# Shifting the Power Balance: community-led resistance and the shaping of local understandings of place

Breffní Lennon<sup>1,2</sup>, Niall P. Dunphy<sup>1,2</sup>, Paola Velasco-Herrejón<sup>1,2</sup>, Lauren Quinlivan<sup>1,2</sup>

<sup>1</sup> Cleaner Production Promotion Unit, Environmental Research Institute, University College Cork, Lee Road, Cork T23 XE10, Ireland

<sup>2</sup> School of Engineering and Architecture, University College Cork, College Road, Cork T12 K8AF, Ireland

DOI: 10.3217/978-3-85125-932-2-12

Abstract. Past energy transitions have been characterised by strategic geopolitical and socio-economic drivers that rarely considered issues of social justice or community cohesion. This is interesting given the profound systemic reconfigurations that took place. The current transition to low-carbon energy has seen a departure of sorts, particularly in terms of the complex, intersecting drivers involved. Consequently, there has been a widening of the roles citizens are expected to take, particularly in terms of participation and engaging with the energy system. However, differing interpretations of how these roles are to be expressed, and the degree of power to be assigned those roles, has resulted in contradicting responses from local people. The rollout of what appear to be broadly popular renewable energy technologies has met with strong resistance at the local level. Place attachment - especially in terms of belonging, identity, relationships, and acceptance - has come to define localised responses to recent (inter)national energy and climate-related policy. Understanding how place attachment affects the (re)negotiating of local understandings of place is therefore important, as is its role in sustaining narratives of resistance to locally unpopular strategic energy projects. This paper will present findings from the SEAI-funded project, EnergyPolities and cognate work, which explored how governance structures intersect with socio-economic and key socio-cultural factors to influence the social acceptability or otherwise of current energy transition pathways. It will also examine recent responses from powerful actors challenged by emerging citizen participation and engagement roles, and discusses the tactics used to limit the diversity of voices and perspectives in the energy transition.

## **1** Introduction

This paper reports on findings from a notable case study from the recently concluded EnergyPolities project<sup>19</sup>, and cognate work, examining the roles and modes of citizen

<sup>&</sup>lt;sup>19</sup> This project was supported by the Sustainable Energy Authority of Ireland Research, Development, and Demonstration Funding Programme under contract 18/RDD/356

participation currently taking place in the energy transition. From this research we also looked at the socio-economic and socio-cultural factors shaping participation, as well as the many intersecting experiences of citizens negotiating the governance frameworks that frame current energy transition pathways. Consequently, a key objective of the project was to identify what (in practice) constitutes 'energy justice' for different stakeholders. Using this approach, we hoped to develop a deeper understanding of the factors affecting the social acceptability of strategic energy projects. There has been a certain expectation in the public administration and policy domains that people's recognition of the socio-environmental benefits of renewable energy technologies would translate into positive local responses to new energy infrastructure, especially when compared to traditional fossil fuel configurations. However, this has not been the case to date and people's attitudes to new energy infrastructure - be it to prop up the existing fossil fuel infrastructure or newer renewable technologies – display far greater nuance and depth of understanding than is often expected of them (e.g., see Koecklin et al., 2021). The energy transition requires us to move beyond simply swapping out one technology for another. For it to be just, it will need far greater levels of introspection and a thorough reassessment of those entrenched inequalities and power structures already locked into the current energy system (Lennon and Dunphy, 2022). Understanding how existing inequalities may replicate or even deepen as we transition will be essential if we are to respond effectively to current and future justice and ethical issues around energy. While recognising the key issues around energy are both multiscalar and intersectional will also be important to achieving the goal of a carbon neutral future.



Figure 3 The three primary principles of energy justice (adapted from Wallsgrove *et al.*, 2021). An emerging critique of the policy domain that has coalesced at the interface of procedural, distributive, and restorative justice is the concept of *energy justice*, see Figure 3 above. Primarily concerned with the workings of actors at the top of the policy cycle, it seeks to apply "justice principles to energy policy, energy production and systems, energy consumption, energy activism, energy security and climate change" (Jenkins *et al.*, 2016: 174). Consequently, it has garnered considerable attention from policy makers, researchers, and even practitioners from within the energy industry itself, resulting in a certain attenuation of the concept in some circles. So much so, that some scholars suggest that while it has reached critical mass in terms of contributions in recent years, it still lacks coherency in terms of a unified conceptual framework to capture the many, sometimes competing, expressions of the concept in the literature (Lee and Byrne, 2019; Pellegrini-Masini *et al.*, 2020). Fundamentally, ideas around energy justice are deeply embedded in traditional modes of philosophical and political thinking, while also incorporating substantive and formal equality concepts (*ibid.*) that now also consider the more-than-human (Sovacool *et al.*, 2017; Silva Ontiveros *et al.*, 2018; Jenkins *et al.*, 2020; After Oil Collective, 2022). It is this multifaced aspect to the concept that in many ways makes it useful for critiquing existing governance structures and has contributed to it becoming somewhat of a guiding principle for many in energy law and policy. An *ethical turn* if you will, which may have potentially radical implications to how we realise the energy future (McHarg, 2020).

