

Institution: Queens University, Belfast
Unit of Assessment: 13

Title of case study: Shaping Community Engagement in Energy Transition
Period when the underpinning research was undertaken: 2003-2017

Details of staff conducting the underpinning research from the submitting unit:
Name(s):
Role(s) (e.g. job title):
Period(s) employed by submitting HEI:
August 1998 - Current

Period when the claimed impact occurred: 1st August 2013 - July 2020

Is this case study continued from a case study submitted in 2014? Y

1. Summary of the impact

Our relationship with energy infrastructure is changing as different technologies are deployed in new locations. This can lead to community concerns around environmental impacts, community involvement and distribution of costs/benefits of development, which has a significant influence on the pace and nature of energy transition. Ellis' research on this had impacts including: i) Influencing Ireland's Energy White Paper and Renewable Support Scheme, which has already secured c.1,300MW renewable capacity ii) Advising international institutions' (EU/ IEA) on social engagement around renewables; and iii) Guiding energy companies' approach to community relations, including the Community Benefit Fund for Ireland's largest windfarm (SSE) and engagement processes for Coillte's €1 billion wind energy programme.

2. Underpinning research

This case study is based on research that began in 2003 with an ESRC-funded investigation (RES-000- 22-1095, PI: Ellis) of community concerns around a windfarm proposal, and evolved through six further research projects, funded by UKRI, EU, Irish Environmental Protection Agency, Danish Council for Strategic Research and Canadian Social Science and Humanities Research Council, and ongoing with the <u>MISTRAL EU-Innovative Training Network</u>.

This research has focussed on social engagement with renewable energy projects. A particular focus has been wind energy in Ireland, which has rapidly expanded from providing 4% of the country's electricity in 2005 to 30% today and is now critical to the country's climate targets, energy security and economic benefits for rural communities. However, in many countries, including Ireland, concerns of host communities has emerged as a limiting factor to the overall potential of wind energy. This was initially understood primarily in term of 'NIMBYism', which led to responses of dismissal and marginalisation. However, Ellis' research has contributed to a better understanding of these concerns and shown that they reflect deeper anxieties linked to environmental impacts, place-attachment, community involvement and distribution of costs and benefits. This has helped shape new approaches to energy policy in many countries, and particularly in Ireland, which has now adopted a strong community focus in its approach.

Ellis' research has developed new methodological and theoretical approaches to social engagement in a large and varied body of work. This includes an edited book, 14 peer-reviewed papers, 6 book chapters and 5 advisory reports, which has attracted 1640+ citations and 18,000+ downloads. 11 of these peer reviewed papers are in the top 25% of all Altimetric scores, and 5 in the top 5%. This work has been presented more than 40 times, including

Impact case study (REF3)



keynote presentations at major EU events, prestigious international academic conferences in India, China and across Europe, and policy/practitioner events, including European Wind Developer Congress. The work has influenced other projects (e.g. GPWind, WisePower and WinWind, while Ellis' membership on advisory boards of other international projects (e.g. Crowdthermal, Windplan, COM-RES, Cowind) extends this contribution. Ellis was also invited as the Independent Expert Witness for the Northern Ireland Assembly Enquiry into Planning for Wind Energy http://www.niassembly.gov.uk/assembly-business/committees/2011-2016/environment/reports/report-on-the-committees-inquiry-into-wind-energy/ Six specific outputs have been selected here to highlight some of the impacts generated from this research.

