its residents with safe drinking water – even in cases of contamination.

On the other side of the border, public officials in Lund municipality found themselves unable to fully assist with or mediate a conflict between Tor, a disgruntled resident, and the party responsible for ensuring clean up and revegetation of areas impacted by the construction of the wind farm. Over the years, Tor has sent numerous complaints to various actors, including the developer, governmental agencies, and the municipality. More recently, Tor has worked to prevent an extension of the licensing agreement. After the wind farm was constructed, he has continued to write letters and emails⁷³ demanding that the developer, NVE, or the Norwegian Environmental Agency, take responsibility for cleaning up debris from the construction of the wind farm. While he did sign a contract with the developer allowing them the use of his property to construct parts of the wind farm, he says that he did this because he feared that the land would be expropriated if he did not sign. According to the license application, the developer confirmed that they would apply to use the Expropriation Act⁷⁴ in cases where the developer and the

⁷³ Most of this correspondence is available to the public through EInnsyn as they are a matter of public record. I gained access to some emails that were not available to the public through Tor.

⁷⁴ *Oreigningslova* §2 – 19

landowner could not reach an agreement. In Tor's experience, his concerns have been discounted. While he receives compensation from the wind turbines and infrastructures that are on his property, this, he argues, does not exempt the developer from fulfilling its duty to restore vegetation along the service roads. Even in cases where he has provided documentation for what he argues is a breach of contract, he contends that his concerns have not been taken seriously. While municipal officials had meetings with the developer to support or legitimize Tor's concerns, the municipality's course of action was limited.

Marginalization of community members and NGOs is rather common during the licensing process (Inderberg et al., 2019). Geir and Tor's concerns and the municipalities' handling of their concerns showcase how marginalization may not be limited to individuals and civil society but may also extend to governing bodies such as host municipalities. Gulbrandsen et al. found that "many host municipalities feel marginalized *after* a license has been granted, when the project is realized" (2021, p. 5). While both Inderberg et al. and Gulbrandsen et al. contend that actors experience processes of marginalization, the rural dimension of these processes is rendered invisible. Municipalities such as Sokndal and Lund have to negotiate the needs and claims of their residents with those of other actors, despite lacking the power to do so due to the current energy regime. The current policies that are in place limits the municipality's self-governance. These limits inhibits the municipality's ability to ensure that central government agencies and other actors fulfill their part of the agreement.

8.4 Chapter summary

Focusing on the ecological implications that the wind farm has had in the Tellenes area, this chapter has answered how some of the ecological burdens and benefits of this project have been distributed. This chapter has broadened the scope of this conversation by examining and then challenging the dominating discourse of the Tellenes area being industrialized to a point where further resource extraction would not do much additional harm. While the area surrounding the mine is undoubtedly heavily industrialized, the construction of the wind energy infrastructures has led to a significant loss of "unencroached" natural areas.

By drawing on the concerns of locals and the municipalities' limited courses of action, this chapter has shown how neither EJ nor ecological justice has played a significant part in the license application process nor in the phases during and after construction of the wind farm. Devaluing local concerns regarding water and lack of revegetation points to the marginalization of local knowledges, which the municipality may play a part in reproducing due to its lack of self-governance in issues related to (wind) energy production. The ecological costs of producing energy are, as in this case, largely dispersed on a hyperlocal scale in that it is local residents that experience loss of nature and potential threats to drinking water and ecosystems. As most wind power developments are situated in rural areas, this (mis)distribution further marginalizes peripheral areas. Furthermore, this chapter has demonstrated how – when faced with significant economic challenges – these municipalities prioritized the potential financial benefits of hosting wind energy infrastructures over ecological concerns. On a national scale, expansion of renewable energy projects tend to take precedence over other concerns.

This chapter also examines the role that rural municipalities may play in (re)producing forms of rural marginalization through environmental degradation. The municipality of Sokndal aims to expand the industrialized zone of Tellenes, both through regulation and through attempting to attract more businesses in this particular area. This attempt can be interpreted as an attempt to alleviate the symptoms of financial marginalization described in the previous chapters. This chapter also showed how the host municipalities may attempt to serve as an intermediary between its residents and the corporations that manage the wind power plant. As these particular examples have shown, the municipality is largely powerless and can only provide limited support.