# 2 Spatialising justice in the energy system

Bouzarovski and Simcock (2017: 640) have broadened energy justice debates to incorporate the spatial and temporal dimensions of energy injustices across contemporary cross-sectoral energy chains. These they describe as manifesting through four key mechanisms, 1.) through landscapes of material deprivation, 2.) via geographic underpinnings of energy affordability, 3.) the lock in of vicious cycles of vulnerability, and 4.) the spaces of misrecognition. All operate along a multiplicity of scales. This spatial justice perspective is useful, not only for highlighting energy-related inequalities, but also (and possibly more importantly) for evaluating the underlying structural dynamics that go into (re)producing spatial inequalities in the energy system (ibid). Considering this 'spatial turn' Healy et al. (2019: 219) introduce the notion of embodied energy injustices "to encourage integrative, systemic, transboundary assessment of the global implications and responsibility of energy-policy decisions". Consequently, broadening deliberations on energy justice to also consider the often hidden, external injustices (in energy systems of the Global North at least) that are spatially distant upstream or downstream on the energy chain<sup>20</sup>. Understood in this way, the embodied energy injustices lens also gives decision-makers the tools to consider the broad gamut of injustice linked to individual energy policies, but also how these decisions impact on decisions made elsewhere in the policy domain. Though, as the authors acknowledge the outsourcing of injustices along the energy chain to countries in the Global South has made it more difficult to hold decision-makers to

<sup>&</sup>lt;sup>20</sup> Often, it is those activities that include the extracting, processing, transporting, and the eventual disposal of energy resources and their waste streams are where some of the most egregious inequalities in the energy system take place.

account for upstream embodied injustices when they take place in another jurisdiction, state, or country.

Even in the Global North, the inherent complexities found in the policymaking ecosystems there can lead to consequences incompatible with the initial assumptions of decision-makers. For example, recent European efforts to stimulate growth in community energy projects, as part of efforts to realise a just transition to a low-carbon energy system, has been driven by presumptions that community energy in and of itself will bring about energy justice (von Bommel and Höffken, 2021). However, this assumption ignores the role existing social inequalities both frame and embed future inequalities, whether they are in society more generally or the energy chain itself. The current energy transition will neither be fair or equitable simply because we swap out one – albeit highly destructive – set of energy sources (*i.e.*, fossil fuels) for another set (*i.e.*, renewables) given much of the existing socio-technical structures that facilitate the production and consumption of oil, coal, and natural gas are now being redeployed to accommodate renewables. As von Bommel and Höffken (2021: 2) rightly point out, "not all societal groups are equally positioned to benefit from policies focused on community initiatives". This has been true for the fossil fuel economy for the past one hundred years or so, and it will be true for whatever replaces it in the future.

An interesting dimension to the energy transition that is only recently being explored are the roles and expectations being made of citizens as we transition to low carbon energy systems. In traditional fossil fuel configurations, the role expected of citizens is strictly demarcated by market sensibilities that framed energy solely as a commodity. A citizen's access to energy therefore is primarily predicated by strictly controlled purchasing arrangements as *a consumer*, with any agency clearly confined to one's purchasing ability. However, this perspective removes agency on the part of citizens to make choices beyond the prescriptive 'energy as commodity' paradigm (Lennon *et al.*, 2020).

# **3 Public Participation in Environmental Decision-Making**

In keeping with wider justice narratives, how the public is expected to coalesce around decision-making processes has shifted in recent years and range from rather proscriptive stakeholder 'engagement' processes to more participative and inclusive means of 'public/citizen participation'. The growing importance given to public participation has been attributed to several intersecting factors, including the deepening of human rights sensibilities within legal and political systems and a lowering of levels of trust in government(s) across all levels (Rauh, 2021; Dunphy *et al.*, 2022). In response, a growing international interest looking to address governance concerns at both the local and national levels have manifested around a wide array participatory mechanisms (Razzaque and Richardson, 2006).

Very often, those most adversely affected by infrastructure developments in the past had little or no voice in the process. Where there were dissenting voices, these were usually side-lined via 'public consultation' events that were little more than box-ticking exercises and could be characterised as basic information sharing with any local concerns simply ignored. Increasingly, these stakeholders are beginning to experience greater transparency from project leads informed by 'people centred' or 'humancentric' principles. Areas where public participation principles have been applied include education, public policy, business, and the development sector, with tools ranging from public hearings, advocacy work, advisory/review boards, education, and information dissemination (Razzaque and Richardson, 2006).

Writing back in 1972, Lawrence Tribe acknowledged that the way decisions are made are as crucial as the decisions themselves in impacting on policy outcomes (Tribe, 1972, in Razzague and Richardson, 2006). The same is true today. A key goal of public participation within environmental decision-making is to help decision-makers understand and effectively respond to public interest concerns in ways that are seen as fair and just. Furthermore, as public participation within the decision-making process encourages accountability of final decisions - which in turn informs acceptability - this can potentially lead to fewer project delays, less litigation etc., and should understandably serve as a motivating factor for those hoping to move forward with a planned development (Razzague and Richardson, 2006, in Dunphy et al., 2022). However, much of the mixed results we continue to see around public engagement can be explained by confusion or a certain unwillingness on the part of project leads to move away from unproductive 'consultation' methods (box-ticking exercises like information meetings etc., usually held by hired public relations firms with little or no real knowledge of local issues) to more inclusive, participatory approaches that require more time and resources (Dwyer, 2016; ten Brink and Dalton, 2018).

#### 3.1 Public Participation in Energy Infrastructure Projects

Discussions on public participation very often settle on Sherry Arnstein's seminal 1969 'ladder of citizen participation', which continues to inform scholars on how to involve citizens in decision making processes. In it, she outlines participation as occupying a spectrum of different engagement and participation potentials, ranging from notification at the bottom rung (effectively, non-participation) to joint decision-making power – including the ability to veto proposed decisions – at the top rung (Arnstein, 1969). The distinction between "top-down" and "bottom-up" approaches to participation has also been made, with communications by governments occupying the former example, and community-led initiatives occupying the latter (Langton, 1978, in Razzaque and Richardson, 2006). Participation has been described using other models that incorporate substantive or procedural involvement, however the two distinctions are

often confused or misapplied in practice (Ebbesson, 1992, in Razzaque and Richardson, 2006).



