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Behavior Change for the Climate: Is the Public Thinking What We're Thinking?

Presented by Ingo Bensch
Behavior, Energy & Climate Change Conference
Sacramento, California
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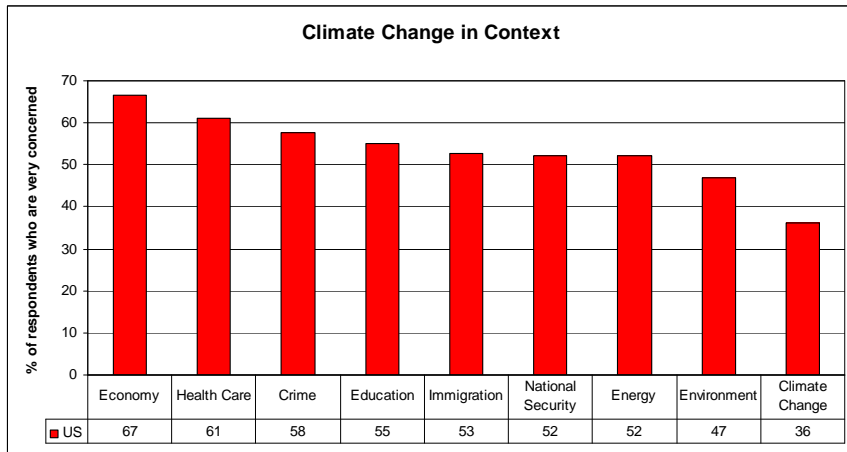
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A Tracking Study of Attitudes and Behavior

- **Part of the “Midwest Energy Survey”**
 - n=3,284; 9 states; begun in 2007
- **Comprehensive residential survey on climate change and energy to understand:**
 - What are people thinking about climate change, energy, and the connection between them?
 - What are our next steps in public education and motivating public behavior?
- **Nationwide snapshot in March 2008**
 - n=302; 50 state sample; for comparison
 - See www.ecw.org/climate-opinion for more results.

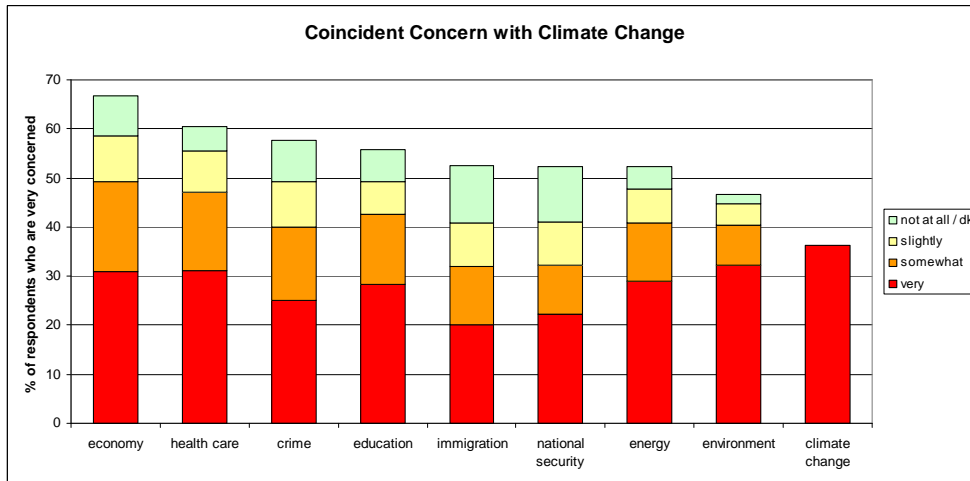
The Energy Center of Wisconsin initiated a public opinion study of climate change and related energy issues in 2007 motivated in large part by a need to understand how public attitudes about climate change might affect the work we do to promote energy efficiency in the residential sector. This “Midwest Energy Survey” comprised telephone and web-based surveys of 3,284 Midwestern households. We explored climate change beliefs, attitudes, preferences, and practices, as well as the connections people made between climate change and their own use of energy. High level results are available at www.ecw.org/climate-opinion. In March 2008, we repeated key portions of the survey on a national sample of 302 households so we can compare the Midwest to the nation. In this presentation, I will present selected results from this national survey ... as much as I can fit into a 15-minute presentation ... and post the full presentation on our web site.

How concerned are people about climate change?



