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# Emergence of new industries in peripheral regions: the role of narratives in delegitimation of onshore wind in the Arctic Finnmark region

Trond Nilsen<sup>a\*</sup> and Rune Njøs <sup>b</sup>

## ABSTRACT

This paper discusses how narratives influence the legitimation of new industries in peripheral regions. We contribute to the literature a discussion of the emergence of green industries in peripheral regions, but particularly to the emerging debate in evolutionary economic geography on the role of legitimation in the emergence of new industries. Based on an empirical investigation of narratives regarding onshore wind in the Finnmark region in northernmost Norway, we caution against the focus in the literature on 'successful' legitimation, arguing that to better comprehend how new green industries emerge in regions there is a need also to understand delegitimation of new industrial activities and to investigate unsuccessful path creation processes, not only paths that have come into being and where legitimation has been 'achieved'. Following from this we argue that our study on how representations (i.e., narratives) of emerging paths are linked to observable outcomes (e.g., delegitimation) teases out the need for further investigation of power relations, a topic that has received very little interest in research on regional industrial path development.

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path creation; emergence of new industries; legitimation; delegitimation; evolutionary economic geography

## 1. INTRODUCTION

The evolution of industries in regions, and, more recently, the development of *green* industries in regions, has become a key area of research in economic geography (Binz et al., 2016b; Essletzbichler, 2012; MacKinnon et al., 2019; Matti et al., 2017; Njøs et al., 2020; Simmie, 2012; Steen & Hansen, 2018). Interest in the topic stems from evolutionary theorizing (Martin & Sunley, 2006), and analytical interest centres on how regional industries are created, renewed and dissolved (Oinas et al., 2018). Taken together, this focus has contributed important insight into, for instance, the role of endogenous regional resources and assets (Trippel et al., 2020), networks and knowledge sharing (Afewerki, 2020; Vale & Carvalho, 2013), multiscalar linkages (Matti et al., 2017; Isaksen & Trippel, 2016; Nilsen, 2016), agency (Bækkelund, 2021; Grillitsch & Sotarauta, 2019) and, lately, restructuring towards more environmentally friendly industrial

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activities (Capasso et al., 2019; Grillitsch & Hansen, 2019; Njøs et al., 2020). However, most studies on (green) path creation have tended to overlook the role of narratives and discourses (Fløysand & Jakobsen, 2016; Njøs et al., 2020; Sjøtun, 2020; Steen, 2016). In this paper we link discussions of narratives and their observed effects in a discussion of legitimation of industrial activities, a topic that has recently gained interest among evolutionary-inspired economic geographers, as exemplified by a special issue in *Regional Studies* (Gong et al., 2022). However, the growing interest in legitimation by economic geographers has focused on explaining how legitimation has been ‘achieved’ and the processes underpinning ‘success stories’, that is, studies where legitimation challenges have been overcome in order for industrial development processes to proceed and evolve (Binz et al., 2016a; Binz & Gong, 2021; Binz & Truffer, 2017; Gong, 2020; Heiberg et al., 2020; Jolly & Hansen, 2021; Markard et al., 2016; Panori et al., 2022). Far less attention has been devoted to understanding *delegitimation* of emerging industries and, moreover, how delegitimation may lead to unsuccessful path creation. It is our position that understanding of *delegitimation* and unsuccessful path creation is of high importance for the literature to better comprehend barriers for green regional industrial path development. Thus, insight into ‘failing’ or ‘unrealized’ path creation should, in addition to ‘successful’ path creation, be of interest (Isaksen, 2018; Martin, 2010). Based on discussions of the literature and empirical investigation into the emergence of a potential onshore wind industry in Finnmark, Norway, we address the following research questions:

- What is the role of narratives in (de)legitimizing the emergence of new industries in rural regions?
- How have narratives on onshore wind influenced green path creation processes in Finnmark, Norway?

The paper proceeds by discussing the literature on path creation and the recent interest in green path creation. This is followed by discussions of the emerging, yet growing, literature on legitimation in evolutionary economic geography. Following from this, we investigate narratives identified in the debate on onshore wind in Finnmark, before providing an illustrative analysis of the investigated case, discussing how the identified narratives have been a barrier to the potential formation of an onshore wind industry in the region. Following from this we discuss the need for closer inspection of how and why some narratives come to dominate over others, that is, we call for stronger focus on power and power relations in studies of regional industrial path development.

