sustainability

MDPI

Article

Life in Anticipation of Wind Power Development: Three Cases from Coastal Norway

Reidar Staupe-Delgado [1,*] and Philip R. Coombes [2]

[1] Department of Technology and Safety, UiT The Arctic University of Norway, 9037 Tromsø, Norway
[2] Department of Media and Social Sciences, University of Stavanger (UiS), 4036 Stavanger, Norway; philiprcoombes@gmail.com
* Correspondence: staupedelgado@gmail.com

Received: 10 December 2020; Accepted: 18 December 2020; Published: 21 December 2020

Abstract: Wind power development, whilst welcomed by many as a potentially green source of energy, also gives rise to considerable local resistance. Drawing on three case studies from coastal Norway (Frøya, Haramsøy, and Egersund), the present article sets out to reflect on life in anticipation of wind power development. Reflecting on the nature of life in anticipation of undesired wind power developments, with implications for how life is lived in dread of imminent adversities in general (such as climate change, pandemics, and disaster risks), these case studies focus on how communities relate to the future and how they perceive and strive to organise so as to shape outcomes. A central point raised in this article is that wind power projects could become more socially, environmentally and economically sustainable if greater attention is paid to working with communities to reduce distrust and uncertainties before, during and after such projects. Hence, relational work carried out that may shape the affective state of anticipation prior to and during wind farm construction can be understood as crucial to the sustainability of large-scale green infrastructure projects.

Keywords: renewable energy; climate change; adaption; mitigation; political ecology; community; resistance; NIMBY

1. Introduction

Wind power is commonly suggested as an effective way for local communities to lower their carbon footprint, thus enhancing their sustainability [1,2]. Alongside solar power, geothermal energy, and hydroelectric power, wind power constitutes a significant proportion of renewable energy investments and consumption worldwide [3]. Wind power is increasingly framed as a critical piece in the challenge towards complying with global and regional carbon emission targets [4,5]. While consumer willingness to pay has remained an issue [6], policy support and financial incentives for the expansion of wind power developments have surged in the past two decades [7–9]. The European Union, for example, has listed further wind power development as a central part of its renewable energy directives, alongside other technologies [10]. According to energy market projections, wind power technology may make up more than 20% of the global demand for electricity by 2050 [11]. Wind power developments have in many ways become prestigious projects both for national leaders and local decision-makers, but local views are often mixed.

The concept of anticipation has become a central concept in the study of how communities relate to and organise in the face of what they perceive as threatening futures [12–15], as well as how they hold decision-makers accountable for contingencies in hindsight [16]. One way of relating to the future is through protest and resistance, both before and after the fact.

Communities often resist wind power development for a number of reasons. Indeed, a common critique of early wind power research was their failure to incorporate social considerations, exposing at

the same time a trade-off between climate change mitigation priorities and aesthetic or conservationist norms. Critiquing the so-called Not-In-My-Back-Yard (NIMBY) explanation, Aitken [17] argues that the assumption that the majority of the public, in reality, supports wind power but prefers to free-ride on the aesthetic burden is an oversimplification (for further critiques of the NIMBY adage cf. [18–21]. Rather than being about protecting the local environment (one's backyard) per se, resistance to wind power development on the part of communities is arguably instead a result of a stronger conservationist normative stance against intrusive infrastructure developments in seemingly pristine sceneries and recreational spaces, among other factors, including economic concerns about the liberalisation of energy and carbon markets [18,19,22]. Accumulating evidence of more concrete externalities, for example, the effects of wind turbines on wildlife and biodiversity has further fuelled resistance campaigns against further wind power developments [23,24]. Put differently, resistance to wind power development may be conceptualised as being more about dread or fear of intrusive infrastructures and their potential social effects—at worst leading to community decay if people leave the community as a result—than about misguided anxieties.

Public acceptability is a significant determinant for the longevity of new technologies. Technological pathways have been stalled–even completely abandoned–in the face of public backlash. In an increasingly globalised world, the success of technologies outside of national borders can still have a substantial influence. One such example is that of the case of German nuclear power, whereby a country with long-standing anti-nuclear sentiment began phasing out its nuclear power plants in the wake of an accident at the Fukushima Daiichi Nuclear Power Station in Japan [25]. Public acceptance is thus an important factor for the successful diffusion of new technologies [26–28].

Norway is a country with a substantial capacity for onshore wind development. One study for the viability of onshore wind power projected it would be possible to add between 5800 and 7150 MW of wind power to the grid [29]. Offshore wind is more logistically challenging and significantly more expensive than onshore development [30] and thus the expansion of onshore wind capacity is an attractive proposition for realising Norway's wind power potential. Wind power has proven a topic of great contention in Norway in recent years, with opponents often attracting sympathy due to the conflict being viewed in the context of small communities fighting against large corporate and government interests. Somewhat paradoxically, although wind energy is conceived in large part due to the need to transition towards greener energy, the opponents of wind power often mention environmental concerns as a key factor for their resistance. Norway is often perceived as having a somewhat pristine, untouched and remote landscape, and many small communities feel a deep connection to their surroundings due to their ties and, to a large extent, reliance upon the environment in both an industrial and cultural context. Concerns surrounding the need to build infrastructure, such as roads to service wind turbines, the perceived negative impact on birdlife and even the very aesthetic of wind farms are oft-cited as prime reasons as to why local communities fear such developments. Here we refer to three separate case examples which shed light upon wind power developments in relation to perceptions surrounding imminent adversities and the nature of life in anticipation of what communities perceive as undesirable futures.

