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Research paper

From consultation to collaboration: A participatory framework for positive community engagement with wind energy projects in Ontario, Canada

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ABSTRACT

The social conflict over the development of wind facilities is evidence of a new type of environmental controversy. One side of the argument is composed of wind proponents who advocate the environmental benefits of wind energy to tackle climate change and secure energy sources. On the other side of the argument are the opponents who are concerned with potential health and ecological impacts. Although wind has become a contributor to the energy mix in Ontario, Canada there remains a significant and organized resistance to wind power development in the province. This paper serves to identify the factors that can lead to social acceptance of wind project development, and applies a conceptual framework for encouraging more effective public participation. Employing the case study methodology, representatives of key stakeholder groups in five Ontario wind project approvals remains limited and explains, to some degree, the ongoing resistance to these projects. Stakeholders were however, broadly supportive of the authors proposed conceptual participatory framework, which encourages a collaborative approach in the approval process. Also, all stakeholder groups welcomed the notion of a knowledge-broker to assist in the decision-making process.

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1. Introduction

The global energy sector is a rapidly changing environment. Twin concerns of climate change and energy security are driving energy policies toward renewables. What the characteristics of future sustainable energy systems will be is to some extent indefinite, given all the unknowns and uncertainties. However, it is clear that transforming from conventional sources of energy to renewables requires all system components to be addressed: economic, technical, social, and cultural [1].

Wind energy has been a key technology in meeting the challenge of climate change. The interest in wind power stems from the fact that it is currently one of the most technically and economically feasible options for supplying green energy, as well as providing a strong basis for more sustainable growth [2]. However, there are social conflicts and heightening debates about wind energy. There has been a significant opposition and, at times, orga-

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http://dx.doi.org/10.1016/j.erss.2017.02.007 2214-6296/© 2017 Elsevier Ltd. All rights reserved. nized resistance to wind power development in Ontario, Canada. Social resistance to wind energy development is an important factor that influences deployment of wind projects and has led many authors [3–7] to identify the current decision-making process – or the weak regulatory governance – as a barrier that needs to be overcome. They believe projects with high levels of participatory planning and decision-making are more likely to be publicly accepted and successful.

Theory-building research on the social-cultural dimension of renewable energy is in its infancy. Most available literature on wind energy development discusses the economic and technical barriers, while relatively little research has specifically focused on effective communication and the role of a trusted third party in the decisionmaking process. For the purpose of our research, this third party will be referred to as a knowledge-broker and defined as a skilled third party who attempts to facilitate creative problem solving through communication and analysis, aided by the social-scientific knowledge of conflict (see Jami and Walsh [8] for a more detailed discussion of the knowledge-broker). This study provides in-depth, evidence-based analysis of the issue of social acceptability involved in delivering wind energy in Ontario. The twofold principal aims of this paper are to spark a critical investigation of the factors affecting







wind power development in Ontario and to deepen possible policy and management lessons for future studies by answering the core question: "How does public participation affect the public decisionmaking process of developing a wind energy project?" To answer this core question, two sub-questions must be addressed: "What are the major social conflicts (concerns of the local community) of wind power development?" and "What is the role of a knowledgebroker (trusted third party) in resolving these conflicts?"

This study investigates the role of public participation by reviewing a number of projects in the Ontario wind power generation market to identify the factors that affected public input into wind project development in Ontario. In the following section we provide a brief review of the literature on the role of public participation and the factors leading to successful public engagement and then some background on the current approval process for wind power projects in Ontario leading to the identification of a conceptual participatory framework for a more effective public participation process for wind project development. Next, we address the methodology employed to investigate the applicability of the framework followed by a section addressing our results. The paper concludes with a discussion of our results and conclusions in support of our recommended collaborative framework approach to improving public engagement in the wind project development decision-making process.

2. Literature review

2.1. Factors necessary for successful public engagement

The typical approach for engaging local communities in the wind power development process is through the use of an environmental assessment where the proponent of the project is required to present a study addressing the various environmental consequences arising from the development of wind power on an identified area of land or water. Generally, a presentation is made in an open forum such as the local community hall to allow for comments and feedbacks from local residents. Research has shown that this approach can lead to one-directional dialogue, dissatisfied community members, greater length of time to project implementation, and ensuing increased project costs [9-13].

