

Strong Public Support for State-level Policies to Address Climate Change

a report from the National Surveys on Energy and Environment

Since 2008, the National Surveys on Energy and Environment (NSEE) has been tracking public opinion about climate change and energy policy. While recent surveys have focused on preferences for implementation of the federal Clean Power Plan,¹ the latest survey wave instead focuses on how Americans would prefer their state respond to a series of energy and climate policy options in the Trump Era. This report presents findings from the Spring 2017 survey fielded just prior to President Trump's June 2017 announcement to withdraw the U.S. from the 2015 international climate agreement negotiated in Paris and subsequent pledges by a number of states to continue to honor their share of Paris emission reduction commitments.

Key Findings

1. A majority (66%) of Americans believe that it is their state's responsibility to address the issue of global warming in the absence of federal action.
2. There is very high support for renewable energy (79%) and efficiency (81%) mandates, two established state-level policy options to reduce carbon emissions from the electricity sector.
3. There is even greater support for increasing the use of solar energy (89%) and wind energy (83%) at the state level outside of the context of a mandate. This increase in support is largely attributable to Republicans who, while slightly more inclined to oppose a renewable energy mandate in their state, show very strong support for increasing wind and solar use.
4. Support for renewable energy is high even among those Americans who do not think that there is evidence that the earth is warming, with a majority of this group saying they support adding more solar (74%) and wind (67%) energy in their state.
5. A majority of Americans—including those who do not think climate change is happening—say that solar and wind energy create jobs.

Authors

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

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

Christopher Borick

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

Majority Believe States Have a Responsibility to Act

Early iterations of the NSEE asked respondents how much responsibility, if any, different levels of government have for addressing climate change. While these early surveys consistently found that most Americans see a role for all levels of government—local, state, and federal—in addressing global warming, most believed that the federal government should bear the greatest responsibility for taking actions to reduce global warming. In light of the unsuccessful Congressional attempts to pass federal climate legislation in the early Obama years, the NSEE added a question to understand whether Americans would prefer to hold out for federal action, or have their state step in. While that question was discontinued in 2014 when the Clean Power Plan was announced, the latest survey revived the question, finding that 66% of Americans agree that “if the federal government fails to address the issue of global warming, it is my state’s responsibility to address the problem.” Americans today are significantly more supportive of state action than in Spring 2013, when only 48% believed that states had a responsibility to act (see *Figure 1a*). Some of this is likely a reflection of more Americans now believing that climate change is occurring—70% of Americans say there is solid evidence of global warming now compared to 64% in Spring of 2013—and exhibiting more concern over the issue of global warming.² It may also be prompted by reaction to the Trump administration’s environmental policy steps prior to the Paris withdrawal announcement, including announcing plans to terminate the Clean Power Plan (which the NSEE has previously found to have a solid base of support among the public) and pronouncements to pursue significant reductions in federal grant programs that assist states with environmental protection, climate mitigation, and alternative energy development.

As *Figure 1b* demonstrates, this increasing sense that states have a responsibility to address climate change also spans the political spectrum. Over three-quarters (77%) of Democrats now say they believe it is their state’s responsibility to address global warming, a 20-point jump from 57% in 2013. Notably, a majority (51%) of Republicans now also agree that states should act, up from just 34% four years ago.

Agreement/Disagreement that States have a Responsibility to Address Climate Change Absent Federal Action, Spring 2013 vs. Spring 2017

Figure 1a. Overall

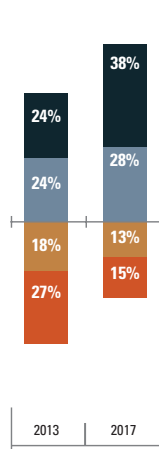
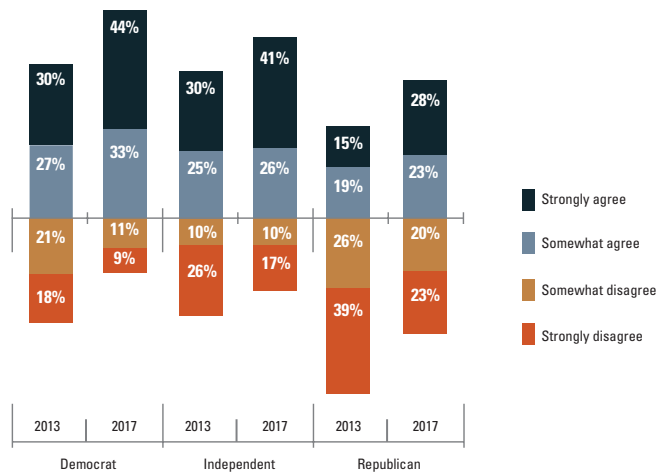


Figure 1b. By Political Party



Question text: “Please identify your level of agreement with the following statement, indicating if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. If the federal government fails to address the issue of global warming it is my state’s responsibility to address the problem.”

