

Decoupling Climate Change and Energy Efficiency : National Policy Options

Kenneth R. Zimmerman

Journal of Applied Social Science 2012 6: 125

DOI: 10.1177/1936724412445129

The online version of this article can be found at:

<http://jax.sagepub.com/content/6/2/125>

Published by:



<http://www.sagepublications.com>

On behalf of:

[Official Journal of the Association for Applied Social Science](#)

Additional services and information for *Journal of Applied Social Science* can be found at:

Email Alerts: <http://jax.sagepub.com/cgi/alerts>

Subscriptions: <http://jax.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://jax.sagepub.com/content/6/2/125.refs.html>

>> [Version of Record](#) - Nov 28, 2012

[What is This?](#)

Decoupling Climate Change and Energy Efficiency: National Policy Options

Journal of Applied Social Science
6(2) 125–132
© The Author(s) 2012
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1936724412445129
<http://jax.sagepub.com>



Kenneth R. Zimmerman¹

Abstract

Energy efficiency is widely accepted as a tool to achieve reductions in greenhouse gas (GHG) emissions. And reductions in GHG emissions are necessary in order to control the effects of climate change resulting from increased GHG emissions. With these statements the assemblage that explains the need for energy efficiency is supposedly complete. But that simply is not the case. Energy efficiency is not only pursued for reasons other than GHG emission reductions but is often pursued by actors that actually reject the entire notion of human-caused climate change and/or reject GHG emissions as a cause for climate change. In this paper I explore how and why actual actors decouple energy efficiency from climate change and examine some of the factors actors include in their decisions to pursue energy efficiency that are not related to climate change.

Keywords

energy, efficiency, climate change

Introduction

Poll after poll show that Americans support efficient lighting, greater fuel efficiency for vehicles, compact fluorescent light bulbs, improvements in home heating and cooling, wind and solar power, and so on. This support crosses political party lines and regions of the country. The rationale for support varies from saving the planet to saving money, from serving God's will to accepting the scientific evidence, from reducing foreign energy imports (particularly from countries unfriendly to the United States) to ending the use of fossil fuels, from improving the economic prospects of American communities to meeting our economic obligations to developing countries. I propose to examine two premises in this paper:

1. Energy efficiency and renewable energy do not need and often suffer from association with efforts to reduce or control climate change.
2. The most effective strategy to work with people and situations to foster development of energy efficiency and renewable energy is to frame the effort in terms of the understandings and ways of life already present. In other words, expanding efficiency and renewable

¹Oregon Public Utility Commission, Salem, OR, USA

Corresponding Author:

Kenneth R. Zimmerman, Oregon Public Utility Commission, Salem, OR, USA
Email: jammieprice@gmail.com

energy are important, and they tend to do better when we work with rather than against the basic understandings about the world of all the players (human and nonhuman) involved.

Most so-called “mainstream” environmentalists reject these conclusions. They are purists. They often respond with a type of moral disgust. People should not be allowed to pursue energy efficiency or renewable energy without knowing and accepting the truth about climate change that justifies these efforts. Climate change is in their view absolutely real and the most dangerous issue facing the world. It must be attacked with all possible speed and means. It cannot be subordinated either to energy efficiency or renewable energy goals, and certainly not to the nonsensical ranting of anti-intellectual conservatives who in their ignorance oppose evolution, abortion, population control, and scientific evidence. Whether they are correct or not about climate change is not the issue here. Rather, I say energy efficiency and renewable energy can be expanded without any reference to climate change. In fact, it appears such a connection does more harm than good for climate change believers and nonbelievers.

