



What Does the Public *Really* Think About Climate Change?

As local officials contemplate how best to plan their communities' actions to reduce greenhouse gas (GHG) emissions and adapt to the impacts of climate change, they consider what their residents think about these issues. To assist in these efforts, it can be instructive to take a look at what we know about the public's views on climate change.

Over the past few years, California and national public opinion polls have provided a better picture of this evolving topic. Several key themes offer a window into what our communities' residents think.

- Nationally and in California, the public's awareness of and concern about climate change and global warming have been increasing. The majority of Californians believes climate change is real and poses a threat to the state.
- California residents seem to be more aware of and concerned about climate change than people in other states.
- Nationally and in California, political affiliation, age and income appear to be correlated with individual views about climate change.
- A majority of Californians believes climate change is caused either by human activity alone or by a combination of human activity and natural causes. A minority believes climate change is a result of natural causes *only*.
- Most climate-change skeptics --- those who do *not* believe the earth's climate is changing or who believe that the change is the result of natural causes, not human behavior --- nevertheless support undertaking many of the actions that can reduce GHG emissions because of other reasons, such as saving money and resources and reducing dependence on foreign oil.

Climate Change or Global Warming: What's in a Phrase?

Confusion abounds. The terms "climate change" and "global warming" are frequently used interchangeably when in fact they mean different things. Interestingly, some people think "climate change" refers to the narrow subject of weather, such as "changes in weather."

Although "global warming" is used frequently in general conversation and in some public opinion polls, many people understandably are skeptical and ask why temperatures are *decreasing* in some areas as a result of "global *warming*." While one effect of climate change is a warming planet, the impacts are more varied than simply higher temperatures. Thus, many prefer the term "climate change" because it more accurately reflects the broader impacts of increased GHG emissions on the earth's climate and weather system. In addition to higher temperatures,

these impacts include increased drought and extreme weather events, such as heavy rain and storms, floods and reduced snow pack.

In this article, "climate change" is used wherever possible, except where "global warming" is used in the public opinion polls or reports that are discussed.

Californians' Opinions About Climate Change

A significant majority of Californians is concerned about climate change. Nearly 80 percent believe climate change poses a very (52 percent) or somewhat serious (27 percent) threat to California's future economy and quality of life, according to the July 2008 Public Policy Institute of California (PPIC) statewide survey. The percentage of Californians who call the threat of global warming "very serious" increased by 13 points since PPIC asked the same question in 2005. The 2008 PPIC survey also found that "64 percent of Californians believe the effects of global warming have already begun to take place, while just 10 percent believe there will be no effects."

A 2007 poll commissioned by the State of California's Flex Your Power program found similar evidence that Californians believe global warming is occurring. Eighty-one percent of Californians believe global warming to be a very serious or somewhat serious problem, and 63.4 per cent believe it is possible to reduce the effects of global warming and that virtually everyone is willing to make a personal change to reduce global warming.

Public Opinion on the Causes of Climate Change

The overwhelming scientific consensus is that the earth's climate is changing and the change is caused by human activity. The Intergovernmental Panel on Climate Change has concluded, "Warming of the climate system is unequivocal" and "Most of the observed increase in globally averaged temperatures since the mid-20th century is *very likely* [greater than 90 percent] due to the observed increase in anthropogenic [caused by human activity] greenhouse gas concentrations."

It appears that the majority of the public is aware of this conclusion. A July 2007 Yale University-Gallup-ClearVision Institute Poll found, "69 percent of Americans now believe that global warming is caused mainly by human activities (57 percent), or caused equally by humans and natural changes (12 percent), while only 29 percent believe it is caused mostly by natural changes in the environment."

The views of climate skeptics --- those who either do not believe the earth's climate is changing or do not believe the primary cause is human activity --- appear to be related to several factors, including political affiliation, age and education level.

A May 2008 report from the Pew Center for the People and the Press found that nearly 60 percent of Democrats and half of Independents nationally say global warming is primarily

caused by human activity and about 25 percent of Republicans view human activity as the cause. Slightly more than half of people younger than 30 years of age believe that human activity is the cause of global warming, compared with only 37 percent of people older than 65. Similarly, the Pew Center report found that college graduates are more likely to believe global warming is caused by human activity than those who have completed high school or less.