Climate change came in ninth of nine societal issues we tested in our survey. Thirty-six percent of respondents were very concerned about climate change. We will see some potential reasons for this rating a bit later in this presentation. It is worth noting that both energy as its own topic and the environment scored higher.

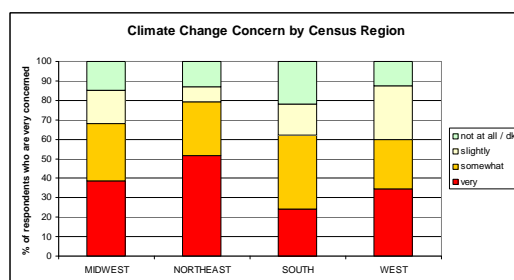
How concerned are people about climate change?



Concern about climate change appears to coincide with concern about the environment and much less so with the other issues, including energy. Nearly all respondents who were very concerned about climate change were also very concerned about the environment. As this chart illustrates, overall concern about climate change stood at 36 percent with nearly all of those people (32 of the 36 percentage points) also very concerned about the environment. People are making that connection, and concern about the environment may be a prerequisite for being concerned about climate change. Connections between climate change and other issues, including energy, are weaker.

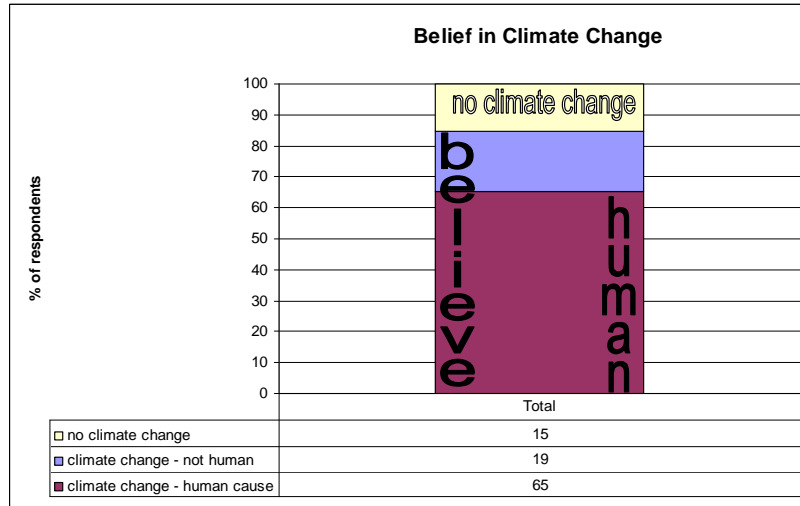
Who is concerned?

- Women (40% vs. 32% for men)
- Non-linear patterns for age, education, and income
- Northeastern census region (52% vs. 36% national)



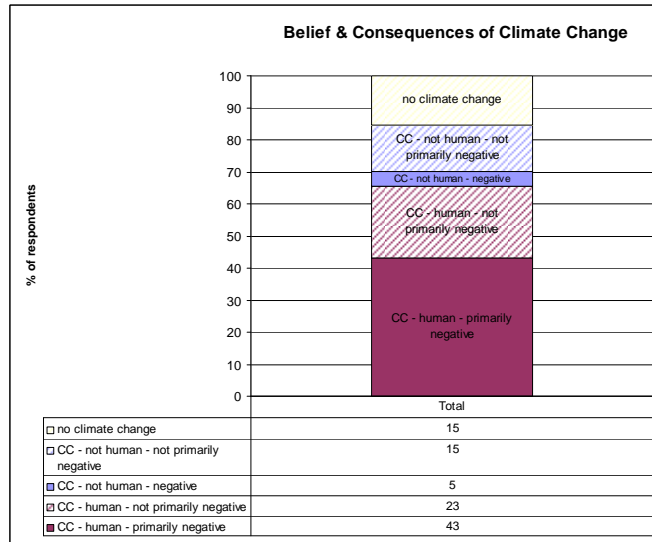
We analyzed the demographic characteristics of those who are very concerned about climate change. Women are more concerned than men, but the patterns for age, education, and income were non-linear. That is, there was no clear increase or decrease in concern as age, education, or income increased. The patterns were more of a zig-zag or a tent-shape. Among the four Census regions, residents of the Northeast were most concerned, followed by the Midwest, the West, and the South. However, due to the small sample sizes, most of these differences do not pass a statistical significance test at the 5% level. Only differences between both the Northeast and the Midwest against the South meet that standard. We hope to be able to repeat a national sample with a large number of completions as part of this study as it continues in the future, as funding and sponsorships allow.

