

Helping Coastal Communities Evaluate Wind Energy Options

INTEGRATED ASSESSMENT

BACKGROUND

Michigan is recognized as a state with strong wind energy development potential. As a result, coastal communities are likely to face pressure to develop wind farms. Currently, there is limited information about how coastal wind turbines might impact communities, businesses and the environment. Many towns are not prepared to evaluate future wind energy proposals.

Project Description

This project will help community leaders in some of the windiest regions understand the possible benefits and consequences of wind energy development. Three distinct regions of Michigan have been selected for the study: Presque Isle County, Bay County and the Keweenaw-Houghton-Baraga-Marquette area. In each region, the project team will conduct a series of public meetings, focus groups and interviews to gather feedback about local concerns. Using input from local people and a variety of data sources and models, researchers will assess the following factors related to wind energy development:

- Environmental and aesthetic impacts
- Costs and benefits for communities
- Interests and motivations of different stakeholders
- Information and support needed by communities
- Existing local ordinances and inconsistencies between local and state policies
- Policy options for each region
- Technical considerations, including turbine design and transmission needs

Expected Outcomes

The goal is to develop optimum approaches for evaluating and locating wind energy facilities in three coastal regions. This project will build expertise among Michigan residents, decision-makers and other wind energy stakeholders by providing or enhancing:

- Information about the full costs and benefits of wind energy development
- Training opportunities for government officials and community groups
- Access to decision-support tools for turbine siting, such as the GIS-based *Wind Prospecting Tool*
- Sample local ordinance and state statutory language for regulating coastal resources
- Recognition of local concerns within state-level policy discussions

Get Involved

This project will develop diverse wind energy stakeholder groups that include town officials, local landowners and farmers, wind industry representatives, environmental groups and tourism professionals.



PHOTOS: AMOL PAVANGADKAR



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