

Institution: University of Northumbria at Newcastle		
Unit of Assessment: 17 (Business and Management Studies)		
Title of case study: Improving understanding of tourism and landscape to shape policy and planning for windfarm developments		
Period when the underpinning research was undertaken: July 2013 – June 2020		
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:
Tom Mordue	Professor	01/07/2013 – present
Lee Pugalis	Reader	21/03/2011 – 11/09/2015
Lorraine Johnston	Associate Professor	01/07/2010 – present
Period when the claimed impact occurred: January 2014 – December 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>Research led by Professor Tom Mordue has made a vital contribution to planning policy and practice relating to windfarm development, providing local authorities with a greater understanding of how their communities experience tourism-related impacts on local landscapes. Northumberland County Council (NCC) included the research in its Local Plan, a policy package approved by the Secretary of State for Housing, Communities and Local Government, that is used to determine future planning applications in Northumberland. Specifically, the research formed the basis for two new policies concerning onshore wind-turbine development which are being used to assess the acceptability of planning impacts associated with any given proposal, and underpin NCC's Landscape Character Assessment process. The benefits of this work are felt beyond Northumberland, with its findings supporting major planning applications for windfarm developments in East Anglia – the research featured in detailed environmental assessments undertaken by ScottishPower Renewables, supporting successful applications at 2 sites, which, on completion, will have the capacity to supply enough green energy to power over a 1,000,000 UK homes.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>The topography of Northumberland's rural hinterland, with its prevalence of high ground and good wind resources, makes it a highly desirable location for windfarm development. This has led to concerns about the potential impact that onshore-windfarm development can have on environmentally sensitive and culturally cherished areas, particularly those popular with tourists. Research by Mordue, Dr Lee Pugalis, and Associate Professor Lorraine Johnston, addressed this problem by focusing on the relationship between people and landscape, the views of tourists on development activities in rural settings, and how democratic decision-making at the local level responds to the needs of citizens [R1-R4].</p> <p>Since joining Northumbria University in 2013, Mordue has explored tourism as a vehicle that traverses the society/nature dualism, considering rural tourist destinations as spaces of consumption where certain cultural performances are enacted in relation to received cultural appreciations for the setting. For example, Mordue's research highlighted the tensions associated with eco-tourist sporting experiences such as British game-angling, an activity that has grown rapidly to become an international tourism product but also faced pressures to ensure that local-sporting traditions remain protected [R1]. The study revealed implications for place management and marketing, and how careful coordination of different leisure and tourism activities within the same space, such as a national park, can enhance the leisure value of that location while reconciling spatial conflicts between those activities. This demonstrated that public sector governance, given the strategic oversight it provides, is best placed to implement the type</p>		

of sophisticated place management and marketing needed to achieve a coordinated place-based outcome [R1].

Tourists are now an ever-present, though temporary, presence in many communities. Dualisms like tourist and local, stranger and neighbour, global and local, fail to capture the complexity of the globalised mobility of people [R1]. Mordue's research shows that research needs to be far more effective in helping public and private sector organisations understand the relationship between local citizens, tourists, and the urban and rural spaces they increasingly share [R1]. Research by Pugalis explored a related set of issues around the emergence of a 'place-based' approach to regional development, the proponents of which cite the importance of mapping out the potential for developing specific assets within a locality, and the appropriate paths for development that should be pursued as a result [R2]. Whilst appearing to offer a solution for securing economic growth in a sustainable and socially inclusive manner, Pugalis highlighted how place-based approaches are not without controversy, noting how broad-brush 'anyplace' policies are often an unintended outcome of place-based discourse. Further weaknesses include a reliance on competent diagnosis of past, existing, and potential conditions within a locality, combined with the fact that many locations lack the devolutionary capacity to deliver place-sensitive strategies for development, re-generation, or to enhance tourism [R2].

In recognition of their research expertise, Mordue, Pugalis, and their colleague, Johnston, were commissioned by Northumberland County Council (NCC) and the Institute for Local Governance (LGI), to undertake a study that explored why siting windfarms in rural landscapes popular with tourists is so contentious [R3]. Given tourism constitutes 11.8% of Northumberland's economy, the issue is of particular concern to NCC. The research consisted of a meta-analysis of data relating to onshore-windfarm development across the UK and Europe, combining a mixed-methods empirical approach that drew together a range of views from residents, businesses, and landscape professionals (e.g., from Northumberland National Park) in Northumberland, on the impacts of onshore-windfarms on tourism in the region [R3].

The study provided a uniquely comprehensive set of insights into the issues, revealing deeply felt, though often hidden, landscape relations that drive familiar conflicts associated with onshore windfarm development - not only in Northumberland but in similar rural tourism locations across the UK [R3]. The final, circa 20,000 word report, concluded that there is no published evidence to support any hypothesis that onshore-windfarms either negatively or positively impact on tourism in UK rural landscapes, nor is there any evidence to suggest that Northumberland is in any way exceptional in this regard. Indeed, the meta-analysis indicated that as many tourists in UK rural landscapes seem to enjoy wind turbines as those who do not, with the great majority expressing either a neutral to positive attitude toward onshore-windfarm development in rural locations [R3].