Our Political Grand Canyon—Red States and Blue States

By now, most of us have heard the news about the red/blue divide among the States and the people of the United States. Supposedly, the blue States are inhabited by latté-drinking, Volvo-driving liberals who hate America and have no patriotism. However, the red States are the home of the genuine, real Americans—the conservative (in all senses of the word) heartland that is the center of what it means to be an American. In his book, *What's the Matter with Kansas?* Thomas Frank (2005) traces a series of actions and events that lead to the red/blue divisions. Conservatism took control in Kansas and most of the rest of the Midwest and South, contends Frank, because the Democratic Party gave up the fight for working-class economic welfare, leaving the working class with only one champion, the Republican Party. And these Republicans mostly fought only the “social values” battles of the working class (antigay, antiabortion, antievolution, anti-intellectual). The other factor, Frank identifies as accounting for the red State/blue State division is what he calls the inherent tendency of the Midwest and Southern regions of the United States toward rebellion. Despite Frank's conclusion, it is not clear whether rebellion really played such a major role. Frank goes on to assert that all of these explanations of the red/blue division can be subsumed under the conflicts that exist today and have existed since the founding of the country regarding social class. The country has been at war over and among social classes since its founding. From all this, Frank concludes that the red State/blue State split is mostly manufactured for nefarious political and economic purposes. It is really just the result of massive misinformation campaign. With the purpose, in Frank's words to foster, “a political debate that has increasingly become a style competition, a contest to determine which ultrarich prep school candidate can strike the most ‘authentic’ pose” (p. 3). The pretense of authenticity is what is being manufactured. And the red State/blue State split is both one of the manifestations of this manufacturing process and one of the tools, the devices employed to fabricate the false authenticity that now dominates our political and social arrangements.

Whether Frank is correct or not, it is the case that the widespread conflicts subsumed under the rubric “red State versus blue State” has impeded the advance of energy efficiency and renewable energy in the United States.

Red, Blue, Energy Efficiency, and Renewable Energy

Whether it makes sense or not, or is overly simplistic in the extreme, as many suggest, the red State/blue State separation does capture an increasing polarization in the United States. Feelings



Figure 1. Jesusland

Source: Vector map from North America second level political division 2.svg by Alex Covarrubias. Data and colors from Jesusland map.png by OwenBlacker. Combined by Lokal_Profil.

Note: This vector image was created with Inkscape, and then manually edited. This file is licensed under the Creative Commons Attribution-Share Alike 2.5 Generic license.

of cultural and political polarization between red State and blue States, which have gained increased media attention since the 2004 election, have led to increased mutual feelings of alienation and enmity. These attitudes have led to the often jocular suggestion that a red State–blue State secession is in order. The Jesusland map is one such joke, a satirical map that redraws the United States–Canada border to reflect this sociopolitical schism (Figure 1).

Polarization is more evident on a county scale. Nearly half of U.S. voters resided in counties that voted for Bush or Kerry by 20 percentage points or more in 2004. By comparison, only a quarter of voters lived in such counties in 1976.

So polarization is both silly and serious. Jesusland is the lunatic fringe, but the increasing polarization of voting and the even more important continuing increase in the number of Americans who do not vote are, I believe, results of this growing polarization. The polarization seems to be growing deeper and ever more difficult to traverse. And the zealots on both sides of the divide seem to grow louder and more committed to the notion that those “on the other side” are un-American, if not outright traitors. Left unchecked, this polarization can destroy the country. And right now there are few efforts to check it.

What does all this mean for someone, anyone, involved in the growth of energy efficiency and renewable energy resources in the United States? Part of that answer can be found in the work of

the Climate and Energy Project of Kansas (“Project”).¹ The Project’s aim is to reduce fossil fuel use and the emission of CO₂ and other greenhouse gases that contribute to global climate change. But climate change, CO₂ emissions as harmful, and the contribution of humans to both are widely rejected in Kansas and the surrounding states. But saving energy, conserving fuels, constructing alternative means to generate electricity, including wind power, and saving money through energy conservation are not rejected. The Project has had great success in sponsoring competitions among cities to achieve the greatest energy efficiency and conservation, and alternative forms of energy such as wind power, geothermal, biomass, and even solar have shown themselves to be popular. Climate change or greenhouse gas emissions were not part of these efforts. As the director of the Project notes, “Attempts by the Obama administration to regulate greenhouse gases are highly unpopular here because of opposition to large-scale government intervention. Some are skeptical that humans might fundamentally alter a world that was created by God.”

So, rather than basing its successful campaigns on what is disliked and rejected in Kansas, the Project based its campaigns on what is accepted and respected in Kansas—thrift, patriotism, spiritual conviction, and economic prosperity. The success of the programs is measurable. The towns involved in the competition mentioned earlier reduced energy usage by 5 percent, in 2010, a remarkable achievement, and the Project has received a grant from the U.S. Department of Energy (DOE) to expand the competition to 16 cities in 2011.

