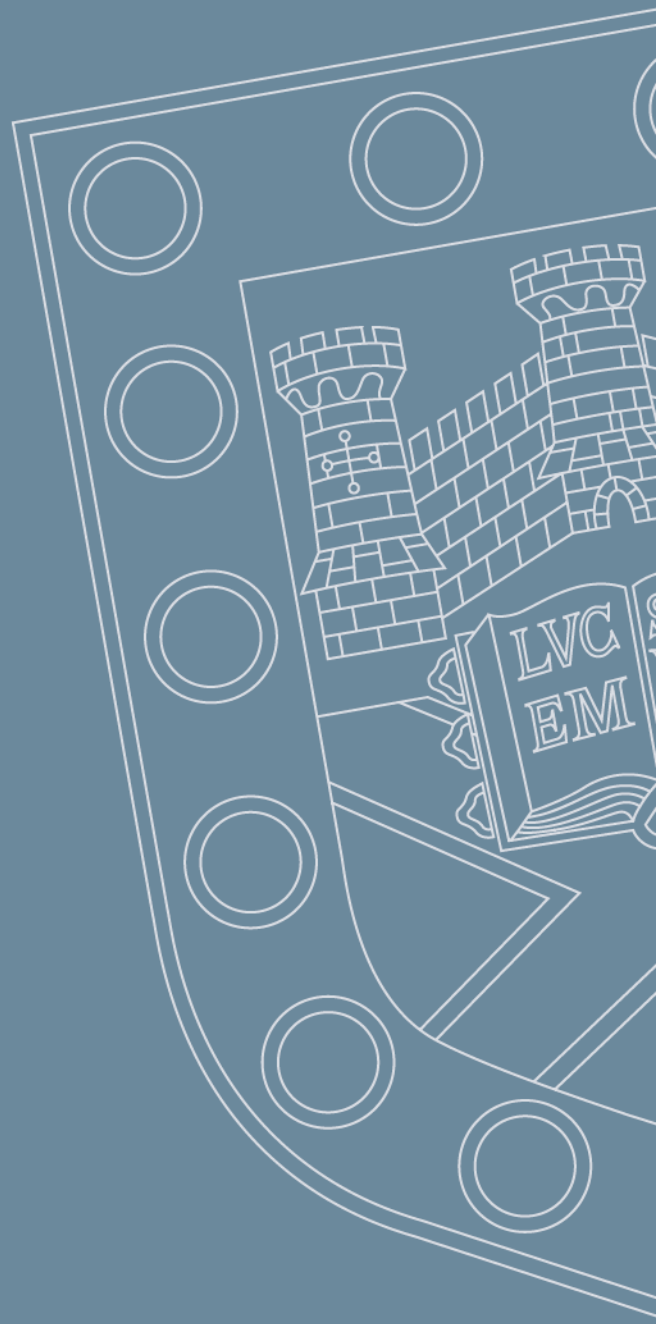
UNIVERSITY OF EXETER

Place and Participation: Principles for public engagement with large scale net zero infrastructures