In a follow-up evaluation of their initial study, Mordue and Johnston demonstrated how local interests can resist certain types of tourist-related activity, and yet often cite it favorably when presenting arguments against other types of planning proposal, such as windfarms [R4]. Mordue notes this selective representation of landscape impacts serves to reproduce a particular image of a lived-environment - one where certain social groups, activities, and installations are presented as ideal and acceptable, while others are considered out of place, even invasive [R3, R4].

Siting onshore-windfarms always raises questions concerning: who and what does that landscape represent, what should it contain and consist of, and where do its physical, social, and aesthetic boundaries lie? While it is important to acknowledge and understand legitimate claims regarding local 'rights to landscape', Mordue demonstrates how tourists' views and interests can be carefully framed and curated by anti-windfarm lobbyists to support narratives of landscape exceptionalism [R4]. The research has thus provided a much-needed, nuanced insight into the pivotal role that tourism plays in onshore-windfarm development disputes in rural locations both in the UK and internationally [R3, R4].

3. References to the research (indicative maximum of six references)

R1. Tom Mordue (2016) 'Game-angling tourism: Connecting people, places and natures' *International Journal of Tourism Research* **18**: 269–276 doi.org/10.1002/jtr.2003

R2. Bentley, G. and Lee Pugalis (2014) 'Shifting paradigms: People-centred models, active regional development, space-blind policies and place-based approaches' *Local Economy* **29**:4, 283-294* doi.org/10.1177/0269094214541355

R3. Tom Mordue, Lee Pugalis, and Lorraine Johnston (2014) *Evaluation of the impacts of onshore wind farms on tourism* (Commissioned Report, Northumberland County Council) http://committeedocs.northumberland.gov.uk/MeetingDocs/9006_M1044.pdf

R4. Tom Mordue, Moss, O., and Lorraine Johnston (2020) 'The impacts of onshore-windfarms on a UK rural tourism landscape: objective evidence, local opposition, and national politics' *Journal of Sustainable Tourism* **28**:11, 1882-1904* doi.org/10.1080/09669582.2020.1769110
Submitted to REF2

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Research Income

G1. Northumberland County Council, 2014, GBP9,553

4. Details of the impact (indicative maximum 750 words)

The outlined research has (1) played a leading role in the development and implementation of the Northumberland County Council (NCC) Local Plan and the NCC Economic Strategy 2015-20. The NCC Planning Department incorporated the research findings as a key reference for future onshore-windfarm planning permission decision-making. The research also provided NCC with a better understanding of people's relationship with, and perception of, landscape. The insights (2) led to new approaches in how NCC engage with local communities with regards to the evaluation or development of major planning proposals. Further, Northumbria's research has been used in planning practice, underpinning applications for two multi-million pound windfarm projects undertaken by ScottishPowerRenewables in East Anglia.

4.1 Informing the development and implementation of new planning policies at NCC

The Planning Policy Team at NCC praised '*the lasting benefits*' derived from its collaboration with Northumbria University since 2014, and the vital insights that the ongoing research has provided to them [E1]. The in-depth empirical study proved to be '*invaluable*', providing NCC with '*a deeper understanding of the landscape/tourism issues raised, and the competing views around the development of onshore-windfarms that shape debates*' [E1].

Since 2014, the research has improved how NCC '*undertake, and make the case, or not, for development projects in Northumberland*' [E1]. NCC confirm how the study '*was, and continues to be, so useful to us*', precisely because of the limited research to-date on this important issue [E1]. The findings clearly showed how assumptions claiming negative impact by onshore-windfarms on tourism in rural locations are not supported by evidence either generally, or in Northumberland specifically. As NCC explain, '*on the face of it, this might appear to be an inconclusive result, but from a planning perspective this has crucial implications for how we do and will approach (and have since approached) the issue of onshore-windfarm development*' [E1]. These benefits were reflected '*in immediate and longer term plans the council has made in light of, or as a result of, the findings*' [E1].

The research '*played a significant role*' [E1] in shaping the 'Northumberland Local Plan', a package of policies - approved by the Secretary of State for Housing, Communities and Local Government - which is used to guide and determine future planning applications in Northumberland, detail the scale and distribution of new development, and include land

allocations and designations [E1]. The research was specifically cited in the plan, '*one of the main concerns expressed with respect to proposals for the development of wind turbines in Northumberland through the planning application process has been in relation to their overall impact on the landscape ...an independent study of the landscape and visual effects of the current operational wind farms in Northumberland has been undertaken [by Northumbria University]*' [E2, p293].