The prospect of local wind power infrastructure developments may, by some, be experienced as more than a mere nuisance but instead as a local calamity akin to environmental degradation or the aesthetic destruction of recreational spaces, leading potentially to loss of belonging, feeling of community, and heritage. Parts of the population on the picturesque island of Frøya in Norway, for example, have threatened to leave their community as part of local resistance to a relatively large wind energy development project, signalling their strong and almost desperate call for stopping this development. In this way, the aim of the paper is not to analyse practicalities concerning the implementation process or its potential role in municipal sustainability strategies. Rather, the analytical aim of this paper is focused on analysing the effective anticipatory states that planned or delivered wind parks trigger in communities, and it is structured as follows.

The next section outlines the analytical focus on anticipation this paper employs in its discussions of wind power development. Section three elaborates on the three Norwegian cases, including their key characteristics as wind power development projects, as well as local acts of resistance. In section four, we discuss how the cases in various ways related to anticipatory affective states either before their completion or after, while the last concluding section reflects on the implications of the themes touched upon in the article.

2. Analytical Approach: Living in Anticipation

Anticipation has emerged as a central concept through which to theorise the way in which societies and communities relate to the future [12–15]. Preoccupying oneself with speculations about the future and what the future may bring (looming crises, undesirable outcomes, the continuation of negative social and demographic trends, dreaded infrastructure developments), combined with discourses about our pasts, arguably constitutes a central feature of present-time lived experience. The way we imagine ourselves to be, after all, as communities, as individuals, are directly related to how we make sense of our histories, as well as how we imagine our futures. Paradoxically, it is often only when the status-quo is disrupted that we value what we have had and wish to continue to have. The lived experience of anticipation is hence described in terms of 'unfolding' in ways that are informed by certain speculative practices that may be either formal (in terms of projections, reports or models), or informal (hunches, rumours, anxieties or potential what-if narratives etc.) [12]. These sentimental sides to anticipation thus ultimately shape lived experience and political manoeuvring space:

> The present is governed, at almost every scale, as if the future is what matters most. Anticipatory modes enable the production of possible futures that are *lived and felt* as inevitable in the present, rendering hope and fear as important political vectors [12] (p. 248).

Expected crises on the horizon, regardless of whether they are already approaching (such as an infrastructure project already agreed on or under construction), or one that is only a potentiality (such as when a site has still not been agreed on, but one's community is a likely candidate), may give rise to "a sense of looming time limits that generate urgency and anxiety about acting now to protect the future" [12] (p. 248) from environmental and social decay.

What Christopher Stephan and Devin Flaherty [13] (p. 6) call the "anticipatory object" can change over time as anticipatory politics mature and are shaped by attention cycles [31]. The affective state of anticipation does, as such, not necessarily remain coherent or constant over time and the way we relate to potentialities lurking on the horizon may change as new signals come in. We can infer that as new information is made available in the form of reports, projections, and estimates, how we feel about these data will also be shaped by prevailing rumours, narratives, or even concrete observations (once infrastructure projects are already under construction, for example), when we realise, that in some ways, our expectations have to be adjusted for the better or the worse. Even after adjustment, however, new information could surface which ultimately ends up causing a renewed sense of dread. As Céline Granjou, Jeremy Walker, and Juan Francisco Salazar [14] (p. 5) argue, anticipation is essentially political as ideas about "the future" nearly always "informs action in the present" by means of striving at "knowing, forecasting, and actively anticipating future events", and these epistemological stances are themselves "crucial elements of social organisation". The way in which communities selected for a certain undesired (not necessarily undesired by all) infrastructure development, and are thus subjected to a process of waiting, can in itself be considered an exercise of power, as argued by Bourdieu [32] (p. 228):

> Waiting is one of the privileged ways of experiencing the effect of power, and the link between time and power—and one would need to catalogue, and analyse, all the behaviours associated with the exercise of power over other people's time both on the side of the powerful (adjourning, deferring, delaying, raising false hopes or conversely rushing, taking by surprise) and on the side of the 'patient' as they say in the medical universe, one of the sites par

> excellence of anxious powerless waiting. Waiting implies submission: the interested aiming at something greatly desired durably—that is to say, for the whole duration of the expectancy – modifies the behaviour of the person who 'hangs', as we say.

Writing specifically on larger-scale infrastructure developments and their tendency to trigger what we may call "economies of anticipation", Jamie Cross [33] describes these zones as "uniquely charged objects of conviction and anxiety about the capitalist future". Seeing places destined for infrastructure developments as places of aspiration and imagination, where people engage with both hopes and fears for what the future may bring, this work conceptualised outcomes as pinned between aspiration and dread. Nowhere is this more evident than in green energy infrastructures. These beacons of sustainability are essentially the political capstone for some, representing their dreams and hopes for a more desirable future, both for themselves and, as the narrative goes, the world. Members of local communities may also experience the process as one of hope and positivity. Others, however, will experience the same development process as undesirable, something to be dreaded, resisted and feared. Others still, as our cases show, initially see local investment in green infrastructure in a positive light, only to find themselves regretting not having resisted more in hindsight when promised futures fail to deliver. In this paper, we explicitly aim to tease out these dilemmas, paradoxes and contradictions that occur as part of life in anticipation of green infrastructure development.

