



The Polarization of U.S. Public Opinion on Climate Change

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Scientists and the environmental movement are sounding ever louder alarms about climate change – urging the United States to join other nations in responding to this serious threat to our economic and social order. But many industrialists and conservatives are pushing in the opposite direction, denying the validity of climate science and blocking government policies to respond to global warming. Elites have moved to opposite political poles on a range of issues in recent decades, including the environment and climate change. The U.S. news media often feeds and reinforces partisan polarization, as networks and programs offer slanted coverage that makes it possible for Americans to receive news that reinforces their political inclinations.

Where does public opinion about climate change fit in? Analyzing data from ten nationally representative Gallup polls between 2001 and 2010, we probe trends in Americans' views about climate change. The year 2001 is a good place to start, because it saw the release of the *Third Assessment Report* of the U.N. Intergovernmental Panel on Climate Change, along with the *Climate Change Science* report from the U.S. National Research Council. Both reports highlighted the scientific consensus that global warming is accelerating and human activities are a significant contributor. Mean global temperatures are projected to increase between 1.4 and 5.8 degrees centigrade by 2100. To see how public views shifted amid such warnings, we tracked beliefs about global warming and its causes, as well as personal worries about the threat.

Polarizing Public Views on Climate Change

Our findings are striking. Ideological and partisan polarization increased significantly over the first decade of the 21st century, as citizens with contrasting, self-declared ideological or partisan proclivities embraced contradictory beliefs about findings from climate science and diverged in their levels of personal concern about global warming.

- In 2001, about 49% of self-identified Republicans said in the Gallup survey that they believed the effects of global warming had already begun; but that number dropped to 29% by 2010. Meanwhile, the percentage of Democrats who believe global warming has already begun increased from about 60% in 2001 to 70% in 2010. All told, the gap between “believers” in the two parties grew from 11 to 41 percentage points in just one decade.
- Similar divisions grew between self-identified conservatives and liberals. On the question of whether global warming has already begun, the gap between conservatives and liberals increased from about 18 percentage points in 2001 to 44 points in 2010.

Why has public opinion diverged so much? From all indications, the divide between party activists and ideological elites, which was already very wide by 2000, has influenced American citizens in general, nudging them to sort themselves along ideological and partisan lines. This is consistent with “party sorting theory” in political science. Sorting is largely a top-down process, in which elected officials and activists lead the way in adopting sharply polarized positions – and then ordinary voters pick up the “cues” and sort themselves or adjust their beliefs accordingly.

Political Orientation Trumps Education

Another finding from our research may startle observers who assume that citizens with higher levels of education are automatically more likely to accept scientific findings than citizens with less education. Among Americans who call themselves liberals or Democrats, more education is indeed associated with higher levels of belief in the reality of global warming and greater personal concern about it. But the opposite is true among self-described Republicans and conservatives, where education is either very weakly related or negatively related to belief in global warming. In short, for liberals and Democrats, holding a college degree *increases* the likelihood of accepting the scientific consensus about global warming; but for conservatives and Republicans, holding a college degree often *decreases* this likelihood.

Our findings are consistent with theories about information processing. Scholars doing research on many issues have found that when issues are publicly controversial, and when people can get information from separate and competing sources, well-educated people are especially likely to arrive at issue-positions that reinforce their overall political predispositions. To see how this works, think of two different people. On the left, imagine a liberal Democrat who follows Al Gore and gets her news from National Public Radio, from the liberal-leaning cable network MSNBC, and from the *New York Times*. On the right, imagine a conservative Republican who follows politicians like Oklahoma Senator James Inhofe and gets his news from conservative talk radio, FOX News, and the *Wall Street Journal*. The liberal woman is more likely to hear and accept messages about the reality and significance of climate change, while the conservative man may hear that climate science is fraudulent, or else hear nothing at all about global warming as an important issue. If both of these citizens are highly educated, they will be adept at finding and absorbing claims from their favorite news sources – and both will think (and tell pollsters) that they are confident they understand the issue.

That political predispositions influence the impact of education challenges a cherished assumption held by many leaders – the faith that more information and higher levels of public education about science will convince Americans of the need to deal with climate change. In fact, more “information” alone will not dispel conservative and Republican doubts about the reality of threats from human-induced warming.

Divided elite stances about global warming have made it very difficult for the United States to adopt policies to reduce greenhouse gas emissions. Opportunities to enact reforms declined still further once public views also polarized, as they did during the 2000s, culminating in Tea Party efforts to cement GOP doubts and opposition. As long as their party’s advocates, funders, and base voters question the reality of the threat, Republican politicians will be very unlikely to acquiesce in measures to deal with global warming.

Read more in Aaron M. McCright and Riley E. Dunlap, “[The Politicization of Climate Change and Polarization in the American Public’s Views of Global Warming, 2001-2010](#),” *The Sociological Quarterly* 52 (2011): 155-194, and Aaron M. McCright, “[Political Orientation Moderates Americans’ Beliefs and Concern about Climate Change](#),”

Climatic Change 104 (2011): 243-253.

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