

# Developing a more nuanced understanding of social acceptance for implementing wind power in Norway

**KEYWORDS** Local communities; Renewable technologies; Landscape intervention

**TIMEFRAME** Fellowship meetings with Associates took place in April and May 2020

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This Energy-SHIFTS Policy Fellowship report is part of a wider collection published in November 2020 describing dialogue between 21 energy policyworkers and [86] social scientists and humanities scholars, available via [energy-shifts.eu](https://energy-shifts.eu).

## Policy context

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Norway is one of the leading countries in terms of domestic renewable energy use. Although it produces gas and oil for export, Norwegian society primarily uses renewable energy, mainly from hydropower plants that have been established since the 19th century. Today, Norway has 1,166 hydroelectric generating stations, which account for 96% of total installed capacity<sup>1</sup>. Municipal, county and central authorities own about 90% of Norway's electricity production capacity<sup>2</sup>. Hydropower installation is often co-owned by communities and municipalities, with local communities sharing profits.

As the capacity to develop more hydropower is now limited, Norway has sought to expand its energy production including implementing other renewable technologies. One major reason for this is the high levels of electrification, particularly in the transport sector. The hydropower system in Norway ensures high storage capacity which means that production can be increased and decreased as needed at low cost. The growing share of wind or solar power technology improves the balance between production and consumption. Norway has excellent geographical conditions for implementing wind power, with foreign companies now beginning to invest in Norwegian wind and small-scale power production.

However, there is an increasing wave of social protest against the building of windfarms in Norway. Recent growth in the sector has seen increased public opposition to wind turbines, perceived as visually polluting the landscape and harmful for birds. Media reports have included a focus on local protests 'killing' Norway's wind plans<sup>3</sup>. Significantly, the government has ended work on a national framework for wind power<sup>4</sup> after overwhelming local opposition to the plans. This plan was supposed to designate the most suitable areas for wind power development, with the least consequences in terms of local opposition, nature, tourism etc, and at the same time de facto excluding many more areas for development. Instead, this 'map' was interpreted as giving the green light for even more wind power.

With the plan shelved, the Norwegian Minister of Petroleum and Energy decided to put all new licenses on hold and go back to Parliament with a new White Paper on the future of wind power in Norway.

Despite the above, across Norwegian society there is also wide support for climate protection goals, especially among younger groups; for respondents aged under 45, climate is perceived as the most urgent and important political issue in Norway<sup>5</sup>. Protests against windfarms, however, have been organised right across the country and it seems the problem goes beyond issues of NIMBYism<sup>6</sup>.

In this context, Energy-SHIFTS Fellow Jan Magne Bae's role involves supporting policies within clean energy technology in the Norwegian Ministry of Petroleum and Energy. His field of responsibility includes monitoring and following up with a number of research centers and programmes on clean energy technology – both technical and within Social Sciences. Recently, there has been increased attention to non-technical barriers to renewable energy development.

Jan therefore wished to discuss this policy challenge area with Social Sciences and Humanities (SSH) researchers, including from different country contexts. According to his own intuition, the significant protests to windfarms could be linked to the self-perception of Norwegians who see themselves as an outdoor society and do not want to be limited by technologies in their practice of using landscapes.

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1 See: <https://energifaktanorge.no/en/norsk-energiforsyning/kraftproduksjon/>

2 See: <https://energifaktanorge.no/en/om-energisektoren/eierskap-i-kraftsektoren/>

3 See, for example, articles such as: <https://www.windpowermonthly.com/article/1662940/local-protests-kill-norways-wind-plans> ; <https://www.reuters.com/article/us-norway-windfarm-politics/norways-public-backlash-against-onshore-wind-threatens-sector-growth-idUSKBN1WA177> ; <https://www.newsenglish.no/2020/06/15/new-wind-power-protests-turn-ugly/>