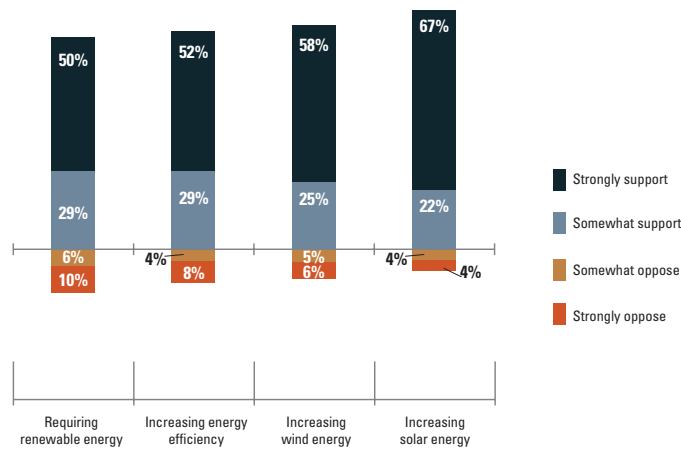
Note: “not sure” responses not shown



Strong Support for Renewables, Efficiency Mandates

Not only do Americans think it is their state’s responsibility to act to address climate change in general terms. There is also strong support among Americans for specific policies such as state level renewable energy and energy efficiency mandates, which have been implemented in recent decades in more than half of the states.³ The Spring 2017 survey finds that 81% of Americans support their state requiring increased energy efficiency standards, often referred to as energy efficiency resource standards (EERS). Additionally, 79% of Americans support their state requiring a set portion of all electricity come from renewable energy sources. This policy, commonly referred to as a renewable portfolio standard (RPS), is active in 29 states plus the District of Columbia.⁴ Support for renewable energy is even higher if you remove the context of a state-level mandate. An overwhelming 89% of these same survey respondents would support increasing the use of solar energy in their state, and 83% say the same about wind energy (see *Figure 2*).

Figure 2. Public support and opposition to clean state-level energy policy



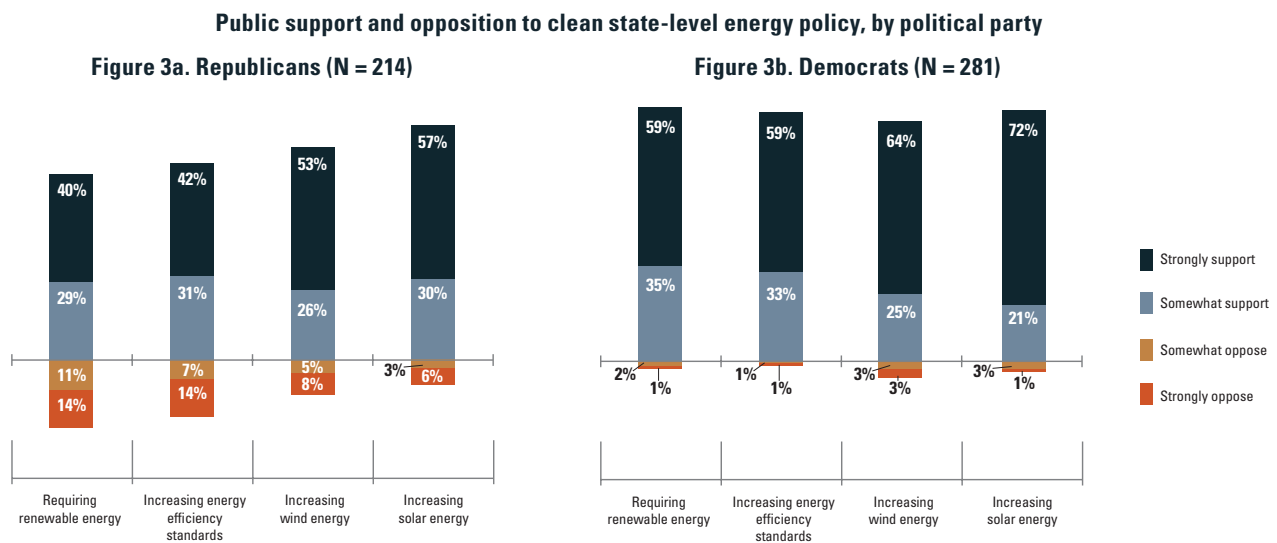
Question text: “Now I would like to ask you a few questions about government policy designed to reduce greenhouse gas emissions. For each of the following policy options I read please indicate if you strongly support, somewhat support, somewhat oppose, or strongly oppose your state adopting that policy as a means of reducing emissions?” [Full question text in *Note 5*]

