

As Americans Experienced the Warmest May on Record Their Acceptance of Global Warming Reaches a New High

a report from the National Surveys on Energy and Environment

Key Findings:

- 1. More Americans think that there is solid evidence of global warming than at anytime since 2008 with 73% maintaining this view in the latest version of the NSEE conducted in late April and May of 2018.
- 2. A record 60% of Americans now think that global warming is happening and that humans are at least partially responsible for the rising temperatures.
- 3. While half of Republicans think that there is solid evidence of global warming, the divide between the 90% of Democrats that hold this view and the 50% of Republicans that maintain this position is as large as anytime since 2008.
- 4. The divide between Democrats and Republicans on the existence of anthropogenic induced global warming is also at record levels with 78% of Democrats now holding the view that humans are at least partially responsible for warming on the planet compared to only 35% of Republicans.

Authors

Christopher Borick

Professor of Political Science Director, Muhlenberg Institute of Public Opinion Muhlenberg College cborick@muhlenberg.edu

Barry G. Rabe

J. Ira and Nicki Harris Professor of Public Policy Director, Center for Local State, and Urban Policy Gerald R. Ford School of Public Policy University of Michigan brabe@umich.edu

Natalie B. Fitzpatrick

Research Area Specialist Center for Local, State, and Urban Policy Gerald R. Ford School of Public Policy Unviersity of Michigan nfitzpat@umich.edu

Sarah B. Mills

Postdoctoral Fellow Center for Local State, and Urban Policy Gerald R. Ford School of Public Policy University of Michigan sbmills@umich.edu



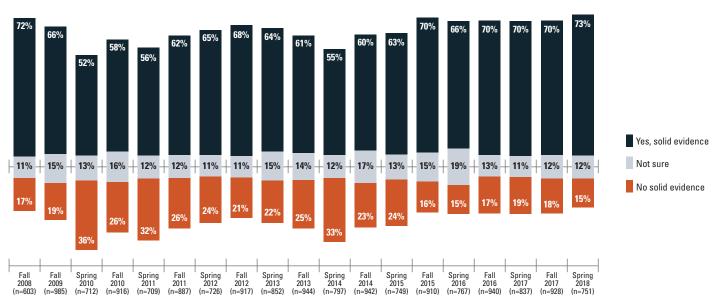




Summary:

Over the course of the last 10 years the National Surveys on Energy and the Environment (NSEE) has fielded 19 surveys in which Americans have been asked if they believe there is solid evidence of global warming. In the latest version of this ongoing research initiative from the University of Michigan and Muhlenberg College, a larger percentage of Americans reported that there is solid evidence of global warming than at any time since the survey began in the fall of 2008. This record level of acceptance of global warming came as the National Oceanographic and Atmospheric Administration (NOAA) announced that May of 2018 was the warmest in the continental United States since records began to be kept in 1895¹.

The most recent NSEE survey, which was fielded through late April and much of May of 2018, found that 73% of Americans now think there is solid evidence of global warming. This 73% level of acceptance surpassed the previous record level of 72% that was found in the initial NSEE survey during the fall of 2008, and marks the fifth straight survey that at least 70% of Americans think that there is evidence that temperatures on the planet are rising. As can be seen in Figure 1, only 15% of Americans report that they do not think there is solid evidence of global warming, matching the lowest level previously found in the Spring of 2016.





Question: From what you've read and heard. Is there solid evidence that the average temperature on earth has been getting warmer over the past four decades?

The record level of acceptance of global warming by Americans was accompanied by the highest percentage of Americans that believe human activity is at least partially responsible for the warming that is being experienced. The most recent NSEE found 60% of Americans believe that humans are either primarily (34%) or partially responsible (26%) for the warming of the planet. The 60% level of belief that humans are contributing to global warming surpasses the previous record of 58% that was established in NSEE waves in 2008, 2009 and 2017 (see *Figure 2*).

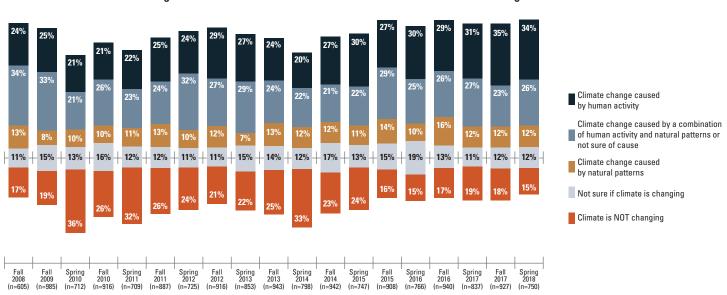


Figure 2. American Views on the Existence and Causes of Climate Change 2008-2018

The role of party affiliation in determining American views on the existence and causes of global warming has been one of the most salient findings of NSEE studies over the past decade. The divide between Democrats, Republicans and independents in regards to multiple aspects of global warming has been significant over the past decade and the most recent findings indicate this divide is large and modestly widening. In terms of acceptance of global warming the divide between Democrats and Republicans in the latest NSEE iteration was as large as anytime in the last decade with a 40% gap: 90% of Democrats think there is solid evidence of global warming while 50% of Republicans maintain this same view (see Figure 3). This 40% difference matches the previous record divide that was measured in the spring of 2012.