3. Three Cases of Wind Power Development in Norway

3.1. The Island of Frøya (Outside the Coast of Central Norway)

Wind power development on the island of Frøya is principally driven by TrønderEnergi (TE), a company owned by 24 municipalities in the region, including the Frøya municipality itself, as well as a public pension savings fund and a local energy provider. The license for the Frøya wind farm was granted in 2012 and covers an area equivalent to 6.6 square kilometres whilst granting capacity for installation of up to 60 MW of power. The original 2004 plans for turbines of 200 MW installed capacity were changed during the process to a reduced capacity of 60 MW, with the final permit being granted by the Norwegian Ministry of Petroleum and Energy in August 2013 [34]. The wind park comprises 14 installed turbines at a height of 112 m and construction formally began in April 2019, much to the dismay of the majority of local residents. We argue that life on Frøya has, since the decision to construct the turbines were made, been shaped to a great extent by an affective state of living in anticipation of wind power development.

The project has been strongly opposed by activists, whilst local politicians have strived to halt the project altogether. There has also been much discussion and concern with regards to foreign ownership of TE due to the German company, Stadtwerke München, holding a large share in the project. Together with TE, it is reported that they have invested nearly € 300 million in four wind power projects. Stadtwerke München will retain a 70% share, as opposed to TE having only a 30% stake. The two companies have established a jointly owned company, TrønderEnergi Vind, whereby TE will own a majority share of 51%. The turbines are being supplied by the Danish manufacturer Vestas [35]. There is also a fear of relinquishing control to foreign investors, a subject with which Norway has previously been very cautious towards as evidenced during the exploration and development of the first oil fields on the Norwegian Continental Shelf. The sovereignty of national resources and market liberalization remain contentious political issues in Norwegian politics.

On the very first day that construction was due to commence, TE was met by activists who blocked access to the site with their cars. In a local referendum conducted the very next day, 78.7% of residents expressed their opposition to the wind park [36]. The project has been subject to numerous delays in the wake of strong opposition from local residents and a conflict of interests between local politicians at a municipal level and the national government at large. Protest camps have been dismantled by police, access to the site has been blocked by protestors, demonstrators have been accused of harassment and

intimidation against employees and site workers, machinery and fencing have been sabotaged and masked individuals have frequently entered the site and disrupted activity [37,38]. Among the various motives for opposing the Frøya development are concerns over the impact upon local nature, fears that foreign ownership will result in little economic benefit for the local community and many local residents are unhappy with their scale and aesthetic. In letters from local residents to TE, many referenced their belief that the developers and decision-makers were motivated by financial interests, with the project being perceived as a conflict of nature versus money and power [39]. The local municipality, despite requesting the Ministry of Petroleum and Energy to allow them to have control over the site and to not be overruled by the state, were eventually resigned to accepting the decision by the Ministry of Local Government and Modernisation.

3.2. The Island of Haramsøya (Western Norway)

The Haramsøya wind park is located on the island of Haramsøy outside of Ålesund. The 8 turbines will have an installed capacity of 34 MW. Landowners who currently graze livestock upon the area will receive an annual income as well as being allowed to continue these activities. Although the energy company Haram Kraft were first awarded a concession for construction in 2008, there have been several alterations such as a planned overhead cable having been replaced with a cable running both underwater and underground and the voltage level on the network connection seeing a reduction from 132 kV to 33 kV. Haram Kraft is owned outright by Finish company Taaleri Energia, whilst the Norwegian company Zephyr AS will oversee the development and operation on their behalf [40].

Significant opposition is also evident in the case of Haramsøya. Numerous demonstrations have taken place. Protestors have disrupted ferry operations to stop construction vehicles disembarking, both via blockading and boarding the ferry to the island. Police had to intervene in order to remove the protestors and open roads on numerous occasions. Residents have also blockaded the road leading up to the site as well as construction vehicles, whilst one local resident even went so far as to threaten a hunger strike outside the offices to the municipal council [41]. Whilst the population of Haramsøya numbers just over 500, the Facebook group set up by the protest organisation No to Windpower on Haramsøya comprises 33,000 members. The local protest organisation lost a costly legal challenge in an attempt to stop the development. The court case also involved testimony from a member of the Norwegian Ornithological Society, who stated that the area was one of the main migratory routes for birds across Norway [42]. The Haram Kraft energy company stated it has lost millions due to actions attempting to prevent the development. Hence, it seems evident that the strength of opposition is significant for such a small community, and that emotions run high for a local community with deep geographical roots. The developer eventually felt compelled to produce a 33-page document addressing what they deemed to be 15 erroneous allegations about the wind project, that stresses the importance of factual information for the basis of discussion [43]. However, as this case ultimately suggests, anticipation as a lived state is not easily moved by numbers as effective dynamics are at work, driven as much by distrust, dread, and hopes as by technical details.