9.0 Where the wind may blow: Conclusion

9.1 Summary

This thesis has answered the main research question:

How can the local financial and ecological implications of wind power for Lund and Sokndal municipalities be better understood using an Energy Justice analytical lens? , both directly and through the three sub-questions:

1. *What role does the national wind power regime play in rural marginalization in Norway?*
2. *How have the changes in national energy policies impacted rural municipalities?*
3. *How are burdens and benefits of wind power negotiated and distributed among actors involved in wind power development?*

To summarize, the thesis structure was as follows: After presenting the topic and the research questions that would guide this thesis in Chapter 1, Chapter 2 provided an overview of onshore energy production in Norway and research on wind power. It described the neoliberalization of the energy regime that governs wind energy and how this has informed both policies and research on wind power. Chapter 2 then problematized the lack of convergence between academic research on wind power and on rural areas, showing how this particular topic has been understudied both domestically and abroad. In Chapter 3, I explored the theoretical frameworks through which this thesis would be analyzed. This chapter first presented a summary of how the rural can be defined and delimited before discussing how to conceptualize the challenges that rural areas in Norway face. Labeling these processes as a form of marginalization distinctive in rural areas, i.e., *rural marginalization*, I then outlined central features of the Energy Justice framework. The chapter concluded that the EJ framework might benefit from including the rural dimension in discussions on energy and justice. The following chapter, Chapter 4, described and reflected upon the methodological choices made for this case study, which consisted of semi-structured interviews and thematic content analysis. This chapter also provided insight into some of the ethical challenges I had to navigate to do research during a pandemic. Furthermore, this chapter also reflected on some of my subjectivities as a researcher and how I negotiated these. Chapter 5 provided background information on Sokndal and Lund municipalities, and the Tellenes wind farm project.

The research questions were more thoroughly investigated in Chapters 6-8. Chapter 6 examined two sub-questions: “*What role does the national wind power regime play in rural marginalization in Norway?*” and “*How have the changes in national energy policies impacted rural municipalities?*”. This chapter found that rural municipalities are marginalized through rural and regional policies that underscore the demographic and financial precarity of the municipalities. The municipalities’ motivation for opening up for hosting renewable energy infrastructures is purely financial, and in large parts, necessitated by rural and regional policies that encourage municipal innovation and financial growth. This chapter also explored the differences between the relationships that the cornerstone businesses have with the municipalities compared to the owners of Tellenes wind farm. While the cornerstone businesses attempt to enter a reciprocal relationship with the municipalities, the wind farm corporations are perceived as attempting to extract maximum profit from the wind farm at the cost of the host municipalities. This chapter concluded that the municipalities face financial marginalization and spatial peripheralization, compounded by a lack of distributional and procedural justice.

Chapter 7 investigated how the host municipalities have attempted to mitigate the burdens of hosting industrial-scale energy production through negotiating community benefits. It answers how changes in national energy policies have affected rural municipalities. Additionally, it answered the third sub-question: *How are burdens and benefits of wind power negotiated and distributed among actors involved in wind power development?* This chapter built upon the financial aspects of rural marginalization from the previous chapter. The municipalities saw the need to guarantee a fairer distribution of benefits from hosting the Tellenes project. This chapter demonstrated how the municipalities’ expectations for community benefits were largely shaped by the distribution of benefits under the hydropower regime. Chapter 7 found that Lund and Sokndal’s perceptions of outcome fairness were shaped negatively by the notion of only having received “buttons and scraps” despite lengthy negotiation processes. Additionally, this chapter displayed how the EJ framework, in particular the tenet of distributive justice, benefits from incorporating the notion of intergenerational justice. The motivations for several politicians in the municipalities were founded on a wish to ensure long-lasting benefits to current and future generations of *Lund-* and *Sokndøls* that would outlive the wind farm – and themselves.

The following chapter, Chapter 8, examined how the wind energy infrastructures have shaped the Tellnes area. This chapter answered the main research question, “*How can the local financial and ecological implications of wind power for Lund and Sokndal municipalities be better understood using an Energy Justice analytical lens?*” through the third sub-question: “*How are burdens and benefits of wind power negotiated and distributed among actors involved in wind power development?*”. This chapter found that the ecological implications of the wind power plant play a secondary role compared to the potential benefits of the wind farm, both on a local and a national scale. While the wind power plant is located in an area with significant mining, the construction still led to a significant, if downplayed, loss of “encroached” nature. Chapter 8 also demonstrated how the construction led to the marginalization of local knowledges about waterways. The chapter concludes that the ecological burdens of the Tellnes project were dispersed unevenly, disproportionately affecting local residents.