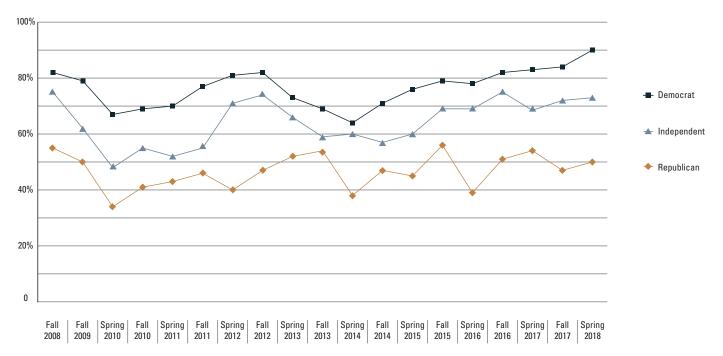
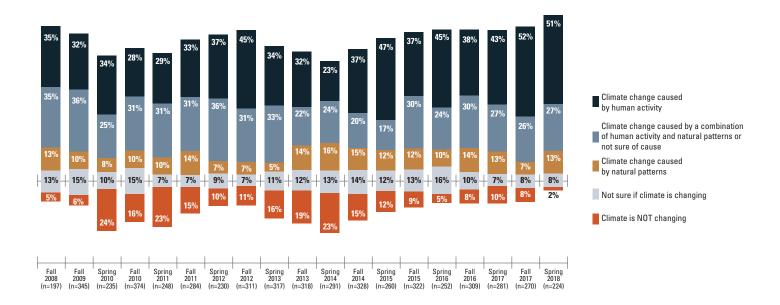


Figure 3. Percent of American that Believe there is Solid Evidence of Global Warming, by Party Affiliation

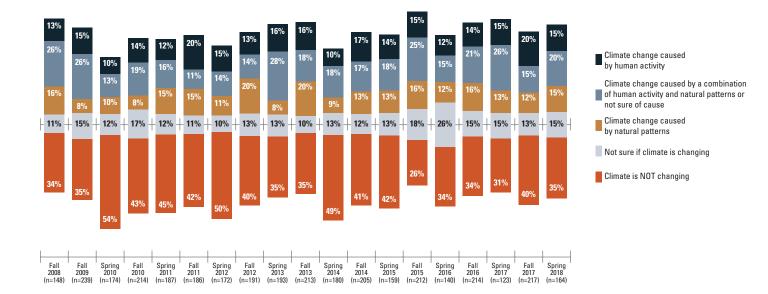
The Center for Local, State, and Urban Policy

The Spring 2018 NSEE findings also indicate significant divides between Democrats and Republicans on the underlying causes of global warming. While the latest findings show a record 78% of Democrats now believe that global warming is happening and humans are at least partially responsible for the increased temperatures (see *Figure 4*), only 35% of Republicans maintain the same beliefs (see *Figure 5*). Notably, a smaller percentage (35%) of Republicans now believe that humans are at least somewhat responsible for global warming than a decade ago when 39% of those affiliating with the GOP maintained that position.









Notes

1. National Oceanic and Atmospheric Administration (NOAA). (2018, June 6). *Contiguous U.S. had its warmest May on record*. Washington, D.C.: NOAA. Retrieved from: http://www.noaa.gov/news/contiguous-us-had-its-warmest-may-on-record

Methodology:

The following report contains the results of a telephone survey of 751 adult (age 18 or older) residents of the United States between April 29 and May 25, 2018. Respondents were interviewed in English on both land lines (146) and cell phones (605) by the staff of the Muhlenberg College Institute of Public Opinion (MCIPO) in Allentown, Pennsylvania on the Institute's Computer Aided Telephone Interviewing (CATI) system. With a randomly selected sample of 751 respondents the margin of error for the surveys is +/- 4% at a 95% level of confidence. Margins of error for questions with smaller sample size will be larger. In addition to sampling error, one should consider that question wording and other fielding issues could introduce error or bias into survey results. The sample data has been weighted by gender, race, age, income and educational attainment to reflect those population characteristics of the United States as reported by the United States Census Bureau for 2016. The calculation of sampling error takes into account design effects due to the weighting identified above. In order to reach a representative sample of American Association of Public Opinion Research (AAPOR) RRII formula is 8%. Due to rounding the totals provided in the frequency report may not total 100%. The survey instrument was constructed by the staff of the Muhlenberg College Institute of Public Opinion and the Center for State, Local and Urban Policy (CLOSUP) of the University of Michigan. The survey was funded exclusively by Muhlenberg College and the University of Michigan. For more detailed information on the methods employed please contact the MCIPO at 484-664-3066 or email Dr. Christopher P. Borick at cborick@muhlenberg.edu.