Note: “not sure” responses not shown

Support for State-level Energy Policy Spans Partisanship

With such high levels of overall support, it is perhaps unsurprising that this suite of energy policies finds broad support across the political spectrum. There is overall support by large majorities of both Democrats and Republicans for all four of these policies. Republicans tend to be slightly more inclined than Democrats to oppose renewable energy or energy efficiency mandates, with Republican opposition to these policies at 25% and 21%, respectively (see *Figure 3a*). However, this does not mean that Republicans are opposed to renewable energy. Indeed, an outright majority of Republicans say they strongly support increasing solar (57%) and wind energy (53%) outside of the context of a mandate.

While Democrats show very low opposition to renewable energy mandates, they do have slightly more opposition to specific renewable technologies. While just 3% of surveyed Democrats oppose requiring renewable energy, 6% of these same respondents say they oppose increasing the use of wind energy in their state and 4% oppose increasing the use of solar energy (see *Figure 3b*).



Question text: "Now I would like to ask you a few questions about government policy designed to reduce greenhouse gas emissions. For each of the following policy options I read please indicate if you strongly support, somewhat support, somewhat oppose, or strongly oppose your state adopting that policy as a means of reducing emissions?" [Full question text in *Note 5*]

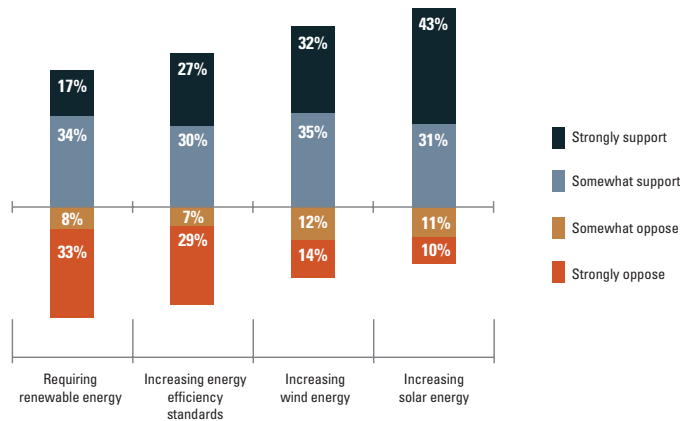
Note: "not sure" responses not shown



Even Climate Change Skeptics Support Adding Renewable Energy, Perhaps for Economic Reasons

Perhaps surprisingly, there is majority support for all four of these state-level energy policies even among those Americans who do not think there is solid evidence that global warming is occurring. While just over half support renewable energy mandates (51%) or energy efficiency standards (57%), a full two-thirds (67%) of those who do not think the climate is changing say they would support increasing the use of wind energy and nearly three-quarters (74%) support increasing solar energy in their state (see *Figure 4*).

Figure 4. Public support and opposition to clean state-level energy policy, among those who do not think there is solid evidence that the average temperature on earth has been getting warmer over the past four decades (N=155)

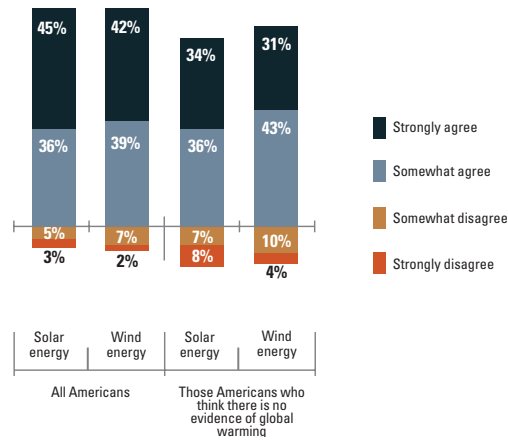


Question text: “Now I would like to ask you a few questions about government policy designed to reduce greenhouse gas emissions. For each of the following policy options I read please indicate if you strongly support, somewhat support, somewhat oppose, or strongly oppose your state adopting that policy as a means of reducing emissions?” [Full question text in *Note 5*]

Note: “not sure” responses not shown

This high support for renewable energy technologies particularly among this group of Americans indicates the diverse motivations driving renewable energy deployment across the country. Key among these are economic motivations. A majority of Americans (81%) believe wind and solar energy create jobs. The numbers are nearly as high among those who think there is no solid evidence that global warming is occurring: 70% believe solar energy creates jobs while 74% believe the same of wind energy (see Figure 5).

Figure 5. Agreement/Disagreement that renewable energy technologies create job, by technology



Question text: "Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the statement: [Solar panels / wind turbines] create jobs."

aNote: "not sure" responses not shown

Note: split sample; half of respondents (N=422) were asked about solar panels while remainder (N=413) were asked about wind turbines.