## 2. THEORETICAL BACKGROUND

In this paper we refer to the emergence of new industries in a region (i.e., path creation) as ‘the emergence of new development trajectories in a region based upon the growth of new industrial sectors or new products, techniques and forms of organisations’ (MacKinnon et al., 2019, p. 3). Binz et al. (2016b) argue that four key processes are particularly influential for path creation: market development, knowledge generation, financial and human resource mobilization, and legitimation. Recently, the latter key process has received increased scholarly attention, and it has for instance been argued that legitimation is a particularly important topic for industries that are novel to the geographical setting (Heiberg et al., 2020). Njøs et al. (2020), citing Johnson et al. (2006), note that legitimation ‘can be considered a social process explaining the acceptance or not of, for instance, a new technology or industrial activity ...’ (p. 7). Hence, legitimacy can be considered as ‘the process by which proponents of a technology attempt to align norms, values and beliefs in favour of their proposed solution ...’ (Heiberg et al., 2020, p. 472). According to Jolly and Hansen (2021), the recent interest in legitimation in EEG build on insights and

theorizing from organizational sciences and institutional theory, and from a geographical perspective a key topic is how/why geography matters for explaining differences in how/why (new) industries are legitimated (Binz & Truffer, 2017). This implies that new industries can be contested in some places and not in others (Gong, 2020), something that may be typically so in early phases of their evolution (i.e., a liability of newness) (De Vaan et al., 2019). Furthermore, Gherhes et al. (2022) argue for the importance of multi-agential efforts to influence narratives generating legitimation for new industries in regions and how the roles of different actors might change throughout the course of the evolving path. Moreover, Heiberg et al. (2020) investigate the role of multiscale institutional dynamics and how these influence the emergence of new industries. They argue that legitimation processes influencing path creation can be shaped both endogenously and exogenously to a region, where the latter can be characterized by absorption of legitimation from non-local settings, attraction of nonlocal actors providing legitimacy, or by local actors 'exporting' legitimacy to other spatial settings. In other words, following the Heiberg et al. argument, legitimation for emerging industries can be highly conditioned by processes beyond the region. This means that legitimation can be 'imported' to a region by external actors, in turn implying that legitimation for a new technology/industry can diverge between locals and externals but where the former can – in some instances – be on the receiving end of discourses and narratives developed and shaped elsewhere. Thus, narratives around new industries can (substantially) diverge within a region (Fløysand et al., 2016), for example, between different actors (Binz et al., 2016a), but also between one region and another (Rohe & Chlebna, 2021) or between regional and national or global actors (Gong, 2020).

Accordingly, legitimation can be conceived as positive or negative (Jolly & Hansen, 2021), something that can be assessed by investigating representations, that is, narratives, around a (new) industry (MacKinnon et al., 2022) or a technology. For instance, the literature on technological innovation systems ascribes high importance to 'positive legitimation' for understanding the success or not of a new technological solution (Markard & Truffer, 2008). Such an understanding is also emerging in studies of regional industrial path development (Binz et al., 2016b; Binz & Truffer, 2017), where focus has, with few exceptions, been towards explaining paths that have come into being and the interests involved in such efforts (e.g., Dawley et al., 2015). Far less interest has been directed towards explaining the failure of emerging paths (Isaksen, 2018), specifically in terms of legitimation issues 'blocking' the emergence of new industries in regions (Blazek et al., 2020; Fløysand et al., 2016; Jolly & Hansen, 2021;). In other words, it can be claimed that the literature has provided 'too little emphasis on constraining factors embodied in vested interests' (Boschma et al., 2017, p. 33).

Based on these discussions it surfaces that narratives can influence observable outcomes (legitimation dynamics around a new industry) in regional settings (Fløysand et al., 2016). However, the literature has typically investigated 'success stories' where triumphant narratives have contributed to legitimation of new industrial activities; far less interest has been devoted to delegitimation dynamics and, moreover, unsuccessful path creation. In section 4 we discuss an example of this, where a potential onshore wind industry in Finnmark, Norway, has been met with strong resistance. We assess narratives influencing the delegitimation of this potentially emerging path, before we proceed by discussing how the analysis teases out a need for also assessing why some narratives gain dominance, that is, that power relations should be an important analytical focus in future studies on (de)legitimation of emerging industries in regions.