Californians Look to State and Local Officials to Take Action

What does this mean for California cities and counties and their elected officials and staff? Does the public support local efforts to reduce GHG emissions?

The number of Californians who want their local officials to take action to address climate change appears to be increasing. The July 2008 PPIC survey found that a majority of "Californians do not only believe it is possible to reduce the effects of global warming, they also think steps should be taken immediately to do so." PPIC found the proportion of Californians who think immediate action is necessary to counter the effects of climate change has increased over the past five years. The PPIC survey also found that about half of Californians believe the state government could be doing more to address global warming.

More to the point for city and county officials, however, the PPIC survey also found that about half (52 percent) of Californians "think their local governments are not doing enough, while 40 percent believe it is already doing enough (31 percent) or more than enough (9 percent)." The PPIC report observes, "Of those residents who believe the effects of global warming are already under way, 61 percent think their local government is not doing enough to address this issue." Interestingly, the survey found subtle regional differences in the public's views of local agencies' climate change actions (see Figure 1 below).

	All Adults	REGION					Likely Voters
		Central Valley	San Francisco Bay Area	Los Angeles	Orange/San Diego	Inland Empire	
More than enough	9%	10%	7%	8%	12%	6%	12%
Just enough	31%	34%	33%	25%	30%	33%	31%
Not enough	52%	49%	50%	58%	49%	54%	48%
Don't know	8%	7%	10%	9%	9%	7%	9%

Source: *Californians and the Environment – Statewide Survey*, Public Policy Institute of California, July 2008

Figure 1. "Overall, do you think your local government is doing more than enough, just enough or not enough to address global warming?"

The survey also noted partisan differences on the topic: "While 62 percent of Democrats and 52 percent of Independents think local government is not doing enough, just 33 percent of

Republicans agree. Fifty-eight percent of Republicans say local government is doing just enough (38 percent) or more than enough (20 percent)."

The message is clear. If your local agency is doing work to address climate change and you believe your residents are concerned about the issue, it's important to let your community members --- businesses and residents alike --- know what the city or county is doing. The public is looking to local officials for leadership.

Does the Political Landscape Play a Role in Support for Local Action?

As noted previously, political affiliation correlates to public opinion regarding climate change. But does political affiliation affect a city or county's climate change-related activities?

The November 2008 PPIC report *Climate Policy at the Local Level: A Survey of California Cities and Counties* examined, among other factors, whether the political affiliation of residents is reflected in the level of city or county activity to address climate change. The PPIC report indicates, "Although there is no difference in the extent to which local governments are working on climate issues in general, communities with higher Republican share are less likely to be conducting emissions inventories, developing climate action plans and incorporating measures to reduce GHG emissions in various local planning and regulatory tools (General Plans, California Environmental Quality Act reviews, building codes, Title 24 energy codes and zoning requirements)." The survey asked respondents about their assessment of the extent of local support for climate change programs among residents and businesses. In communities with higher numbers of registered Republicans, perceived support from residents, businesses and elected officials was lower than in those communities with fewer registered Republicans, although there were no significant differences in the perception of support by city and county agency staff.

Support for Local Action

Do climate change believers *and* skeptics support local actions? It depends.

If your city or county includes a high number of climate skeptics, can your agency still undertake activities to reduce GHG emissions without stirring up opposition? The answer appears to be yes. Interestingly, qualitative and quantitative research suggests that climate skeptics --- both members of the public and local agency officials --- still support actions or programs that ultimately result in reductions in GHG emissions, even though their primary focus may not be climate change. Indeed, many of the mitigation measures recommended to reduce GHG emissions --- such as investing in energy efficiency and water conservation and embracing infill development and efficient transportation like transit or fuel-efficient agency vehicles --- represent good government, sound planning and cost-effective ways to conserve resources. Thus, they generally are broadly supported by community residents and businesses.

Does the Ad Industry Know Something We Don't?

A growing number of advertisements promote a business's or product's environmental credentials. Clearly, the ad industry views the green market as an attractive niche. Recent evidence points to a modest backlash from consumers in response to "green washing" and false environmental claims, which has somewhat dampened the early enthusiasm as people become more discerning about so-called environmental benefits.

