

Land-based Wind Energy: A Guide to Understanding the Issues and Making Informed Decisions



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Who we are

- The non-profit consulting affiliate of Conservation Law Foundation, a New England environmental advocacy organization
- We work in collaboration with public and private organizations to advance sustainable innovation and bring about positive environmental change



Collaboration with MassCEC

- Facilitated 3 interactive regional conversations with municipal officials & volunteers
 - Theme of “*What will help us make robust decisions about wind power in our communities?*”

Regional Meetings: Content Take-Aways

Cape and Islands	Western MA	North Shore
Need to balance local control with regional and state coordination	Need to balance local control with State's role	Regional coordination on implementation (e.g., regional utility)
Need for better local and regional collaboration and communication	Important role for regional planning agencies	Would help to have a repository of information and experiences (model bylaws, etc.)
State could help by commissioning neutral studies	Need for more information	Explore opportunities for small-scale wind

- Produced resource guide on land-based wind energy siting for a lay audience
 - How to make sense of information about wind energy
 - Literature review in 5 issue areas
 - Public Engagement in the Siting Process

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In partnership with the Massachusetts Clean Energy Center

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The full document is available on the CLF Ventures and
Massachusetts Clean Energy Center websites.

CLF Ventures: www.clfventures.org/docs/wind_guide.pdf (1.6 MB)

MassCEC: www.masscec.com

How to make sense of information about wind energy

- What are the authors' credentials?
- Are the conclusions based on documented, factual information from other sources you know and trust?
- How current is the information? For web material, when was it posted and/or last updated?
- Is there broad consensus regarding the information presented, or is it based on the conclusion of one individual or one study?
- How generalizable is the information?
- If the information is anecdotal, what are some of the key features that make it comparable to, or distinguish it from, a project you may be considering?
- How representative is the information of the views and experiences of all people who might be affected positively or negatively by a particular project?

Sound and Health

- **The issue:** Some people have stated that inaudible sound created by wind turbines can cause physiological health impacts.
- **More information:**
 - Sounds at frequencies below 200 Hz are referred to as “low frequency sound”; when low frequency sound drops below 20 Hz it is commonly called infrasonic sound, or infrasound
 - infrasound is generally below the threshold of human hearing, but may be audible when produced at more than 70 decibels
 - People have stated that they can feel vibrations or pressure, which they attribute to wind turbines, and these tangible impacts have come to be associated with low frequency sound and infrasound by some stakeholders.

Visual Impacts and Health

- **The issue:** Some people living near wind turbines have reported experiencing negative health impacts, such as headaches and dizziness, which they attribute to shadow flicker from the turbines.
- **More information:**
 - No studies in the epidemiology or medical literature have reported that shadow flicker from utility-scale wind turbines is harmful to health.
 - It is important to identify potential flicker effects during the design phase of a wind project and employ tools to help mitigate flicker or manage it.
 - There are no documented cases of epileptic seizures caused by shadow flicker from utility-scale wind turbines, and the risk of such an event occurring is negligible

A Guide to Understanding the Issues and Making Informed Decisions

- Not all information is equal and it is important to compare **apples to apples**
- Need to engage stakeholders **early and often**
- Need to engage in serious discussion of **issues of concern**

Thank you!

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- To access the resource guide

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visit:

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