To the Project’s experience in Kansas and Missouri, I can add my own experience. For years, I worked with many groups in the implementation of energy efficiency programs and building wind power plants. These groups do amazing and effective things related to changing energy use patterns, conserving energy, and moving to sustainable energy sources such as wind and solar when these options are framed in terms they understand and that matter to them. I helped move Oklahoma, which is in the middle of that now right-wing Midwest region that Thomas Frank talks about in his book, *What’s the Matter with Kansas?* from 0 MW of wind power to more than 1,100 MW today, and it is still growing. We never mentioned climate change once, but we did mention increased Oklahoma tax revenues for schools, rents to farmers for wind turbine sites, and exporting wind power, along with the popular argument of reducing dependence on Saudi Arabian and Russian oil. Personally, I believe that climate change is happening and its impacts will be significant, but not beyond the ability of humans to manage and mitigate. But, I did not have either the desire or inclination to debate the reality of climate change with legislators and farmers. I was too busy getting wind farms built. If climate change impacts become more severe, perhaps we will have to do even more to help people do what can be done to control and mitigate it. But as with building wind power, energy efficiency, and renewable energy, I contend that meeting climate change challenges too works better and costs less if we do it within frameworks that make sense to and matters to all the actors involved, not just climate scientists or environmentalists.

I have worked with many so-called “environmentalists” in building wind farms and setting up energy efficiency programs. My view of most of them is sadly summarized by the term often used even by insiders to describe them—“intolerant zealots.” We really do not have time anymore for zealots. And I never had the patience for them. But I do have passions for alternative energy, replacing oil use with natural gas, energy efficiency, and energy sustainability (better described as ensuring energy for our children, their children, etc.).

Finally, let us briefly look at a counter example—an example of an approach that has not been effective. A movement is afoot among the elites of “sustainable living and energy efficiency.” The American Council for Energy-Efficient Economy (ACEEE) even has an annual conference to highlight it, “Behavior, Energy and Climate Change Conference,” a conference focused on understanding the behavior and decision making of individuals and organizations and on using that knowledge to accelerate our transition to an energy-efficient and low-carbon future. According to the conference announcement, this is “the preeminent conference focused on the

practical applications of social and behavioral research to achieve viable solutions to energy/climate challenges that increase America's energy independence and national security and create sustainable jobs."²

I see three concerns with this "new" energy efficiency strategy. First, it is really not new. It still links solving climate change with energy efficiency. One method frequently associated with this approach is that described by Doug McKenzie-Mohr (2000): "uncovering barriers to behaviors and then, based upon this information, selecting which behavior to promote; designing a program to overcome the barriers to the selected behavior; piloting the program; and then evaluating it once it is broadly implemented" (pp. 531–4). Throughout the description of this process, McKenzie-Mohr interlocks behaviors to reduce greenhouse gas emissions with behaviors intended to foster energy efficiency. In McKenzie-Mohr's scheme, he is looking to put in place behavior changes that address climate change and energy efficiency. Both are subsumed under the term, "sustainability." The way this term is used asserts that actions contribute to a sustainable future only if they address climate change and energy efficiency (along with renewable energy sometimes).

Second, according to the literature from this "seminew" method, its focus is the practical application of social and behavioral research to achieve viable solutions to energy/climate challenges. However, how the "application" plays out in real situations is not clear. Supporters claim that they want to hasten the transition to a sustainable future, and to do this, they want to encourage the adoption of a wide variety of behaviors that support these goals. They also claim that large-scale education/advertising campaigns, the most commonly applied alternative approach, have failed to encourage the adoption of sustainable actions. This is a fine line to walk, between helping people make informed and thoughtful decisions, even if some participants consider them in error, and surreptitiously working to change what and how people believe and want. This approach has a clear and potentially dangerous downside. It could easily become the behavior modification paradise of a wide assortment of zealots.

