



Understanding Local Impacts of Wind Farm Developments Together

Par Lucy Natarajan 29 Octobre, 2020 4:04 Aucun Commentaire



Introduction

There are some well-known concerns about new developments for renewable energy generation, including Wind Farm projects. To put it simply, there is a justifiable fear of green-wash about land use changes and local impacts of projects. As set out here, this is evidenced in UCL's research on the Nationally Significant Infrastructure Projects or 'NSIPs' consenting processes in the UK[1]. That study showed the importance of engaging with the complexity of evidence about the local impacts of Wind Farms, and the challenges of involving the public in decision-making for the development of new renewable energy generation stations and associated changes in land use.



The general 'public good' of a low-carbon development is sometime presented in such a way that objections are misrepresented, ignored or simply not given a hearing. This happens when objections to Wind Farms are assumed to arise from a NIMBY attitude ('not in my backyard'). The widespread 'national support' for renewable energy infrastructure is often cited as proof that local citizens' concerns are marginal, unimportant or selfish. In fact, the opposite is true when local people raise concerns in public forums: they want to protect about their communities and the places where they live[2]. Equally importantly, local people can explain the detail of environments, infrastructures, and places in a unique and insightful way. Their knowledge can help decision-makers – both developers and planning authorities – to identify important issues that need to be addressed.

If the transition to renewable energy is to be socially just and protect the natural environment, development projects cannot simply be allowed to go ahead on the basis that they are part of a processes of transitioning to low or zero carbon energy production. The purpose of planning processes is to engage with knowledge, but understanding sustainable development that can support local and global environmental processes is inevitably complex. Those involved must go further than a generalized concern to reduce carbon emissions, and shed light on all of the impacts that will arise from new infrastructure. Detailed study of developing and operating new infrastructure projects is needed in order to evaluate the relative merits of proposed locations for Wind Farm projects and identify where mitigation measures can reduce negative impacts, on the local communities and natural environments where they are sited. Local people can help broaden out what is considered, and deepen understandings of the local impacts of Wind Farms.

Lessons From UCL's Research

It is important that the public is brought into decision-making and this goes beyond the issue of democratic rights to 'a say'. Citizens can help decision-makers learn about the local impacts of developments, by explaining how communities and ecologies might be affected by proposed changes. UCL's research into decisions on Nationally Significant Infrastructure Projects showed how this matters in relation to the impacts of onshore and off-shore Wind Farms. It also demonstrates that citizens can get involved before and during project planning stages. This note captures the key points about 1) the areas of knowledge of local impacts, and 2) the opportunities and barriers to local people engaging in decision-making at different stages.

1. Knowledge Of Local Impacts

Nature

Modeling, short-term surveys and quantified assessments one way of knowing environmental impacts, and often used to provide legal certainty for instance about impacts on bird populations (Lee, Natarajan, Lock, *et al.*, 2018). Such forms of knowledge are inevitably narrow and limited to pre-determined areas of nature, as they (quite rightly) seek to establish the lawfulness of decisions. Therefore, predictions with the highest level of scientific certainty cannot possibly hope to capture the fullness of the impacts of any single project on nature in the local area.

Local people have other types of knowledge of local nature, accumulated from experiences of living and working in the area. This type of knowledge is 'lay' and non-professional, and it is often undocumented. Yet, local knowledge shows up the gaps in 'expert' data, and expresses the 'grey' areas of shifting tides, seasonal behaviours of local fauna, and other changing natural patterns.

as a fishing person and you know about the sea, I can close my eyes and I see all the mess underneath. And these cables are going on top of other cables, now the national grid going through. It's just a total, total mess underneath (fisher woman)

Local people also have more formal expertise. Special interest environmental groups conduct their own surveys regularly. They are also aware of how their places is important to the thriving of particular species, and consequently to wider biodiversity.

We've probably got one of the richest offshore areas, not necessarily in breeding terms but in what sort of birds we get. If there's storm in the channel, lots of stuff is thrown up this way. We are on a main migration route. For instance at the moment there's stuff varying from little yellow warblers 5 inches long called Chiffchaffs coming in overnight. But you'll be getting things like wading birds called Whimbrels with a big beak like a curlew, they'll be coming in from the south from their wintering grounds. You'll be getting straight-billed things called godwits coming through on their way north to Scotland... (local birder)

Economies

New Wind Farm projects generate economic activity. Yet in practice local economies might not benefit from the new developments in their area. This is exacerbated by insufficient knowledge of the diversity of local economic interests, and the lack of explicit strategy for how to hook into the local skill-base and existing local businesses.