Figure 4 Ladder of participation (adapted from Arnstein, 1969).

Looking at the literature on public engagement – most notably engagement with energy infrastructure projects - there are distinctions between discourses on 'public participation' and 'public acceptance', both of which recognise the importance of citizen engagement with the project process. However, despite shared commonalities at first glance, they are fundamentally different in how the roles and expectations of engagement are ultimately understood (Armeni, 2016). In participatory public engagement approaches it is assumed that a variety of options are still on the table and open for debate, and therefore influence. Consequently, it is taken as given the public has real (as opposed to tokenistic) capacity to impact the decision-making process. This approach seeks to achieve inclusive more transparent decision-making by involving people in deliberative, consensus-based public consultations (ibid.). In contrast, public acceptance models invariably view public engagement/participation with the project as more of a bureaucratic hurdle to be overcome so the project can advance. It is seen as a means for increasing social support for a project and validating decisions that have already been made. In this context acceptance is a means to accelerate the implementation of a project, where alternative options for discussion have already been taken off the table (*ibid*.).

One should also note that public concerns or opposition to a project may not necessarily be ameliorated by the existence of legal and enforceable rights to participate in the decision-making process. Very often, wider legal and policy contexts tend to negate the public's ability to impact decision-making through the use of 'expert knowledge' the challenge and/or discredit genuine public concerns. These are commonly put forward as part of risk assessment paradigms, cost-benefit analyses, and deficit models, and tend to mislead the public about the level of influence they

actually have over the decision-making process. In emphasising citizens' procedural rights to participate, such models tend to encourage public engagement only in terms of transparency and accountability, often portraying the public concerns as irrational, emotional, or scientifically ignorant (*ibid*.). This 'decide-announce-defend' approach, adopted by many developers, ignores the genuine concerns of local people and consequently has garnered considerable attention in the literature (Natarajan *et al.,* 2018).

# 4 Research Design and Methodology

The research presented in this paper set out to unpack and analyse the many intersecting roles and expectations made on citizens in three case study communities, two in Ireland and one in Austria. This paper focuses on one of the case study communities, the Corrib Gas pipeline dispute in County Mayo, Ireland. This section briefly outlines the approach taken to meet the complex challenges presented to the researchers and the methodological approach deployed to meet those challenges. The methodology followed the form of 'engaged research' (Holliman et al., 2015), representing a range of methodological approaches that strive to co-produce relevant and meaningful research by engaging academic researchers with members of nonacademic arenas (e.g., stakeholders, end-users, and/or members of the public). An engaged research approach is very useful when undertaking an intersectional analysis of citizen participation. However, the emergence of the COVID-19 pandemic significantly impacted initial efforts to undertake the types of engaged research usually deployed for a study of this kind. In response, the research team adapted to the changing protocols around engagement, conducting an extensive search and review of the literature, complementing the in-depth semi-structured interviews with informants in each case study. When in-person interviews were not feasible, the research team pivoted to using video-conferencing platforms made more ubiguitous by the pandemic. Every effort was made to engage informants representing a diversity of perspectives and the resultant interview notes were then analysed using thematic analysis to identify, analyse, and interpret patterns of meaning emerging from the discussions. The following sections provide an overview of the methods used in the study, namely: in-depth interviews and thematic analysis.

#### 4.1 Semi-structured interviews

To complement the literature review and allow for an in-depth analysis of citizen perspective on participation, key informants were engaged through semi-structured interviews. Described as a 'conversation with a purpose' (Webb & Webb, 1936, quoted in Legard *et al.*, 2003, p138) an interview requires significant preparation in advance and the aim is to gain an appreciation of the perspective of interviewees about a given topic. Dunphy *et al.*, (2021) note allowing for sufficient time and scope in the <sup>200</sup>

engagement for the interviewee to feel able to give their point of view and to tell 'their story'.

Participants in the semi-interviews comprised key actors involved in each of citizen mobilisations examined by the project. For the case study at the centre of this paper, the Corrib Gas pipeline dispute, informal interviews were conducted not only with the protesters but with actors in the community development sector in Mayo. Also, local people not immediately connected to the protests, but who had knowledge of events arising from the protests or knew people associated with those events, were also consulted. The interviews carried out in-person prior to the COVID-19 crisis, and via video-conferencing thereafter, used pre-formed interview schedules of concise, clear, and open-ended questions. Applying Dunphy et al.'s (2021) approach, the prompts and probes where specifically designed to examine the roles and expectations made on citizens – along with their perceptions of those expectations – as participants in the energy system. During the interview, extensive notes were taken, including any relevant non-verbal communication, which proved possible in videoconferencing. The video-calls were recorded where permission was provided, and these recordings were used to supplement and enhance the notes, which were then analysed as described in the next section.

#### 4.2 Data analysis and interpretation

Interpreting the interview notes involved a comprehensive qualitative analysis to study what was communicated and theorise from those findings (Schwandt, 2007). This iterative approach, returning time and again to the data, was often time-consuming and painstaking work. As indicated by Dunphy *et al.*, (2021) the analysis began with an initial read-through of the notes taken<sup>21</sup>. Following on from this, the texts were then carefully analysed to capture key information and to identify themes most relevant to examining the drivers and barriers to public participation in energy. Subsequently, emergent data was then cross-referenced and linked to that from the literature review. In this way, any inconsistencies were resolved by filling in identified knowledge gaps and the iterative process ensured any fresh inconsistencies were also resolved. Next, the notes were thematically analysed involving the systematic ordering, categorising, and labelling of text. Given the relatively small dataset, it was possible to code the text by hand and significantly reduce the iterative analysis and interpretation process.

