



28 MAY 2009: REPORT

Beyond Abstraction: Moving The Public on Climate Action

Most Americans believe climate change is a serious problem but are not committed to making the hard choices needed to deal with it. Recent research begins to explain some of the reasons why.

BY DOUG STRUCK

Humans have been wired by evolution to respond to the most immediate threats, ones they can hear or smell or see — like the lions approaching our ancestral watering holes in the Serengeti. So in searching for answers as to why society has been so slow to react to one of the greatest threats facing the planet today — global warming — this deeply ingrained instinct is a good place to start. Climate change just doesn't offer those kinds of sensory signals — at least not yet — and humans have not felt the need to react, according to researchers.

"Danger brings emotional reactions, dread, a feeling of alarm. Evolution has equipped us with that," says Elke Weber, director of the Center for Research on Environmental Decisions at Columbia University. "The threats we face today are not of that type. They are psychologically removed in space and time. So cognitively, we know something needs to be done about climate change, but we don't have that emotional alarm bell going off."

Weber is one of a handful of researchers trying to unravel a glaring contradiction: Even though global temperatures are rising, the Arctic ice cap is melting, scientists are offering increasingly urgent warnings about climate change, and polls show Americans acknowledging that the threat of global warming is real, we're still not doing very much about the problem.

Scientists are exploring new theories about what affects behavior concerning global warming, such as people's decisions to give up their SUVs, weatherize their houses, or support tougher environmental legislation. This research has moved beyond the old theory of rational action that predicted we would make logical changes in our behavior if we were given the right information about a problem.

One problem is the inability to see how our individual decisions will solve a problem created by millions of individuals.

"We make decisions in lots of different ways, even when we are trying to be rational," says Anthony Leiserowitz, head of the Yale Project on Climate Change. "Humans have two ways of processing information: analytical, and experiential." The analytic system is logical; the experiential system is based on emotions, past experiences, unconscious memory, stories we have heard, and other immeasurable clues.

"These are parallel processing systems, dance partners always interacting with each other," Leiserowitz says. So while our rational system may tell us

to buy a hybrid car that gets great mileage, we may drive away from the car lot with a muscular pickup because we responded to the ads.

Adding to that problem is the inability to see how our individual decisions will solve a problem created by millions of other individual and institutional acts.

"You don't see carbon dioxide when you turn on the car," Leiserowitz says. "You don't smell it, you don't taste it, and it's not poisonous. The experiential system is good at responding to something if I can see it and believe it. That allows us to survive in a more natural world. But we are not good at responding to slow, gradual, incremental effects that we can't see."

Changing behavior, then, becomes a complicated process. Leiserowitz, working with the George Mason University Center for Climate Change Communication, recently released research findings showing how complicated the task may be.

Their analysis from an opinion poll of environmental attitudes of 2,164 adults identifies six groups, which they call the "Six Americas." Those groups react to different messages, to different messengers, and in different ways to information on climate change. Leiserowitz argues that moving society on this issue will require a tailored approach to each.

The most proactive group, which his researchers call the "Alarmed," represent 18 percent of the public. These are people who believe that the threat of global warming is real and already are doing something in their lives to address climate change. The largest group, the "Concerned," is 33 percent of the public. They also are convinced global warming is a serious problem, but have not done anything about it and do not seek information to do so.

The "Cautious" at 19 percent, the "Disengaged" at 12 percent, and the "Doubtful" at 11 percent, are by steps increasingly less trustful of scientists, environmentalists, and the mainstream media, more reliant on information from friends or family, and more likely to believe the television weatherman, acquaintances, and religious figures when it comes to climate change. Only 7 percent, "the Dismissive," flatly disbelieve in human-induced climate change and actively work against global warming measures. This group reads newspapers at half the national average and gets its news from commentators like Rush Limbaugh and Bill O'Reilly.

Research suggests that getting action on climate change will require more than dire stories in the media.

The breakdown suggests that getting action on climate change will require more than dire stories in the media. Some groups will be more receptive to the same message delivered by Pat Robertson — or the corner barber — than from Al Gore. Some groups will be willing listeners, while others will need the message to be hammered home again and again.

Leiserowitz says the sizeable percentage of those who believe in climate change, whether they have acted or not, should encourage environmentalists. "I don't think most policy makers realize how much consensus there is" on global warming, he says. "It's latent, sitting there, waiting to be mobilized."

More worrisome is the politicization of the issue. In another large-scale study on public attitudes, Barry Rabe — a political scientist and professor

of environmental policy at University of Michigan who worked with the Miller Center of Public Affairs at the University of Virginia — found that 83 percent of Democrats believe global warming is happening, while only 53 percent of Republicans do so.