Professor Patrick Devine-Wright

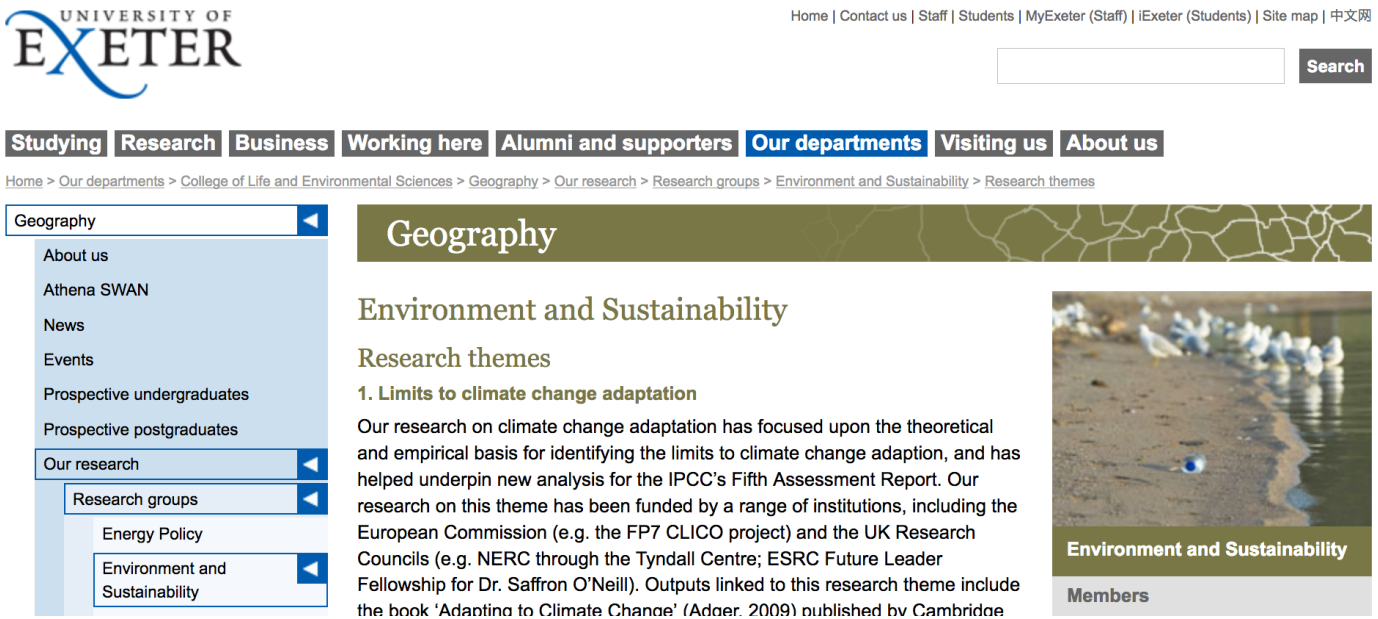
NASEM Webinar

June 6th 2022



Making an introduction

- Climate change mitigation and sustainable energy transitions
- Interdisciplinary insights from across the social sciences to inform policy and practice
- Empirical approach - multiple and mixed methods
- Transdisciplinary working in collaboration with stakeholders



Lead author, IPCC Working Group 3

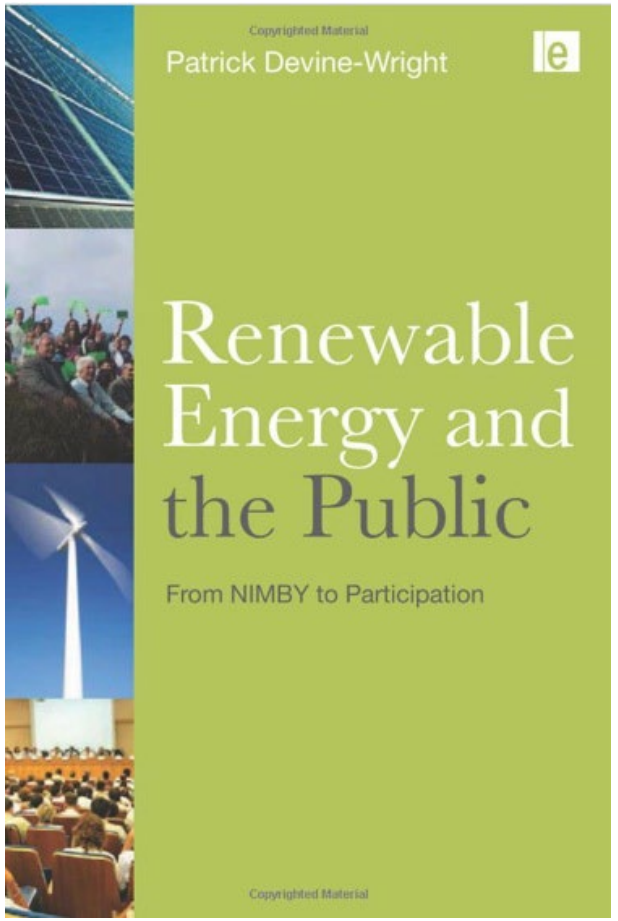
Advisor, Governments of UK and Ireland

Chair, Devon Net Zero Task Force

Board member, Exeter Community Energy

Beginnings – Beyond NIMBYism

- Critiquing common framings of community objections to infrastructure proposals (Devine-Wright, 2005)
- Many researchers focused on attempting to verify 'NIMBY' assumptions (e.g. proximity) despite Burningham's (2000) advice to treat NIMBY as an object of study, not a theoretical understanding of community responses
- Concept of 'social acceptance' arose from this critique
- Focus on place and participation