Finally, it is questionable that what the proponents of this approach say they want to accomplish is even possible, or ever will be. The history of "social engineering" makes clear that such engineering works, almost every time, but generally not as anticipated and often in ways that seem to have no relationship to the actions taken to "manufacture" alternative behaviors. I attribute this result to the fundamental complexity of all interactions and the understandings that result from them. Interactions are not linear. What goes into any series of interactions cannot ever fully explain the results observed. Interactions are better described as "messy." They are always uncertain and subject to changes and failures that cannot be predicted in advance. Whatever approaches we decide to take toward energy efficiency and renewable energy must recognize this "messiness." Messiness is a primary reason that actions and questions about energy efficiency must begin from the existing understandings of all the participants involved to the extent that these can be determined. Understanding what participants believe and want, and the worlds they inhabit, as well as how these have been built up, how they are represented and discussed, and then fitting the work on energy efficiency and renewable energy within these frames is essential. Unfortunately, this approach shares the same limitation as the proponents of the more formal behavioral approach just described—We cannot ever fully observe, describe, or understand these worlds and their construction and thus are always to some extent feeling around in the dark.

The so-called "red Staters" have shown themselves not only willing but quite able to set up, operate, and assess effective and broad-based energy efficiency and renewable energy arrangements that make a measurable difference in the level of energy use and the dispersion of alternative energy sources such as wind, biomass, and geothermal. This they have achieved despite their frequent rejection of climate change and humans' role in it, and despite the fact that psychological and sociopsychological reeducation curriculums to teach them about "sustainable" behavior have apparently often failed.

Environmentalists' and climate scientists' narrow and almost exclusive focus on climate change and its cure has made their involvement in energy efficiency and renewable energy development problematic. Moreover, many environmentalists and climate scientists impose even more restrictions on energy efficiency and renewable energy by tying them directly to climate change. In other words, energy efficiency and renewable energy, if used at all must first be utilized to reduce, control, or mitigate climate change and its impacts. Only then can they be utilized to save money for customers, reduce foreign oil imports, increase tax revenues for states, or serve God's Commandment to conserve the Earth, and so on.

If skepticism about climate change and its human causation is widespread and deep in Kansas and other parts of the Midwest and South, this does not translate to skepticism about or rejection of energy efficiency and renewable energy. To tap into to the latter, we have to stop telling people to accept what they reject and believe what they doubt. Climate change can be and for the welfare of the country should be decoupled from energy efficiency and renewable energy.

Conclusion

I have made the case that it is neither necessary nor wise to seek to change how and what people believe about climate change to create successful energy efficiency and renewable energy strategies and programs. The people I have worked with over the last three decades have a wide variety of understandings of why saving or using less energy or switching from one type of energy to another is the right thing to do. I accept these understandings at "face value."

In working with Midwesterners on energy efficiency and renewable energy, saving money and reducing oil imports ("energy independence" if you will) are among the understandings I have encountered often. But protecting human health, making energy choice more democratic, obeying God's law to conserve the Earth and all the creatures on it, and protecting the environment are also at times cited as reasons. On a clear summer day in 2004, a farmer (with two degrees from the University of Texas and Georgia Tech) explained to me that CO₂ is not a pollutant; it is a necessity for life to exist on Earth. I could have challenged his statement, arguing that like many other things (even oxygen), too much CO₂ can be dangerous, sometimes even deadly. But I did not. It was not germane to the wind turbine siting contract I was negotiating with the farmer that would allow the construction of more than 50 wind turbines.

But, clearly, there is no "one size fits all." What I did in Oklahoma to help promote the spread of wind farms would not work where I am now, Oregon. There are points of concern and contention about wind power in Oregon that simply do not exist in Oklahoma. For example, wind turbines in Oklahoma set in motion few environmental complaints. Such turbines in Oregon have lead to numerous environmental complaints. Also, unlike Oklahoma, Oregon setup a State tax incentive program to aid wind power development, which produced some unexpected results concerning graft and bid rigging.

There are certain policy lessons I draw from this work:

1. There is no "one size fits all" approach to energy efficiency and renewable energy. As a result, we are forced to accept participants involved in the process at "face value." None is better or worse than the other so long as he or she helps advance the development of energy efficiency and/or renewable energy.
2. Participants' views on climate change are mostly irrelevant for advancing energy efficiency or renewable energy. The preferred approach for policy development on climate change and renewable energy is to decouple them. Both are likely to make better progress when they are thus decoupled.