9.2 Thesis contributions

This summary of the thesis contributions is divided into four parts: First, I summarize how this thesis has answered the call to examine the intersection between rural and energy studies. Subsequently, I briefly outline how theorizing the challenges rural municipalities in Norway face as a part of a *rural marginalization* process provides a richer understanding of the implications of hosting wind power infrastructures for rural Norwegian municipalities. Following this, I summarize how this thesis has contributed to the conversation on Energy Justice in a Norwegian setting before briefly relating how this framework can be expanded to shed light on perceptions of justice and fairness. Finally, I outline how the expansion of the EJ framework as I have suggested in Chapter 7 may provide further insight in rural municipalities’ and politicians’ motivations when attempting to negotiate community benefits.

Firstly, this thesis has attempted to answer Naumann and Rudolph’s (2020) call for scholars to “energize rural studies” and to “ruralize energy research” by investigating the rural dimensions of wind power expansion in Southwestern Norway. As this particular case has shown, the intersections between energy studies and rural studies are significant. Chapters 6 and 7 displayed how rural municipalities view energy projects as a means to mitigate the effects of the challenges

that rural municipalities tend to face. Rural municipalities' struggles and motivations for hosting wind power infrastructures are rooted in spatial peripheralization and financial marginalization. The municipalities are spatially peripheral, sparsely populated, and face demographic and financial precarity. This thesis has displayed how rural and regional policies exacerbate these vulnerabilities, necessitating the municipalities' attempt to seek outside funding through hosting wind power plants. More specifically, this thesis has explored how rural Norwegian municipalities attempt to navigate increased demands from the central government, tight budgets, and a push from the center to expand and innovate, often at the cost of the natural environment.

Secondly, this thesis has contributed to the discussion of lower-carbon energy production in rural areas by theorizing it as a part of a *rural marginalization* process. Through an empirical analysis of the Tellenes case, this thesis has demonstrated how there are processes of marginalization that are distinctive of rural areas in Norway. As the previous paragraph detailed, the challenges that these rural municipalities attempt to navigate are rooted in both peripheralization and marginalization. Chapter 3 gave an overview of how neither marginalization nor peripheralization encompasses the environmental, sociocultural, economic, and spatial processes that produce and reproduce patterns of marginalization in rural areas. Chapters 6-8 displayed how these patterns are not only made visible through rural municipalities hosting utility-scale wind power infrastructures but also how hosting these infrastructures in many ways produces and reproduces these patterns of marginalization. By framing these processes as part of a rural marginalization process, this thesis has demonstrated that maintaining the rural dimension when analyzing the financial and ecological implications of energy production in rural Norway brings to light previously overlooked aspects. This thesis has found that scholars within the field of energy studies need to be cognizant of rural dimensions and dynamics and actively examine how the rural dimensions affect and are affected by energy production.

Third, this thesis has utilized the Energy Justice framework to explore and analyze the municipalities' perceptions of justice and fairness, and examine the inequities inherent in the current wind power regime. This thesis has relied upon the connections between EJ and political economy and political ecology to emphasize the environmental and political aspects that are articulated through wind power policies, rural policies, and how they are rendered visible on a

local scale in Dalane. Jenkins et al. suggest that EJ “provides the opportunity to explore where injustices occur, to recognize new sections of society and to develop new processes of avoidance and remediation” (Jenkins et al., 2016, p. 180). The empirical findings in this thesis support the claim that including the rural dimension to discussions on Energy Justice provide a more comprehensive understanding of rural municipalities’ motivations for hosting energy infrastructures.