4 Nasjonal ramme for vindkraft, see: <https://www.nve.no/nasjonal-ramme-for-vindkraft/>

5 European Commission, 2019, *Special Eurobarometer 490 "Climate Change"*, Directorate-General for Climate Action

6 NIMBY (or NIMBY syndrome) is an acronym of the phrase 'Not-In-My-BackYard'. It refers to characterization of opposition by residents to proposed developments in their local area, as well as support for strict land use regulations (see e.g. Dear, M., 1992, *Understanding and Overcoming the NIMBY Syndrome*, *Journal of the American Planning Association*, 58:3, pp. 288-300). Recently, this framework has been extensively critiqued for its simplification and pejorative framing of local opponents as motivated by selfishness and ignorance (see e.g. Burningham, K., Barnett, J. & Walker, G., 2015, *An Array of Deficits: Unpacking NIMBY Discourses in Wind Energy Developers' Conceptualizations of Their Local Opponents*, *Society & Natural Resources*, 28:3, pp.246-260).

“ I would like to discuss how to understand and relax the tension between the high level of acceptance for general aims of climate policy (however noting big differences between rural and urban areas) and the lack of acceptance for any intervention in the neighbourhood land. ”

Jan Magne Bae

## Policy challenges

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Jan prepared the following central question to stimulate discussion with his matched Policy Associates: How to create social acceptance and citizen engagement for the renewable energy transition, particularly themes relevant for smart cities and communities?

In this context, Jan felt he would find particularly valuable the following aspects:

- A comparative perspective, exploring similar problems regarding renewable technology rollout in different countries
- Going beyond economic factors and technology perspectives
- Going beyond ‘NIMBY’ explanations
- Understanding local communities



## Matched Policy Associates

Given the policy challenges Jan was interested in exploring, the Energy-SHIFTS team looked for expertise across the social acceptance of renewables technology as well as motivation and dynamic of local protests. They bore in mind that his priority was to understand what affects public perception of energy technologies (in particular wind power) and to learn how to communicate with local communities. His five matched Associates were thus:

**Susana Batel** - Integrated Researcher, CIS- IUL Centre for Social Research and Intervention, Lisbon, Portugal. Her research adopts a critical perspective to examine the relationship between re-presentation, identities, power, discourse and communication, and social change, namely regarding public participation in environmental issues, and public responses to renewable energy and associated technologies. She was invited due to her knowledge of which factors should be taken into consideration to understand the public acceptance of renewables technology and what affects public participation in local communities.

**Ana Horta** - Research Fellow, Institute of Social Sciences, University of Lisbon, Portugal. Her main research interests are focused on energy transition, including social practices and representations, as well as media discourses on energy and climate change. In the programme, she provided her expertise on recent studies on how public accountability and democracy can secure public legitimacy and more equitable and just outcomes of policy decisions.

**Natalia Magnani** - Assistant Professor, Department of Sociology and Social Research, University of Trento, Italy. Her recent research is focused on energy transition and environmental conflicts. She was invited due to her knowledge on analysis of the conflicts over renewables that underline the relevance of a variety of social and cultural factors concerning the interaction with political and social institutions (cultural aspects of the perception of risk, justice, trust, territorial attachment, etc.).

**Karen Parkhill** - Senior Lecturer, Department of Environment and Geography, University of York, UK. Her research interests span energy geographies. She uses qualitative methods to explore how the public engages with/resists notions of low carbon lifestyles and low carbon transitions, including examining how they themselves consume/perceive energy. In the programme, she provided knowledge on how the public socially construct and engage with environmental and technocratic risks.

**Inne Withoutuck** - PhD Researcher, NAFC Marine Center, University of the Highlands and Islands, Shetland, UK. Her research interests focus on spatial decision support to assist the energy sector in optimising the siting of marine energy developments, which broadened the discussion on the presented policy challenge. She brought to the programme her insights on the problem of the 'social gap' - a mismatch between nation-wide support for climate protection vs. overwhelming local opposition to onshore wind.

## Discussion points and SSH insights

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Jan had one-to-one calls with each of his Policy Associates between 29 April and 13 May. The discussions were preceded by exchanging written responses on the policy challenges between Jan and each Associate. In this section we share the experiences and insights Jan shared with us in his reflections. In particular he sought to understand the mismatch between support for climate protection vs. opposition to onshore wind. These started with discussing the limitations of the explanation of local protest in terms of NIMBY syndrome, which is still a powerful policy

discourse. From here, social acceptance was introduced as a complex and context-dependent issue. This was useful to prepare the ground for further analysis of chosen protests against wind power technologies in different countries and regions.