### 3. METHODOLOGY AND DATA COLLECTION

#### 3.1. Background

The geographical context in this paper is the region of Finnmark, a peripheral and traditionally disadvantaged part of Norway. Finnmark is the largest and least populous of the northern

counties in Norway, with 74,000 inhabitants spread out across 46,000 km<sup>2</sup>. The long and narrow shape of the region of Northern Norway makes for great internal distances and related climatic, economic and cultural differences (Fitjar, 2013). When it comes to economic development, the region of Northern Norway and Finnmark especially is among Norway's poorest and has been a target region for regional policy. Accordingly, a range of mechanisms have been initiated in terms of state policies to attract capital and skilled labour to the region (Fitjar, 2013).

Our industrial context is the emergence of onshore wind production in Northern Norway. As the region has favourable and unique conditions of steady wind resources throughout the year, areas without much infrastructure, an advantageous topography and the notion of clean and green environment, the conditions for new wind production in the area are promising. Additionally, the enhanced debate on climate change with the aim of reducing emissions from offshore oil development, and the need for renewable energy sources to substitute for oil as an energy source, add to such a potential of a new regional path. Accordingly, regional industrial actor constellations were in favour of developing onshore wind as a new source of energy to bridge the gap between electricity consumption and existing production. However, counter-initiatives mobilizing to preserve nature and the rights of indigenous people in Finnmark have strong momentum, and at the time of data collection (2014–15) national government had rejected several new wind projects with reference to reindeer herding and preservation of land.

### 3.2. Narratives

This paper 'follow[s] recent contributions from transition studies that have used legitimation as a "proxy-indicator" for assessing the complex institutional dynamics that influence the embedding of a new industry in relevant structures ...' (Binz & Gong, 2021, p. 2). Linked to this, Rohe and Chlebna (2021), in their analysis of legitimation for onshore wind power in two German regions, argue that regional decision-makers are particularly influential for understanding the level of legitimacy for the technology. Hence, understanding the claims of key actors in a region is relevant for understanding the constitution of narratives and their influence on legitimation of onshore wind power. Narratives are here understood in line with Rose (2001), that is, as 'the process used to produce the meaning of a topic that inherently structures the perceptions and practices of the participants, although without their necessarily being conscious of being controlled' (p. 138).

Conferring the above discussion, we investigate narratives surrounding legitimation of onshore wind in Finnmark by discussing how the industry is portrayed by actors on different spatial levels. This links up to Miörner (2020, p. 5), who argues that 'the creation of legitimacy is often associated with the creation of new institutions, such as narratives in support of emerging activities, developed through joint visions, and strategies, product testing and demonstration, and lobbying and platform building ...', requiring that 'existing strategies and dominating narratives may have to be deinstitutionalized to facilitate experimentation in new fields'. The onshore wind industry in Finnmark was meeting strong opposition, and lack of legitimation has been an important barrier for its emergence. However, the narratives surrounding technology/industry were not homogenous, and, based on data collection and analysis (see below) we identified three hegemonic narratives that provided strong articulations for and against the potential new industry. These are narratives emphasizing (1) international and national pro-climate change and renewable energy; (2) regional entrepreneurial pro-wind arguments on self-sufficiency and energy export through new grid transmission, and (3) the indigenous Saami narrative on land preservation.

### 3.3. Methods, data collection and analysis

In defining the three dominant narratives within new wind production in Finnmark, we identified and analysed the different articulations from stakeholders of new wind production through

qualitative in-depth interviews and document studies. First, document studies were conducted to enrich and contextualize the interviews and widen the scope of the empirical material. Document studies were an important part of the methodological approach because documents contain multitudes of voices represented in policy documents, media and public hearings and these represent important stakeholder opinions. Analyses of public policy notes, regional government wind plans, White Papers and existing research papers on this topic have contributed to widen the empirical context. We conducted a thematic analysis approach (Braun & Clarke, 2006) to create different analytical categories of narratives identified in the document analysis (Table 1). The aim was to identify arrays of arguments on how different actors related to onshore wind and to gain an in-depth understanding of the variety of meanings in this field. By adopting Braun and Clarke's (2006) suggestion of a six-phase thematic analysis, the qualitative data from the interviews and text analysis were first transcribed and imported to NVivo (Bazeley & Jackson, 2013). After reading the data material (phase 1), we searched for configurations in the material, leading to the construction of codes and categories (phase 2). By sorting the data (i.e., 'positive', 'negative' or 'neutral'), we searched for themes and sorted them in a thematic map (phase 3). We found themes like 'renewable energy', 'job creation', 'local culture', 'resistance', 'indigenous rights', 'opportunities for economic growth' and 'sustainability'. After reviewing the themes (phase 4) we identified 'international renewable energy path', 'indigenous people' and 'job creation regionally' as three main themes. In phase 6, following Braun and Clarke (2006) we wrote an analysis of each of these themes.