Furthermore, this thesis has shown that the research gap between energy and rural studies is not only present within academia but is also present within policymaking in Norway. The Energy Justice framework has proved helpful in analyzing the implications hosting wind power has had on Lund and Sokndal municipalities but is not without its flaws. While the EJ framework was useful in examining and understanding how the municipalities perceived the negotiating process and its results, the EJ framework in and of itself does not contribute to understanding why these municipalities were willing to host wind power plants. The EJ framework does not fully encompass the power dynamics in these negotiations nor how global interests are articulated on the local scale. Therefore, this thesis has used the concept of *rural marginalization* to create a more comprehensive understanding of the precarious situation rural municipalities may face. The processes of marginalization that these rural municipalities experience exacerbate the feeling of powerlessness and lack of fairness when negotiating how burdens and benefits are distributed on a local scale. This marginalization narrative is largely informed by the historical division between urban and rural areas and the position of Norwegian municipalities as institutions with a fairly high degree of self-determination. As shown in Chapters 7 and 8, national energy concerns supersede municipalities’ right to self-determination, leading to a partial dismantling of municipal self-governance. The benefits of hosting wind power facilities for rural municipalities seem to be lacking compared to the burdens that they experience. In short, this thesis has shown how, while the EJ framework helps analyze implications of hosting wind power for rural municipalities, including both the rural and spatial dimensions provide a fuller contextual understanding.

Lastly, this thesis has proposed to expand the EJ framework by incorporating the notion of intergenerational justice to the tenet of distributive justice. As this thesis has shown, the existing

EJ framework is insufficient when analyzing the rationale behind rural communities' attempt to secure lasting community benefits. Incorporating intergenerational justice provides a fuller understanding of the motivations for rural municipalities to negotiate for additional material benefits. Even so, the rural dimension remains significant here, as the municipalities' desire to seek outside aid in financing large-scale projects are rooted in insufficient funds and financial support from the central government.

To summarize, this thesis has contributed to both the fields of energy studies and rural studies by displaying the areas in which they intersect. This case study has demonstrated the need to maintain both the energy dimensions and rural dimensions when examining the implications hosting wind power plants has had for rural municipalities in Southwestern Norway. By drawing on, and expanding upon, the EJ framework, this thesis has found that while EJ is largely absent from national policies, concepts of justice and fairness are present in the municipalities' assessment of the ecological and financial implications of hosting wind power.

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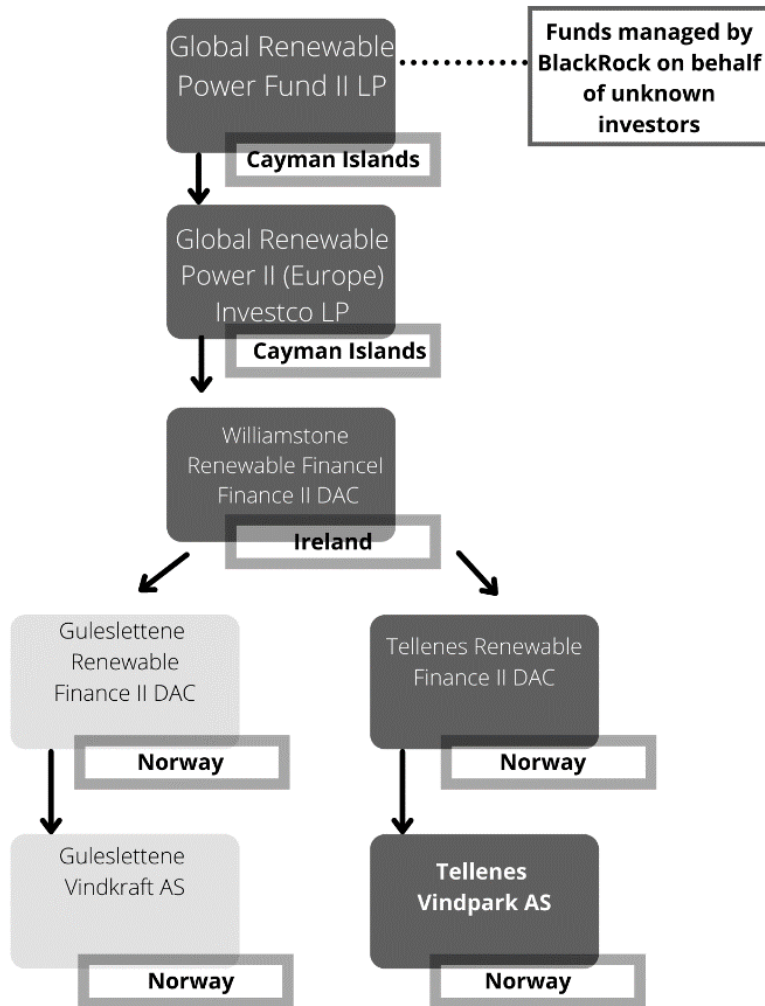
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Appendix