### Overcoming the limitations of the NIMBY concept

In conversation with Associates, Jan confirmed his original intuition that so-called ‘Not-In-My-BackYard’ attitudes, or the NIMBY syndrome, despite being a popular explanation of local protest, have been very much challenged in research communities as too simplistic, and that opposition to renewable energy systems has more complex explanations. By referring to the NIMBY syndrome, policyworkers and developers often dismiss local opposition because they see it as based in selfish, ignorant, fear of change and lack of information. This powerful discourse leads to undermining the legitimacy of public opposition. Moreover, it closes down the space to actually acknowledge communities and opposers’ valid concerns and local knowledge, which can contribute to further increase local opposition<sup>7</sup>.

“ I learned that in recent research the NIMBY-theme has very much challenged as too simplistic and that opposition to RES has a much more complex explanation. ”

Jan Magne Bae

### Social acceptance as a complex and context-dependent issue

The complexity of social acceptance results from the interaction of different actors (local communities, publics, developers, policymakers and policyworkers), different factors (such as associated with technology, process and place dimensions), and at different scales (local, regional, national and global).

Leading on from discussion of the main limitations of the NIMBY concept, Jan explored reframing his policy challenge as related more towards exploring the perceived gap between acceptance for climate policy at a national level and opposition at a local level. It was also underlined that if we want to fully understand responses to renewable energy generation and associated technologies (RET) we must first understand assumptions and preconceptions that may permeate key RET stakeholders’ ideas and practices around local communities’ opposition. Major factors helpful in understanding people’s attitudes to renewable energy technologies are: socio-cultural and institutional factors, market factors and community factors.

Jan discussed with Associates how concepts like ‘Place Attachment’<sup>8</sup>, as well as research into equity, fairness and trust can be applied to better understand social acceptance questions. Symbolic meanings of landscape, nature and outdoor recreation should be addressed respectfully.

In the light of recent research the opposition against renewables energy technologies seems to be neither a selfishness grounded nor a solely communication problems but is linked to the energy governance<sup>9</sup>. Also, the concept of ‘Energy Justice’ with its three tenets – distributional, recognition and procedural<sup>10</sup> was proposed as helpful in analysing the distribution of the costs and benefits of energy production. Jan evaluated being introduced to these

7 Devine-Wright, P. 2011. Public engagement with large-scale renewable energy technologies: breaking the cycle of NIMBYism. *Wiley Interdisciplinary Reviews: Climate Change*, 2(1), pp.19-26

8 The Place Attachment concept offers a multidimensional approach to understood affective bonds between people and place. Symbolical meaning associated with a proposed project and the places affected by it can help explain the difference in residents’ response to implemented projects. (See: Devine-Wright, P., Howe, Y., 2010, Disruption to place attachment and the protection of restorative environments: A wind energy case study, *Journal of Environmental Psychology*, Volume 30, Issue 3, September 2010, pp.271-280)

9 Wolsink, M., Wind power implementation: The nature of public attitudes: Equity and fairness instead of ‘backyard motives’, *Renewable and Sustainable Energy Reviews*, Volume 11, Issue 6, August 2007, pp.1188-1207.

10 Distributional justices recognises unequal allocation of environmental benefits and ills and represents a call for the even distribution of benefits and ills on all members of society regardless of income, race, etc.; Recognition justice states that individuals must be fairly represented, that they must be free from physical threats and that they must be offered complete and equal political rights; Procedural justice refers to equitable procedures that engage all stakeholders in a non-discriminatory way (see: Jenkins, K., McCauley, D., Heffron, R., Stephan, H. and Rehner, R., 2016. Energy justice: a conceptual review. *Energy Research & Social Science*, 11, pp.174-182.)

concepts as valuable as his Ministry very much leans towards technical or economical explanations. He reflected on the necessity of multidisciplinary disciplinary approach.