# 5. Place identity and perceptions of trust

Understanding the modes of citizen participation was therefore a key area of interest for the EnergyPolities project, particularly in terms of civic mobilisation around energy projects. For this paper, a key aspect to citizen mobilisation we examined concerns the

<sup>&</sup>lt;sup>21</sup> This read-through process was repeated until the material became familiar to the analyst.

role place has as a motivating factor for people. The case study in question looked at protests around the construction of a natural gas pipeline and onshore terminal near the village of Rossport, in Co Mayo, in the West of Ireland during the late 1990s and 2000s. Much of the campaign material generated around the protests situated ideas of place as central to the narrative identities of many of the protesters. This is noteworthy, since place is not simply just a physical site, a 'surface' or points or areas on a map. Instead, place is imbued with meaning and better understood as an "integration of space and time" (Massey, 2005: 130). In order words, instead of understanding place as 'a thing', more accurately it can be described as a manifestation of spatio-temporal events, or a confluence of "stories-so-far" (*ibid*.). Place is something one interprets, moves to, or indeed moves through. It defines and is redefined through experiences, and it is through these contexts that place is both formed and contested.

If space is rather a simultaneity of stories-so-far, then places are collections of those stories, articulations within the wider power-geometries of space (Doreen Massey, 2005: 130)

With regards to the energy transition, place and the idea of place has often been used to express and contextualise local discord, and to present alternative counternarratives to official (and therefore sanctioned) perspectives. This approach has been used from everything from protesting energy infrastructure and road projects to environmental protection legislation *etc*. As Peng *et al.* (2020: 14) suggest, people's identification with a place and the place identity of that same place overlap. They are not the same thing, but rather both constructs "embody subjective or emotional bonds" between humans and the physical world and it is important to understand that *place identity* forms part of an individual's personality. The role of place is key to the formation of individual identities, with place identity contributing to the overall personality of a place (*ibid*).



Figure 5 The interconnecting relationships between people, place, and place identity (adapted from Peng *et al.*, 2020: 15).

Therefore, it is this integration of physical reality and social cognition that sees considerable overlap with environmental psychological concepts such as place attachment. All have a role in contextualising and framing the causal factors affecting disputes as they arise from local place development, planning, and social conflicts. In conjunction with the spatial dimension, one must also consider temporal factors. Just because a project was successfully built in an area does not mean the next project will meet with the same level of 'acceptance' from local people. As such places,

...do not necessarily exhibit particular qualities or have predetermined effects in the world. In this sense, like practices, places are entities that are constantly changing

(Pink, 2012: 24)

#### 5.1 Public perceptions of place and trust when negotiating acceptability

Public perceptions about climate change must always be factored in when introducing specific energy technologies to debates on how best to tackle it and related issues (Nisbet, 2009; Corner et al., 2014). For example, any energy development must now invariably be linked to public concerns around climate change, with perceptions of the technology (whether fossil fuel or renewable) contributing to public expectations of its mitigating effectiveness on climate or otherwise. This is an important factor that is often ignored by project leads when trying to influence public acceptance (Sharp et al., 2009), or when it is addressed, it is often used to justify what might otherwise be seen as a locally unjust project. In this scenario, those who accept the science on climate change will have specific understandings of the impact an energy project may have on wider mitigation strategies. In the case of oil, coal, and natural gas, those who understand the science are less likely to be predisposed to further exploitation of such energy sources given their negative impact on global climate temperatures (Davis et al., 2010; Grasso, 2019; Howarth, 2014; Jackson et al., 2019; Poortinga et al., 2018). These understandings feed into the contextual and psychological components that shape community and individual cost /benefit perceptions. Perlaviciute and Steg (2014), for example, outline the factors that impact people's judgement and in turn acceptability of energy technologies and their alternatives. Their conceptual framework acknowledges how contextual and general psychological factors have been addressed, namely as independent predictors. However, the contextual and general psychological factors intersect with each other when "shaping evaluations and acceptability of energy alternatives and should therefore be studied in combination" (ibid., 2014: 363). Therefore, place attachment should also be seen as a multidimensional concept with personal, psychological process, and place dimensions to consider.



Figure 6 Conceptual framework outlining how evaluation and acceptability are determined by multiple, intersecting criteria that shape an individual's perception of a specific (energy) project as it relates to place (adapted from Perlaviciute and Steg, 2014: 363).

Perlaviciute and Steg conclude that renewable energy sources (RES) are generally viewed as clean, safe, and possessing a lower environmental impact than say fossil fuels. As a result, the attributed higher collective benefit and lower collective costs for society can be more easily understood (Culley et al., 2011; Butler et al., 2013; Parkhill et al., 2013). However, there are caveats to this and often it can very much depend on the RES technology involved, e.g., wind and solar power are frequently seen more favourably, while other RES technologies like bioenergy may (sometimes incorrectly) be linked to fossil fuels and therefore not be considered a viable energy source (Butler et al., 2013). Contextual variables (energy pricing, operational safety, etc.) also impact on public perceptions with individual costs and related advantages thus influencing societal acceptability of RES technology in particular (Perlaviciute and Steg, 2014). In addition, the associated costs and benefits of a particular technology may be perceived differently depending on individual circumstance. Therefore, different levels of acceptability will be reported despite individuals accessing for example the same information on a specific energy technology. Research on the psychological factors influencing how the public evaluates energy technologies also points to a number of key aspects, including place-attachment and identity, predictability, individual values and trust (Lindenberg and Steg, 2007).

