



Winning Public Arguments about Renewable Energy

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Climate policy advocates want to increase public support for renewable energy. Because renewable energy is a low-carbon source, substituting it for coal in electricity generation can help reduce carbon emissions in the United States. This approach gains credibility with experts and advocates as the cost of renewable electricity generation declines and renewable portfolio standards spread in U.S. states. Following President Obama's August 2015 announcement of his Clean Power Plan, the various U.S. states gain important responsibilities for planning and implementation. We can expect to see more campaigns in the states to boost the use of renewable energy in the American power sector. In Paris, recently, the United States pledged to lower carbon emissions, and public support will be needed to make sure this promises is actually met.

Advocates frame renewable energy in ways they hope will appeal to the broader public, calling it a home-grown source that avoids pollution and never runs out. Wind and solar power are touted as clean and abundant resources that can help make America "energy independent" and create "green jobs." As the Natural Resources Defense Council puts in on its website, this kind of electricity "comes from natural sources that are constantly and sustainably replenished. The technologies featured here will make our families healthier, more secure, and more prosperous by improving our air quality, reducing our reliance on fossil fuels, curbing global warming, adding good jobs to the economy and – when they're properly sited – protecting environmental values such as habitat and water quality."

Such positive arguments are not the end of it, however, because opponents of electricity generation from renewable sources are bound to have their say in a democratic setting. Opponents warn the public that using renewable sources will increase electricity prices make supplies unreliable, because the sun does not always shine and the wind does not always blow. Conservative consultant Rupert Darwall declared in *The Wall Street Journal* that electricity generation from renewables "does not produce jobs, growth or prosperity."

How Does the Public Hear Positive and Negative Messages?

In practice, most people hear both positive and negative messages, so renewable energy advocates cannot win the hearts and minds of the American public simply by pointing to nice features of their preferred approach. They have to win the debate with opponents. To learn more about how this might play out, my colleague Michaël Aklin and I tested the interactive effects of positive frames and negative counter-frames on public opinion about renewable energy. In a randomized survey experiment, we used different combinations of negative and positive messages about renewable energy in a survey of a nationally representative sample of Americans through the 2010 Cooperative Congressional Election Study. Because a thousand people answered our questions, we were able to examine the effects of different sets of messages on people's responses when asked about the desirability of new federal policies to promote solar and wind power. Sometimes, we offered positive messages that pointed to advantages from either energy independence or job

creation; in other cases, we offered negative arguments pointing to higher energy prices or the threat that reliance on renewable energy could pose to domestic coal production. This approach allowed us to pinpoint the impact of give and take between specific positive and negative messages. For example, did people end up evaluating renewable energy differently depending on whether a positive economic message was countered by negative arguments based on national security or economic considerations?

Negative Messages are Very Powerful

Overall, our results show that just about any kind of negative argument against renewable energy has a powerful impact. Although stressing energy independence or job creation increased support for renewable energy from both conservatives and liberals, the positive effect of such messages disappeared when people heard a counter-argument of any kind. That is, positive messages framed in terms of either energy independence or job creation lost effectiveness no matter what kind of negative argument was made in return. Simply put, this key finding suggests that *any kind of negative response was enough to neutralize positive messages about the advantages of renewable energy use*. Conservatives and liberals both reacted the same way, suggesting the broad power of negative messaging to influence citizens across the board.

What Can Supporters of Renewable Energy Do to Sway Public Opinion?

For groups campaigning for increased use of renewables, our results serve as a warning that more than happy talk is needed. Strategies must be found to counter inevitable criticisms of renewable energy from fossil fuel industries and other opponents. The positive messages we tested did not survive negative claims about the high cost or impracticality of renewable energy, and we suspect that many other kinds of climate communications suffer the same fate.

Clearly, future efforts to develop framing strategies for renewable energy and other climate policies should anticipate possible counter-frames and prepare to deal with them in a strategic fashion. Social scientists may be able to do tests to see how well various kinds of positive arguments stand up when they are challenged. Further communications research is clearly needed to inform a sophisticated strategy, deployed by advocates of renewable energy who are prepared to deal with negative messages and backlash.

- Because counter-arguments are quite effective, we already know that a strategic approach will require communications that do more than repeat positive arguments again and again.
- Perhaps various counter-arguments can be anticipated and pre-empted – or countered. For example, if the coal industry points to higher costs from renewable electricity generation, what *specific* responses can advocates make to effectively assuage public concerns?

Too often, advocates of measures to cope with climate change presume that their arguments are obvious and will gain automatic public support. But that is not true. Our research shows that loud critics can neutralize positive messages. Building political support for effective climate policies depends on making a compelling case in back and forth debates over long periods of time. Social science can help by doing more research on the dynamics of frames and counter-frames.

Read more in Michaël Aklin and Johannes Urpelainen, "Debating Clean Energy: Frames, Counter Frames, and Audiences." *Global Environmental Change* 23, 5 (2013): 1225-1232.