Second, 10 in-depth interviews have been conducted with key informants. The interviews lasted between 45 and 60 min and were all recorded on tape. We interviewed supplier firms in the region that already took part in the onshore power development. These firms belonged to the construction sector. Further, we interviewed power companies which had been awarded license to operate in the area, both locally owned and owned by actors outside Finnmark. Finnmark Kraft is one example. Fred Olsen Renewable is another. These two companies were selected because they were important power companies in already existing wind projects in the region, but also since they had further projects planned on how to develop wind power in the region. Moreover, we interviewed regional governmental representatives with responsibility for coordinating different interests in the planning process of wind projects in the region. These were selected since coordinating between conflicting interests were of particular importance for understanding the dynamics in the region on future wind power development. Further, we conducted interviews with Statnett which is the system operator of the Norwegian power system, owning and operating the transmission grid and maintaining the balance between consumption and production. Here, we interviewed the regional responsible in Finnmark. In addition, we interviewed one reindeer herder, and one member of the Saami Parliament. Our analysis of new wind production and related narratives on how wind development influences the processes of regional path development focused on questions such as for and against the expansion of the industry, implications of land use and conflicting areas of interests. Further, we examined to what degree spinoffs from new wind production were articulated as sustaining regional

**Table 1.** Steps in thematic analysis of narratives.

Phase	Topic	Description
1	Transcription of data	Import data to NVivo
2	Overview	Reading the data material
3	Search for configuration	Construction of codes and categories
4	Sorting data	Themes and thematic maps
5	Overview themes	Identifying main themes
6	Writing	Write analysis based on themes



development; and, finally, to what degree outcomes of new wind stimulated regional industry development.

As the debate on new renewable energy contained conflicting interests between key stakeholders that were repeated in the dominant social forums such as debates, news articles and conferences, we identified three hegemonic narratives in our analyses of the empirical material from the interviews and the document study. To classify these narratives in relationship to each other, we identified four key dimensions: (1) the argument itself on new wind production (for, against, neutral); (2) the frequency of articulation as in the number of repetitions of specific stakes in the debate; (3) if and how other stakeholders refer to other positions in the debate; and (4) to what degree stakeholders linked their arguments to other administrative or policy decision-making bodies. Based on this, we were able to isolate the three narratives from each other and go into greater depth for each of them. For analytical purposes, the narratives are considered in isolation; however, in practice there are also intersections between them (see section 4.3.).

It should be noted that data collection and analysis was conducted in 2014–15. Since then, onshore wind has been heavily debated both in Norway and elsewhere (Ellis & Ferrara, 2016), and, as onshore wind turbines/farms have been developed in several communities, resistance has been mounting. On a national level, two main ‘camps’ can be observed: (1) those who are pro-onshore wind by arguing that it is important for national and global economic development and climate change mitigation; and (2) those who put forth that the development of onshore wind leads to the destruction of nature, ecosystems and the environment (Vasstrøm & Lysgård, 2021a). The latter narrative has recently gained strong momentum and influence on national policy, and currently Norwegian onshore wind is at a crossroads and the future implementation of onshore wind power is unclear. Hence, during the period from 2016 to the present, Vasstrøm and Lysgård (2021b, p. 2) note that ‘increasing wind power has spurred an upsurge in local and national protest movements and public debates related to a range of socioenvironmental, procedural and distributional concerns challenging the legitimacy of wind power policy’. Nevertheless, though opposition has increased and the situation at the national level is unclear, narratives remain rather unchanged between now and the time of our data collection; what is different is the influence and dominance of the pro et contra narratives (Vasstrøm & Lysgård, 2021b).