Place-attachment and place-identity have received growing attention in the literature in recent years as alternative means for explaining people's judgement, and consequently acceptance, of energy technologies. Often, they are seen as somewhat of a counterpoint to reductive and accusatory NIMBYist explanations for local resistances/mobilisations to specific energy projects (Vorkinn and Riese, 2001; Devine-Wright, 2005, 2009, 2011; Devine-Wright and Howes, 2010). Place attachment and identity, respectively, relate to one's emotional attachment to a local place, and the level to which it contributes to an individual's sense of self (Vorkinn and Riese, 2001; Devine-Wright, 2005, 2009). Where an energy project is seen to threaten these characteristics (Devine-Wright, 2009) unfavourable attitudes may develop in response to that development (Vorkinn and Riese, 2001). Alternatively, some stakeholders depending on the circumstances – may perceive the same energy project as being more beneficial to the community (Devine-Wright, 2011; Butler et al., 2013). In addition, the level of trust for the developers leading the project is equally important and plays a significant role in influencing the public's perception of whether a specific development threatens their neighbourhood or not. For example, the Corrib Gas dispute reflects a case in the United Kingdom that Devine-Wright and Howes (2010) highlight where place-attachment and its impact on local identity there had a significant negative impact on local levels of acceptance towards of a proposed large-scale offshore wind farm. This was further compounded by a lack of trust by many locals regarding the true intentions of the developer leading that project (Devine-Wright and Howes, 2010). In essence, both place attachment and trust acted as drivers, each informing the other, and in turn strengthening the positive/negative (in both cases negative) response to the project.

As Perlaviciute and Steg (2014) suggest, individual values may also account for the varying levels of trust, place-attachment, and identity that inform people's overall acceptance of energy technology projects in their area. Values may be determined by ideals that constitute what is important to the individual and can encompass the psychological elements influencing a variety of attitudes, beliefs, preferences, and behaviours (Schwartz, 1992; Rohan, 2000; Schultz, 2001; Maio, 2010; Steg et al., 2011). Therefore, it is no surprise that there has been considerable research into the role values play in determining public acceptance of energy technologies (Whitfield et al., 2009; de Groot and Steg, 2011; Bidwell, 2013; Butler et al., 2013; de Groot, Steg and Poortinga, 2013; Parkhill et al., 2013). Of note, are the distinctions made between self-transcendence and self-enhancement values (Stern et al., 1998; Stern, 2000; Nordlund and Garvill, 2002; Dietz, Fitzgerald, and Shwom, 2005; de Groot and Steg, 2008; Steg and de Groot, 2012; Phillips et al., 2019), with the former concerned with collective outcomes while the latter focusses on the costs and benefits at the individual level. For instance, when holding self-transcendence values, one may consider the collective outcome of a given project and express a combination of altruistic values (focusing on the well-being of others) and biospheric values relating to strong environmental self-identity (Wang et al., 2021). Alternatively, one may hold stronger egoistic values, incorporating safe-guarding and self-preservation tendencies in the pursuit of enhancing one's own resources (e.g., wealth, status, etc.), or focus on following hedonic values devoted to improving how one feels (e.g., comfort, pleasure, etc.), which comprise what are referred to as self-enhancement values (Perlaviciute and Steg, 2014). Individual values can and do determine the social acceptability of various energy technologies, with those possessing higher altruistic and/or biospheric values being more likely to support and accept energy alternatives that offer higher

collective benefits and low collective costs. While those with higher egoistic and/or hedonic values show a greater likelihood for accepting technologies that offer high perceived individual benefits and low perceived costs. In this regard self-transcendence values have been shown to lead to more positive attitudes towards renewable energy technologies and greater social acceptance (Bang *et al.,* 2000; Arkesteijn and Oerlemans, 2005; Spence *et al.,* 2010).

# 6 Discussion: the role of place in the case study communities

Consequently, a particular landscape can be seen both as a suitable site for practicing good climate governance, while simultaneously the very same space can be held up as an exemplar natural environment in need of protection from 21st Century-style industrialisation. Indeed, for some, renewables (just like the fossil fuels they are designed to replace) render the landscape just as symptomatic of wider societal inequalities and the exploitation of the natural environment. As Ellis *et al.* put it,

the key issues facing wind farm [RES] development are not "objective" policy blockages, but clashes of values related to inter alia, governance, technology, landscape aesthetics, issues of participation and power inequalities.

(Ellis et al., 2007: 524)

Therefore, when it comes to energy, place is a defining issue. Given the strategic value of energy production, the decision to situate new energy infrastructure is usually determined through the spatial planning process. With local authorities or national planning bodies [in Ireland, An Bord Pleanála] being responsible, depending on the size of the proposed project, it is often during the planning process that multiple perspectives of place get to intersect with the values and perspectives of the different actors involved.

For the protesters we spoke to in relation to the Corrib Gas pipeline, it was striking how much the sense of place featured in their discussions. One respondent described a conversation he had with a couple of prominent leaders of the protests where he asked them what the protests were all about and they summed up their involvement to him as follows, essentially "...this is all about memories, the footsteps, our footsteps are around this property, we grew up here" (CG2). A self-declared motivating factor was the individual and familial histories that intertwine with the physical landscape to inform local perceptions of place. As Stephanie Taylor (2010) suggests, the place where people live their lives still plays an important role in their identity, especially within the narratives they use to express who they are. And while a "person's identity ('who I am') is fragmented and unfixed, differing, for example, from one situation to another" (*ibid.*, 2010: 43) – this can be seen as a process of ongoing, open-ended change – notions

of place still act as an anchor for many people's *identity work*. A notable example of this is the name local people assign to the area around the Corrib Gas pipeline, which links back to the medieval Norman baronies rather than the more modern county system used today in Ireland:

Like you have to understand Erris. You have to understand it as a [pause] it's a very unique area in Ireland because it's probably the only place I know that still identifies itself as a barony. Baronies are Norman and again this is interesting geographically, baronies are old Norman divisions, and they predate counties, and they are deeper than counties. I doubt anybody in Ireland knows what barony they live in. It's a completely redundant idea and in Mayo no-one knows what barony they live in, but Erris people do. Erris is the only place that is distinctive by virtue of its barony. And so, people talk about 'Erris' and it means something.

