

Scientific and Public Perspectives on Climate Change

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Yale Project on Climate Change Communication

Scientists' vs. Public Understanding of Human-Caused Global Warming

A new report by [Cook et al. \(2013\)](#) examined nearly 12,000 peer-reviewed papers in the climate science literature; the analysis found that 97% of the papers that stated a position on the reality of human-caused global warming said that global warming is happening and human-caused, at least in part. By contrast, only 41% of Americans say global warming is happening and human-caused ([Leiserowitz et al. 2013](#))*. Assuming the scientific literature reflects climate scientists' conclusions about global warming, Americans' belief in human-caused global warming is about 56 percentage points lower than that of the climate science community (Fig. 1).

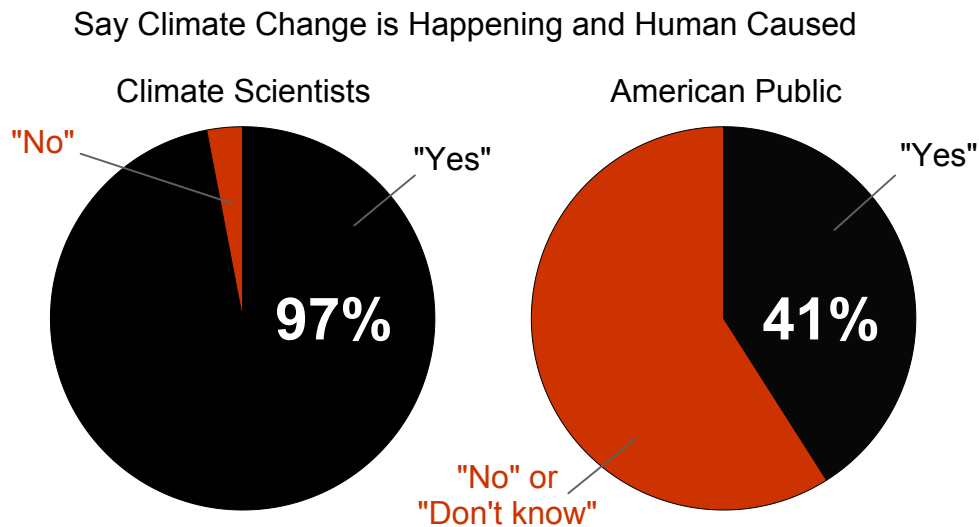


Fig. 1. *Left*: Proportion of peer-reviewed research papers that stated a position on the reality of human-caused global warming and said it is happening and human caused ([Cook et al. 2013](#)). *Right*: Proportion of the American public that says climate change is happening and human caused ([Leiserowitz et al. 2013](#)).

Public Perceptions of the Degree of Scientific Agreement

Despite nearly unanimous agreement among climate scientists that the Earth's climate is warming due to fossil fuel burning and other human causes, only 42% of Americans believe that most scientists think global warming is happening (Fig. 2). One third (33%) of Americans believe that "There is a lot of disagreement among scientists about whether or not global warming is happening" ([Leiserowitz et al. 2013](#)).