...such infrastructure generates important economic benefits and is essential for national economic growth. But there is also often an assumption that these projects will produce local economic benefits (Rydin, Natarajan, Lee, et al., 2018a)

As Rydin et al. explain (2018), direct employment in NSIPs construction was frequently overstated by developers. The eventual levels of employment of local people is typically low, and in any case construction jobs are short lived. The use of local supply chains for new renewable energy development is also known to be low and planning for this was limited, for instance when the ports to be used by maintenance crews were not decided.

Local business may suffer from the disruption caused by construction as well as effects of the new infrastructure. Sites of development were often those places that were heavily reliant on tourism and fishing industries, and many small and medium sized operators were affected. So, it was key to know which business would be affected and how, and provide mediation or compensation. However, the level of evidence on local economies provided by local authorities was very low, and only one sector benefitted from protocols and a strategic liaison body to aid liaison and secure compensation[3].

Landscape

Landscapes are central to debates about Wind Farms, but there is great difficulty in understanding impacts because of the fluidity and live social nature of the value of landscapes. As Lee discusses, there are many claims to knowledge "because of its slightly ambiguous status in terms of factual claims" (Lee, 2017). There are expert, professional, and lay approaches to landscape. The matter goes beyond the purely visual to other issues of quality, including long-term psychosocial need, such as cultural and spiritual identity, and place-related affect. Therefore, the impacts of changes to the landscape relate to human responses and social understandings.

Lee (2017) found that both local people and local authorities brought lay knowledge of landscape into decision-making. They referenced the cultural and emotional importance of views. Institutional and professional actors also referenced aesthetic values and 'beauty', but their 'expert' forms of evidence were preferred in decision-making because they were more rigid. This means that the important *local social* perspectives on landscape may be drowned out by other approaches.

the dynamism and particularity of the social construction of landscape, is likely to be lost, even in the very best of cases (Lee, 2017)

As Rydin et al. (2017) discuss, local people are able to bring their knowledge of landscape through contestation of expert's 'artefacts' such as maps, digital graphics and visualisations. Often the points they made explained the relevance of context, and showed how the living and changing nature of the landscape couldn't be known through those materials.

... certain photos were criticised because it was misty on the day they were taken. There may be more fundamental concerns over the ability of visualisation to represent the local environment ... it was argued that the visualisation could not capture the difference of up to 6 m between the open sea level and the retained water in the proposed lagoon, that is, a dynamic feature compared to a static visualisation. (Rydin, Natarajan, Lee, et al., 2017)

2. Engaging In Decision-Making Processes

Decisions On Spatial Policy

The public can be involved directly in decisions on Wind Energy Infrastructure at a variety of points. The earliest point is consultation on the development of regional/national policy about a desirable location and level of energy infrastructure development. These spatial policies are important as they identify the overall distribution and patterns of use of land for Wind Farms that are in the public interest.

In Wales, citizens and civil society organizations were involved in developing policy on preferred sites for Wind Farms. This type of regional/national policy can provide explicit protection to irreplaceable areas of wilderness and associated economic activities (e.g. heritage landscapes, unique ecologies, tourist destinations). The Welsh policy gave guidance on the intensity of development that was appropriate for preferred sites, i.e. the maximum total number of Wind Turbines permitted. This type of policy can give confidence to developers about sites they might consider for large scale new Wind Farm projects. It also prevents 'cherry picking' of valuable sites that are easy to develop. In England where no such policy existed, a major offshore Wind Farm station underwent a planning examination and, even after technical debates and project re-design, was refused consent in large part because of significant landscape impacts.

The technical and expert knowledge claims of the applicant were very robustly challenged by objectors, and specifically through competing technical and expert knowledge claims. And further, the shape of the prior institutional knowledge was novel in this case, since the project would affect an area designated as a World Heritage Site. (Lee, 2017)

The UCL study also showed the importance of properly applying spatial policies later on in decision-making on projects, and making sure that the detail of policy that had been worked out with communities' input is not over-ridden. In the UK, energy policy was used to 'outweigh' spatial policy, because of the a-spatial centralized nature of decision-making on energy. So, some regional protections in Welsh spatial policy were not applied, consequently undermining democratic processes and citizens' relationships with devolved authorities.