## 4. NARRATIVES AND THE DELEGITIMATION OF ONSHORE WIND IN THE ARCTIC FINNMARK REGION

### 4.1. The narratives

#### 4.1.1. *The international and national pro-renewable narrative*

The first narrative emerging from our data collection reflects the *international pro-renewable* industry and government rhetoric on developing more renewable energy in the long term as a substitute for fossil fuel. Wind power was seen as one of several energy sources in this respect. These aims were reflected at the international and national level mainly through policy documents, pointing to the need for more sustainable energy production.<sup>1</sup> Around the time of data collection, the hegemonic actors within the discourse, such as the United Nations (UN), held an international conference on climate change in Paris. The well-known output of the conference, commonly referred to as the Paris Agreement, included a temperature limit of 2 degrees Celsius, and of even greater practical relevance, long-term emissions goals for nations involved. Here, the role of renewable energy to secure sustainable energy supply was seen as key to reduce the ecological footprint from energy production. Additionally, the European Union (EU) held another hegemonic position in the discourse. The directive from the EU on renewable energy from 2008 pointed to a commitment to increase the share of renewable energy to over 22% in 2010. Wind power was seen as important realizing this goal, as exemplified by a regional

government representative: 'It is important for the region to take part in the global energy transition ... it is necessary to have lower footprint on climatic issues.'

In addition, the Climate Settlement, implemented in 2008 with broad political consent in Norway, pointed to the aim of becoming carbon neutral by 2030. One of the most important measures in this respect was to increase economic incentives, so-called green certificates, of financial character to promote renewable energy production. Finally, the White Paper from 2006 to 2007 set the stage for how Norway would face the challenges of increased CO<sub>2</sub> emissions and seek to adapt to the Kyoto Protocol. Adding these international and national processes to arguments for new renewable energy, and more power from wind onshore, was intended to create potentials for industrial development in the region. This related to creating a new way of thinking about the regional economy and consequently, taking these signals literally, implementation of political aims would lead the way to new path development in wind production in Norway, especially in Finnmark, as it consists of the most stable and efficient wind resources. Still, in 2014, limited wind power covering approximately 80,000 houses in Norway, equivalent to the city of Tromsø, was produced. The debate on improving wind as a new source of energy did not, at least at the time of writing, result in a significant volume of new onshore wind power parks.

#### 4.1.2. *The regional entrepreneurial pro-wind narrative*

Second, the *regional entrepreneurial pro-wind* narrative was constituted by several hegemonic actors such as regional industrial actors, power companies, labour organizations and private firms in the region. Dominant positions within this narrative promoted wind power as a possibility to become a self-sufficient producer of wind power and to export energy resources to other regions. This representation was anchored by the initiative of the regional county administration to engage all regional actors in a process of developing a regional wind plan (Finnmark fylkeskommune, 2013). This pro-wind initiative with labour organizations, business organizations, local consultants and regional state representatives worked to promote wind as a potential new path in Finnmark. Nevertheless, the actors supporting this view failed to agree with indigenous and nature conservation interests, which only partly participated in the process. The regional actors could not reach full unity on a common regional policy on wind power.

The reasoning for promoting this entrepreneurial pro-wind narrative was fourfold. First, it is a significant challenge to increase the reliability of energy production in the region during the cold months, as part of Finnmark is dependent on power imported from Finland to secure sufficient power for the population. Implanting new wind on the grid can improve this situation. Second, as the grid transmission capacity is full, new grids needed to be built in the region, especially in the eastern part. Third, pro-wind actors in the region believed that by fulfilling these two first, increased wind production from the region would enable increased export of wind power to neighbouring counties, and even Finland and Sweden, as they are in geographical proximity to Finnmark. Finally, increased wind production could boost the regional economy and create new markets for new firms. For instance, one initiative related to the possibility of transforming wind energy to hydrogen to be shipped to Asia. This would also be a considerable technological innovation and meet the shortfalls of the grid infrastructure. Hence, linked to this narrative, regional actors articulated expectations of new jobs and employment in the development and operation phase of new wind production, as exemplified by one of the informants: 'Wind power can help the region to grow ... wind power can create new jobs, but most importantly, we can have better energy balance within the region in period of time when we have to import power' (representative from private company).

#### 4.1.3. *Indigenous people and land-use narrative*

Third, the narrative on indigenous people in Northern Norway contained representations where traditional land-use and nature-based business activities are of importance. The dominant



actors within this narrative are the Saami Parliament and the Reindeer Management administrative body. Consequently, the dominant representations were mainly negative towards an active and progressive wind power extension (interview data). The most prominent example of neglect related to wind production was the situation involving reindeer herders, who actively opposed the development by arguing for their rights to land preservation and business activities. Reindeer herding is the cultural and business fundament of the Saami people, and an informant argued that ‘As we have said before, it is not possible to collaborate with the power companies in this respect, they are not listening to us, they overrule us.’