WIND ENERGY
Open Access

Research Article | Free to Read

Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy

Patrick Devine-Wright

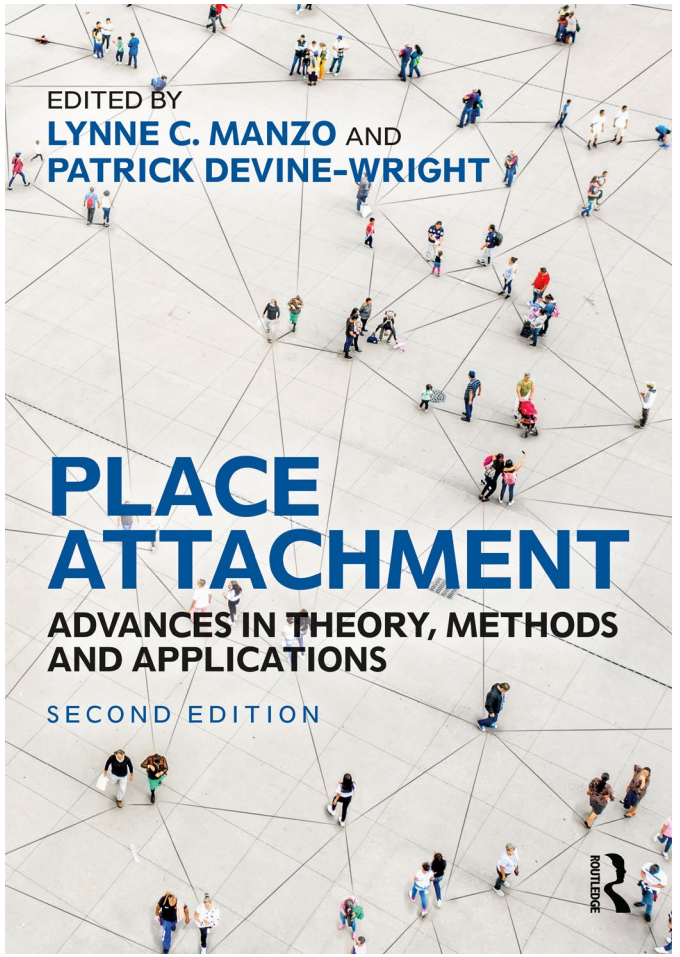
First published: 08 September 2004 | https://doi.org/10.1002/we.124 | Citations: 742

Part 1: Place

- Aim: identify theoretically grounded explanations for community responses to infrastructure siting proposals
- The concept of 'place': more than a container or backdrop (Gieryn, 2000*)*
- 'A way of seeing, knowing and understanding the world' (Cresswell, 2004)
- Two inter-related strands:
  - *How residents feel about places that will be changed by infrastructure siting – place attachment*
  - *How ideas about places and landscapes, and changes to those, are central to understanding siting conflicts – place transformations*

Place attachment as alternative to 'NIMBY'

- Place attachment: emotional bonds that develop over time from the lived experiences of individuals and/or communities in their socio-physical environment (Altman and Low, 1992)
- Alternative to 'NIMBY': when anticipated changes to places are perceived to threaten (or enhance) place attachments and identities (Devine-Wright, 2009)
- Used to explain objections to hydro-electric plants (Vorkinn and Riese, 2000), offshore wind energy (Devine-Wright and Howes, 2010) and high voltage power lines (Devine-Wright, 2013, Bailey et al., 2015) as well as support for tidal energy proposals (Devine-Wright, 2011) and nuclear power (Venables et al., 2012)



Diversity of place relations and responses (Bailey et al., 2016)

People's residence history and mobility (life trajectories)	Type of relationship with the place	Response to the power line proposal
1. Life-long residence in the town 2. Grew up in the town, moved away briefly, then returned 'home'	- **'Traditionally attached'** - Accustomed to existing electricity infrastructure (132kV) in local environment - Powerlines as 'familiar'	**Acceptance**
3. Moved to the town as adults from similar (semi-rural) types of place • Active bonds to prior residence places + value proximity to nature • Actively sought to move to the town	- **'Actively Attached'** - Powerline seen to 'industrialise' the surrounding landscape, which is seen as 'natural' and 'scenic'	**Opposition**