What do we believe about climate change?



As other surveys are showing too, Americans do believe that climate change is happening. Eighty-four percent of our respondents believe that climate change is happening, and 65 percent believe the phenomenon is caused primarily by human activity. This is important because we cannot expect to motivate people to take personal action based on their concern about climate change if they don't think climate change exists or that human activity is a significant factor in its occurrence.

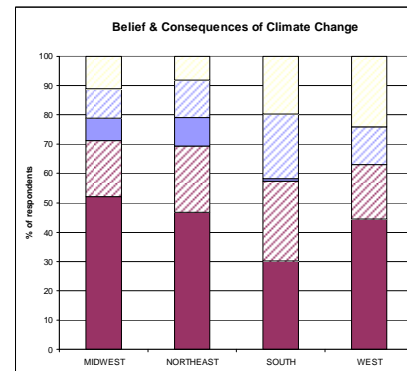
What do we believe about climate change?



There is an additional component to belief in climate change that we think is critical: What will the consequences be? To our surprise, a solid minority of our respondents who believe in climate change think that the phenomenon will bring a balance of positive and negative effects. A few even think it will be primarily positive. So, whereas 65 percent of respondents believe in human-caused climate change, only 43 percent believe in human-caused climate change that will bring primarily negative effects. Just a few more percent believe in natural climate change that will be negative. We believe this evaluation of climate change's effects is a key explanation for the comparatively low levels of concern about climate change compared to other societal issues. It also helps define an area that requires more public education.

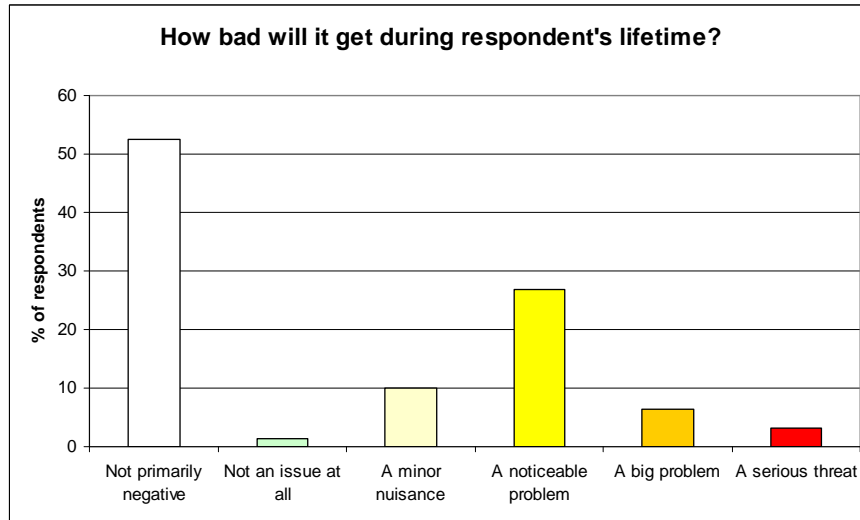
Who believes in human-caused climate change with negative effects?

- Women (49% vs. 37% for men)
- Middle-aged respondents
- College attendees & graduates
- Middle class respondents
- All regions except the South