3.3. Egersund (Small Town in Western Norway)

Egersund wind park, located around 8 km east of the urban area of Egersund, is comprised of a total of 33 windmills with an installed capacity of 112 MW. The wind park is owned by the Luxcara company whilst its construction and operation were overseen by Norsk Vind AS. Upon completion in 2017, it was the first site to incorporate turbines over a height of 150 m.

The case of Egersund stands somewhat in contrast to those of Frøya and Haramsøya, in that most of the uproar has occurred in the aftermath of the park's construction as opposed to in anticipation of it. The controversy seems to predominantly be due to the fact that, upon its completion, the wind park has been perceived as being more intrusive than had been envisaged by many members of the local community, causing them to feel like their initial trust had been misplaced. Perhaps owing to its urbanity, affected households claimed they were not initially in opposition to the construction of a

nearby wind park and trusted information they were given stating that nuisance would be minimal. One controversy stems around the surface area covered by the wind park itself. Rogaland County Municipality has suggested that the wind farm covers an area three times larger than had been communicated in plans by the developer, encompassing a total area of 450,000 square meters. This includes interventions in streams and water for which no permit was submitted, according to the regional planning department [44]. The developer, Norsk Vind AS, admitted that it did not apply for all the permits in question, however, stated that the given area in the plans is only the road and installation area necessary for construction and operation. This had led to calls for greater controls and supervision for future projects.

One family, whose property is located in close proximity to the turbines, refused initial compensation for the noise the turbines would generate. Norsk Vind determined the property to be on the border of the noise zone, with the sound generated to be approximately at 45 decibels. After losing a court case, the family states that an external company calculated the level to be 50 decibels. They also stated they were assured that the turbines were unlikely to be visible from their property, however, that they claim to directly observe six out of the 33 turbines in total [45]. One local politician stated that he had felt almost alone in initial opposition to the proposed wind park and that the precautionary principle should have been adhered to in this case. A distinct temporal orientation has thus emerged where the affected community feels like their trust had been misplaced, only to have been abused by infrastructure developers as construction was underway and the window for resistance had closed.

4. Local Perspectives on the Wind Power Developments

Other wind projects are also opposed by local communities and activists around Norway. Windpark projects in Tysvær, Øyfjellet, Storheia, and Sørmarkfjellet, all prestigious windfarm projects in Norway, have also seen demonstrations from communities feeling a sense of unease at the impact that these projects are anticipated to have upon the landscape and the effect they may have upon the lives of those living under their shadow. Opposition appears to be widespread and far from occurring in merely isolated instances. Cases such as Storheia also show resistance from the indigenous Sami population, who oppose the wind parks on the basis that they may interfere with reindeer husbandry that is key to their culture and livelihoods [46]. Fear is thus not only present due to anxiety of the immediate material consequences the developments may bring, but also occurs due worries surrounding the erosion of traditions, cultural values, and emotional ties to land upon which indigenous people have lived for thousands of years.

Wind power has proven a topic of great contention in Norway in recent years, with opponents often attracting sympathy due to the conflict being viewed in the context of small communities fighting against large corporate and government interests. For many, not necessarily the wind parks themselves, but the way they are so forcefully implemented, make them appear as so-called 'white elephants' (see for example [47]). Somewhat paradoxically, although wind energy is conceived in large part due to the need to transition towards greener energy, the opponents of wind power often mention environmental concerns as key factors for their resistance. Norway is often perceived as having a somewhat pristine, untouched and remote landscape, and many small communities feel a deep connection to their surroundings due to their ties and, to a large extent, reliance upon the environment in both an industrial and cultural context. Concerns surrounding the need to build infrastructure, such as roads to service wind turbines, the perceived negative impact on birdlife and even the very aesthetic of wind farms are oft-cited as prime reasons as to why local communities fear such developments. Sometimes, as in the Egersund case, noise above approved levels are also brought up as sources of discontent. Thus, apprehension surrounding wind power developments within Norway stem from a variety of concerns and underlines the paradoxical dilemmas that arise in trying to balance community concerns with wider sustainability commitments.

It is evident that anti-wind sentiment is particularly strong amongst the local residents of Frøya, with some going so far as to suggest they are considering leaving the island altogether [38]. With the referendum having shown that 78.7% of residents are opposed to the wind park, the development seems far from popular. In an interview with a news website, one resident stated that, if they lost the fight to oppose the development, they would consider there to be no other alternative then to move, even though the site of the wind park is located a few thousand meters from their property [48]. Among the various motives for opposing the wind parks development are concerns over the impact upon local nature, fears that foreign ownership will result in little economic benefit for the local community, and many local residents are unhappy with their scale and aesthetic. Much of the rhetoric centres around the view that nature is untouched or unspoilt and that the wind power would harm this natural beauty. Many do not foresee any environmental benefit from the wind power, with many residents upset in their belief that the decision is motivated primarily by financial interests. "Madness" is the term one member of the Frøya action group used when interviewed in describing the project [48].