Context of research: interviews with residents in small rural town in South West England called Nailsea about proposal to site new 400kV high voltage power line nearby

Patterns of residence history, attachment and response

Residence history and mobility	Type of relationship with the place	Response to power line proposal
4. Moved to the town as adults from different types of place (i.e. large towns and cities) • Discontinuity in settlement type moving to the small rural town	- **Place Relative/Place Alienated** - Representations of landscape or power line less important	**Opposition:** - **Procedural Injustice** (consultation as tick box exercise) - **Distributive Injustice** (lack of benefit to the local community)
5. Moved to the town as adults • High residential mobility across life course • Indifference to residence places	- **Placelessness** - Representations of landscape or power line less important	

Acknowledgement: Funding from EPSRC and Dr. Etienne Bailey

Implications of place attachments for public engagement with infrastructure siting

- Engage with residents as inhabitants of places – denizens – not just ‘the public’, consumers or NIMBYs
- Design engagement processes to acknowledge place attachments
- Construct local narratives of technology deployment
- Respect local knowledges and expertise
- Use diverse mechanisms to engage people with different relations with place
- Lack of attachment does not mean apathy or support for proposals

Transformation of the countryside: Industrialisation

- Siting of high voltage power lines in UK and Norway
- The countryside as a rural idyll (Woods, 2011) essentialised in discourse (Batel et al., 2015)
- *A pylon is a pylon is a pylon, it's still a scar on the landscape* [Mid Wales Focus Group 6]
- *Coming on holiday here and people do initially feel their getting an escape from industrialised Britain and you know built up Britain to be able to go to somewhere with a beautiful natural environment and in a way you know there's a criticism that we are somehow NIMBYS but it's not just that; you're also again custodians of this area (…) which is for the enjoyment of all of us and the visitors* [Mid Wales Focus Group 6]

Acknowledgement: Funding from Norwegian Research Council (SusGrid project) and Dr. Susana Batel

Transformation of the underground – shale gas

- Relationships with and understandings of the underground are rooted in local history, place & culture
- Concerns about disruption to the underground tied to local knowledge & expertise
- Seismicity, subsidence, drilling through abandoned coal mines
- *We have met ex-miners who have said we don't know how safe those shafts and things are, we don't even know where they all are. So they've raised the concerns of what on earth is going to happen. – Woodsetts 3b*
- Politics of knowledge - mismatch between what industry emphasizes and what matters to local communities
- Whose vision drives decision-making is a justice issue with implications for other net zero technologies
- Attitudes to Shale Gas in Space and Time project – Dr. Stacia Ryder