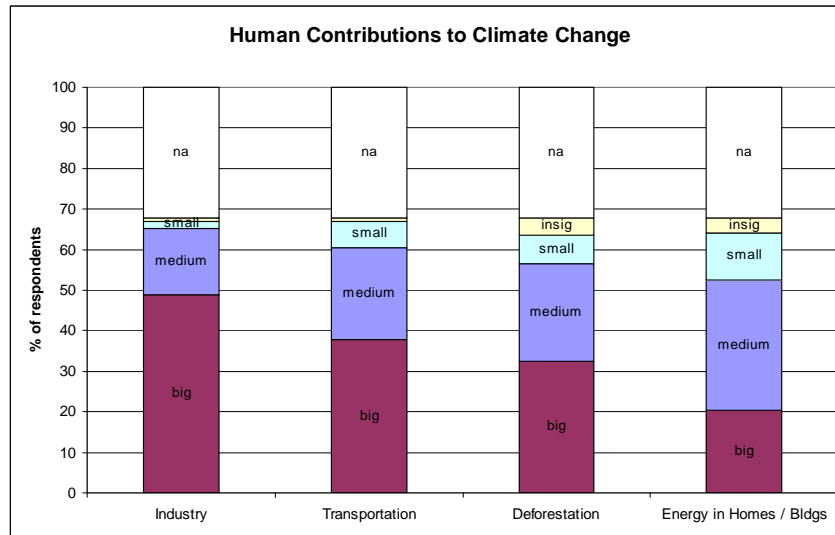
On this metric, we saw somewhat more clearer demographic patterns than on our question about level of concern. Women are more likely to believe in human-caused climate change with negative effects than men by a 49 to 37 percent margin. Beyond that, middle-aged respondents, those who are more educated, and those in the middle income brackets are more likely than other groups to express this belief. However, as before, our sample sizes are too small to achieve statistical significance for some of these comparisons. Geographically, all regions except the South believed in negative human-caused climate change at similar levels.

How “bad” will it get?



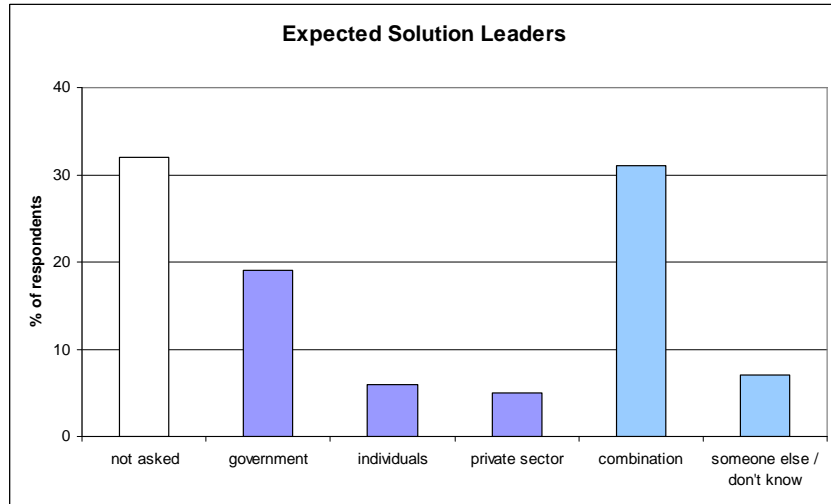
We followed up with respondents who expected a negative consequence to find out how bad people thought climate change would get during their lifetime. When given the five response options shown above, most people picked the middle one: a noticeable problem. Relatively small shares of the population expect climate change to be a big problem or a serious threat during their lifetime. Interestingly, we did not see young people expecting more serious consequences than middle-aged or older adults.

What are the human causes?



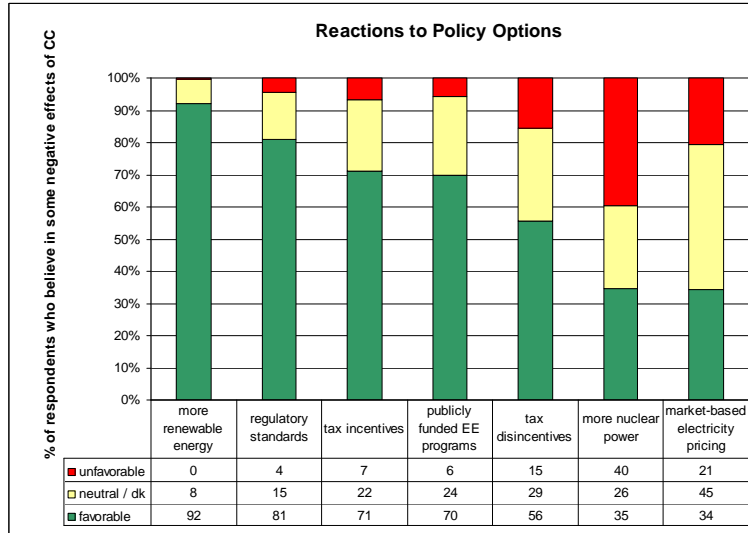
We know that total U.S. carbon emissions from transportation, industry, commercial buildings, and residential buildings are more or less the same, but that is not what the public thinks. We asked respondents from our national sample who believe in human-caused climate change to indicate how much four different human activities contribute to climate change. We included deforestation among the causes because we know from our Midwestern study that this is a human activity on people's minds. Industry and transportation were the two energy-related "winners" with 49 percent of respondents saying that industry is a big contributor and 38 percent giving the same answer for transportation. Energy used in homes and buildings came in last with a meager 20 percent of respondents thinking their contribution was big. This is another important finding. If people think they are contributing to climate change only on the road, then that is where they will look for solutions – and not in their homes. This is another public education need.