(CG2)

It was also a strong factor in defining how local people responded to the pipeline. One respondent described this as an *indigenous sense of place*, where belonging is wrapped up within oneself but also with one's familial history and "the integrity of a place not being disturbed" (CG2) by external actors. It is, therefore, this maelstrom of place attachment, identity work, and personal values that continues to shape one's understanding of place and is in turn shaped by the collective and personal interpretations a potential energy project might have on those constructions.

In turn, these contestations of place and place identities reveal (in part at least) the many power imbalances different actors experience in strategic energy infrastructure projects. Identities are ascribed to a place by social actors who have different knowledges, interests, and/or power relations to that place (Peng *et al.*, 2020). As Doreen Massey (2005: 85) puts it, "not only is space utterly imbued with and a product of relations of power, but power itself has a geography. There are cartographies of power." How these are expressed, reflects the power one has within one's own social group, but also in relation to those wider social groups external to one's locality.

For both case studies, place identity was constantly being reaffirmed, built upon, and applied amongst the protesters in order to strengthen bonds within the movement and for (re)establishing core identities whenever the local leaders of the protests were in danger of being subsumed within wider national protest networks. The use of protest camps in Erris, ensured that the focus of the protests remained close to where the pipeline was. It remained the site for contestation. This also ensured those leading the protests retained control over the direction the protests were to take, even when they began to attract more national and international attention. As such, place continues to hold significant symbolic and representative meaning through the intersecting interpretations of space, power, and identity for stakeholders across the energy domain.

# 7 Conclusion

This paper reports on findings from recent research into the roles and modes of citizen participation currently taking place in the energy transition. Most notably, we focused on how ideas of 'energy justice' are framed by local stakeholders' perceptions of trust, place-attachment, and personal identity when mobilising in response to a strategic energy project in their area. Our work was very much informed by Doreen Massey's (2005) understanding of the 'power-geometries of space' and Peng et al.'s (2020) work on the interconnecting relationships between people, place, and place identity. From these and other contributions from the literature, we were able to frame our own study using Perlaviciute and Steg's (2014) conceptual framework for outlining how evaluation and acceptability are determined by multiple, intersecting criteria in shaping an individual's perception of a specific (energy) project. Taken together, we were able to examine in-depth the perceptions of citizens in each of the three case studies comprising the EnergyPolities project. From our analysis, place played a significant role in framing not only the narratives for resisting specific (energy) projects but also the personal identities of many of the protesters involved.

However, as Sayan (2019: 3) suggests "place-based approaches remain a niche area of research which have not been adequately considered directly within the conceptual framework of energy justice". This is surprising given the intersecting relational impacts experienced by policy, the environment and the local communities affected by energy production and applies to renewable energy just as much as to the carbon-based sources it replaces. This paper seeks to contribute to furthering place-based studies in energy research. If we are to have a just and equitable energy transition, place and an acknowledgement of specific, local place identities, will need to occupy a more central role in energy planning and associated projects over the coming decades.

## 8 References

- After Oil Collective. (2022). Solarities: Seeking Energy Justice (A. Vemuri & D. Barney, eds.). University of Minnesota Press. https://www.upress.umn.edu/bookdivision/books/solarities
- Anderson, J. and Douglas, J. (2005) Promoting Civic Engagement at the University of California: Recommendations from the Strategy Group on Civic and Academic Engagement [online]. Available at: https://gspp.berkeley.edu/faculty-andimpact/publications/report-promoting-civic-engagement-at-the-university-ofcalifornia-recommend (accessed 23 August 2022)
- Bouzarovski, S., & Simcock, N. (2017). Spatializing energy justice. Energy Policy, 107. https://doi.org/10.1016/j.enpol.2017.03.064

- Butler, C., Parkhill, K. A. and Pidgeon, N. (2013) Deliberating Energy System Transitions in the UK - Transforming the UK Energy System: Public Values, Attitudes and Acceptability, UK Energy Research Centre. London.
- Corner, A., Markowitz, E. and Pidgeon, N. (2014) 'Public engagement with climate change: The role of human values', Wiley Interdisciplinary Reviews: Climate Change, 5(3), pp. 411–422. https://doi.org/10.1002/wcc.269.
- Culley, M. R. et al. (2011) 'Sun, Wind, Rock and Metal: Attitudes toward Renewable and Non-renewable Energy Sources in the Context of Climate Change and Current Energy Debates', Current Psychology, 30(3), pp. 215–233. https://doi.org/10.1007/s12144-011-9110-5.
- Davis, S. J., Caldeira, K., & Matthews, H. D. (2010). Future CO2 Emissions and Climate Change from Existing Energy Infrastructure. Science, 329(5997), 1330– 1333. https://doi.org/10.1126/science.1188566
- Devine-Wright, P. (2005) 'Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy', Wind Energy, 8(2), pp. 125– 139. https://doi.org/10.1002/we.124.
- Devine-Wright, P. (2009) 'Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action', Journal of Community & Applied Social Psychology, 19(6), pp. 426–441. https://doi.org/10.1002/casp.1004.
- Devine-Wright, P. (2011) 'Place attachment and public acceptance of renewable energy: A tidal energy case study', Journal of Environmental Psychology. Elsevier Ltd, 31(4), pp. 336–343. https://doi.org/10.1016/j.jenvp.2011.07.001.
- Devine-Wright, P. and Howes, Y. (2010) 'Disruption to place attachment and the protection of restorative environments: A wind energy case study', Journal of Environmental Psychology. Elsevier Ltd, 30(3), pp. 271–280. https://doi.org/10.1016/j.jenvp.2010.01.008.
- Dietz, T., Fitzgerald, A. and Shwom, R. (2005) 'Environmental Values', Annual Review of Environment and Resources, 30(1), pp. 335–372. https://doi.org/10.1146/annurev.energy.30.050504.144444.
- Dunphy, N.P., Lennon, B., Quinlivan, L., Velasco-Herrejón, P., and Curran, R. (2021). Critical review of education and public engagement initiatives. Deliverable 4.1 of the REALISE H2020 project, funded under the EU Horizon 2020 research and innovation programme under grant agreement No 884266.
- Dunphy, N. P., Lennon, B., Quinlivan, L., & Velasco-Herrejón, P. (2022) Framework of social acceptability factors of energy projects. Deliverable WP4-D2 of the EnergyPolities project, SEAI, Ireland.