Wind companies, both from the region and multinational corporations (MNCs), planned to invest on land already used by the Saami reindeer herders and for other harvesting activities (Finnmark fylkeskommune, 2013, p. 86). The position of the Saami people in the region is strong and institutionally embedded within a contextual frame of seeking to ensure land-use rights. This implies that the licensing process of windmill parks, regulated by the Energy Act, gives the Saami people’s representative parliament a possibility to be heard through consultations with the Norwegian Water Resources and Energy Directorate (NVE).<sup>2</sup> The Saami organizations (reindeer herders’ organizations and the Saami Parliament) can object to the plans if vital Saami interests are not considered in the environmental impact assessment process. Such objections are considered by NVE when balancing all merits and demerits before granting or rejecting a license to the developer of the wind park.

The indigenous dimension folds out as a counterpart to the notion of Finnmark as a vast and untouched land available for new industrial development. Traditional Saami livelihood with reindeer herding occupies practically all land of the region, as the annual trekking of 146,000 reindeer follows a pattern using inland areas for winter pasture, and coastal areas for summer pastures (interview data). Territories used in autumn and spring are particularly important for breeding and calving. This is the period when the reindeer are most vulnerable to external interference. Windmills are often planned on barren, mountainous areas close to the coast where the reindeer find no nourishment. It is believed that these areas have no value for the reindeer, but these windy places can be important for escaping the mosquitos in the summer, as a geographical corridor to further trekking, or for calving land.

The Saami narrative of protecting the land from further development heavily conflicted with the regional actor’s position of utilizing the resources and territories. The Saami anti-wind power attitude rested on the claim that ‘all land’ is already in use by the reindeer, and there was ‘not an inch to give’ (interview data). Windmills occupy vast territories and require considerable new infrastructure. As related roads can conflict with traditional trekking routes, intervention in these areas can force the Saami people to give up future herding in the area. It was argued that building windmills could restrain future generations of herders from inheriting a livelihood based on hundreds of years of tradition, the implication being that the basis for survival of the Saami culture and livelihood itself would be in jeopardy.

#### 4.2. (De)legitimation of the potential new industrial path

The three narratives contain representations with diverging interests, and considered separately, they each contribute differently to legitimation of the potentially emerging new path in the region. However, the narratives run up against external environments related to strategic energy concerns and political ambitions. The interplay between the narratives shows that the international renewable narrative and the regional entrepreneurial pro-wind narrative contain representations legitimating new wind production and possible path creation in the region. A more sustainable energy mix, more jobs, new industrial activity and increased energy security in the case-study region have been the dominant representations in the regional entrepreneurial narrative. This is exemplified by one of the informants from the county administration:

Our possibility to thrive is dependent on a stable energy supply and during winter, when (bad) weather strikes us, the power failure induces dramatic situations when power closes down due to heavy wind. If we could have wind power to supplement this situation, the security for people would be more balanced.

The international pro-renewable narrative contained 'greening the economy' as one of the most prominent representations. Both narratives promote the emergence of an early phase of new wind production. However, the regional entrepreneurial narrative of enhanced new wind also contains conflicting arguments represented by state policy institutions, that is, questioning the economic benefit of new wind production. Consequently, the lack of economic long-term incentives supporting investments in greening energy production is a barrier to the emergence of a new path within the region. Even though the international and national pro-wind narratives underlined the need for new renewable energy, the economic support from government related to green certificates was not deemed sufficient to create sustainable wind production in the future.

Contrasting these two narratives, the narrative on indigenous land preservation and reindeer herding contains counter-representations to new wind production. The Saami also had support from legal protection internationally and international organizations such as the UN and International Labour Organisation (ILO) conventions (Eikeland, 2021). The overall position within this narrative was to avoid new wind production in the region even though there were examples of successful cooperation where dominant representations within narratives on regional pro wind and indigenous people interacted fruitfully. Nevertheless, our data demonstrate that this narrative helped restrain the formation of an embryonic new path in the region. Within this narrative, international and national legislative bodies supported key actors and their representations. Hence, the narrative strongly contributed to *delegitimation* of the potential new industry.