UKUH

UKRI Natural Environment Research Council

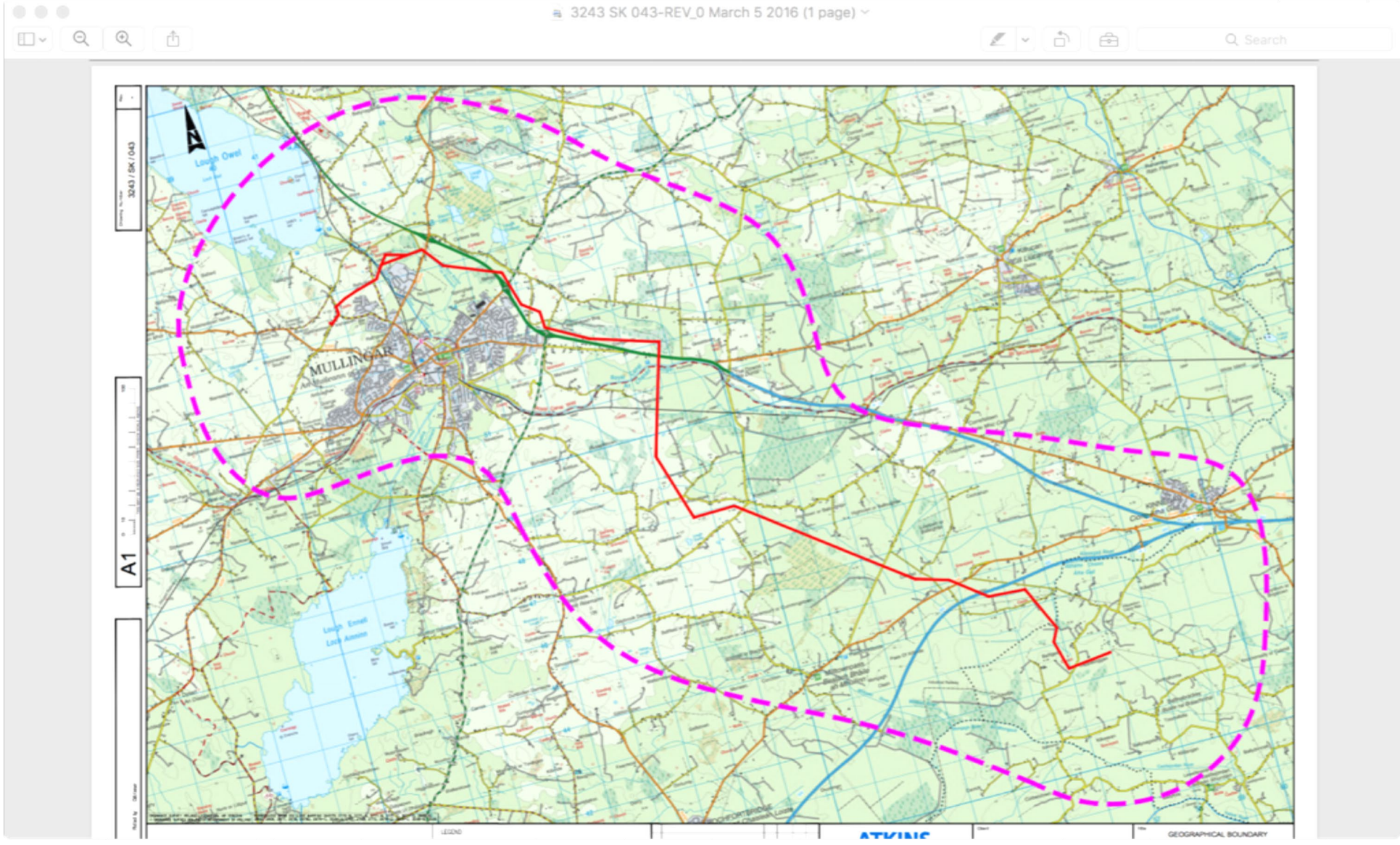
UKRI Economic and Social Research Council

Transformation of industrial areas– Net Zero Sense of Place

- UK policy aims for net zero industrial clusters by 2030
- Carbon capture, utilisation and undersea storage + hydrogen production, distribution and storage
- Large scale facilities to be sited in already industrialised areas: estuaries, ports, marine areas
- Policy discourse imagines industrial clusters as places of 'clean growth' that will be 're-invigorated' through decarbonization
- *Can national policy take account of local residents' lived experiences, place attachments and identities? Can local voices be heard in decision-making?* – Just Transition
- Industrial Decarbonization Research Consortium (IDRIC) – Dr. Huei-Ling (Lynn) Lai

Defining the host community and distributing community benefits (Sherry-Brennan and Devine-Wright, 2019)

- Distributing community funds requires defining the 'host community'
- Maps used to identify spatial boundaries
- Engagement in boundary making vital to ensure fairness and legitimacy
- Powerline project funded by EirGrid and ESRC, Dr. Fin Sherry-Brennan



Implications of spatial transformations for public engagement with energy infrastructure

- Consider infrastructure siting as acts of ‘place-making’
- Avoid ‘project-centric’ perspectives that neglect the histories of (industrial or rural) places (Lai, 2019)
- Respect local knowledge and lay expertise
- Develop narratives of spatial transformation that enhance identities and place character through engagement with local communities
- Work collaboratively, transparently and iteratively to map fair boundaries for community benefit provision with host communities

Part 2: Participation

Expectations of the public shape public engagement

- Assumptions about the public circulate in industry and policy networks (Walker et al., 2011)
- NIMBYs - irrational, selfish
- Information deficit model – the public as ignorant, disinterested, apathetic
- These expectations shape how industry and policy actors engage with the public

"Excellent! So that's passed then. All we need do now is draft the consultation document"