Solutions?



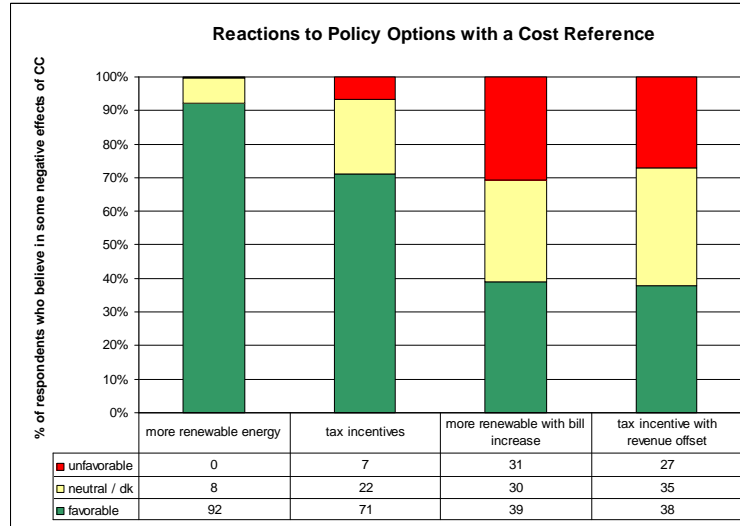
We inquired to find out who Americans expect to lead us to solutions for climate change. Those who believe in human-caused climate change appear to recognize that no one entity or sector will lead us to the solutions. Government was the most common single answer, but responses like “everyone,” “all of us,” and other references to multiple leaders were even more common. There appeared to be a feeling that individuals are part of the answer. In contrast, we did not see evidence that the public expects the business sector – especially the energy or transportation industries – to take a lead toward the solution.

Solutions?



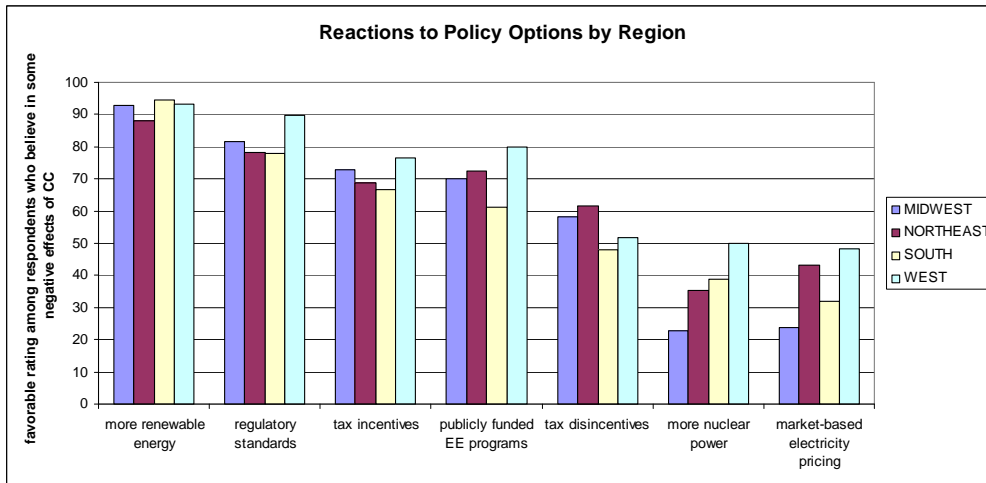
Respondents who expected negative effects of climate change had some preferences among seven policy options we presented to them. People gave high favorability ratings to more use of renewable energy; regulatory standards to require energy efficient buildings, equipment, and vehicles; tax incentives to encourage climate-friendly actions; and publicly funded energy efficient programs that provide information and education, technical assistance, and rebates to promote energy efficiency.

Solutions?