In letters from Frøyan residents to developers, many referenced their belief that the developers and decision-makers were motivated by financial interests, with the project being perceived as a conflict of nature versus money and power [39]. Some expressed their dissatisfaction that the windfarm was being used to 'save the world', as it were. Others, that they felt a political elite were neglecting their interests and that the project made a 'mockery' of democracy, whilst even decrying the press for what they perceive as lobbying on their behalf. Whether such concerns carry any legitimacy or not, it would certainly seem to indicate that there is some work to be done towards reconciling local concerns with national interests. Additionally, the Frøya conflict, and others, can be viewed in the context of local authorities lacking sufficient powers so as to veto developmental licenses granted by the national government [49]. The action group "No to Windpower on Frøya" stated in an open letter to the owners of a local energy company that people felt overrun by the capital and described local democracy and the municipality's self-reliance as being non-existent [39].

There is precedent within Norway for resistance and civil disobedience against green technologies. The Alta conflict, a series of large protests against the construction of hydroelectric power, lasted for many years and united environmental groups. It also led to the land rights of the indigenous Sami coming to the forefront of the national political agenda. Whilst the situations are by no means the same, there are significant parallels to be drawn.

The fallout from the conflicts contributed in part to the formation of national anti-wind power action groups, which has been formed in order to assist small communities that can only offer limited resistance. The development certainly evokes emotions as well as a sense of helplessness amongst local residents. Perhaps a better understanding of such concerns could prove beneficial to all parties in the planning of future developments within Norway, for such hostile responses could well jeopardise the feasibility of future wind projects as well as attitudes towards green energy as a whole. Such ramifications may have wider political consequences as well as perhaps contribute towards shifting attitudes towards renewable energy and climate change as a whole. This article thus contributes with better understanding of how such developments are experienced, anticipated and locally acted upon.

5. Discussion: Living in Anticipation of Wind Power Developments

There are many ways in which imminent adversities shape life in the present at scales ranging from the individual to global. The concept of anticipation makes way for analysing the lived experience of dread towards (what is perceived as) imminent adversities. Developing a better understanding for the sentimental aspects of how certain future occurrences permeate lived experience in the present is thus growing in importance as societies increasingly concern themselves with expected future calamities rather than current hardships in the present. By no means should this temporal distinction be considered in categorical terms, however, as the presence of the future is not constant, but rather exists as a backdrop in present experience, entering in and out of direct

consciousness, but still shaping anxieties suffered in present time. Phenomena as diverse as climate change, impending pandemics, one's community being exposed to newly uncovered landslide risk, or a newly diagnosed terminal illness are all examples of how a dreaded future calamity enters the lived experience of the present [12–15]. The notion of life in anticipation thus concerns the phenomenology of how known future outcomes—"scheduled" adversities—shape life in the present by giving rise to anticipatory worries and dread, in turn oftentimes triggering resistance or precautionary actions undertaken in the present in the hope of changing expected future outcomes.

Following this line of reasoning, it makes sense to say that after the inhabitants of Frøya and Haramsøy learned that their islands would be subject to wind power development, life on the islands became increasingly defined as revolving around anticipating and dreading the completion of these developments. Whilst some would seek to downplay the significance of public sentiment towards new technologies, there are many historical examples where negative public perceptions have resulted in their rejection or stalled their implementation. Public acceptability is a significant determinant for the longevity of technologies. Technological pathways have been stalled—even completely abandoned—in the face of public backlash. In an increasingly globalised world, the success of technologies outside of national borders can still have a substantial influence. Public acceptance is thus an important factor for the successful diffusion of new technologies [27]. However, it is not just the wind turbines themselves. The community also feels under threat, from what is perceived as an attack on their very autonomy. Corporate interests, under foreign ownership, are being given priority over the rights of local residents. National government—overruling local councillors—in order to press ahead with an agenda that ignores the rights of small communities. This is how the conflict can be framed, perceived and understood in the minds of the communities.

Perceptions of such conflicts often vary based upon the lens through which they are viewed and as to the ideological position of the viewer. The same spoken narrative can sound entirely different to those whose ears are receptive as opposed to those who are resistant. This is not the frontline of climate change. The residents of Frøya are not the most vulnerable or susceptible to its negative consequences, nor is there any suggestion that this will drastically threaten their way of life. It is a conflict that, for the majority, is evidently emotional, principled, and born out of their desire to conserve their homes and the local environment. It is somewhat of a paradox, that technologies introduced to mitigate the worst consequences of environmental destruction, lead to fears and anxiety's surrounding their environmental impact. Climate change presents a threat on a scale of such large proportions that perhaps it is therefore all too easy to disregard the dissension of those people on the very fringes of its influence. Recognising that its consequences will be felt by all of humanity, no matter the extent, is crucial to our understanding.

Whilst the cases explored here have diverse histories there are significant parallels to be drawn. Peoples connection to the land upon which they live evokes a strong emotional response to any external threat, which is often coupled with resentment towards the national government trying to enforce its technological objective. Not only is the innovation a new invasive species but there is perhaps little or no perceived benefit from it for the local people. It becomes not only a matter of us against it but also one of us against them. With no immediate economic or social benefit to be derived from the project, there is little cause for residents to accept the development. In the case of the wind power, an added drawback is that it will leave no lasting industry to which employ local residents, which can often be a way in which to incentivise support. If there is little direct benefit, then why would residents be willing to overlook any negative aspects a development may bring?