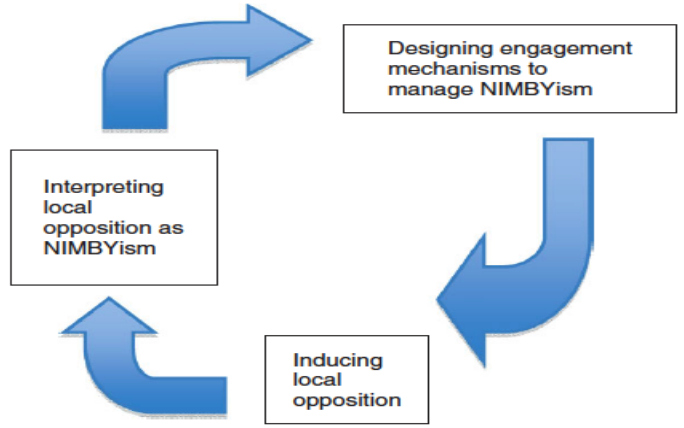


FIGURE 1 | The cycle of NIMBYism in public engagement with renewable energy.

Source: Devine-Wright (2011)

Common practice: Expecting conflict, limited effort to engage, not early enough, one-way information provision, consultation as tokenist 'tick-box' exercise

Example: Shale Gas Community Engagement & Environmental Justice

- Lack of space in decision-making (procedural justice)
  - Lack of timely access to data, local data dismissed by operator
  - No feedback from community meetings incorporated into planning
  - Decision-making process stalled, in one case remains unresolved
  - What constitutes acceptable planning objections does not reflect community concerns
- Industry operators uninterested & dismissive of local knowledge and community concerns (recognition justice)
  - Locals painted as uninformed, biased, unqualified to weigh in on planning
  - Operator unaware of proximity of proposed project site to multiply marginalized residents
  - Operator unconcerned about impact to socially meaningful spaces, i.e. footpath, holly bush
  - Lack of awareness of levels of local, day-to-day stress of uncertainty

UKUH
UKRI Natural Environment Research Council
UKRI Economic and Social Research Council
University of Exeter
Dr. Stacia Ryder

Example: Power lines & public disengagement

Reasons for public *dis*engagement

- A ‘one size fits all’ approach to consultation with insufficient understanding or detail at a local scale;
- Proposal options which are perceived as final solutions i.e. a ‘done deal’;
- The use of technical language;
- Controlled access to information;
- Consultation fatigue – too much technical information;
- Public disempowerment through the controlled framing of feedback options;
- Lack of time, or poor timing of events;
- Lack of representation and/or recognition of ‘hidden’ or ‘seldom-heard’ publics.

Dr Catherine Queen

Understanding and seeking to solve the problem of disengagement – novel typology

Categories	Type	Sub-type
Unaware	Unaware	
Disconnected	Disinterested	
Disengaged	Voluntarily disengaged	Elective disengaged
		Intimidated disengaged
Indirectly engaged	Engaged disengaged	
	Disengaged engaged	
	Representative voice	Engaged individual
		Disengaged individual
		Group
Fully engaged	Capital rich engaged	
	Capital rich engaged outsider	

Community Energy and Just Transitions

- *Who owns the wind and the sun?*
- Alternative business models: cooperatives, social enterprises
- High levels of participation and benefit sharing (Walker & Devine-Wright, 2008; Creamer et al., 2019)
- Can involve both communities of locality and communities of interest (through share issues)
- Co-benefits: strengthening participation in energy transitions and democratic structures with global potential (WWEA/IRENA, 2021)
- But policy must address inequities in community capacities (NESC, 2013; Catney et al., 2014)