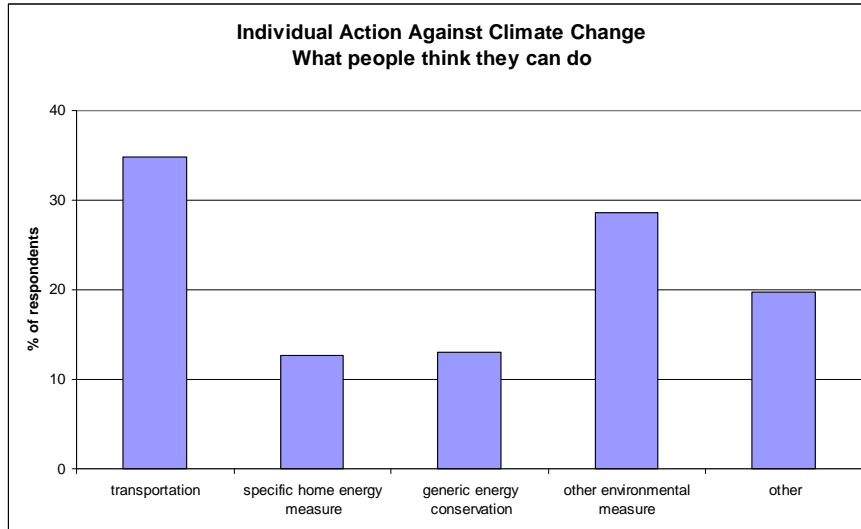
When we included explicit references to some of the trade-offs in the wording of our questions, support dropped substantially. For example, support for more use of renewable energy dropped from 92 percent to 39 percent when that meant a 10 percent increase in energy bills. We saw a similar drop – from 71 percent to 38 percent – for tax incentive when we clarified that the lost taxes would need to be offset with other revenue sources. We take this to mean there is a broad, but sometimes shallow, support for the favored policy options on the prior slide. We hope to explore the depth of public support for some of these policy options some more in future research, when opportunities avail themselves.

Solutions?



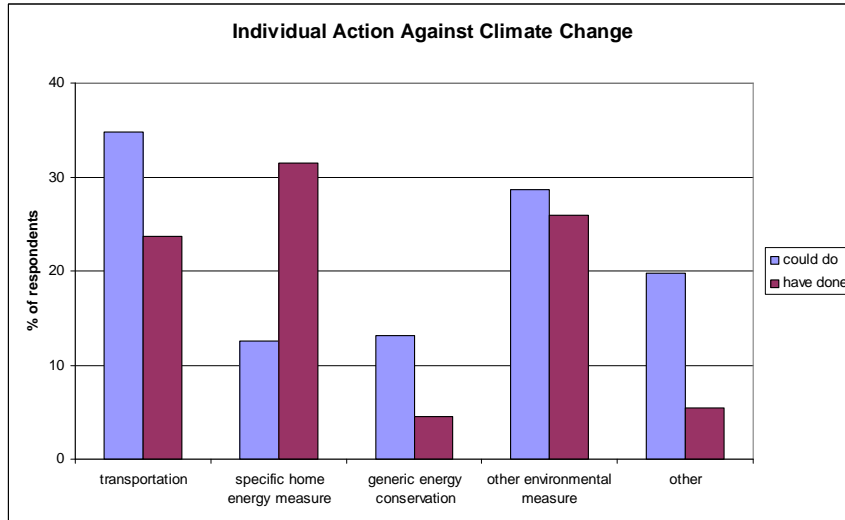
There appear to be differences in support by Census region, as well. As before, our sample sizes were too small for meaningful tests of statistical significance. However, it seems that the favored solutions don't vary across regions and that Westerners have a more favorable disposition toward these policies, in general.

What can individuals do?



We found that individuals think they need to be part of the solution. What do they think they can do? When we asked this as an open-ended question, we heard a lot of transportation-related ideas like driving less and getting a more fuel-efficient car. Thirty-five percent of respondents gave a transportation-related response. Non-energy environmental measures, some of which have a less direct connection to climate change, comprised the second most common response category with 29 percent of respondents saying things like “reduce, reuse, recycle” or “stop using aerosol sprays.” Only 13 percent of our respondents cited something they can do in their home to save energy. Those who did get it right, however, mentioning more efficient lighting and appliances, turning off lights and appliances, turning the thermostat up or down more, and insulating their house. The “other” mentions tended to be such things as staying informed, voting, or expressing one’s opinion to elected officials.