Appendix 1: Ownership structure of Tellenes Guleslettene and Tellenes (BlackRock)

Ownership structure - Guleslettene Vindkraft AS and Tellenes Vindkraft AS



Adapted and translated from Tax Justice Network - Norway

[https://taxjustice.no/assets/images/_1024xAUTO_fit_center-center_100 none/Guleslettene-Tellenes.png](https://taxjustice.no/assets/images/_1024xAUTO_fit_center-center_100_none/Guleslettene-Tellenes.png)

Appendix 2: Information letter and consent form

Vil du delta i forskningsprosjektet

”Det nåværende vindenergiregimet og lokale konsekvenser for innbyggere i Sokndal og Lund kommuner”?

Formålet med prosjektet er å undersøke hvordan norsk vindkraftspolitikk utvikler seg, samt hvordan dette påvirker lokale økonomiske og økologiske forhold i kommunene Lund og Sokndal. I dette skrivet finner du informasjon om målene for forskningsprosjektet og hva deltakelse vil innebære for deg. Prosjektet gjennomføres av Aggie Victoria Handberg, masterstudent ved Senter for utvikling og miljø (SUM) ved Universitetet i Oslo. Prosjektet er en masteroppgave som vil leveres i mai 2021.

Målet med denne masteroppgaven er å undersøke følgende:

- Hvilke prosesser har ført til det nåværende vindenergiregimet i Norge?
- Hva er de økonomiske og økologiske konsekvensene av dette vindenergiregimet for Lund og Sokndal kommuner?

Hvorfor får du spørsmål om å delta?

Dette skjemaet sendes ut til personer og bedrifter som på ulike måter har vært involvert i konsesjonsprosessen til Tellenes vindpark for å lære om deres erfaringer knyttet til temaet. Gjennom å undersøke deres erfaringer med konsesjonsprosessen og konsekvensene av dette, er målet å avdekke hvilke konsekvenser nasjonal vindkraftpolitikk får på lokalt nivå.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det å gjennomføre et uformelt intervju som varer i ca. én time. Her vil du bli spurt om din tilknytning til Tellenes vindpark, hvordan du/din bedrift har jobbet med konsesjonsprosessen, hvordan ulike aktører har påvirket denne prosessen, samt eventuelle økologiske og økonomiske endringer i vindparkområdet.

Det vil bli tatt lydopptak og notater fra intervjuet. I noen tilfeller vil det kunne være tegnspråktolk til stede. Dette er fordi masterstudenten er hørselshemmet. Transkripsjonen vil derfor også kunne bli utført av en kombinert tegnspråk-/skrivetolk etter behov. Ta gjerne kontakt med Aggie Victoria Handberg aggievh@uio.no hvis du har spørsmål.

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

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- Aggie Victoria Handberg (student) og Mariel Aguilar-Støen (professor ved Senter for utvikling og miljø ved Universitetet i Oslo) vil ha tilgang til dine opplysninger.
- Eventuelle eksterne transkriptører har fullført treårig tolkeutdanning og er i kraft av sitt yrke underlagt taushetsplikt.
- Deltakere vil anonymiseres slik at du ikke kan gjenkjennes i den ferdige publikasjonen.
- Dersom du samtykker til det, kan du velge å la opplysninger om deg som navn og stilling, være gjenkjennbare i den ferdige publikasjonen.

- Vi følger standardrutiner for anonymisering og for personvern, slik at navn og kontaktopplysninger skal beholdes adskilt fra øvrige data.
- Du vil også få anledning til å lese gjennom opplysninger om deg selv, inkludert sitatsjekk, før publisering.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Masterprosjektet skal etter planen avsluttes i juni 2021. Etter prosjektets slutt vil personopplysninger og opptak slettes.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Oslo har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til prosjektet, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Aggie Victoria Handberg, aggievh@uio.no
- Mariel Aguilar-Støen (veileder), mariel.stoen@sum.uio.no
- Personvernombud ved UiO, Roger Markgraf-Bye personvernombud@uio.no

Hvis du vil vite mer om tegnspråktolking og tolkens taushetspunkt, kan du lese mer her: https://www.nav.no/no/person/hjelpemidler/tjenester-og-produkter/tolketjenesten/bruk-av-tolk_kap

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen
Aggie V. Handberg

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet “*Det nåværende vindenergiregimet og lokale konsekvenser for innbyggere i Sokndal og Lund kommuner*”, og har fått anledning til å stille spørsmål. Informasjonen som deles vil bli brukt til en masteroppgave som leveres ved Senter for utvikling og miljø ved Universitetet i Oslo.