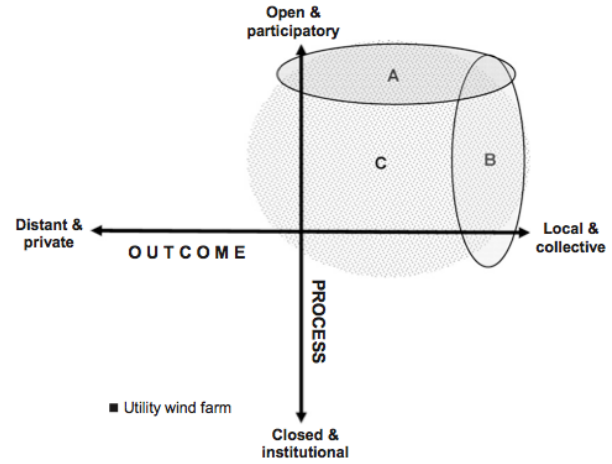


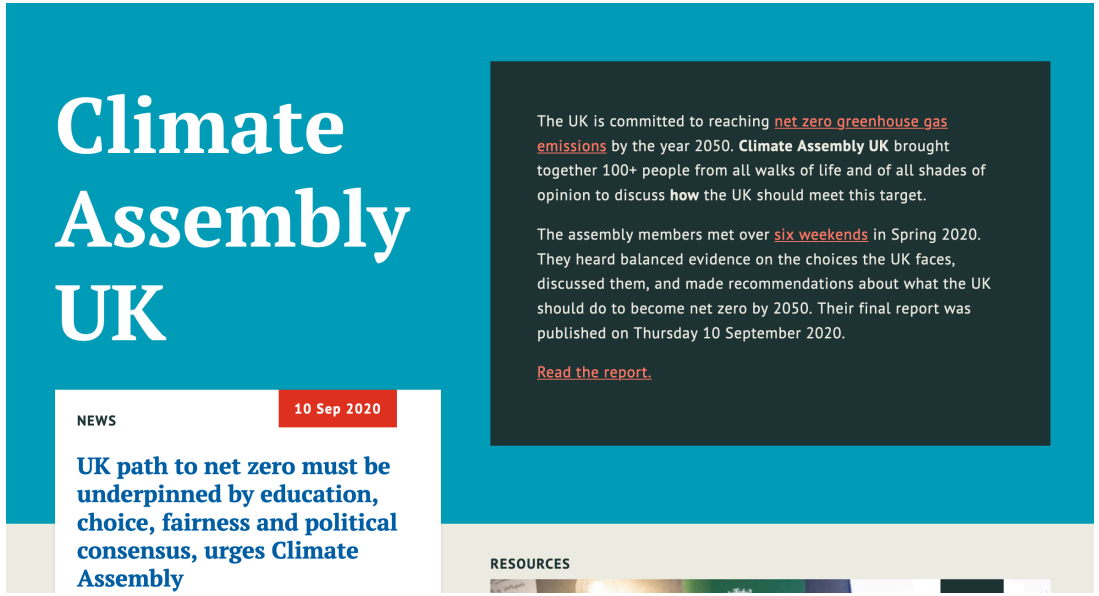
Fig. 1. Understanding of community renewable energy in relation to project process and outcome dimensions.

Source: Walker and Devine-Wright (2008)