- Grasso, M. (2019). Oily politics: A critical assessment of the oil and gas industry's contribution to climate change. Energy Research & Social Science, 50, 106–115. https://doi.org/10.1016/j.erss.2018.11.017
- Healy, N., Stephens, J. C., & Malin, S. A. (2019). Embodied energy injustices: Unveiling and politicizing the transboundary harms of fossil fuel extractivism and fossil fuel supply chains. Energy Research & Social Science, 48, 219–234. https://doi.org/10.1016/j.erss.2018.09.016
- Howarth, R. W. (2014). A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas. Energy Science & Engineering, 2(2), 47–60. https://doi.org/10.1002/ese3.35
- Jackson, R. B., Friedlingstein, P., Andrew, R. M., Canadell, J. G., le Quéré, C., & Peters, G. P. (2019). Persistent fossil fuel growth threatens the Paris Agreement and planetary health. Environmental Research Letters, 14(12), 121001. https://doi.org/10.1088/1748-9326/ab57b3
- Jenkins, K. E. H., Spruit, S., Milchram, C., Höffken, J., & Taebi, B. (2020). Synthesizing value sensitive design, responsible research and innovation, and energy justice:
  A conceptual review. Energy Research & Social Science, 69, 101727. https://doi.org/10.1016/j.erss.2020.101727
- Jenkins, K., McCauley, D., Heffron, R., Stephan, H., & Rehner, R. (2016). Energy justice: A conceptual review. Energy Research & Social Science, 11, 174–182. https://doi.org/10.1016/j.erss.2015.10.004
- Koecklin, M. T., Longoria, G., Fitiwi, D. Z., DeCarolis, J. F., & Curtis, J. (2021). Public acceptance of renewable electricity generation and transmission network developments: Insights from Ireland. Energy Policy, 151, 112185. https://doi.org/10.1016/j.enpol.2021.112185
- Lee, J., & Byrne, J. (2019). Expanding the Conceptual and Analytical Basis of Energy Justice: Beyond the Three-Tenet Framework. Frontiers in Energy Research, 7. https://doi.org/10.3389/fenrg.2019.00099
- Legard, R., Keegan, J. and Ward, K. (2003) In-depth Interviews. In J. Richie & J. Lewis (eds.) Qualitative Research Practice: A Guide for Social Science Students and Researchers (pp. 138–169). SAGE Publications.
- Lennon, B. & Dunphy, N.P. (2022) Mind the gap: citizens, consumers and unequal participation in global energy transitions. In (eds.) Nadesan, M.H., Pasqualetti, M.J. and Keahey, J., Energy Democracies for Sustainable Futures. Elsevier.
- Lennon, B., Dunphy, N. P., Gaffney, C., Revez, A., Mullally, G., and O'Connor, P. (2020) Citizen or Consumer? Reconsidering Energy Citizenship. Journal of

Environmental Policy and Planning, 22 (2): 184-197. https://doi.org/10.1080/1523908X.2019.1680277

- Lindenberg, S. and Steg, L. (2007) 'Normative, Gain and Hedonic Goal Frames Guiding Environmental Behavior', Journal of Social Issues, 63(1), pp. 117–137. https://doi.org/10.1111/j.1540-4560.2007.00499.x.
- Massey, D. (2005) For Space. London: Sage Publications.
- McHarg, A. (2020). Energy Justice. In Energy Justice and Energy Law (pp. 15–30). Oxford University Press. https://doi.org/10.1093/oso/9780198860754.003.0002
- Morgan, David L.; Bottorff, Joan L. (2010): Advancing Our Craft: Focus Group Methods and Practice. In Qual Health Res 20 (5), pp. 579–581. DOI: 10.1177/1049732310364625.
- Nielsen-Bohlman, Lynn; Panzer, Allison M.; Kindig, David A.; Institute of Medicine, Committee on Health Literacy (Eds.) (2004): Health literacy. A prescription to end confusion.
- Nisbet, M. C. (2009) 'Communicating Climate Change: Why Frames Matter for Public Engagement', Environment: Science and Policy for Sustainable Development, 51(2), pp. 12–23. https://doi.org/10.3200/ENVT.51.2.12-23.
- Nordlund, A. M. and Garvill, J. (2002) 'Value Structures behind Proenvironmental Behavior', Environment and Behavior, 34(6), pp. 740–756. https://doi.org/10.1177/001391602237244.
- Parkhill, K., Demski, C., Butler, C., Spence, A. and Pidgeon, N. (2013) Transforming the UK Energy System: Public Values, Attitudes and Acceptability - Synthesis Report. UK Energy Research Centre: London. https://eprints.whiterose.ac.uk/82906/.
- Peng J., Strijker, D. and Wu, Q. (2020) Place Identity: How Far Have We Come in Exploring Its Meanings? Frontiers in Psychology. 11:294. https://doi.org/10.3389/fpsyg.2020.00294.
- Perlaviciute, G. and Steg, L. (2014) Contextual and psychological factors shaping evaluations and acceptability of energy alternatives: Integrated review and research agenda. Renewable and Sustainable Energy Reviews. Elsevier, 35, pp. 361–381. https://doi.org/10.1016/j.rser.2014.04.003.
- Pink, S. (2012) Situating Everyday Life: Practices and Places. London & Thousand Oaks: Sage Publications.
- Poortinga, W., Fisher, S., Böhm, G., Steg, L., Whitmarsh, L., & Ogunbode, C. (2018). European Attitudes to Climate Change and Energy: Topline Results from Round 8 of the European Social Survey. Online: https://bit.ly/3z443U2