## 5. DISCUSSION: NARRATIVES, DELEGITIMATION AND POWER RELATIONS

The narrative on indigenous people and land preservation evolves through interaction on multi-scalar levels including both national and regional. National politics set the scene as the indigenous bargaining power strengthened followed by the implementation of the Finnmark Act and a consultation agreement between the government and the Saami Parliament in 2005. As an example, one of the first wind farms in Finnmark (Kjøllefjord in 2003) acquired a license before the political changes, and here the State expropriated reindeer land to realize the project. The Saami narrative on wind power progressed through later experiences when wind production initiatives were suspended at an early stage by the wind company, or by the State through the licensing process. Hence, some regionally anchored companies, such as Finnmark Kraft in Snefjord, saw the conflicting interest of the reindeer herders and decided not to work further on the project: 'We realized that there was no meaning in developing this further. The resistance was too strong ...' (private company representative). Several wind power projects planned by locally owned wind company Finnmark Kraft, among other companies, were rejected by NVE with reference to the Saami reindeer herding traditions and conflict over land use (examples are Fallerasca and Ulveryggen, in Kvalsund municipality). Additionally, other economic activities have also been considered to affect herding negatively (e.g., mining and power grid development).

In other wind projects, the state, through the Ministry of Petroleum and Energy (MPE) intervened in the licensing process to protect Saami interests at stake, for example, in the Fálesrášša project near the municipality of Kvalsund in Finnmark region, where the regional politicians welcomed new industrial initiatives. However, the reindeer herders and the Saami

Parliament considered the project as incompatible with further herding in the area and objected to the plan. The NVE considered the positive effects on the local community to outweigh the negative effects on the traditional Saami livelihood, and granted Finnmark Kraft a license. The MPE later reviewed the decision and considered the cumulative effects on reindeer herding of several developments in the area as indispensable. This includes the permission of establishing new grid lines and a new mine in the area. Protection of the Saami livelihood is a national responsibility, and the MPE rejected the license for the windmills after considering the overall adverse effects for the reindeer herders.

Hence, though we do not have sufficient data to discuss the topic in depth, we believe that an important issue that emerges from our analysis is that power and power relations appear to be an important avenue for future research on legitimation of emerging industries. Though narratives can be considered as (contested) representations of discourses, narratives in and of themselves do not produce observable outcomes (e.g., Haarstad & Fløysand, 2007). Rather, representations and their anchoring in power relations surface as an important link between narratives and (de)legitimation of industrial activities (Fløysand et al., 2016). This also appears as important in our investigation, where we have observed how a dominating narrative contributed to delegitimation and hampering of a potentially emerging industry. However, discussions and investigations of power is a topic that has received scarce interest in the evolutionary economic geography literature on industrial development. Regardless, existing literature from the broader field of economic geography does contribute insight into, for example, how power can be vested in formal positions. Sotarauta (2017) illustrates that in a regional development context, actors often exercise power indirectly through their networks and their ability to convince others and to introduce new ideas. Consequently, and linked to the topic of regional industrial path creation, relational characteristics and how (and why) some actors are more dominant than others in regional development is a relevant topic for economic geographers (Sotarauta & Pulkkinen, 2011; Yeung, 2005). However, as discussed in the theory section, this topic has received little interest in research on evolutionary economic geography. As a rare exception, MacKinnon and colleagues discussed the importance of considering the 'broader' societal anchoring of industrial development processes from an evolutionary perspective (MacKinnon et al., 2009), but, potentially because of a lack of interaction between evolutionary and relational economic geography theorizing (Yeung, 2021), the rationale that '[p]ower is obviously not "contained" in spatial scales, but is spatially constituted by social and production relationships, as well as the ways in which [power] is mediated by distance', has not received much interest in EEG. Arguably, an exception to this can be the recent interest in actors and agency in EEG which recently has considered 'broader' approaches to agency beyond the purely Schumpeterian rationale (Bækkelund, 2021, Fløysand et al. 2022; Grillitsch & Sotarauta 2019; Sotarauta, 2017). However, that 'the different positions and material interests of [how] particular individuals and groups can generate conflict over strategies of adaptation at the level of individual firms, industries and regions' (MacKinnon et al., 2009, p. 137) has not been recognized in the path creation literature. Consequently, and concurrent with the view on legitimation discussed earlier, power may be considered as unequally distributed in and between spatial scales (Bækkelund 2021; Haarstad & Fløysand, 2007) and between actors in the same regional industrial context (Yeung, 2005). In other words, we believe that future studies of legitimation of (emerging) industries in regions would benefit from deeper and more explicit consideration of how and why power relations help explain how certain narratives gain particular dominance and real-world effects.