The three cases explored can be seen to encapsulate many of the issues surrounding resistance to new technologies and the difficulty in trying to transition our current energy systems. Social systems tend to change incrementally, and the pace at which innovations develop and diffuse can tend to outrun this. The challenge for decision-makers when faced with the need to transition is implementing a policy that is disruptive to current fossil-fuel dependency but not to the people's lives within their respective communities. The Frøya conflict in particular would also perhaps illustrate the need for

developers to engage with local communities before pressing ahead with projects. The Egersund case shows the importance of not eroding trust when it is given. The economic losses incurred by energy companies due to resistance may perhaps substantially outweigh any costs that could have arisen from consultations and engagement with the local community.

6. Concluding Reflections

As we have set out to demonstrate in this account, the dynamics of the wind power planning and construction processes have deeply impacted life for members of the three communities covered in this article. Introducing the analytical concept of "life (or living) in anticipation", this paper set out to bring to light the perceived calamitous effect such (externally initiated) projects may have on local communities.

Although the case of Frøya may seem rather inconsequential, a small municipality of just under 5000 inhabitants—residing upon a cluster of islands off the western coast of Norway—opposing a somewhat small-scale development, it resonates loudly and emphasises the need for careful consideration on the part of decision-makers. Frøya is thus a good example of a small community banding together against externalities that seek to alter the landscape upon which many of them have lived their entire lives. The residents of Frøya are a small community, whose grievances stem from feeling powerless against those who seek to impose their interests upon their home against them. The name of the island itself is a variant of Freyja, a goddess of love and beauty in Norse mythology.

Freyja is also associated with seiðr, a form of magic concerned with shaping the future, discerning the course of fate and working within its structure to bring about change. For this small island community, this change is not a welcome one, yet the fate of their landscape is perhaps no longer within their control. With Anthropogenic impact having altered the very structure of climatic systems, for many small communities the future is being shaped by externalities both all too powerful and large for them to oppose, thus giving rise to a state of living in anticipation. Frøya is representative of conflicts and narratives that will undoubtedly rear their heads with ever-increasing frequency as climate change brings disruptive alterations to people's lives. Perhaps there is some wisdom in the mythology of seiðr, that there exists some magic by which the future can be controlled portrays mankind's great irony. The irony that, in striving to bring the natural world under human control, the effect has rendered it less controllable.

Having lived for an extended period in a state of waiting for the impending wind power developments, many residents of Frøya have dreaded this process as being more than a mere inconvenience, but rather as a decisive moment in their local history. With concerns over what is at stake encompassing degradation of their local environment and its associated aesthetics and recreational functions, residents have lived in anticipation of the loss of heritage and community. As we have seen in this paper, responses have varied from threatening to leave the island to actively sabotaging the process, sometimes using illicit means.

Haramsøya also shows the strength of feeling amongst residents when anticipating unwelcome changes. With a population of just over 500 people, it would again be easy to overlook such protest and disregard its significance. However, the backlash serves to show just as to how significant the landscape is to the local population and how fiercely communities are willing to resist when anticipating change. Having lived for an extended period in a state of waiting for the impending wind power developments, many residents have dreaded this process as being more than a mere inconvenience, but rather as a decisive moment in their local history. With concerns over what is at stake encompassing degradation of their local environment and its associated aesthetics and recreational functions, residents have lived in anticipation of the loss of heritage and community. The Egersund case, on the other hand, shows the importance of nourishing trust once it is given by being transparent and inclusive both during the planning stage and the construction stage.

Although the cases discussed in this article show only minor effects of the actions of protestors, as none have thus far succeeded in stopping construction, they may well have provided a wakeup call

to planners and given local communities the ability to find a voice against what is often perceived as unwelcome external interference in their lives and homes. This paper further argued that the notion of life in anticipation provides an interesting lens for studying such processes of dread and resistance to a diverse set of perceived threats, whether they be disasters or other adversities the community deems undesirable for their continued wellbeing. Bringing attention to the connection between present sentimentality towards perceived future adversities, living in anticipation is also connected to the ways in which dreaded future occurrences are actively resisted in the present. The wind power question in such instances thus brings to light affective states extending beyond literature on wind power and resistance. Communities and societies are constantly living in anticipation of (perceived) impending adversities, at various temporal proximities and geographical scales, ranging from climate change, health risks to disaster risk exposures, such as recurring landslides or flood risk. At any moment in time, individuals and societies are potentially exposed to a number of impending adversities, all of which coexist, but their effect on lived experience will vary significantly nonetheless, owing not only to temporal proximity but perhaps also to the perceived possibility of influencing outcomes through local action. To summarise, it thus seems plausible to conclude that wind power projects could become more sustainable in a social, environmental and economic sense provided greater attention is paid to working with communities to reduce distrust and uncertainties.

Author Contributions: Both authors have been involved at all stages of the process, including idea formation, conceptualization, draft preparation, editing and formatting. All authors have read and agreed to the published version of the manuscript.