“That really did surprise us,” Rabe said. “No matter how you asked the questions, there wasn’t much diversity by state, age, income, gender. The one that jumped out time after time was partisan affiliation.”

Rabe, like Leiserowitz, believes that support for action on climate change is greater than many politicians believe and that politicians have been needlessly timid about calling on the public to make sacrifices to slow global warming. For example, rather than make a case to Americans for tough action — including a modest carbon tax — Congress seems intent on watering down carbon cap-and-trade legislation to make it “politically palatable,” he says. And despite a desperate need in many states for revenue, “they won’t use the ‘T’ word” and raise gasoline taxes that would generate funds and cut driving, Rabe notes.

Politicians have been needlessly timid in calling for public sacrifices to slow global warming.

“Most of what has been enacted is really not asking much in the way of behavioral changes, or would cost (people) much,” he says. While many state leaders have moved more aggressively, national leaders have been “timid, in the sense of not really pushing Americans to confront the complexity of all of this and the possible transitions that may have to be made.”

For example, he asks, “At what point can we speak with more transparency about the whole question of energy transformation? For any political leader who really wants to take the lead on the issue, there is tremendous reluctance to be very specific about price ramifications.”

Some of Barack Obama’s top appointees, such as Energy Secretary Steven Chu and economic advisor Lawrence Summers, have written about the need for carbon pricing, but have not pushed it aggressively in Washington, Rabe notes. Even good ideas such as basing car insurance or state vehicle registration fees on miles driven gets few advocates willing to espouse a sensible — yet unpopular — idea.

Anthony Patt, who studies decision-making and environmental policy at the International Institute for Applied Systems Analysis in Laxenburg, Austria, believes our language has not been specific enough. Too much information is indistinct and vague about solutions, he says. He has worked to change environmental policies in developing countries where there are too few information sources. But the same lessons apply to developed countries with an information overload, he says.

“The information is not in a form that people quite trust, or understand, or maybe they see contradictory information,” he says. In Africa, for example, farmers need to know what irrigation practices would help conserve water. In Europe, however, the problem is “an inability to find the right information. It was confusing for people to decide if it’s even worth their time to worry about global warming.”

Patt contends that changes in behavior come when people are given information about exactly what they can do to fix the problem. He suggests, for example, creating the energy **The message has to come**

equivalent of the agricultural extension service, which could advise consumers and businesses

clearly from a source who has moral authority.

on practical ways to save energy, just as the agriculture service advises farmers on the best way to grow crops. Putting a price on the carbon consequences of our choices also makes those decisions much clearer, he says.

And "the message has to come clearly from a source that has moral authority," says Columbia's Weber. "In Europe, that might be the Green Party, for example. Here, it could be political leadership, or it could be cultural. It could be evangelical churches, reminding their congregants that as Christians, they have a stewardship of the earth. What would Jesus drive? Turns out it's not an SUV."

Weber believes that [our behavior toward the environment may well change as a result of messages from a multitude of sources](#). In addition to following personal motivations, she says, individuals adapt their choices to the rules and norms of society. People are affected by what their neighbors drive, what their family thinks, what a television personality says about global warming, advertising, the attitudes of other communities and groups, and, of course, what laws are passed.

"After awhile, these things add up, and changes happen incrementally," Weber says. "In the last ten years we have seen tremendous changes in attitude toward climate change. By changing attitudes, I think we will see changes in how people react."

But that will require overcoming some very basic impulses, she acknowledges.

"People are very unwilling to sacrifice," she says. They base many decisions on the immediate cost. "It hurts us a lot to give up whatever we think we are due, such as our standard of living," Weber notes. Or, she says, we decide based on emotion: "If something feels good, like impulse shopping, we do it. Emotions are a strong motivator. And technical risks like climate change don't trigger those emotions."

Still, Weber believes that a consistent message about a genuine threat — coupled with social pressure and the right economic carrots and sticks — can eventually change people's behavior.

"Society," says Weber, "is a way of overcoming the 2-year-olds in all of us."

POSTED ON 28 MAY 2009 IN [CLIMATE POLICY & POLITICS NORTH AMERICA](#)

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So one concept might be to say that because climate change is filling us with the dread of terrible losses in our beautiful world, and because this despair is not helpful, we will make the great sustainable transition fun. Yes fun, including the fun of "right relationship."

For example, we could use all the national affection for railroads and model railroads and put our nation back on track. We will use the strength and beauty of old style passenger streamliners and classic streetcars. We can use all the interest in our nautical heritage and envision building great sailing ships for sail training, travel and transport. We can encourage rebuilding of center cities through the beauty of historic preservation and "smart development." We can promote sustainable family farming that may wish to use the draught power of animals like days of old. We can install rooftop solar coast to coast.

We can re-envision ourselves via the best of heritage design, sustainable