Empirically, we have observed that a minority group in Norwegian society, the Sami people, succeeded in developing a hegemonic, and delegitimizing, narrative around onshore wind development in Finnmark. The narrative on indigenous rights triumphed over the environmentalist narrative around green energy production, and the (regional) capitalist narrative on job creation.

Unfortunately, the present paper does not have data to further discuss the relevant power relations and how these have ‘come together’ to support this observable effect (i.e., delegitimation of the embryonic industry), but we, as discussed above, encourage further work to better comprehend, analytically and empirically, how tactics/strategies are developed and employed to strengthen positions and representations among actors involved in the emergence of new industries in geographical settings (see MacKinnon et al., 2022; and Miörner, 2022, for a somewhat similar argument).

## 6. CONCLUSIONS

Markard et al. (2016, p. 341) argues that ‘[l]egitimacy is crucial for firms, industries and technologies to emerge, expand and survive. It is the basis for securing resource flows and maintaining support’. This is a topic that has also gained interest recently in EEG and studies of the emergence of new industries in regions (Binz et al., 2016a; Binz & Gong, 2021; Binz & Truffer, 2017; Gong, 2020; Heiberg et al., 2020; Jolly & Hansen, 2021; Njøs et al., 2020). However, focus has thus far primarily been on explaining how legitimation is ‘achieved’, and far less interest has been devoted to delegitimation, and, moreover, explanations of unsuccessful path creation (Fløysand et al., 2016; Isaksen, 2018). We have in this paper linked this topic to path creation in rural regions, where we have focused on narratives surrounding the embryonic onshore wind industry in the Finnmark region and its status in 2014–2015. We have identified and investigated three dominant narratives, finding that a counter-narrative pertaining to the indigenous Saami population has been highly influential in delegitimizing, and blocking, emergence of the potential industry in the region. However, we also note that the narrative is not solely linked to the region; multi-scalar processes of legitimation and delegitimation have been important for explaining our findings. For instance, indigenous peoples’ rights as embedded within regulative institutions and their role as a counterpart in processes of new wind production have had major impact on the embryonic formation of a new path in wind power in Finnmark. As the regional municipality actor needed to balance the diverging interest regarding different needs and aims related to land use and other societal consequences, the dimension of indigenous rights and their interests were challenging to embed within a unified regional policy. As their arguments related to the historical foundation of the region and the cultural tradition, regional actors pursued different aims to reach their goals. However, one should not overstate the role of indigenous people as the main neglecter of a new industrial path in this region. Significant infrastructural and financial assets such as intervention in existing nature, challenges regarding transportation of wind energy and the cost–benefit of new wind in the market reveals the need for strong subsidy policies from the state in this context.

Hence, while narratives supporting renewable energy gain momentum around the globe and the need of restructuring energy production in Europe enhances, important factors of economic, cultural and historical character may obstruct the development of new wind production. Going back to 2014–15 and identifying three distinct narratives on new wind production in the rural Finnmark region on multiple geographical scales, we found that representations within the international and regional policy discourse enabled the emergence of new wind production. By contrast, the narrative represented by the Saami population and institutions supported by legislative structures restrained the development of an embryonic regional industrial path. In the years following this, debates over onshore wind have intensified in Norway, and currently, opposition to further large-scale development appears to be too strong.

Based on the findings in this paper we have argued that narratives and their role in (de)legitimizing new industrial activities would benefit from considering not only ‘successful’ cases (i.e., where legitimation has been ‘achieved’ and where new industries have emerged), but, importantly, that further research should complement such approaches by also paying more explicit

attention (theoretically, conceptually and empirically) to how hegemonic narratives gain traction based on underlying power relations and ‘real’ power. We believe this would be very helpful for understanding not only *why* legitimation is important for emergence of new industrial paths, but also *why not* new industries emerge in a region.

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## DISCLOSURE STATEMENT

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## NOTES

<sup>1</sup> White Paper No. 34, 2006–07; Norwegian Climate Policy. The Climate Settlement, EU renewable Directive 2008.

<sup>2</sup> A consultation agreement between the NVE and the Saami Parliament, signed in March 2009.

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