... more emphasis was placed on UK energy policy than Welsh planning, and national policy could override Welsh policy even where it offered no position on the matter at hand. In addition, energy strategy could eclipse (devolved) planning powers, and thereby 'squeeze out' potentially protective aspects of spatial strategy. (Natarajan, 2018)

In the absence of statutory guidance on the importance of the various dimensions of specific sites, the discretion and knowledge of consenting authorities became more significant. Their site visits offered a possible route to understanding the local social importance of environments, though not necessarily a reliable one.

The ExA [examining authority, i.e. planning officials] seem to be partly creating their own "expert-led" discourse, in which the emotional value of the landscape is constructed as a particular form of knowledge, but also sympathising with existing local discourses of attachment to place. It remains for further investigation to consider whether the key regulatory actor, here the ExA, is advancing their own discourse on nature while ignoring/discounting local ones or is generally supporting them. (Rydin, Natarajan, Lee, et al., 2017)

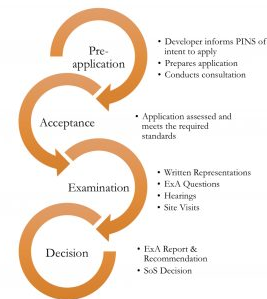
Decisions On Projects

There are further points for public engagement in decisions on Wind Energy Infrastructure, during the design and regulation stages of new infrastructure projects, when developers and planning authorities address the expected local impacts of projects. In the NSIPs cases studied, there were two key means of public engagement; community consultation by developers, before they applied for consent, and representations from local people and organizations' to the planning authorities during their examination of the developer's application.

Pre-Application

Under the Planning Act 2008, developers must conduct a local consultation about their proposals prior to any application for planning consent, and including consulting with relevant local authorities on their approach to the local consultation. When done well developers made significant investment in communications and public engagement across several districts. Interestingly developers typically found the consultations very worthwhile in terms of improving their applications and streamlining design processes.

I think it is important to have these discussions as you develop plans, because a lot of work goes into surveys ... and if you didn't have that insight on where it needs, taking on that feedback, you could end up doing a lot of work and having to change plans multiple times. (NSIPs developer)



Good practice involved going beyond the statutory minimum requirements. It required information at multiple stages of project design in formats that were accurate and could be easily understood, and diverse means for public interactions, through online exchanges and discussions with technical specialists at open events. However, there were still reports of poor practice by some local people, and developers engagement consultants had concerns about the complexity of the processes.

... [developers] had needed to provide a good deal of explanation to local people, in one instance even producing a 'roadmap' guide to navigating the participatory processes. (Natarajan, Rydin, Lock, et al., 2018)

Local citizens, businesses and organizations were deeply involved in formal examination of applications to develop NSIPs. They could register as Interested Parties (IPs), and then give evidence by directly submitting written representations and speaking at hearings to the examining authority. There was also great transparency with free public access to the application materials, and all of the other documentation submitted to the examining authority, which were loaded onto the planning inspectorate's website.

The local knowledge of IPs was significant. They identified the exact nature of the social and environmental impacts and gave details that would not otherwise have been known. This opportunity to feed directly into an examination is valuable since earlier consultations might fail to capture information on all of the local impacts of the new developments, or the response to issues raised might not be insufficient.

I'd been monitoring the Belted Beauty moth for probably about 10 years, or a bit less than that prior to the development being proposed. [The developer] employed that company, an environmental impact survey company, at the early stage, who purportedly did surveys of the site. They didn't identify the moth. (resident)

They are too close to where horses will go. So because to run a business, you've got to have insurance, you can't insure somebody to take the horses somewhere is not safe. You are crippling those businesses (local organization)

But what they don't look at is that small but significant number of occasions where we have a weather route for particular weather conditions. There hasn't yet been a major incident between a car vessel or ferry and an offshore windfarm turbine farm but at some point there is going to be one. (local business)

However, there were barriers to engagement in the NSIPs examination. Local people were engaging on a voluntary basis in formal procedures that were new to them, and therefore materially onerous and culturally challenging. Involvement of the public required significant efforts and resources, and this created an imbalance not only between developer and IPs, but also between citizens.

Those with lower download capacity struggled more than others to access information; those with low levels of literacy or digital skills were less able to engage in documentary exchange; those without public-speaking experience were more nervous in their oral representations; those without private transport were more challenged by locations of hearings; and those in full-time employment were more strained by ad hoc scheduling of hearings.

