



WIND POWER PUBLIC ACCEPTANCE:
EVOLVING CHALLENGES
& THE
NEW ENGLAND
WIND ENERGY
EDUCATION PROJECT

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Wind Powering America All-States Summit

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Good Info →
Good Decisions



Sustainable Energy Advantage, LLC

Mission: Sustainable Energy

Approach: Sustainable Advantage

***We help build Renewable Energy Businesses, Markets, Policies & Projects...
through Analysis, Strategy & Implementation***

Services

- ***Interdisciplinary consulting & advisory services*** (regional & national)
- ***New England Renewable Energy Market Outlooksm*** (REMO) subscription briefings
- ***New England Eyes & Earssm*** Regulatory, Policy & Legislative Tracking and Analysis Subscription Service

Practice Areas

- ***Power market and public policy analysis, tracking, development & implementation.***
- ***Strategy development.***
- ***Financial analysis & economic feasibility***
- ***Renewable Energy supply & procurement.***
- ***Quantitative analysis and modeling.***
- ***Transaction facilitation, contract development and negotiation support.***
- ***Business infrastructure development.***
- ***Green power product development & pricing***

OVERVIEW

- ⦿ Public Acceptance of Wind - Lay of the Land
- ⦿ Key Public Acceptance Issues are Evolving
- ⦿ New England Wind Energy Education Project
- ⦿ What I've Learned (so far)



PROCESS TRENDS: PROJECTS & COMMUNITIES

- ◎ When wind proposed → pitched battle results
 - Change is perceived as threatening. Public' objectives can conflict.
 - Heated debates!
- ◎ Siting decision-makers need...
 - Accurate & objective understanding of the issues → best decisions
 - Accepted & applicable standards (typically absent)
- ◎ Siting decision-makers face...
 - Conflicting info; competing claims; valid & baseless concerns
 - Absence of independent (scientific, peer-reviewed) data
 - A chaotic brew of... fact, opinion, fear, hyperbole; disinformation; misinformation, or misunderstanding of complex systems.
- ◎ Reactions: Bylaws, ordinances, moratoriums
 - To provide time to make well-considered choices, or
 - As a weapon to preclude or delay

THE PLAYERS

⊙ Proponents...

- Info can't be perceived as without commercial interest

⊙ Open-minded abutters, community, citizens groups with valid concerns

⊙ Opponents...

- 'Skeptics'... requiring high burden of proof
 - 'Character of Place' groups... "In favor of wind, but not here"
 - (I don't use NIMBY: disrespectful, counterproductive & oversimplifies motives)
 - 'Ideologically-Opposed'... Increasingly sophisticated & networked groups, often from outside of the community →
 - Disseminate info ranging (IMHO) from legitimate questions to rhetorically brilliant disinformation painting wind in the worst possible light
 - Community-based/abutters
- All groups sharing info, arguments, and game plans, that have worked, inc. info from the ideologically-opposed

A SNAPSHOT: RESULTS TRENDS

- ⊙ Emotion (VOLUME) High
 - Crowding out opportunity for decision-makers to consider facts
- ⊙ More projects being turned down
 - Doubts introduced; Uncertainty favors the status quo
- ⊙ Siting wind projects is getting harder
 - Whether well-sited or poorly-sited project...
- ⊙ Approvals via existing due process usually not accepted by losers
 - exhausting all appeals = the norm

PUBLIC ACCEPTANCE ISSUES ARE EVOLVING

- ⊙ Phase I: Wind's early growth phase
 - Aesthetics (eye of the beholder), birds
 - Bats
 - Wildlife
- ⊙ Phase II: Rapid Growth in installations
 - Habitat fragmentation
 - Sound
 - Shadow Flicker
 - Health
 - Property values
 - Tourism
 - Safety
- ⊙ Phase III: Offshore
 - Aquatic environment
 - Fishing
- Shipping
- Recreation
- Tourism, etc.
- ⊙ Phase IV: Categorical
 - Economics (shale gas, recession, harder to justify INVESTMENT in infrastructure, higher premiums)
 - Shifting public priorities (LT sustainable environment → ST immediate economics)
 - Conflict with incumbents (capacity glut, displacement)
 - Issues:
 - Cost & Subsidies
 - Integration & Transmission Expansion Costs
 - Reframing: 'wind doesn't deliver benefits'... so no mitigation is worth it

REFRAMING WIND PUBLIC ACCEPTANCE: UNDERMINING WIND'S LEGITIMACY

- ⦿ Argument: “...support sound scientific solutions – and wind power is not acceptable as it fails to deliver¹...’:
 - Not a technically legitimate solution for our grid
 - Doesn't meaningfully reduce CO₂
 - Not a commercially viable source of energy on its own
 - not environmentally responsible.
- ⦿ Argument supported by increasingly sophisticated blending of elements of truth, issues where wind advocates have overstated the case, truthiness², false straw men, oversimplification of complex systems and science, brilliant rhetoric, and mockery.
- ⦿ “Once you fully absorb the understanding that wind power does not work, then you can see the foolishness of saying that it is OK if it is “sited properly.” {Exactly what is proper siting for something that does not work?}”
- ⦿ The mix can be pretty compelling to a lay audience.