Howard [14], in her assessment of community engagement in Australian wind power projects, found that there was an overreliance on procedural compliance as part of the governance process in approving wind farm development. This minimal interaction with the community resulted in public opposition. Community engagement processes that encourage transparency, continual transfer of knowledge, and a sense of procedural justice during the planning and approval stages have been found to contribute to community support for a wind project [15]. Active community engagement in the planning and approval process not only leads to local acceptance but can also contribute to more regional acceptance of renewable energy projects [16]. By furthering community engagement and education, wind energy developers are promoting a "public understanding of the science" that reduces community ignorance and misunderstanding, helps promote a favorable attitude towards wind power technology, and uses common sense as an asset in convincing the public of the merits of the project [17,p. 154].

2.2. Public participation spectrum

Numerous studies have addressed the role of participation and inclusive governance in providing effective public engagement. Renn [18] identified six concepts of stakeholder and public involvement in the literature, each with different public participation models and instruments whose objectives include improving the quality of decision-making (Functionalism), proportional stakeholder representation (Neo-liberalism), truthfulness (Deliberative), the use of common sense (Anthropological), empowering the underprivileged (Emancipatory), and recognizing the legitimacy of dissent (Post-modern). Krütli et al. [19] debated the appropriateness of different techniques in the public participation process suggesting that a set of consecutive methods may be required given the variety of circumstances in which public participation may occur. They highlighted a number of typologies of public participation that reinforced these core concepts: direction of information flow [20], resolving conflict [21] or empowering people [22].

Arnstein's [22] concept of the ladder of participation has become one of the most accepted and commonly used typologies relevant to examining participation and power in the decision-making process. It distinguishes between three levels: non-participation, tokenism, and citizen power. The objective of non-participation level is to enable power-holders to profess public engagement rather than involving participants in planning and decision-making processes in a meaningful way. Tokenism involves information provision and limited consultation. Citizen power includes partnership, power delegation, and citizen control; at this level, citizens can negotiate with power-holders and have managerial power to make decisions [8].

Based on Arnstein's [22] ladder of participation, the International Association for Public Participation (IAP2) developed a public participation spectrum with different levels of public participation in the decision-making process: inform, consult, involve, collaborate, and empower. The spectrum of participation begins with providing information to the public, continues with consultation which is basically a top-down communication and a one-way flow of information between regulators and the public, whereas the higher level is a two-way information exchange, which seeks some degree of public input and more direct involvement. The next level is collaboration, and finally the spectrum ends with public empowerment that places final decision-making in the hands of the public. The principal difference between the collaborative approach and the other participatory methods is the higher level of involvement of stakeholders through a two-way communication and face-to-face negotiations in order to reach a consensus agreement and resolve disputes [23]. Healey [24] defines it as a collective process for resolving conflicts and advancing shared visions involving a set of diverse stakeholders.

2.3. Renewable energy approval process in Ontario

As found by Howard [14] in her wind energy case studies in Australia, the Province of Ontario also relies heavily on procedural compliance for all renewable energy projects. In 2009, as part of the Green Energy and Green Economy Act, the Ministry of Environment and Climate Change (MOECC) established a new Renewable Energy Approval (REA) process. Prior to the introduction of the REA process, only wind projects over 2 megawatts (MW) were required to complete an Environmental Screening Report (ESR) pursuant to the Electricity Projects Regulation associated with the Environmental Assessment Act [25]. The 2009 REA process now impacts the development of wind projects exceeding 3 kilowatts (kW), and any facility over 50 kW with a sound power rating of 102 dB or greater is required to meet an absolute minimum setback of 550 m from the nearest receptor. Furthermore, the municipal zoning approval is no longer required for wind power development leaving municipalities to be included in the general consultation process only.

Local communities can appeal the REA decisions through the Ontario Environmental Review Tribunal (ERT). The ERT is an administrative tribunal established by provincial legislation, which holds Download English Version:

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