Funding: The publication charges for this article have been funded by a grant from the publication fund of UiT The Arctic University of Norway.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Ydersbond, I.M.; Korsnes, M.S. What drives investment in wind energy? A comparative study of China and the European Union. *Energy Res. Soc. Sci.* **2016**, *12*, 50–61. [CrossRef]
2. Stuart, E.K. Energizing the Island Community: A review of policy standpoints for energy in small island states and territories. *Sustain. Dev.* **2006**, *14*, 139–147. [CrossRef]
3. WindEurope. *Wind Energy in Europe in 2019: Trends and Statistics*; WindEurope: Brussels, Belgium, 2019.
4. Thapar, S.; Sharma, S.; Verma, A. Analysis of Factors Impacting Wind and Solar Sectors: Challenges to sustainable development (Four Country Study). *Sustain. Dev.* **2019**, *27*, 481–511. [CrossRef]
5. Street, P.; Miles, I. Transition to Alternative Energy Supply Technologies: The case of windpower. *Energy Policy* **1996**, *24*, 413–425. [CrossRef]
6. Venugopal, A.; Shukla, D. Between Hesitation and Decisiveness: Understanding consumers' ego, altruism, and eagerness to pay for renewable energy. *Sustain. Dev.* **2019**, *27*, 932–944. [CrossRef]
7. Alves, E.E.C.; Steiner, A.; de Almeida Medeiros, M.; da Silva, M.E.A. From a Breeze to the Four Winds: A panel analysis of the international diffusion of renewable energy incentive policies (2005–2015). *Energy Policy* **2019**, *125*, 317–329. [CrossRef]
8. Nicolini, M.; Tavoni, M. Are Renewable Energy Subsidies Effective? Evidence from Europe. *Renew. Sust. Energy Rev.* **2017**, *74*, 412–423. [CrossRef]
9. Zhao, Z.Y.; Chen, Y.L.; Chang, R.D. How to Stimulate Renewable Energy Power Generation Effectively? China's incentive approaches and lessons. *Renew. Energy* **2016**, *92*, 147–156. [CrossRef]
10. Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the Promotion of the Use of Energy from Renewable Sources. Available online: http://data.europa.eu/eli/dir/2018/2001/oj (accessed on 12 September 2020).
11. IPCC. *Special Report on Renewable Energy Sources and Climate Change Mitigation*; Cambridge University Press: Cambridge, UK, 2012.
12. Adams, V.; Murphy, M.; Clarke, A.E. Anticipation: Technoscience, life, affect, temporality. *Subjectivity* **2009**, *28*, 246–265. [CrossRef]

13. Steophan, C.; Flaherty, D. Experiencing Anticipation: Anthropological perspectives. *Camb. J. Anthropol.* **2019**, *37*, 1–16.
14. Granjou, C.; Walker, J.; Salazar, J.F. The Politics of Anticipation: On knowing and governing environmental futures. *Futures* **2017**, *92*, 5–11. [CrossRef]
15. Anderson, B. Preemption, Precaution, Preparedness: Anticipatory action and future geographies. *Prog. Hum. Geog.* **2010**, *34*, 777–798. [CrossRef]
16. Zeiderman, A. Prognosis Past: The temporal politics of disaster in Colombia. *J. Roy. Anthropol. Inst.* **2016**, *22*, 163–180. [CrossRef]
17. Aitken, M. Why We Still Don't Understand the Social Aspects of Wind-power: A critique of key assumptions within the literature. *Energy Policy* **2010**, *38*, 1834–1841. [CrossRef]
18. Barry, J.; Ellis, G.; Robinson, C. Cool Rationalities and Hot Air: A rhetorical approach to understanding debates on renewable energy. *Global Environ. Polit.* **2008**, *8*, 67–98. [CrossRef]
19. Ellis, G.; Barry, J.; Robinson, C. Many Ways to Say 'no', Different Ways to Say 'yes': Applying Q-methodology to understand public acceptance of wind farm proposals. *J. Environ. Plan. Man* **2007**, *50*, 517–551. [CrossRef]
20. Wolsink, M. Wind-power and the NIMBY-myth: Institutional capacity and the limited significance of public support. *Renew. Energy* **2000**, *21*, 49–64. [CrossRef]
21. Burningham, K. Using the Language of NIMBY: A topic for research, not an activity for researchers. *Local Environ.* **2000**, *5*, 55–67. [CrossRef]
22. Devine-Wright, P. Beyond NIMBYism: Towards an integrated framework for understanding public perceptions of wind energy. *Wind Energy* **2005**, *8*, 125–139. [CrossRef]
23. Zerrahn, A. Wind-power and Externalities. *Ecol. Econ.* **2017**, *141*, 245–260. [CrossRef]
24. Dai, K.; Bergot, A.; Liang, C.; Xiang, W.N.; Huang, Z. Environmental Issues Associated with Wind energy: A review. *Renew. Energy* **2015**, *75*, 911–921. [CrossRef]
25. Glaser, A. From Brokdorf to Fukushima: The long journey to nuclear phase-out. *B Atom. Sci.* **2012**, *68*, 10–21. [CrossRef]
26. Devine-Wright, P. *Reconsidering Public Attitudes and Public Acceptance of Renewable Energy Technologies: A Critical Review*; School of Environment and Development, University of Manchester: Manchester, UK, 2007.
27. Huijts, N.M.A.; Molin, E.J.E.; Steg, L. Psychological Factors Influencing Sustainable Energy Technology Acceptance: A review-based comprehensive framework. *Renew. Sustain. Energy Rev.* **2012**, *16*, 525–531. [CrossRef]
28. Wüstenhagen, R.; Wolsink, M.; Bürer, M.J. Social Acceptance of renewable energy innovation: An introduction to the concept. *Energy Policy* **2007**, *35*, 2683–2691. [CrossRef]
29. Mulighetsstudie for Landbasert Vindraft 2015 og 2025. Available online: http://publikasjoner.nve.no/rapport/2008/rapport2008_18.pdf (accessed on 9 December 2020).
30. Europe's Onshore and Offshore Wind Energy Potential. Available online: https://www.energy.eu/publications/a07.pdf (accessed on 9 December 2020).
31. Downs, A. Up and Down with Ecology—The issue attention cycle. *Public Interest* **1972**, *28*, 38–50.
32. Bourdieu, P. *Pascalian Meditations*; Stanford University Press: Stanford, CA, USA, 2000.
33. Cross, J. The Economy of Anticipation: Hope, Infrastructure, and Economic Zones in South India. *Comp. Stud. S. Asia Africa Middle East.* **2015**, *35*, 424–437. [CrossRef]
34. Frøya Vindpark. Available online: https://tronderenergi.no/vind/froya (accessed on 9 December 2020).
35. Tyskere inn i Trønderske Milliardprosjekter: Vindboomen Fortsetter. Available online: https://e24.no/energi/i/b58jav/tyskere-inn-i-troenderske-milliardprosjekter-vindboomen-fortsetter (accessed on 9 December 2020).
36. 78,7 Prosent sier nei til Vindkraft i Folkeavstemning. Available online: https://www.adressa.no/nyheter/trondelag/2019/04/02/787-prosent-sier-nei-til-vindkraft-i-folkeavstemning-18784391.ece (accessed on 9 December 2020).
37. Ordfører Mener Staten må Gripe inn og Stoppe Vindkraftutbygging. Available online: https://www.nrk.no/trondelag/ordforer-mener-staten-ma-gripe-inn-og-stoppe-vindkraftutbygging-1.14505147 (accessed on 9 December 2020).
38. Vindkraftmotstandar Dømt til Fengsel etter å ha Skremt Tilsett i Trønderenergi. Available online: https://www.nrk.no/trondelag/vindkraftmotstandar-ma-i-fengsel-etter-a-ha-skremt-tilsett-i-tronderenergi-1.14853170 (accessed on 9 December 2020).