Conclusion

As President Trump was announcing that the U.S. will withdraw from the Paris Accord, a number of governors (and mayors) reaffirmed their commitment to reducing carbon emissions, pledging deep cuts within their boundaries and proposing more inter-state collaboration.⁶ Our data suggest that these state-level pledges match the expectations of a majority of Americans who feel that in the absence of federal action, state governments have a responsibility to act to address climate change. Furthermore, while it is still unclear what specific policies states will seek to uphold their pledges, our data finds the suite of policy options that have previously formed the backbone of state climate policy are likely to enjoy broad-based public support across the political spectrum. This even holds among those who don't necessarily think that climate change is occurring. Future waves of the NSEE will continue to track American attitudes about state and intergovernmental climate and energy policy, especially as they relate to policies that have been adopted or are under active consideration in various states.

Methods

The Spring 2017 NSEE surveyed 841 adult (age 18 or older) residents of the United States between April 17 and May 16, 2017. Respondents were interviewed in English on both landlines (201) and cell phones (640) 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. Both the landline and cell phone samples were chosen randomly from sampling frames of United States landline and cell numbers provided the Marketing Systems Group (MSG), Horsham, Pennsylvania.

With a randomly selected sample of 841 respondents the margin of error for the surveys is $\pm 3.5\%$ at a 95% level of confidence. Margins of error for questions with smaller sample sizes will be larger. In addition to sampling error, one should consider that question wording and other fielding issues can introduce error or bias into survey results. The sample data has been weighted by age, race, educational attainment, income and gender to reflect 2015 population parameters for these factors provided by the United States Census Bureau. The calculation of sampling error takes into account design effects due to the weighting identified above. In order to reach a representative sample of adult Americans both landlines and cell phones are called up to 10 times. The response rate for this survey as calculated using the American Association of Public Opinion Research (AAPOR) RR3 formula is 9%. Due to rounding, the totals provided in tables may not equal 100.

The instrument was designed by Christopher Borick of Muhlenberg College, Sarah Mills of the University of Michigan, and Barry Rabe of the University of Michigan. For more detailed information on the methods employed please contact the MCIPO at 484-664-3444 or email Dr. Borick at cborick@muhlenberg.edu.

Funding, Financial Disclosure, and Research Transparency

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Notes

1. Mills, Sarah B., Barry G. Rabe, and Christopher Borick. (2015). *American Attitudes about the Clean Power Plan and Policies for Compliance*. [a report from the national Surveys on Energy and Environment]. Ann Arbor, MI: The Center for Local, State, and Urban Policy at the Gerald R. Ford School of Public Policy, University of Michigan. Retrieved from <http://closup.umich.edu/issues-in-energy-and-environmental-policy/27/american-attitudes-about-the-clean-power-plan-and-policies-for-compliance/>; Also, Rabe, Barry G., Sarah B. Mills, and Christopher Borick. (2015). *Public Support for Regulation of Power Plant Emissions under the Clean Power Plan*. [a report from the national Surveys on Energy and Environment]. Ann Arbor, MI: The Center for Local, State, and Urban Policy at the Gerald R. Ford School of Public Policy, University of Michigan. Retrieved from <http://closup.umich.edu/issues-in-energy-and-environmental-policy/18/public-support-for-regulation-of-power-plant-emissions-under-the-clean-power-plan/>
2. Borick, Christopher, Barry Rabe, and Sarah Mills. (pending) “Presidential Views on Global Warming Remain Elusive but not those of Americans.” Brookings FixGov blog: <https://www.brookings.edu/blog/fixgov/>
3. DSIRE (2017). Detailed Summary Maps: Renewable Portfolio Standards. Retrieved from <http://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2017/03/Renewable-Portfolio-Standards.pdf>
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4. DSIRE (2017). Detailed Summary Maps: Renewable Portfolio Standards. Retrieved from <http://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2017/03/Renewable-Portfolio-Standards.pdf>
5. Question text for the policy options (note that the order of questions a & b and c & d were rotated)
 - a. “Increasing the use of wind energy in your state.”
 - b. “Increasing the use of solar energy in your state.”
 - c. “Requiring increased energy efficiency standards in your state.”
 - d. “Requiring a set portion of all electricity to come from renewable energy sources such as wind and solar in your state.”
6. Storrow, Benjamin. (2017, June 1). “Governors Pledge Climate Action in Face of Possible Paris Withdrawal.” E&E News. Retrieved from <https://www.scientificamerican.com/article/governors-pledge-climate-action-in-face-of-possible-paris-withdrawal/>



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The Center for Local, State, and Urban Policy

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

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web: www.closup.umich.edu

email: closup@umich.edu

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