

ScholarWorks@UMass Amherst

MASTERS THESES 1911 - FEBRUARY 2014

Off-campus UMass Amherst users: To download campus access theses, please use the following link to [log into our proxy server](#) with your UMass Amherst user name and password.

Non-UMass Amherst users: Please talk to your librarian about requesting this thesis through interlibrary loan.

Theses that have an embargo placed on them will not be available to anyone until the embargo expires.

Title

Wind Power, Public Power: Evaluating Public Participation in New England Land-based Wind Development

Authors

Gwen M. Miller, *University of Massachusetts Amherst* Follow

Document Type

Open Access

Degree Program

Regional Planning

Degree Type

Master of Regional Planning (M.R.P.)

Year Degree Awarded

2013

Month Degree Awarded

May

Keywords

Renewable energy, public participation, stakeholder process, wind power, New England, planning

Abstract

Wind energy is a means of energy production without carbon emissions, facilitating regional and national energy security. While there are currently no offshore wind farms in the United States, there has been growing success in building land-based wind capacity. Within the wind industry, there is a call for a streamlined permitting process, as well as an objective evaluation of current stakeholder processes. Within city and regional planning, the stakeholder process and public participation in general have long been subject to research and discourse, as scholars and practitioners alike seek to identify and typify what exactly makes public participation robust or rigorous. In Europe, researchers have found that a stakeholder process characterized by early inclusion and local decision-making increases community acceptance of large-scale wind projects, and that a 'soft-path', decentralized approach to infrastructure development, as seen in Germany, leads to greater community acceptance as well, versus the 'hard-path', centralized approach to infrastructure development as typified in early Dutch wind development. While the public process should not supplant the formal permitting process, or detract from technical expertise, a better understanding of what type of siting and decision-making process are construed by participants as positive or negative could help to formulate stakeholder involvement more effectively in future projects. It could also help to decrease the length of permitting times by promoting consensus-building rather than inadvertently creating an adversarial decision-making climate.

This thesis uses a case study methodology to compare three land-based wind farms in Massachusetts and Vermont. It also compares the wind development policies between the two states. From each site, stakeholders are identified and interviewed concerning their experiences and perspectives of the stakeholder or public process. Interviews are analyzed using a matrix composed of success criteria pulled from the fields of regional planning and public participation theory, collaborative planning, and adaptive resource management. Findings include evidence as to what degree there was a stakeholder process, and to what degree participants found it positive or negative. The research found that the characteristics and practices of ore robust or rigorous stakeholder engagement are largely lacking in New England land-based wind development. These characteristics or practices included third-party data collection and reporting; early and broad stakeholder inclusion; collaborative ground rule setting; and no third-party mediation or facilitation. Stakeholder process perspectives are easily divided by wind-energy attitudes: anti-wind stakeholders reported greater antipathy toward the process, whereas proponents of both specific projects and the technology in general reported greater favorability toward the process and outcome. Vermont and Massachusetts have distinct wind development processes and distinct mechanisms for public participation and stakeholder engagement in a renewable energy technology context. In many ways, the siting of renewable infrastructure still follows the 'decide, announce, defend' character of conventional infrastructure and facility siting.

Wind proponents, and proponents of other renewable energy technologies and sustainability measures in general, should pause and consider how to craft meaningful, robust and rigorous stakeholder processes prior to site selection and development. This will lend legitimacy to both the process and technology, lending political and social sustainability to a technology that is well

needed for social, economic and environmental well-being. Continued avoidance of early and robust stakeholder engagement may contribute to ongoing conflict and confusion regarding renewable energy siting, permitting and development. Stakeholder experiences and perspectives also demonstrated that there are many factors contributing to public and social perceptions of wind technology and specific projects, including the financial gain or reward to communities and stakeholders; the size of individual turbines; project ownership and management; and project scale. There is opportunity for enhancing the public process and allowing rigorous and robust stakeholder process in wind energy development.

First Advisor

Elisabeth M. Hamin

[Download](#)

DOWNLOADS

Since July 30, 2013

Included in

[Urban, Community and Regional Planning Commons](#)

Share

COinS