- Razzaque, J., & Richardson, B. (2006). Public participation in environmental decisionmaking. In B. Richardson, & S. Wood (Eds.), Environmental Law for Sustainability, 165-194. Hart Publishing.
- Rauh, J. (2021). Is trust in government really declining? Evidence using the sequential probability ratio test. Acta Politica, 56(3), 500–529. https://doi.org/10.1057/s41269-020-00163-7
- Rohan, M. J. (2000) A Rose by Any Name? The Values Construct. Personality and Social Psychology Review, 4(3), pp. 255–277. https://doi.org/10.1207/S15327957PSPR0403\_4
- Sayan, R. C. (2019). Exploring place-based approaches and energy justice: Ecology, social movements, and hydropower in Turkey. Energy Research & Social Science, 57, 101234. https://doi.org/10.1016/j.erss.2019.101234
- Schultz, P. (2001) The Structure of Environmental Concern: Concern For Self, Other People, And The Biosphere. Journal of Environmental Psychology, 21(4), pp. 327–339. https://doi.org/10.1006/jevp.2001.0227
- Schwandt, T.A. (2007). The Sage Dictionary of Qualitative Inquiry (3rd ed.). Sage Publications, Inc. https://dx.doi.org/10.4135/9781412986281
- Schwartz, S. H. (1992) 'Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries', in Advances in Experimental Social Psychology, pp. 1–65. https://doi.org/10.1016/S0065-2601(08)60281-6.
- Sharp, J. D., Jaccard, M. K. and Keith, D. W. (2009) 'Anticipating public attitudes toward underground CO2 storage', International Journal of Greenhouse Gas Control, 3(5), pp. 641–651. https://doi.org/10.1016/j.ijggc.2009.04.001
- Silva Ontiveros, L., Munro, P. G., & Melo Zurita, M. de L. (2018). Proyectos de Muerte: Energy justice conflicts on Mexico's unconventional gas frontier. The Extractive Industries and Society, 5(4), 481–489. https://doi.org/10.1016/j.exis.2018.06.010
- Sovacool, B. K., Burke, M., Baker, L., Kotikalapudi, C. K., & Wlokas, H. (2017). New frontiers and conceptual frameworks for energy justice. Energy Policy, 105(March), 677–691. https://doi.org/10.1016/j.enpol.2017.03.005
- Stern, P. C. (2000) 'Toward a Coherent Theory of Environmentally Significant Behavior', Journal of Social Issues, 56(3), pp. 407–424. https://doi.org/10.1111/0022-4537.00175
- Stern, P. C., Dietz, T. and Guagnano, G. A. (1998) 'A Brief Inventory of Values', Educational and Psychological Measurement, 58(6), pp. 984–1001. https://doi.org/10.1177/0013164498058006008

- ten Brink TS and Dalton T (2018) Perceptions of Commercial and Recreational Fishers on the Potential Ecological Impacts of the Block Island Wind Farm (US). Frontiers in Marine Science. 5:439. https://doi.org/10.3389/fmars.2018.00439
- van Bommel, N., & Höffken, J. I. (2021). Energy justice within, between and beyond European community energy initiatives: A review. Energy Research & Social Science, 79, 102157. https://doi.org/10.1016/j.erss.2021.102157
- Vorkinn, M. and Riese, H. (2001) 'Environmental Concern in a Local Context', Environment and Behavior, 33(2), pp. 249–263. https://doi.org/10.1177/00139160121972972
- Wallsgrove, R., Woo, J., Lee, J.-H., & Akiba, L. (2021). The Emerging Potential of Microgrids in the Transition to 100% Renewable Energy Systems. Energies, 14(6), 1687. https://doi.org/10.3390/en14061687
- Wang, X. and Van Wart, M. (2007) 'When Public Participation in Administration Leads to Trust: An Empirical Assessment of Managers' Perceptions', Public Administration Review, pp. 265–278. https://doi.org/10.1111/j.1540-6210.2007.00712.x
- Wang, X., van der Werff, E., Bouman, T., Harder, M. K., & Steg, L. (2021). I Am vs. We Are: How Biospheric Values and Environmental Identity of Individuals and Groups Can Influence Pro-environmental Behaviour. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.618956
- Whitfield, S. C., Rosa, E. A., Dan, A. & Dietz, T. (2009) The Future of Nuclear Power: Value Orientations and Risk Perception. Risk Analysis, 29(3), pp. 425–437. https://doi.org/10.1111/j.1539-6924.2008.01155.x
- Wüstenhagen, R., Wolsink, M. and Bürer, M. J. (2007) 'Social acceptance of renewable energy innovation: An introduction to the concept', Energy Policy, 35(5), pp. 2683–2691. https://doi.org/10.1016/j.enpol.2006.12.001