1. From: John Droz, Jr. www.northnet.org/brvmug/WindPower/AntiWindStrategy.pdf

2. Truthiness, as coined by Stephen Colbert = a "truth" that a person claims to know intuitively "from the gut" without regard to evidence, logic, intellectual examination, or facts. (Wikipedia)



NEW ENGLAND WIND ENERGY EDUCATION PROJECT (NEWEEP)

- ◉ Objective: Provide siting decision-makers & the potentially-impacted public with **objective information on which to make informed decisions** about proposed wind energy projects throughout New England by:
 - **Collecting and disseminating** accurate, objective, up-to-date information on critical wind energy issues impacting market acceptance of proposed wind projects
- ◉ Philosophy/Perspective: Wind Energy has benefits, but...
 - Not every place is the right place for wind generation.
 - Consequences of wind power rarely as dire as depicted by organized opponents...
 - And are often not as free of consequence as proponents would hope (and represent)...

NEWEEP PROJECT OVERVIEW:

- 2-year project through Nov 2011
- Grant funded by DOE Wind Powering America 'Market Acceptance' program. Grant Co-applicants:
 - Sustainable Energy Advantage, LLC (SEA) - Proj. Coordinator
 - National Renewable Energy Laboratory (NREL)
- Directed by Steering Committee consisting of New England state agencies, regional & national research organizations, New England's regional grid operator
- Free Webinars open to public (5 so far)
- Full-day Conference & Workshop:
 - *Wind Energy in New England: Understanding the Issues Affecting Public Acceptance. June 7, 2011, Marlboro, MA*
- Web-based repository for webinar-related materials

Steering Committee Members

- National Renewable Energy Laboratory
- Connecticut Clean Energy Fund
- Massachusetts Clean Energy Center
- University of Massachusetts - Wind Energy Center
- Rhode Island Office of Energy Resources
- ISO-New England
- Utility Wind Integration Group
- Lawrence Berkeley National Laboratory
- Massachusetts Department of Energy Resources
- Clean Energy States Alliance
- New Hampshire Office of Energy & Planning
- Renewable Energy New England (RENEW)*
 - An organization consisting of environmental advocates & wind businesses

APPROACH:

IF WE WERE IN YOUR SHOES, WHAT WOULD WE WANT TO KNOW?

- ⊙ Knowledgeable & credible speaker(s)
 - Can address research with various points of view
- ⊙ Content :
 - What is known, what is not known?
 - Research: speaker's, and review of the literature
 - Credibility → emphasis on scientific/peer-reviewed research & studies
 - Discuss Mitigation & Identify research needs
- ⊙ Webinar participant Q&A - read all questions
- ⊙ Post-Webinar Surveys
 - Are we finding the right balance?
 - Credible, objective, informative?

WEBINARS AVAILABLE AT:

[HTTP://WWW.WINDPOWERINGAMERICA.GOV/NEWENGLAND/NEWEEP/INDEX.ASP](http://www.windpoweringamerica.gov/newengland/neweep/index.asp)

- ◉ #1: The Impact of Wind Power Projects on Residential Property Values (5/5/10)
- ◉ #2: Understanding the Impacts of Wind Turbine Sound (7/13/10)
- ◉ #3: Wind Turbines Noise and Health: Fact vs. Fiction
Simulcast of Live Meeting on Cape Cod (7/15/10)
- ◉ #4: Wind Power's Impact on Grid Reliability, Backup Supply, and Fossil Fuel Use in New England (10/26/10)
- ◉ #5: "Understanding the Current Science, Regulation, and Mitigation of Shadow Flicker" (2/10/2011)

WHAT I'VE LEARNED SO FAR (1)

- Perception is Reality.
- Wind experience similar to other infrastructure
 - Can't make everyone happy. Change is threatening.
- Small minorities (in many cases) have undesirable impacts thrust upon them
 - Usually without receiving any project benefits.
- Media needs education
 - Can *sometimes* badly distort *prevalence* of issues.
- Avoid surprises, manage expectations
 - If supportive abutters (pre-project) become opponents (post-operation), approval harder for everyone else.



WHAT I'VE LEARNED SO FAR (2)

- ⊙ Sound = unique challenges
 - Audibility ≠ annoyance.
 - Sensitivity can vary by... attitude, 'place identity', & individual sound sensitivity → promotes discord.
- ⊙ There is a real need for an independent place to go for credible, objective info.
 - 'Objective' is in the eye of the beholder.
- ⊙ There are some issues where more research is definitely required.
- ⊙ Challenge: If industry is the only source of available funds, how to fund efforts at research or NEWEEP-like outreach without 'tainting' the results by virtue of the funding source?

WHAT I'VE LEARNED SO FAR (3)

- Caution to industry: Arguments for further study of health impacts *might* be a red herring, but 
 - Being dismissive of health impact on people that are stressed and losing sleep is not constructive.
- Important issues:
 - Are undesirable impacts happening?
 - In what #s? At what distances? What % of populace (abutters, and beyond)? How often (a few hours/yr, or constant?)
 - What degree of impact is acceptable, for society?
 - see opponent's reframing arguments
 - What mitigation is appropriate for those impacted?
 - Are predictive tools working?
 - so that #s impacted (frequency & magnitude) fall within what has been deemed acceptable?

NEWEEP

◎ To Sign-Up for Webinars

- There is a link to sign up at the bottom of this webpage:

www.windpoweringamerica.gov/newengland/newweep/webinars.asp

- Email - info@newweep.com

◎ Conference Registration Page:

- www.newweep.eventbrite.com

EXTRA SLIDES

INFORMATION CLEARINGHOUSE

- Repository for Webinar materials:

- [New England Wind Forum](#)

- www.windpoweringamerica.gov/newengland/neweep/index.asp
 - All presentations & reference materials available to the public
 - Audio and text versions of the presentation, with Q&A
 - Speaker PowerPoint presentations
 - Annotated bibliography

ANNOTATED BIBLIOGRAPHIES

- We don't try to be arbiters of what is 'objective' → let the reader decide
- Organize resources into categories... (journal articles, reports, conference papers, etc)