Public perception of and attitudes toward wind energy

Implications for communication efforts

1. Knowledge levels are low.

Althaus 2003; Klick and Smith, 2009

What people want to know:

(Asoro, 2012)

- How does a wind turbine work?
- Can we get 100% of our electricity from wind farms?
- By how much would it reduce my energy cost?
- Are taxpayers paying huge sums to subsidize wind power?
- Will wind farms decrease property values?
- What are my state's renewable energy policies and targets?
- How many jobs would it provide to my community?

2. Mental maps show linkage with other concepts, issues

Wolsink, 2007; Devine-Wright, 2005



Dimitropoulos and Kontoleon, 2009; Eltham et al., 2008; Wolsink, 2000; JIMC 560, 2012

3. Generally positive attitude, so-so behavioral commitment.

Swoford and Slatery, 2009; Lin and Rodriguez, 2013; Devine-Wright, 2005

lowans' attitudes toward wind energy (N=226)

(Lin and Rodriguez, 2013)

Slightly positive disposition (M=3.74, SD=.54)

	Means	Std. dev.
1. Wind turbines are as quiet as a refrigerator one normally finds in the	3.48	1.01
kitchen.		
2. Wind turbines spoil the scenery.	3.62	1.01
3. Wind turbines close to my community will lower local property values.	3.60	.93
4. Wind turbines are more efficient in generating electricity than coal plants.	3.64	.95
5. Wind turbines operate only for short periods of time and are therefore	3.89	.82
unreliable.		
6. Wind turbines kill a lot of bats and birds.	3.60	1.04
7. Wind turbines produce small amounts of electricity compared to coal	3.48	1.00
plants.		
8. Wind energy is clean energy.	4.41	.68
9. Overall, the benefits of wind energy are greater than its drawbacks.	3.92	.89
10. Wind farms will boost the local economy.	3.77	.71
Attitude index	3.74	7.54

Iowans' behavioral intentions about wind energy

(N=226) (Lin and Rodriguez, 2013)

Middling behavioral intentions (M=3.48, SD=.57)

	Means	Std. dev.
1. I will support government initiatives to make wind energy a significant	3.80	.80
part of national efforts to meet America's future energy needs.		
2. I will support more investments in wind energy projects in the US.	3.78	.70
3. I will support a wind project in my community.	3.73	.76
4. I will vote for candidates for public office who are in favor of wind energy.	3.65	.77
5. I will join groups and organizations that will advocate for the	2.96	.83
development of wind energy.		
6. I intend to seek more information about wind energy.	3.25	.85
7. I am willing to pay a little more to support wind energy initiatives in my community.	3.23	.87
Behavioral intention index	3.48	.57

3. Acceptance decreases closer to wind farms

Swoford and Slatery, 2009





Today



RANT ANTROPS I CALETTER





4. Benefits overshadow drawbacks.

Klick and Smith, 2009

5. Misconceptions, perceived drawbacks are feeding an increasingly vocal opposition.

Institute for Energy Research, North East Windmills, Alliance for Wise Energy Decisions, National Wind Watch

In the US, opposition is strongest in:

- New York
- Maine
- Massachusetts
- Wisconsin
- Pennsylvania
- Vermont

Abroad, opposition is strongest in:

- England
- Ontario, Canada
- Scotland
- Australia

In the US, opposition is strongest in:

- New York
- Maine
- Massachusetts
- Wisconsin
- Pennsylvania
- Vermont

"Visual blight"



"Visual blight"



"Visual blight"







"Bird choppers"



"GREENING" THE LAND

"Bird and wildlife choppers"





"Bird and wildlife choppers"

"Enough is enough!" European Platform Against Wind Turbines, 2012



"Noise"

"Not green. Not cheap."

Swindle not clean • not green • not cheap Friends of the Grande Ronde Valley · WWW.FGRV.org

MEADOW



THE GREEN REAPER

JAR .

"Undependable."



Negative dominance theory

Covello, 2001



Solution: 1N=3P

One negative message=three positive, constructive or solutionoriented messages





6. Scientists, engineers still the preferred sources about innovations

US Department of Energy, 2001; Virginia Department of Environmental Quality, 2004

I prefer scientists/engineers as information sources because...

- "I want to hear it from the horse's mouth."
- "I want to see research 'personalized'."
- "I would like to hear it from the originator, not the middleman."
- "I am drawn by scientists' enthusiasm about the work they do."

Source: Horrigan, 2008

Implications for communication campaigns: Strong formative evaluation

- Review the realities
- Examine the ethics
- Survey the sociocultural situation
- Map the mental matrix
- Tease out the target themes

Implications for communication campaigns: Focus on improving community engagement

- Power concentration and/or distribution (e.g., controlled vs. dispersed)
- Wind energy intelligence
- Strength and scope of communication networks (including interpersonal interaction)
- Composition of information sources about wind energy (mass media, opinion leaders, other sources)

Implications for communication campaigns: Focus on improving community engagement

- Quantity and quality of information about wind energy (e.g., strength of arguments)
- History of dealing with innovations (e.g., cynicism vs. euphoria; very permissive vs. overly cautious)
- Co-orientation between communities, between engineers and communities (need for consensus, not necessarily agreement)

Sources of science and technology information, US



N=2000. Source: The Pew Internet and American Life Project, 2006

Implications for communication campaigns: Establish and maintain trust

- Information asked for must be provided.
- Acknowledge what is uncertain, what else needs to be done.
- Don't sweat what you don't know.
- Don't over-promise or over-assure

In **low** concern situations, expertise counts the most (Covello, 2001).



In **high** concern situations, people want to know that you care before they care about what you know (Covello, 2001).



HURT ME WITH THE TRUTH BUT NEVER COMFORT ME WITH A LIE