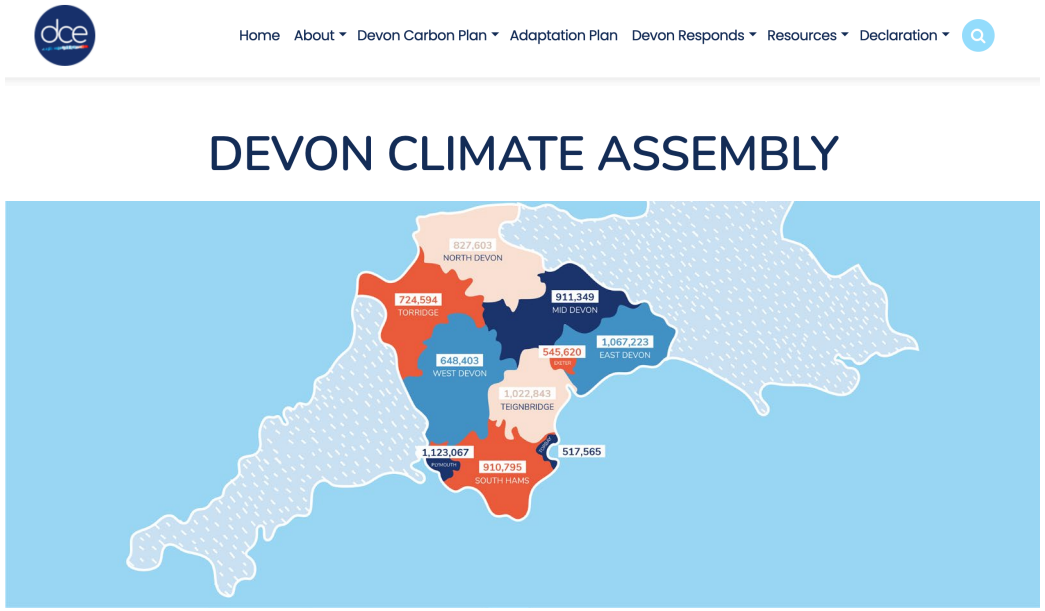
exeter community energy

Deliberative Engagement: Citizens Assemblies

- Democratic innovation: 'mini-public' deliberation at national and local levels
- Representative participants, incentives to participate, expert witnesses, sufficient time to deliberate
- UK Climate Assembly (2020), 108 members representative of UK population
- Devon Climate Assembly (2021), online delivery, 70 participants representative of Devon
- Recommendations of informed public voices inform policy making: legitimacy and wider process



https://www.climateassembly.uk/about/citizens-assemblies/index.html



Deliberating net zero futures research project – Moseley, Sandover, Sherry-Brennan – ESRC funding

Conclusions – Positive principles for public engagement with net zero infrastructures

- Avoid pejorative 'public imaginaries' – NIMBYs, information deficits etc.
- View infrastructure projects as acts of 'place-making':
  - Opportunities to promote place attachments and sense of belonging
  - Recognise and respect local knowledge and expertise
- Ensure public engagement not just a token 'tick-box' exercise
- Use multiple and diverse methods to reach people with different types of relations with place and types of (dis)engagement
- Promote community benefits as distributive justice, not just for acceptance
- Promote community driven projects, but not only in resource-rich communities
- Use deliberative methods to ensure representative public input into policy

Next steps: **Advancing Capacity for Climate and Environment Social Science (ACCESS)**

- 5 year project (2022-2027) with partners across academic, policy, industry and civil society sectors
- Champion environmental social science through strong leadership and a positive vision
- Build capacity and skills for social scientists in interdisciplinary environmental research and practice
- Work with decision-makers to turn social science evidence into delivery to solve environmental problems
- Develop an integrated approach combining sustainability, equality, diversity and inclusion and knowledge co-production

https://greenfutures.exeter.ac.uk/access/

@_ACCESSnetwork

UKRI Economic and Social Research Council

Selected citations

- Devine-Wright, P. (2005). Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy. *Wind Energy*, 8, 125-139.
- Devine-Wright, P. (2009). Rethinking Nimbyism: the role of place attachment and place identity in explaining place protective action. *Journal of Community and Applied Social Psychology.* 19, 426-441.
- Devine-Wright, P. (2011). Public engagement with large-scale renewable energy: breaking the NIMBY cycle. *Wiley Interdisciplinary Reviews: Climate Change,* 2, 19-26.
- Batel, S., Devine-Wright, P., Wold, L., Egeland, H., Jacobsen, G. and Aas, O. (2015). The role of (de-)essentialisation within siting conflicts: An interdisciplinary approach. *Journal of Environmental Psychology,* 44, 149-159.
- Bailey, E., Devine-Wright, P. and Batel, S. (2016). Using a narrative approach to understand place attachments and responses to power line proposals: The importance of life-place trajectories. *Journal of Environmental Psychology*, 48, 200-211.
- Creamer, E., Taylor Aiken, G., van Veelen, B., Walker, G. and Devine-Wright, P. (2019). Community renewable energy: what does it do? Reflecting on Walker and Devine-Wright (2008) ten years on. *Energy Research and Social Science,* 57, 101223.
- Devine-Wright, P. and Sherry-Brennan, F. (2019). Where do you draw the line? Legitimacy and fairness in constructing community benefit fund boundaries for energy infrastructure projects. *Energy Research and Social Science,* 54, 166-175.
- Ryder, S. & Devine-Wright, P. (2021). Environmental justice implications and conceptual advancements: community experiences of proposed shale gas exploration in the UK. *Environmental Politics*, 1-21.
- Sandover, R., Moseley, A. and Devine-Wright, P. (2021). "Contrasting views of Citizen's Assemblies: exploring stakeholder perceptions of deliberative public engagement on climate change. *Politics and Governance,* 9, 76-86.