REF1-6 (below) demonstrate the evolution of this research. **REF1** provided innovative perspectives of local windfarm disputes using a new approach (Q-Methodology), finding that project opponents were not generally the deviant 'NIMBYs' as often portrayed, but expressing rational reactions to locally disruptive developments. **REF2** analysed dominant discourses around wind energy to produce what were then novel insights; that energy transition relied not only on the *viability* of competing technologies, but also their *social acceptability*. The research also highlighted the potential of deliberative processes in overcoming many issues in windfarm disputes. **REF3** elaborated this by drawing on the political tradition of *civic republicanism* to highlight how spatial planning processes could be utilised to catalyse windfarm conflicts into wider discussions about energy choices, and suggested that those expressing concerns around local renewables projects should be welcomed for their engagement with the civic arena, rather than vilified as NIMBYs. **REFS 1-3** created a theoretical and empirical basis that had implications for practice and policy, highlighted the potential for new institutional designs and the need for constructive engagement around windfarm disputes.

REF4/REF5 developed this research for Ireland's National Economic and Social Council (NESC). **REF4** makes the case for conceptualising energy as a socio-technological phenomena and provided international examples of progressive practice, leading to recommendations focused on reducing place-based impacts and enhancing procedural and distributive justice. **REF5** analysed the Irish context and developed an extended list of recommendations for Irish energy transition, many of which were articulated in NESC's own report to the Taoiseach (Prime Minister). **REF6** synthesises Ellis' expertise in a major report for the EU's Joint Research Centre, and, as such, is being used as the evidence base for EU policy and research programmes.

3. References to the research

<u>REF1:</u> Ellis, G., Barry, J. and Robinson, C. (2007) 'Many Ways to Say "No" – Different Ways To Say "Yes": Applying Q-Methodology to Understand Public Acceptance of Wind Farm Proposals', *Journal of Planning and Environmental Management*, 50 (4), 517-551. https://doi.org/10.1080/09640560701402075

<u>REF2:</u> Barry, J., Ellis, G., and Robinson, C. (2008) 'Cool Rationalities and Hot Air: A Rhetorical Approach to Understanding Debates on Renewable Energy' *Global Environmental Politics*, 8 (2), 67- 98. https://doi.org/10.1162/glep.2008.8.2.67

<u>REF3</u>: Barry, J., and Ellis, G. (2010) 'Beyond consensus? Agonism, contestation, republicanism and a low carbon future', in Devine-Wright, P. (ed.) Renewable Energy and the Public, Earthscan. <a href="https://pdf-drive.com/pdf/Patrick20Devine-Wright20-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20From20NIMBY20to20Participation-20Renewable20Energy20and20the20Public20Energy20and20the20

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<u>REF4</u>: SLR, Ellis, G. and Devine-Wright, P. (2014) *Wind Energy: International Practices to Support Community Engagement and Acceptance*, National Economic and Social Council, Ireland http://files.nesc.ie/nesc reports/en/139 additional SLR International Report.pdf

<u>REF5:</u> SLR, Ellis, G. and Devine-Wright, P. (2014) Wind Energy: The Challenge of Community Engagement and Social Acceptance in Ireland, National Economic and Social Council, Ireland: http://files.nesc.ie/nesc reports/en/

139 additional1 SLR National Report.pdf

<u>REF6:</u> Ellis, G. and Ferraro, G. (2017) Social Acceptance of Wind Energy: Where We Stand and the Path Ahead, Joint research Centre, European Commission, Brussels. https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/social-acceptance-wind-energy-where-we-stand-and-path-ahead

4. Details of the impact

Three major areas of impact are claimed for this research:

1. Shaping national energy policies and instruments of the Republic of Ireland. It is possible to establish a clear link with Ellis' work and a change in policy direction expressed in Ireland's 2015 Energy White Paper (Source1), which shifted emphasis away from focusing on the role of Government and infrastructure providers, for which community concerns were a frustrating factor, to the one expressed here:

's87. The transition will see the energy system change from one that is almost exclusively Government and utility led, to one where citizens and communities will increasingly be participants in renewable energy generation, distribution and energy efficiency.

s.88. Improved community engagement will be essential to renewable energy policy making and implementation.' (Source1)