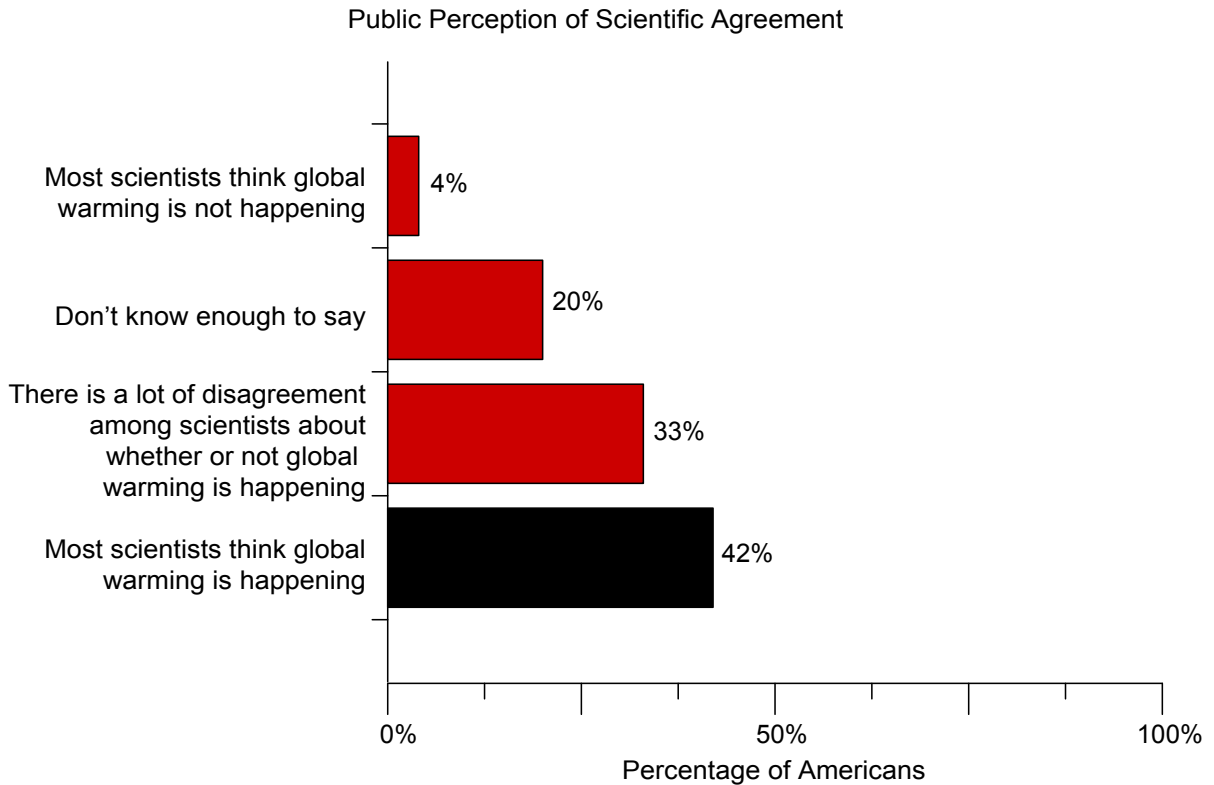


Fig. 2. Responses among the American public to the survey question, "Which comes closest to your own view?" ([Leiserowitz et al. 2013](#)).

Further, in May 2011, we found that only 15% of Americans correctly understand that over 80% of climate scientists think global warming is human caused (Fig. 3; [Leiserowitz et al. 2011](#)).

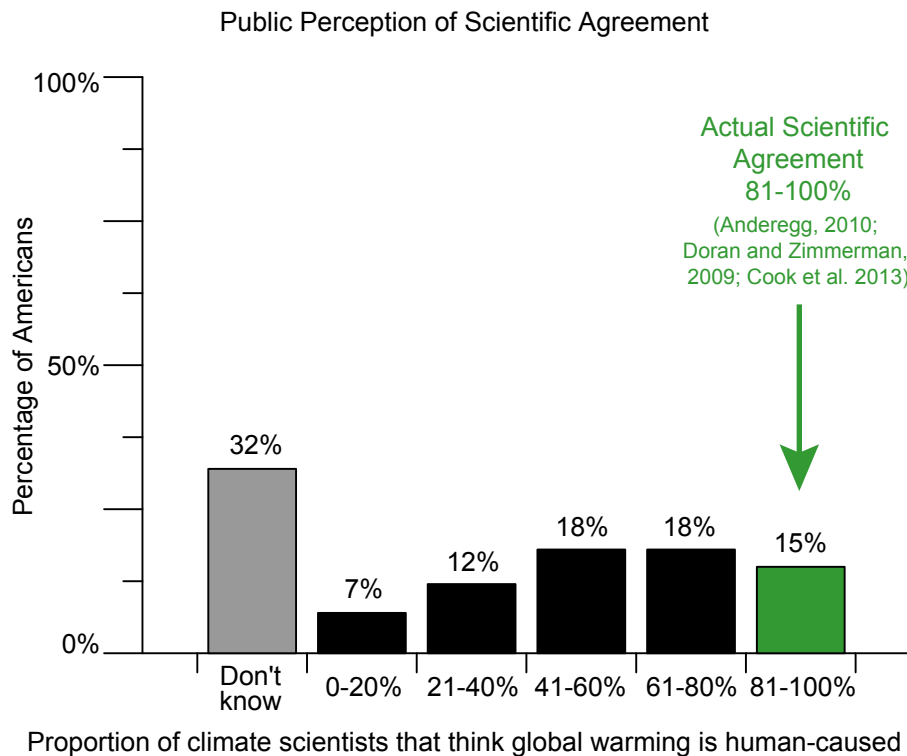


Fig. 3. American responses to the question “To the best of your knowledge, what proportion of climate scientists think that global warming is caused mostly by human activities?” ([Leiserowitz et al. 2011](#)).

* Of those Americans who believe global warming is happening (63%), only 65% then say it is mostly human-caused. Thus, a total of 41% of all Americans believe global warming is happening and mostly human-caused.

References

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