The Local Plan contains two new specific policies '*that were a direct result of the research and its recommendations*' [E1] – 'Policy REN 1' (Renewable and low carbon energy) and 'Policy REN 2' (Onshore wind turbine development) [E2]. The latter includes a requirement to fully address the planning impacts identified by affected communities [E1; E2, p294]. NCC confirm that both policies '*are now used as part of the assessment of the acceptability of the planning impacts associated with any given proposal*', and even though national legislation placed a higher bar for applications of this sort, '*as the need for sustainable/cost-efficient energy sources increases, and climate change continues to rise on the political agenda, there are strong indications that Policy REN 1 and Policy REN 2 will become more pertinent*' [E1]. As well as planning policies, NCC confirm how this also '*contributed to our wider economic growth strategy and spatial strategy (2015-20)*' [E1].

Finally, the collaboration with Northumbria also improved NCC's '*understanding of how to anticipate, assess, and better accommodate potential objections to a range of planned developments with potential landscape impacts*' [E1]. The research improved '*clarity on what is reasonable development and what is not in Northumberland's rural hinterland*' and now guides the location and assessment of the acceptability of future development proposals [E1]. Including establishing '*a Landscape Character Assessment (LCA) at a county level that forms part of the evidence base for planning*'. LCA documents identify and explain the unique combination of elements and features that make landscapes distinctive by mapping and describing character types and areas. They also show how the landscape is perceived, experienced and valued by people and are used to inform policy planning and other activities relevant for landscape. The research has thus '*become invaluable to [NCC] planning processes ... [as the council aims to] effect responsible local development and sustainable human/landscape relations ...and in this regard ...has value well beyond wind turbine development applications*' [E1].

4.2 Improved evaluation and development of major planning applications.

The research has been applied in planning practice in Northumberland and beyond. In 2018 for example, the study was used to inform preparation of a report by The Planning and Environment Studio Ltd and BAYOU BLU Environment Limited, that was commissioned by NCC to identify suitable locations for wind turbine erection [E3a; E3b, p7]. Findings from Mordue's Northumberland study have also supported major planning applications undertaken by windfarm developers in other parts of the UK.

The research featured in two detailed scoping assessments, undertaken by ScottishPower Renewables (SPR) in relation to the East Anglia ONE North and East Anglia TWO windfarm developments (once operational, these two sites will have capacity to supply enough clean, green energy to power over 1,000,000 UK homes). The scoping reports were used to explore the potential impact the scheme might have on tourism, particularly the visual impacts along the coast from Felixstowe to Great Yarmouth [E4a-b]; the research is helping to challenge the assumption that tourists perceive windfarms negatively. In January 2019 the research was considered in more detail as part of a comprehensive review which informed SPR's Preliminary Environmental Information Report. This review specifically explored the impact of windfarms on the tourism industry, identifying the useful findings on attitudes to landscape generally, relating to landscape and offshore siting in particular, from Northumbria research [E5, p9-11, p25]. The research thus supported the consultation process and final application that was submitted to the Planning Inspectorate in October 2019, with construction expected to commence in 2021 [E6].

The research played a similar role in supporting the planning application for the proposed Norfolk Vanguard Offshore Wind Farm development. Again, the Northumberland study featured

in a detailed Environment Assessment (published 2018), which provided an overview of the existing tourism and recreational assets where the onshore project area is proposed [E7, p54]. The planning application received approval from the UK Government in July 2020 (pending judicial review) and once complete will help to cement East Anglia's position as a UK renewable energy powerhouse [E8].

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

Ref.	Source of corroboration	Link to claimed impact
E1	Testimonial - Senior Planning Officer, Northumberland County Council	Demonstrates how research informed understanding, planning processes, and led to new policies at NCC
E2	Policy Documentation - NCC (REN 1 & REN2)	Demonstrates how research led to new policies at NCC
E3	a) NCC homepage showing availability of the report for use/consultation b) Assessment of the sensitivity of the landscapes - Planning and Environment Studio Ltd, 2019)	Demonstrates how research informed understanding, planning processes, and led to new policies at NCC
E4	a) East Anglia ONE North Offshore Windfarm Scoping Report, November 2017. Cover page and p230 b) East Anglia TWO Offshore Windfarm Scoping Report, November 2017. Cover page and p230	Demonstrates how research supported planning applications undertaken by ScottishPower Renewables
E5	East Anglia ONE North Offshore Windfarm Lit Review: Windfarm Impact on Tourism Industry, Jan 2019	Demonstrates how research supported planning applications undertaken by ScottishPower Renewables
E6	East Anglia ONE North Offshore Windfarm, NIP Proposal Timetable	Demonstrates how research supported planning applications undertaken by ScottishPower Renewables
E7	Environment Statement - Norfolk Vanguard Offshore Wind Farm	Demonstrates how research supported planning applications undertaken by Vanguard
E8	Press Release - Norfolk Vanguard Offshore Wind Farm	Demonstrates how research supported planning applications undertaken by Vanguard