In support of this, the White Paper (<u>Source1</u>, p44-45) committed to an extensive list of actions that are now being implemented, many of which were expressly recommended in Ellis's work (<u>REF4</u>, <u>REF5</u>). This includes measures to increase transparency in development decisions, the use of intermediaries, introduction of co-ownership schemes and encouraging community energy. The new procurement programme that emerged from the White Paper, the <u>Renewable Energy Support Scheme (RESS)</u> includes innovative community provisions recommended in <u>REF4</u>, <u>REF5</u> (community ownership, community dividends and community participation) and has already secured 1,276MW of new renewable capacity. Ellis was part of an advisory group for this Scheme, and as confirmed by the <u>Sustainable Energy Authority Ireland (SEAI) (<u>Source2</u>, Letter from the Wind Energy Programme Manager) his work was considered 'very valuable' for the implementing Government Department.</u>

Evidence for Ellis' influence on this policy change is found in both <u>Source2</u> (letter from SEAI) and in <u>Source3</u> (Letter from the Project Leader and the Director of National Economic and Social Council, NESC). <u>Source3</u> explains how the impact was a result of Ellis two advisory reports (<u>REF4</u>, <u>REF5</u>) for Ireland's NESC, which directly advises the Taoiseach. These reports were the basis of <u>NESC's report</u> on building social support for wind energy in Ireland (<u>Source4</u>), extensively discussed in the national media and Irish Parliament (<u>Source3</u>). The NESC report then informed the change in policy that emerged in the Energy White Paper (<u>Source1</u>). <u>Source3</u> explains the influence of Ellis' research on NESC's approach and understanding of social acceptance, and clarifies the chain of



impact that led to shaping the White Paper, RESS and that it is also referenced in new climate legislation. <u>Source3</u> also includes a commendation from the current Political Advisor to Ireland's Minister for Climate Action, Energy and Communication which notes the important policy improvements secured as part of this work, stating that it 'resulted in better consultation with communities and in addition some major policy improvements ...'.

Source2 states that Ellis' work 'provided the evidence for developing Government policies on community engagement for renewable energy' and **Source3** summarises the overall impact of the research as having 'a positive impact on the development of energy policy towards the involvement and engagement with communities.'

In addition to this influence, Ellis' work is regularly quoted in NESC reports, which are made to the Office of the Taoiseach, including its work on 'Just Transitions' (e.g. Source5). As a result of the advice provided on energy issues, Ellis was appointed by the Taoiseach as an independent member of NESC and thus now provides direct advice to the Council and has contributed to its ongoing programmes on climate change and transition. He has also had an influence on Northern Ireland in terms of shifting energy debates around renewable energy (Source6, Letter from the Head of RenewableNI).

2. Influencing major international institutions, including the European Commission on citizen participation in energy. <u>REF1</u> is quoted in the European Wind Energy Associations <u>Wind Energy – The Facts</u>, supported by the EU, which claims to be 'widely considered to be the most important wind energy reference in the world' and Ellis was a keynote speaker at the launch of the EU's work on <u>civic society dialogue on energy issues</u> and <u>Energy-Transparency Centre of Knowledge (E-Track)</u>. The EU's Joint Research Centre (JRC) commissioned Ellis to conduct a knowledge review of social acceptance (<u>REF6</u>). JRC Reports are a primary knowledge source for EU policy-makers and this report has been quoted in <u>The Brookings Institute report on local opposition to renewables in the USA</u> and by <u>The World Bank in their report on improving the investment climate for renewables</u>.

The research has also been taken up by the International Energy Agency (IEA) and REN21 (a global NGO for promoting renewables). Ellis has been the National Expert for Ireland on IEA Task 28, a group recognised as one of the key sources of expertise in the field (e.g. by the trade body Wind Europe), under the auspices of the IEA, the global energy body. Ellis co-authored IEA recommended practice for social acceptance, which has been implemented by many national governments (Source7, Letter from the Joint Operating Agents), including Ireland (Source2). As noted in Source7: ... It is clear that Prof Ellis has played a very important role in ensuring the works of the Task [28] has been of relevance of our international membership and has continued to reflect cutting edge research in the field [he] has had an important and enduring influence on the outcomes and impact of IEA Task 28'.