### Lessons learnt from local protests against renewables in other countries

During the calls, Jan learnt about a similar case with regards to local opposition to onshore wind in the Scottish isles, and used as a basis to discuss a number of relevant concepts:

*“various concepts like ‘democratic deficit’, ‘social gap’, ‘qualified support’ [were] all useful trying to understand the Norwegian context.”* Jan Magne Bae

This example helped illustrate how the concepts of the ‘social gap’<sup>11</sup> could be applied in practice. That case, as well as more discussion about energy development in general, and wind energy in particular, were useful trying to understand factors affecting public participation and its significance for sustainable energy transition.

## Translations to policy impacts

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Jan evaluated his interactions with researchers very positively, and found significant value in terms of broadening his understanding of relevant SSH perspectives as well as leading to deeper insight into social protests as context-dependent and complex issues. The Fellowship has led to three main areas of policy impact for Jan:

### 1. **Changing language: rejection of the NIMBY concept**

Jan found his Fellowship experience inspired him to learn from similar cases in other countries. A key impact is that he now rejects the whole NIMBY concept as too simplistic. This will feed into Jan’s discussions with colleagues including within the Ministry, relevant directorates and the Norwegian energy research community.

### 2. **Feed-in to policy advisory roles**

Jan holds a number of current advisory roles including working on programmes that seek to address social sciences and the energy transition. The themes discussed during the Fellowship are highly relevant for two of them, FME NTRANS and FME INCLUDE<sup>12</sup> the latter of which seeks to provide knowledge on how to realise a socially just low carbon society. Learnings from the Fellowship will directly inform his work with these programmes.

### 3. **Development of further policy-research dialogue mechanisms**

Jan recommends more direct contacts between policyworkers and researchers, for example organisation of a problem-centred joint conference. The idea behind such conferences would be to look at specific energy related problems from many different viewpoints. He strongly believes that many existing conferences are too centered on technological or economical aspects of energy. Jan has offered his Associates support in terms of consulting on their research problems and further exchange of knowledge and experience. In a post-pandemic reality he hopes face-to-face meetings may be possible.

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<sup>11</sup> The term ‘social gap’ refers to a mismatch between acceptance at a national level and opposition at a local level. The reasons for this have been broadly grouped by some researchers into three main explanations: ‘democratic deficit’, ‘qualified support’ and ‘self-interest’. Democratic deficit describes the lack of the public participation – people who are just informed about the decision, are more inclined to object rather than accept project ideas; Qualified support refers to situation when renewable energy is only accepted if its implementation meets certain conditions; Self-interest (linked to the NIMBY concept) relates to supportive of wind energy generally but oppose any developments in own area. See: Bell, D., Gray, T. and Haggett, C., 2005. The ‘social gap’ in wind farm siting decisions: explanations and policy responses. *Environmental politics*, 14(4), pp.460-477.

<sup>12</sup> See: <https://www.sum.uio.no/english/include/>

## Reflections from Associates

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Associates were asked to reflect on their meeting with Jan, including what they learnt about on-the-ground energy policy challenges. Here we share some of their reflections which particularly show appetite for the Fellowship marking the start of conversations and relationships which can further develop over time; this was certainly one of the aspirations of the programme.

“As [someone] without professional experience in the field of policymaking, it is easy to assume that sharing scientific journal articles that address the policy challenge could lead to a quick short-term solution to the problem, but in reality of course this is not the case and **research is something that could inform policy in the long-term, in a slower but perhaps more effective way.**”

“It was **very interesting to get a glimpse of the complexity of energy policy challenges** from the point of view of a policy maker, who needs to make decisions taking into account so many different dimensions and competing interests.(...) Would be good to have these initiatives more often, if possible with more time for discussion and in in-person meetings.

“That it seems as if **similar challenges are found in different countries**. Also, that the policy challenge does not have a straightforward solution, even if there is a lot of research out there that addresses this challenge (albeit in different contexts).”

“The meeting **further highlighted the challenge of translating research into operational and relatable recommendations and statements.**”