What do individuals (think they) do?



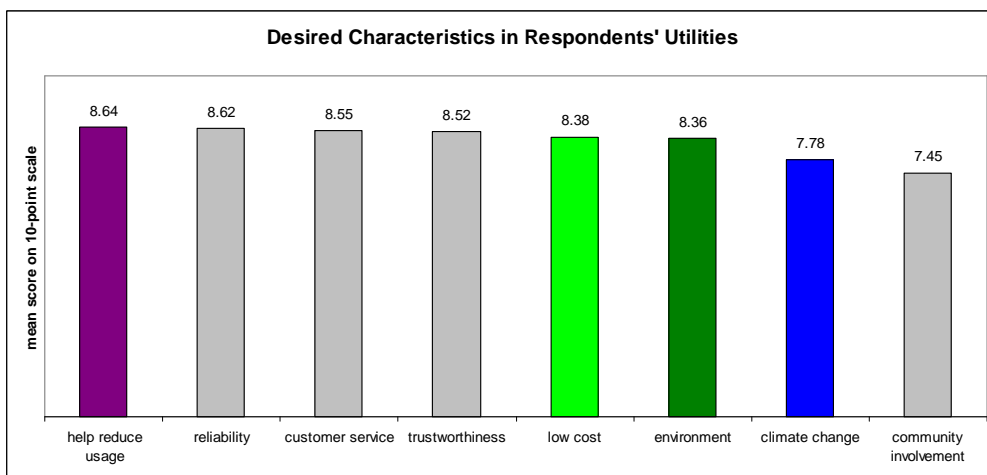
When we explored what people had actually done, we heard a different story. Transportation measures became much less common, probably because it is relative difficult and expensive for many people to change their transportation patterns. Buying a new, more efficient car is expensive. Many people have limited commuting options between their current homes and places of work. Taking small steps is easier in the home, and that is what people told us they had done that is beneficial for climate change. Thirty-two percent of our respondents said they had done something in their homes motivated by climate change. We do realize that we are capturing some socially desirable responses, but the fact that people are thinking of home-based measures when they are trying to think of something they have done is meaningful. That may suggest people could be motivated to do the little things at home.

What are people thinking of doing?

- **Change lights (CFLs)**
- **Adjust thermostat**
- **Window / doors / insulate**
- **Turn off lights**
- **Get more efficient appliances**

We wanted to take the survey one step further to explore what other measures people might take in the future. In behavior change terminology, this would be the contemplation stage. What we heard was more of the same. People are thinking of replacing inefficient lights with more efficient ones; adjusting their thermostats; getting new windows, doors, or insulation; turning off lights, and getting more efficient appliances. We also got some transportation-related responses, but not many.

What do people want from their utilities?



We wanted to know what people expect from their utilities, so we asked them to rate the importance to them of various characteristics. The result was that utility customers want it all. However, it was instructive that helping customers reduce usage rated highest with an average score on a 10-point scale of 8.64, followed by reliability, customer service, and trustworthiness. Low cost and having utilities exceed what they are required to do to protect the environment were slightly lower. Exceeding requirements on climate change and community involvement ranked lowest of the eight characteristics we included in our survey. Helping customers reduce usage ranked first in the Northeast and the West, but lower in the South and Midwest.

Selected Implications

- **More “prep work” needed to prepare the public for widescale behavior change**
 - **Increase understanding of the negative effects of climate change**
 - **Help people connect their energy usage at home to change in the climate**
- **Some audiences more ready than others**
 - **Concerned believers**
 - **Unconcerned believers**
 - **Non-believers**
- **More research and tracking**
 - **Demographics and segmentation**
 - **Track changes over time**

Some of the implications of our research findings are: (1) More prep work is needed to prepare the public for widescale behavior change. We no longer need to convince most people that climate change is real. The challenge now is to increase public understanding about the phenomenon’s negative consequences and help people connect their energy usage at home to climate change. It isn’t just about cars. (2) Some audiences are more ready than others. We can classify people into concerned believers, who are probably most likely to take action, unconcerned believers, and non-believers. What demographic groups fit into these categories and what messages would appeal to each requires more research. Meanwhile, for those who are not at the leading edge of public education or motivating behavior change, it would still be valuable to track changes in public attitudes.

Thank you!

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www.ecw.org/climate-opinion



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