Jeg samtykker til følgende:

	Å delta i intervju
	At det gjøres opptak av intervjuet
	At det jeg sier kan bli sitert
	At alle personlige data anonymiseres, og slettes etter prosjektets slutt, ca. juni 2021
	At opplysninger om meg publiseres slik at jeg kan gjenkjennes
	At samtykket er frivillig, og når som helst kan trekkes tilbake uten å oppgi grunn. All informasjon jeg har delt vil da fjernes fra prosjektet.

(Signert av prosjektdeltaker, dato)

Appendix 3: Interview guides

Lokale aktører (Kommunestyret, ordførere, grunneiere)

Tema	Spørsmål
Bakgrunn	<ul style="list-style-type: none">• Navn?• Yrke?• Utdanning?
Tilknytning til området	<ul style="list-style-type: none">• Hvor lenge har du bodd i området?• Når fikk du først vite om Tellenes/Helleheia-prosjektene?• Hvordan fikk du vite om prosjektet?• Hva tenkte du om prosjektet i begynnelsen?<ul style="list-style-type: none">• hvorfor?• Hva tenker du om vindparken i dag?<ul style="list-style-type: none">• Hvorfor?
Eierskap og lokal forankring	<ul style="list-style-type: none">• Opplever du at kommunen har hatt mulighet til å påvirke prosjektet i løpet av konsesjons- og byggingsfasene?<ul style="list-style-type: none">• Hvis ja, hvordan påvirket kommunen prosjektet?• Hvordan har saken blitt behandlet i kommunestyret?• Vet du om kommunen har samarbeidet med nabokommunen (Lund/Sokndal) om prosjektet?<ul style="list-style-type: none">• Hvis ja, hvordan har kommunene samarbeidet?• Hvis nei, hvorfor tror du at det ikke har vært et samarbeid mellom kommunene?
Området	<ul style="list-style-type: none">• Har du vært i vindparkområdet før de bygget vindparken?• Hvordan ble området brukt før vindparken ble bygget?<ul style="list-style-type: none">• Oppfølgingsspørsmål: Titanias gruvedrift har blitt brukt som argument for utbygging av Tellenes vindpark. Hvordan preget dette området?• Hvordan brukes området nå?• Har du vært i vindparkområdet etter at de bygget vindparken?<ul style="list-style-type: none">• Beskriv området før og etter (evt. enten før eller etter)
Eksterne aktører	<ul style="list-style-type: none">• Hva vet du om hvordan Tellenes vindpark er eid? Hvem eier vindparken?<ul style="list-style-type: none">• Hvor fikk du denne informasjonen fra?• I 2019 publiserte TV 2 en sak om at Tellenes er utenlandskeid og at profitene fra vindkraften potensielt ender opp i skatteparadis. Hva tenker du om dette?• Det har også vært medieoppslag om at BlackRock ønsker redusert eiendomsskatt til Sokndal. Hva tenker du om dette?• Påvirker utenlandske aktører som Google, BlackRock og Arise hvordan du oppfatter vindparken?

	<ul style="list-style-type: none"> • Er det et samarbeid mellom kommunen og disse aktørene? <ul style="list-style-type: none"> • I såfall, hvordan foregår dette samarbeidet?
Endringer	<ul style="list-style-type: none"> • Har det vært noen fordeler ved prosjektet? Hvilke? Hvordan? <ul style="list-style-type: none"> • Har de avbøtende tiltakene hatt en positiv innvirkning? • Har det vært noen økonomiske fordeler? • Har det vært noen ulemper ved prosjektet? Hvilke? Hvordan? <ul style="list-style-type: none"> • Eksempler: økologiske konsekvenser, påvirkning av drikkevannskilder etc. • De siste årene har det vært flere kommuner som har ombestemt seg mtp. vindkraftutbygging i egen kommune - hva tenker du om dette?
Avslutning	<p>Runde av, takke for intervjuet.</p> <ul style="list-style-type: none"> • Er det noe mer om disse temaene som du ønsker at jeg skal vite mer om eller som du ønsker å si? • Er det noen andre du mener jeg bør snakke med om disse temaene?