39. Ti Leserbrev til Trønderenergi—Og Konsernsjefens svar til Dem Alle. Available online: https://www.adressa.no/meninger/ordetfritt/2019/05/24/Ti-leserbrev-til-Tr%C3%B8nderenergi-og-konsernsjefens-svar-til-dem-alle-19103872.ece (accessed on 9 December 2020).
40. Haram. Available online: https://www.zephyr.no/prosjekter/haram/ (accessed on 9 December 2020).
41. Sultstreiker for å få Viken til å stanse vind på Haramsøya. Available online: https://www.nrk.no/osloogviken/vindkraftmotstander-sultestreiker-1.15056109 (accessed on 9 December 2020).
42. Betydeleg trek ved Haramsøya. Available online: https://www.nrk.no/mr/_-betydeleg-trekk-ved-haramsoya-1.15219024) (accessed on 9 December 2020).
43. Fakta om Vindkraft på Haramsøya. Available online: https://www.zephyr.no/wp-content/uploads/2020/10/haram_frakt_15_feil_orginal.pdf (accessed on 9 December 2020).
44. Vindanlegg ble tre Ganger Større enn Oppgitt. Available online: https://www.dn.no/energi/vindmoller/egersund/nve/vindanlegg-ble-tre-ganger-storre-enn-oppgitt/2-1-670909 (accessed on 9 December 2020).
45. Fanga Blant Vindturbinar. Available online: https://www.nrk.no/rogaland/xl/fanga-blant-vindturbinar-1.14548474 (accessed on 9 December 2020).
46. Reiste fra Finnmark for å Stoppe Trøndersk Vindpark. Available online: https://www.nrk.no/trondelag/samer-aksjonerer-og-stenger-anleggsveg-inn-til-vindpark-1.14010318 (accessed on 9 December 2020).
47. Robinson, J.A.; Torvik, R. White Elephants. *J. Pub. Econ.* **2005**, *89*, 197–210. [CrossRef]
48. Pia (27) føler seg presset til å flytte fra drømmehjemmet. Nettavisen Økonomi. Available online: https://www.nettavisen.no/okonomi/pia-%2827%29-foler-seg-presset-til-a-flytte-fra-drommehjemmet/3423691903.html?fbclid=IwAR3PRe6S-g276zszy1n05Ex4P76bmh0r5-XnVcBk8_WBmYLQRnir658S0Es (accessed on 9 December 2020).
49. Har rett til å Bli Hørt om Vindkraft. Available online: https://www.hitra-froya.no/meninger/2019/09/01/Har-rett-til-å-bli-h\T1\ort-om-vindkraft-19815898.ece (accessed on 9 December 2020).