(Natarajan, Lock, Rydin, et al., 2019)

And a final consideration is, what counted as the authentic input from a local place in the decision-making. The performance of the examining authority was critical to this. The interpersonal skills and use of discretion by the individual planning officers could be helpful in dealing with the challenges. However, there

critical to this. The interpersonal skills and use of discretion by the individual planning officers could be helpful in dealing with the challenges. However, there are important ways in which the examination processes might work against the representation of communities' interest. Rydin et al (2018) explain how 'local voice' was constructed within the examination.

the complexity of how a new major infrastructure project may impact on the locality and its people is rendered simpler and atomised into a set of distinct questions. Will reasonable enjoyment be impacted? Can the economic effects on businesses be compensated? (Rydin, Natarajan, Lee, et al., 2018b)

Final Thoughts

The involvement of local people in decisions on Wind Farm developments is under-rated as a form of learning about local communities and places. Engagement before and during decisions on projects promotes participatory democracy, and expands the knowledge used in decisions. Planners can acknowledge the challenges involved, and deal with them by opening up space to discuss complexity, uncertainty and lay knowledge. Communities can be aware of individualizing practices in decision-making and seek support through local and wider networks. If local people and decision-makers work together, they can produce a fuller understanding of the local impacts of Wind Farm developments.

References

- Bell, D., Gray, T., Hagggett, C. & Swaffield, J. (2013) Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy. *Environmental Politics*. 22.September 2013, 115–135.
- Hall, N., Ashworth, P. & Devine-Wright, P. (2013) Societal acceptance of wind farms: Analysis of four common themes across Australian case studies. *Energy Policy*. 58200–208.
- Lee, M. (2017) Knowledge and landscape in wind energy planning. *Legal Studies*. 37.1, 3–24.
- Lee, M., Natarajan, L., Lock, S. & Rydin, Y. (2018) Techniques of knowing in administration: Co-production, models, and conservation law. *Journal of Law and Society*. 45.3, 427–456.
- Natarajan, L. (2018) Major Wind Energy & the Interface of Policy and Regulation: A Study of Welsh NSIPs. *Planning Practice & Research*. 34.1, 1–17.
- Natarajan, L., Lock, S.J., Rydin, Y. & Lee, M. (2019) Participatory planning and major infrastructure: experiences in REI NSIP regulation. *Town Planning Review*. 90.2, 117–138.
- Natarajan, L., Rydin, Y., Lock, S.J. & Lee, M. (2018) Navigating the participatory processes of renewable energy infrastructure regulation: A 'local participant perspective' on the NSIPs regime in England and Wales. *Energy Policy*. 114201–210.
- Rydin, Y., Natarajan, L., Lee, M. & Lock, S.J. (2017) Artefacts, the gaze and sensory experience: Mediating local environments in the planning regulation of major renewable energy infrastructure in England and Wales. In Monika Kurath, Marko Marskamp, Julia Paulos, & Jean Ruegg (eds.), *Relational Planning: Tracing Artefacts, Agency and Practices*. Cham, Palgrave Mcmillan, pp. 51–74.
- Rydin, Y., Natarajan, L., Lee, M. & Lock, S.J. (2018a) Do local economic interests matter when regulating nationally significant infrastructure? The case of renewable energy infrastructure projects. *Local Economy*. 33.3, 269–286.
- Rydin, Y., Natarajan, L., Lee, M. & Lock, S.J. (2018b) Local voices on renewable energy projects: the performative role of the regulatory process for major offshore infrastructure in England and Wales. *Local Environment*. 23.5, 565–581.
- [1] Statutory planning for major developments, which included Wind Farms at the time of the study. The UCL web pages contain more information on the ESRC-funded study, a summary booklet with recommendations for the UK, and links to the research publications. <https://www.ucl.ac.uk/Nationally-Significant-Infrastructure-Projects/>
- [2] Bell at al. explain the 'social gap' between national and local support for energy (Bell, Gray, Hagggett, et al., 2013). Devine-Wight and colleagues explain place attachment (Hall, Ashworth & Devine-Wright, 2013).
- [3] The Fisheries Liaison with Offshore Wind and Wet Renewables (FLOWW) group mediated between developers and the local fishing industries.

📌 Decisions, Participation, Planning, Wind Farms

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