Reports from Issues in Energy and Environmental Policy

Federalism and California's Role in Light-Duty & Heavy-Duty Vehicle Emissions Standards (July 2018) American Opinions on Carbon Taxes and Cap-and-Trade: 10 Years of Carbon Pricing in the NSEE (June 2018) Should State and Local Governments Address Climate Change? 10 Years of Climate Federalism in the NSEE (March 2018) Coal, Natural Gas, and Pipelines: 10 Years of Fossil Fuels in the NSEE (February 2018) A Majority of Americans Support Net Energy Metering (September 2017) Strong Public Support for State-Level Policies to Address Climate Change (June 2017) Moving the Needle on American Support for a Carbon Tax (March 2017) Fewer Americans Doubt Global Warming is Occurring (August 2016) American Views on Fracking (May 2016) American Attitudes about the Clean Power Plan and Policies for Compliance (December 2015) Acceptance of Global Warming on the Rise for Americans of all Religious Beliefs (November 2015) Acceptance of Global Warming Among Americans Reaches Highest Level Since 2008 (October 2015) Belief in Global Warming Among Americans Gradually Increases Following the Winter of 2015 (July 2015) Cap-and-Trade Support Linked to Revenue Use (June 2015) Widespread Public Support for Renewable Energy Mandates Despite Proposed Rollbacks (June 2015) Neighbors Diverge: An Explanation for the Differences in Silica Sand Mining Activity in Wisconsin and Minnesota (May 2015) Public Perceptions of Hydraulic Fracturing in Three Marcellus Shale States (May 2015) Acceptance of Global Warming Among Americans Moderately Increases in Late 2014 (February 2015) Public support for regulation of power plant emissions under the Clean Power Plan (January 2015) Public Opinion on Hydraulic Fracturing in the province of Quebec: A Comparison with Michigan and Pennsylvania (October 2014) Opportunity, Risk, and Public Acceptability: The Question of Shale Gas Exploitation in Quebec (October 2014) Shale Governance in the European Union: Principles and Practice (October 2014) Public Perceptions of Shale Gas Extraction and Hydraulic Fracturing in New York and Pennsylvania (September 2014) Public Views on a Carbon Tax Depend on the Proposed Use of Revenue (July 2014) American Acceptance of Global Warming Retreats in Wake of Winter 2014 (June 2014) Public opinion on climate change and support for various policy instruments in Canada and the US: Findings from a comparative 2013 poll (June 2014) Environmental Policy in the Great Lakes Region: Current Issues and Public Opinion (April 2014) Shale Gas and Hydraulic Fracturing in the Great Lakes Region: Current Issues and Public Opinion (April 2014) Wind Energy Development in the Great Lakes Region: Current Issues and Public Opinion (April 2014) The Decline of Public Support for State Climate Change Policies: 2008-2013 (March 2014) Using Information Disclosure to Achieve Policy Goals: How Experience with the Toxics Release Inventory Can Inform Action on Natural Gas Fracturing (March 2014) State of the Debate: Natural Gas Fracking in New York's Marcellus Shale (January 2014) The Chilling Effect of Winter 2013 on American Acceptance of Global Warming (June 2013) Public Opinion on Fracking: Perspectives from Michigan and Pennsylvania (May 2013) NSEE Findings Report for Belief-Related Questions (March 2013) NSEE Public Opinion on Climate Policy Options (December 2012)

All IEEP reports are available online at: http://closup.umich.edu/ieep.php

University of Michigan

Center for Local, State, and Urban Policy Gerald R. Ford School of Public Policy Joan and Sanford Weill Hall 735 S. State Street, Suite 5310 Ann Arbor, MI 48109-3091

The **Center for Local, State, and Urban Policy (CLOSUP)**, housed at the University of Michigan's Gerald R. Ford School of Public Policy, conducts and supports applied policy research designed to inform state, local, and urban policy issues. Through integrated research, teaching, and outreach involving academic researchers, students, policymakers and practitioners, CLOSUP seeks to foster understanding of today's state and local policy problems, and to find effective solutions to those problems.

web: www.closup.umich.edu email: closup@umich.edu twitter: @closup phone: 734-647-4091



Regents of the University of Michigan

Michael J. Behm Grand Blanc

Mark J. Bernstein Ann Arbor

Laurence B. Deitch Bloomfield Hills

Shauna Ryder Diggs Grosse Pointe

> **Denise Illitch** Bingham Farms

Andrea Fischer Newman Ann Arbor

> Andrew C. Richner Grosse Pointe Park

Katherine E. White Ann Arbor

Mark S. Schlissel (ex officio)