3. There are three competing narratives about the relationship between climate change and energy efficiency:
 - a. The first says energy efficiency is merely a tool to advance the fight against climate change by reducing fossil fuel use and thus CO₂ emissions. This view is standard among most major environmental and climate change organizations.
 - b. The second says energy efficiency and reducing CO₂ emissions are both parts of the glorious campaign to defeat global capitalism and create a sustainable way of life for the world.
 - c. The third says the two can and do operate separately, but neither is a glorious campaign. Both are means to a more efficient and livable world with or without capitalism.
4. In drafting national policy, these are the decisions we must make:
 - a. Working with all comers to advance and expand energy efficiency and renewable energy. Not because these are glorious moral campaigns but because they make sense in terms of the future economic and environmental health of humans and the planet.
 - b. Rejecting a necessary link between energy efficiency/renewable energy and climate change.
 - c. Leaving all our options open about energy efficiency (even so far as the use of fossil fuels) if they improve our economic or environmental future.
 - d. Rejecting no form of renewable energy simply because it does not meet all current climate change mitigation goals.
 - e. Acceptance of climate change or the need for climate change mitigation must not be allowed to be the gatekeeper for energy efficiency or renewable energy. Policy must not force us to this false choice.
 - f. Since we have already concluded that it is better for both if energy efficiency and climate change mitigation are decoupled, is there an appropriate relationship between the two that we should incorporate into policy?
 - i. Energy efficiency assists climate change mitigation.
 - ii. Energy efficiency harms climate change mitigation.
 - iii. Energy efficiency has no impact on climate change mitigation.

Which is it? Based on what I have said above, energy efficiency in most instances assists climate change mitigation. Energy efficiency reduces fuel use, including fossil fuels, as it reduces the amount of input energy required to provide usable energy to consumers. Thus, it reduces direct and indirect climate (greenhouse gases, NO_x, SO_x, etc.) impacts of the acquisition, distribution, and use of this input energy. But at the same time, energy efficiency can also harm climate change mitigation by allowing energy end users to feel comfortable using more energy as the actual efficiency of energy usage improves.³ It is a narrow line to walk but one policy makers must walk if what they put in place is intended to effectively address energy efficiency needs and the need to mitigate climate change.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

Notes

1. <http://www.climateandenergy.org/>
2. <http://www.aceee.org/portal/behavior>
3. Often referred to as the “Jevons Paradox.” This is the proposition that technological progress that increases the efficiency with which a resource is used tends to increase (rather than decrease) the rate of consumption of that resource. Put forward first by William Stanley Jevons (1866) in his book, *The Coal Question*, the proposition is called the Jevons Paradox as it ran counter to popular intuition. The Paradox has been studied extensively by economists, social scientists, and engineers. When technology changes reduce the amount of input needed for a given output, this also lowers the relative cost of using a resource—which increases demand. Overall, resource use increases or decreases depending on which effect predominates—technology-based reductions in input energy or increased demand resulting from lowered relative cost for the output.

References

- Frank, Thomas. 2005. *What's the Matter with Kansas? How Conservatives Won the Heart of America*. New York: Holt Paperbacks.
- Jevons, William Stanley. 1866. *The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal Mines*. New York: Kessinger Publishing, LLC.
- McKenzie-Mohr, Doug. 2000. “Fostering Sustainable Behavior through Community-Based Social Marketing.” *American Psychologist* 55(5):531–7.

Bio

Kenneth R. Zimmerman retired in 2005 as Chief of Energy with the Oklahoma Corporation Commission’s Public Utility Division (1985 – 2005), where he oversaw all general rate reviews, resource planning, and engineering/safety reviews of electric, natural gas, and water utilities in the State of Oklahoma. Dr. Zimmerman is now Senior Utility Analyst with the Oregon Public Utility Commission (2005 – Current). His primary responsibilities in the current position are: natural gas price and demand forecasting; natural gas integrated resource planning; the flow through of natural gas costs to end-users by gas utilities; and analysis of the general structure and operation of the current, past, and future networks for energy exploration, production, and distribution (including energy markets). Prior to his work in energy utility regulation, Dr. Zimmerman was a legislative staffer, private consultant, and university professor. Dr. Zimmerman holds PhDs in Sociology/Anthropology and History.