

Contents lists available at ScienceDirect

Energy Research & Social Science

journal homepage: www.elsevier.com/locate/erss

Original research article

Will communities "open-up" to offshore wind? Lessons learned from New England islands in the United States



Sarah C. Klain^{a,*}, Terre Satterfield^b, Suzanne MacDonald^c, Nicholas Battista^c, Kai M.A. Chan^b

a College of Earth, Ocean and Atmospheric Science, Oregon State University, 104 CEOAS Administration Building, 101 SW 26th St., Corvallis, OR 97331, USA

^b Institute for Resources, Environment and Sustainability, University of British Columbia, 2202 Main Mall, Vancouver, BC V6T 1Z4, Canada

^c Island Institute, 386 Main Street, P.O. Box 648, Rockland, ME 04841, USA

ARTICLE INFO

Keywords: Deliberative learning Community benefits Offshore wind farms Social acceptance of renewable energy

ABSTRACT

National-scale polls demonstrate high levels of public support for developing renewable energy while local opposition has led to delays and cancelations of renewable energy projects around the world. What makes for robust public engagement processes to reject or site renewable energy projects? A literature review reveals numerous considerations, with complexity that impedes their application by practitioners. In this study, we conducted interviews and document analysis to assess the extent to which design principles from the analytic-deliberative process literature arose during public engagement on three New England islands adjacent to proposed offshore wind farms. In our study sites—amongst the array of criteria in the literature—good public engagement boiled down to two key themes: enabling bidirectional deliberative learning and providing community benefit. Decision processes perceived as effective occurred when (1) participants, including experts and local stakeholders, learned from each other while reconciling technical expertise with citizen values; and (2) outcomes included the provision of collaboratively negotiated community benefits. Our findings highlight that community benefits are not the same as benefits to groups of individuals. Attending to these key themes may improve the quality of interactions among communities, government authorities and developers when deciding if and where to site renewable energy infrastructure.

1. Introduction

The scientific consensus regarding the urgency of climate change mitigation has coalesced [1] while ideological and economic debates about appropriate actions and energy policies have become increasingly polarized [2–5]. Achieving the IPCC's goal of 1.5 °C or less of warming entails a transformation of various modes of production and consumption, including massive changes in U.S. energy infrastructure [6]. Transitioning to low carbon sources of electricity largely depends on the extent to which people act at various scales to obstruct (e.g., file lawsuits), accommodate or champion low-carbon energy technology.

Switching to greater reliance on renewable energy can diversify sources of energy, reduce carbon dioxide emissions, reduce air pollution and meet growing demands for electricity [7]. As renewable energy infrastructure scales up, it is becoming increasingly common in and near where people live. Siting this infrastructure has often been controversial, resulting in project delays and cancelations [8,9]. Bell et al. [10] identified a 'social gap' when it comes to understanding why national opinion polls reveal high levels of public support for the development of renewable energy while specific applications for its development have low success rates. Proposed explanations for this 'social gap' include the following: (1) self-interested NIMBY-ism (not in my backyard), defined as "an attitude motivated by concern for the 'common good' and behaviour motivated by 'self-interest" [10]; (2) democratic deficit in that a small, unrepresentative number of opponents dominate the decision processes; (3) qualified support in that national surveys may report high levels of public support, but this support may in reality be based on certain conditions being met (e.g., related to noise, size, number of turbines, environmental protection, community engagement, fairness of decision process, and fair allocation of economic benefits); and (4) place protectors, who perceive higher place value in a specific location without the renewable energy development (e.g., rejecting a development due to its impact on local biodiversity or the historic qualities of a particular landscape), but may accept the development in another location [11]. If renewable energy targets are to be achieved, this "social gap" must be bridged to mitigate, accommodate or otherwise work through concerns of local communities to particular renewable energy projects [10,12].

Social science can elucidate why and how renewable energy controversies might be ameliorated via robust public engagement

E-mail address: klains@oregonstate.edu (S.C. Klain).

http://dx.doi.org/10.1016/j.erss.2017.05.009

Received 8 December 2016; Received in revised form 20 April 2017; Accepted 7 May 2017

2214-6296/ © 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/BY/4.0/).

^{*} Corresponding author.

strategies, including those that seek to clarify both concerns and possible outcomes or alternatives. Public participation in decisionmaking has the potential to enhance the quality of decision outcomes while improving the capacity of those involved to meaningfully engage in policy processes [13]. Scholars of risk, technology and social dimensions of renewable energy recommend shifting governance away from reliance on primarily technocratic evaluations of risks and benefits. Instead, scholars have called for methods that 'open-up' the capacity for people with diverse perspectives to participate in analytic deliberative processes to determine what constitutes appropriate development of a technology [14]. Analytic-deliberative methods are approaches to public engagement in decision-making that involve assessment and dialogue to reconcile technical as well as expert knowledge with citizen values [15]. Such methods can result in increased trust among those involved and acceptability of outcomes [16,17]. "Opening up" decision-making processes entails recognition and accounting for the numerous factors driving the development and deployment of technology, including "individual creativity, collective ingenuity, economic priorities, cultural values, institutional interests, stakeholder negotiation, and the exercise of power" [14]. And yet, when done poorly (i.e., closing down decision making), deliberative processes can 'close' down both discussion of new technologies and so too the possibility of innovations (e.g., offshore wind farms) and potential paradigm shifts (e.g., a move from large corporate-owned to distributed community-owned energy systems) [14].