However, the number of ads that specifically use climate change as their driving message is increasing, positioning the company's product, service or culture as one that's helping to stop climate change. Is this a window into public opinion on climate change? Businesses nationwide have done market research and identified climate change as a message worthy of spending millions of dollars in advertising.

What Does This Mean for City Officials?

Local officials generally have an excellent understanding of their community and are dedicated to improving the quality of life for their residents. As California cities and counties undertake local actions to reduce GHG emissions and comply with state law, it is important for them to also understand how their residents view climate change. Familiarity with the local mix of climate change skeptics and believers may help you respond to local concerns and opportunities and explain what your agency is doing.

Questions to consider include:

- Are your community's residents among those who think their local officials are not doing enough --- or doing too much --- to reduce GHG emissions?
- Is there a role for your agency to play in helping residents understand the science behind climate change?
- How can your city or county involve climate skeptics in planning activities that ultimately will reduce GHG emissions but also have other benefits to the community, such as reduced energy use, financial savings, water conservation and infill development?

Resources on Public Opinion on Climate Change

- California Climate Action Network, Institute for Local Government. www.ca-ilg.org/climatechange .
- Center for Climate Change Communications. "Communicating Climate Change: An Urgent Problem." Connie Roser-Renouf, Edward Maiback, George Mason University. ("Draft is under submission to The Encyclopedia of Science and Technology Communication, Susanna Priest (Ed.), Sage Publications; projected publication date: January 2010.

- Climate Change Communication Center of Excellence. "The Measurement of Key Behavioral Science Constructs in Climate Change Research." Connie Roser-Renouf, George Mason University, and Matthew C. Nisbet, School of Communication, American University. 2008.
- Intergovernmental Panel on Climate Change. <http://www.ipcc.ch/>
- The Pew Research Center for The People and The Press. "Global Warming: A Divide on Causes and Solutions." January 2007. <http://people-press.org/report/303/global-warming-a-divide-on-causes-and-solutions>
- The Pew Research Center for The People and The Press. "A Deeper Partisan Divide Over Global Warming." May 2008. <http://people-press.org/report/417/a-deeper-partisan-divide-over-global-warming>
- Public Opinion Quarterly. "Twenty Years of Public Opinion About Global Warming." Matthew C. Nisbet and Teresa Myers. Vol. 71, No. 3. Fall 2007.
- Flex Your Power. Wally McGuire. "Local Government and Global Warming: Lessons from California's Energy Conservation Campaign." Presentation to the Institute for Local Government 2007 Luncheon Symposium, League of California Cities Annual Conference. September 2007.
- Public Policy Institute of California. "Californians and the Environment - Statewide Survey." Mark Baldassare, Dean Bonner, Jennifer Paluch and Sonja Petek. July 2008. <http://www.ppic.org/main/publication.asp?i=834>
- Public Policy Institute of California. "Climate Policy at the Local Level: A Survey of California's Cities and Counties." Ellen Hanak, Louise Bedsworth, Sara Swanbeck and Joanna Malaczynski. November 2008.
- Yale University/Gallup/ClearVision Institute Poll. "American Opinions on Global Warming." Principal Investigator: Dr. Anthony Leiserowitz, School of Forestry and Environmental Studies, Yale University. 2007. <http://environment.yale.edu/news/5305/american-opinions-on-global-warming/>

Conclusion

Because cities and counties are positioned to lead by example, highlighting the measures implemented to reduce GHG emissions in agency buildings and operations can produce positive results, both by enhancing the public's view of the local agency and by providing concrete examples for the community to follow. These include embracing energy efficiency and alternative energy, implementing green procurement policies, using fuel-efficient and alternative-fuel vehicles, green building practices, water conservation and other actions that are applicable for both the public and private sectors as well as individuals. Understanding the community's views on climate change can help local agencies move beyond focusing on their own facilities to broader community efforts that reduce GHG emissions through land use and community design, and efficient transportation and use of resources.

For More Information

The California Climate Action Network (CCAN), a program of the Institute for Local Government, provides resources and information to cities and counties about ways to reduce greenhouse gas emissions. For examples of what your agency can do in response to climate change, CCAN offers a Best Practices Framework online at www.ca-ilg.org/bestpractices. For more information about CCAN, visit www.ca-ilg.org/climatechange.

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