Ellis was also invited as lead author of the Features Chapter for REN21s's <u>2020</u> Renewables Global Status Report ('the world's most comprehensive crowdsourced report on renewables', <u>Source8</u>, Letter from the Executive Director of REN21), which has been viewed by nearly 30,000 energy professions across the world and discussed at 12 regional and international events in the four months since publication (<u>Source8</u>), helping shaping the understanding of social acceptance amongst organisations such as the EU, IEA, World Bank, UNDP and World Wind Energy Association.



3. The expertise developed from this research has also directly shaped development practice through advice provided to two of Ireland's largest wind energy companies (SSE and Coillte). Following an approach by SSE to Ellis, he aided the design of the community benefit fund of the Galway Bay Wind Park, Ireland's largest windfarm. Source9 (Letter from SSE's The Head of Sustainability, Ireland) notes that his expertise '... has been very useful and valuable for understanding where adjustments need to be made in the final Galway Wind Park Community Fund design'. Similarly, Ellis has advised Coillte on community relations for its €1 billion renewable energy programme and was an expert member of their Community Engagement Panel, which has overseen their community consultation process. Source10 (Letter from the Community Engagement Manager with Coillte) notes that Ellis' involvement '... has confirmed the need for us to adopt a proactive approach to managing social risks of our projects, helped inform the development of our innovative Inclusive Project Development Team model, and provided us with greater confidence and credibility in how we best manage the community relationships of our community development programme'.

5. Sources to corroborate the impact (indicative maximum of 10 references)

<u>Source1:</u> Ireland 2015 Energy White Paper: Dept of Communication, Energy and Natural Resources (2015) *Ireland's Transition to a Low Carbon Energy Future 2015-2030* (see pages 40-45: https://static.rasset.ie/documents/news/energy-white-paper-dec-2015.pdf)

Source2: Letter verifying impact from Sustainable Energy Authority Ireland (8/12/20) from their Wind Energy Programme Manager, and the letter reports the impact of Ellis' research on renewables policy in the Republic of Ireland.

<u>Source3:</u> Letter verifying advisory role and impact via NESC (18/11/20). NESC commissioned **REF4** and **REF5** and this letter reports the impact of that research, from a Policy Analyst and Director of NESC.

<u>Source4:</u> NESC (2014) Wind Energy in Ireland: Building Community Engagement and Social Support https://www.nesc.ie/publications/wind-energy-in-ireland-building-community-engagement-and-social-support/

<u>Source5:</u> NESC (2020) Four Case Studies on Just Transition: Lessons for Ireland, http://files.nesc.ie/nesc_research_series/Research_Series_Paper_15_TTCaseStudies.pdf

Source6: Letter from Renewable NI verifying contribution to policy debates in Northern Ireland (22/12/20) from the Head of RNI, the Renewables Trade organisation for Northern Ireland the letter reports the local impact of Ellis' research.

Source7: Letter verifying contribution to International Energy Agency's Task 28 (23/11/20), from the Operating Agent for Task 28, who acts as a Secretariat for the work undertaken by its remit, and therefore involved in the delivery of its impact.

Source8: Letter verifying contribution to the activities of REN21 (20/11/20) from their Executive Director and the letter describes the impact of Ellis' work with the organisation, particularly the authorship of a chapter in their *Renewables Global Status Report*.

Source9: Letter from the Head of Sustainability with SSE (Ireland) and the letter reports the impact of Ellis' advice to the company on Wind Park Community Fund, verifying contribution to Ireland's largest wind development (11/08/17).

Source10: Letter from the Community Engagement Manager with Coillte, who are a major renewables developer in Ireland, verifying contribution to its wind energy development programme (19/11/20). The letter reports the impact of Ellis's research through engagement with Coillte.