We focused our research attention on contributing to the growing literatures on community-scale analysis of public opinion, participatory processes and community benefits related to wind energy [18–23]. Our research is a response to Smardon and Palmer's [24] call for additional evaluation of processes to facilitate interactive dialogue about renewable energy landscapes. We explore what constitutes meaningful citizen participation for siting offshore wind in the northeast U.S., using three case studies as impetus for a possible streamlining of theory about analytic deliberative processes that is especially relevant for practice and applied research. Within this context, we give special attention to the provision of community benefits, distinguishing specifically between community and aggregate individual perspectives.

By community benefits, we mean additional and distinct funds or investments that the developer provides to communities, often near project sites [25,26]. Benefits associated with the generation of renewable electricity, such as carbon dioxide reduction, are diffuse and tend to accrue at a global scale while several environmental, economic and landscape impacts are concentrated and local. Providing community benefits above and beyond tax revenues can play an important role in managing renewable energy scale-related distributional conflicts [27,28].

We conducted research on the experiences of three New England islands to explore deliberative processes, community benefits and logics of acceptability or unacceptability of offshore wind farms. Our goal was to parse how public engagement has occurred and the types of engagement practices that built or eroded support for wind farms. We used normative theory on key components of analytic-deliberative processes to explain characteristics of community engagement that worked well versus those that resulted in relatively higher levels of frustration among various parties. Our research identifies similarities, differences and gaps between this normative theory and our three island community contexts to identify characteristics of community engagement that may minimize frustration and increase satisfaction with decision processes and outcomes among local stakeholders.

1.1. Theorizing public engagement processes

A normative theory of public participation in decision-making has sought to conceptualize and identify principles for reaching legitimate outcomes (Fig. 1) [29,30]. Concepts of *ideal speech situations* and *communicative competence* are central to this theory. An *ideal speech* situation involves the aspirational goal of reaching a rational consensus wherein communication follows implied rules, no coercive or nonrational pressures exist and assertions made are based on reason and evidence only [17,31]. Communicative competence is "the ability to use language...to create understanding and agreement... This requires people enter into a discourse [i.e., discussion or deliberation exercises] with an attitude oriented toward reaching understanding. People must be committed to reflecting on their personal beliefs, values, preferences, and interests, they must be open to alternative definitions of reality, and they must listen to other people's arguments with an open mind" [33.p. 44]. Competence also means that the people involved in the deliberation are able to assimilate information to reach an adequate understanding of the issue and appropriate procedures are in place to choose the relevant knowledge to inform the process. Principles of fairness are linked to competence to the extent that legitimate outcomes depend not just on competence, but fairness as concerns equality of inclusion in the decision process, procedural fairness throughout the deliberation, and mutual respect among all involved. Lastly, fairness is transgressed when (1) the role of power is ignored or is not neutralized; and/or (2) when political institutions make the deliberative process an end-creating activity, rather than the means for generating an outcome. These obstacles can block the achievement of legitimate outcomes (Fig. 1).

Abelson et al. [29] expand and operationalize this normative theory into pragmatic principles for evaluating public participation in decision-making with more explicit recognition of the role of power in deliberative processes (e.g., the availability and use of particular information can be a source of power). This highly cited review, with over 795 citations on Google scholar as of 2017, documents how no simple formula exists for designing an optimal public engagement process, but four key topics require attention: (1) representation; (2) procedural rules; (3) information employed in the process and (4) the outcomes including decisions resulting from the process.

Representation refers to determining who fairly represents the "public" in a decision-process. This can be challenging because fair and legitimate processes that provide meaningful opportunities for learning and recognition of diverse perspectives tend to be time-intensive and relatively exclusive processes that can only involve a small number of people. Further complicating fair representation is that citizens are more likely to get involved if they fear losing something they value [29]. Situations can arise when a majority of people support or feel neutral towards a proposal, but they choose not to get involved with the decision process [33]. Concerns about representation are prominent in the literature on energy justice, in which *recognition-based justice* calls for greater consideration for segments of society who tend to be ignored or misrepresented [34].

Abelson et al. [29] documents how procedural rules can help manage this potential self-selection of who gets involved. They also identify the importance of being upfront and transparent about the timing and extent of public engagement as well as responsiveness on the part of an authority who compiles and responds to public input. These considerations are part of *procedural justice*, a line of research that looks into the extent to which processes are fair, local knowledge is mobilized and information is disclosed [34].

Providing ample time for those involved to examine, discuss and challenge the information presented in the process is important, as is maintaining mutual respect and concern for others throughout the deliberation. Choices about information are crucial, specifically what information is selected then how it is presented and interpreted.

Finally, not just the process leading to the decision, but also the outcome (the decision) needs to be associated with legitimacy (the general perception that the decision is an appropriate use of power by a legally constituted authority) and accountability [29] (responsibility is assumed for the decision, including an obligation to report, explain and be answerable to the resulting consequences). This last point touches upon distributional justice, which focuses on outcomes related to

Download English Version:

https://daneshyari.com/en/article/6463747

Download Persian Version:

https://daneshyari.com/article/6463747

Daneshyari.com