Eksterne aktører - vindkraftutbyggere o.l. (bedriftene involvert i konsesjonssøknadsprosessen, i utbyggingen og i driften av vindparkanlegget)

Tema	Spørsmål
Bakgrunn	<ul style="list-style-type: none"> • Navn • Utdanning • Yrke
Om bedriften	<ul style="list-style-type: none"> • Hvor lenge har du jobbet i denne bedriften? • Hva vil du si er bedriftens formål? • Hvordan ser eierstrukturen ut? <ul style="list-style-type: none"> • Påvirker eierstrukturen måten dere jobber på eller hvordan dere prioriterer?
Konsesjon og vindkraft	<ul style="list-style-type: none"> • Beskriv hvordan søknadsprosessen ser ut for bedriften din • Det tar ofte lang tid mellom melding om planlegging, konsesjonssøknad, og drift. Hvorfor tar det så lang tid? <ul style="list-style-type: none"> • Hvilke deler av prosessen er mest tid-/ ressurskrevende? Hvorfor? • Har dere hatt prosjekter som ikke har fått konsesjon eller som har blitt satt i bero? <ul style="list-style-type: none"> • I slike tilfeller, hvordan jobber dere med prosjektet? • Hva må til for at dere velger å gå videre/<i>ikke</i> gå videre med prosjektet? • På hvilke måter tror du utbyggingen av vindkraft har potensiale til å fremme <ul style="list-style-type: none"> • Grønn energi

	<ul style="list-style-type: none"> • “Det grønne skiftet” • Redusere klimagassutslipp • Økte investeringer i “grønne prosjekter” • I hvilken grad, om noen, har grønne sertifikater/elsertifikatsordningen spilt en rolle i hvordan dere prioriterer søknader og utbygginger? • Vindkraftindustrien har spesielt de siste årene vært mye omdiskutert. Hva tenker du om denne debatten? <ul style="list-style-type: none"> • Påvirker denne diskusjonen hvordan dere forholder dere til nåværende eller fremtidige prosjekter? • Hvis ja, på hvilken måte? • I en melding til Stortinget (Meld. St. 28 2019-2020) i juni 2020 ble det varslet strengere krav til konsesjonsbehandlingen. Hvordan vil dette påvirke hvordan din bedrift jobber med nye prosjekter?
Tellenes	<ul style="list-style-type: none"> • Hva var årsakene til at dere gikk inn i Tellenes/Helleheia-prosjektet? • Når i prosessen kom dere inn? <ul style="list-style-type: none"> • Hva var ferdigstilt/ikke ferdigstilt da bedriften kom inn på banen? • Var du kjent med området fra før? Har du selv vært i driftsområdet? • Når og hvordan ble avtalen med Google som kraftkjøper inngått? <ul style="list-style-type: none"> • Har dette påvirket prosjektet? • Når og hvordan kom Blackrock inn på eiersiden? <ul style="list-style-type: none"> • Har dette påvirket prosjektet? • Hvordan har forholdet til Lund og Sokndal kommune vært underveis i prosessen? <ul style="list-style-type: none"> • Har kommunene vært med på å forme prosjektet på noen måte? • Hvordan har forholdet til lokalbefolkningen vært? • Har det vært kritikk mot bedriften din? <ul style="list-style-type: none"> • Hvis ja, hva har denne kritikken gått ut på?
Området	<ul style="list-style-type: none"> • Har du vært i vindparkområdet før de bygget vindparken? • Hvordan ble området brukt før vindparken ble bygget? • Hvordan brukes området nå? • Har du vært i vindparkområdet etter at de bygget vindparken? <ul style="list-style-type: none"> • Beskriv området før og etter (evt. enten før <i>eller</i> etter)
Avslutning	<p>Runde av, takke for intervjuet.</p> <ul style="list-style-type: none"> • Er det noe mer om disse temaene som du ønsker at jeg skal vite mer om eller som du ønsker å si? • Er det noen andre du mener jeg bør snakke med om disse temaene?