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American Attitudes about the Clean Power Plan and Policies for Compliance

a report from the National Surveys on Energy and Environment

Introduction

In August 2015, the U.S. Environmental Protection Agency released the final rule of the Clean Power Plan, setting carbon dioxide emission reduction targets for each state's existing power plants. A month later, the National Surveys on Energy and the Environment (NSEE) surveyed over 900 Americans about how they would like their state to respond to the Clean Power Plan, and which energy policies they would like included in their state's implementation plan.

Key Findings

1. A majority of Americans (54%) want their state to submit an implementation plan to comply with the Clean Power Plan. Another 22% would not submit a plan and instead let the federal government impose its own plan on their state, while just 6% would prefer that their state sue the federal government to bock the requirement.

2. Democrats living in states led by a Republican governor are the most likely to want the federal government to impose a plan on their state, while Republicans in states led by a Republican governor are the most likely to want their state to submit its own plan for compliance.

3. Though there are partisan differences on state response to the Clean Power Plan, there is wide agreement on which energy options should be included in any plan.

4. Americans are most in favor of complying with the Clean Power Plan by increasing solar energy (90%), increasing energy efficiency standards (83%) and increasing wind energy (81%). Increasing electricity from natural gas—another of the options for compliance—is supported by 61% of the population, while using a market-based cap and trade policy to reduce emissions has slightly more opposition (36%) than support (31%).

5. If a cap-and-trade program were enacted, most Americans (54%) would prefer that it be organized nationwide, rather than on a state-by-state (12%) or regional (21%) basis.

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
Public Policy Scholar, Wilson Center
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

CLOSUP
Center for Local, State, and Urban Policy
Gerald R. Ford School of Public Policy

GERALD R. FORD SCHOOL OF PUBLIC POLICY
UNIVERSITY OF MICHIGAN

INSTITUTE OF PUBLIC OPINION
MUHLENBERG COLLEGE

Background

Though there were many notable attempts in Congress to adopt a nationwide policy to reduce domestic greenhouse gas emissions during the past decade, none succeeded. As a result, climate policy in the US has largely been led by the states. All of that changed, however, in August 2015 when the U.S. Environmental Protection Agency issued the final rule for the Clean Power Plan. The Plan uses the 1990 Clean Air Act to require states to reduce carbon dioxide emissions from existing power plants to 32% below 2005 levels by 2030. Each state receives an individualized emission reduction target, with the highest level of reductions falling upon states with heavy dependence on coal for electricity. But every state is given the opportunity to formulate its own approach to compliance, though state implementation plans must ultimately be approved by the federal government. Failure to submit a plan for federal approval would result in the imposition of a plan created by the federal government.

States that pursue the state plan strategy may choose from a number of options that would reduce carbon emissions in their power sector. These include expanded use of renewable energy, including the possibility of additional credit for early adoption of expanded wind or solar energy. Additional options include expanded emphasis on energy efficiency or use of natural gas as an alternative to coal. In turn, market-based approaches such as emissions trading, better known as cap-and-trade, are also an option, with the EPA final rule encouraging states to consider multi-state trading systems. Ten states, including California and nine Northeastern states, are thought to have the easiest path to compliance given their existing operation of cap-and-trade programs for the power sector that will be factored into their state implementation plans.

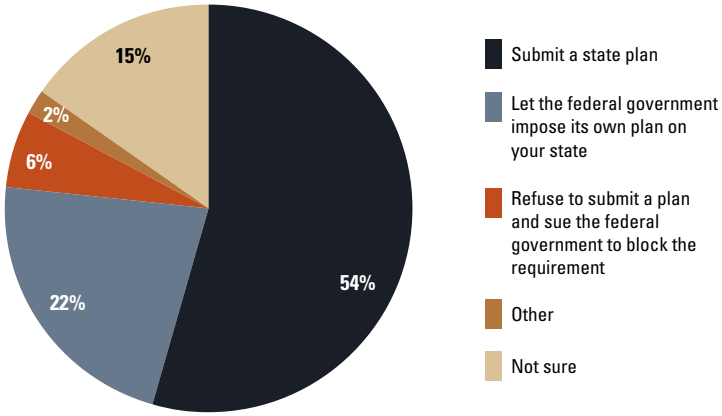
Most states were active in the year-long review of EPA's proposed rule, a draft version that resulted in numerous public hearings across the nation and submission of a record 4.5 million comments to the federal government. Within weeks of the issuance of the final rule, however, twenty-eight states had already responded by joining in litigation that contends that the Clean Power Plan represents an illegal expansion of federal regulatory authority. Further, Congress has also joined in challenging the rule, with the Senate passing a resolution in November 2015 to block many of the Clean Power Plan's key provisions. Even so, many states, including a number now in litigation, have also begun to review possible state compliance options.

Just a month after the EPA announced the final rule, the National Surveys on Energy and Environment examined how American citizens would like their state to respond to the Clean Power Plan. This survey occurred during a period in which there was substantial national and local media coverage of the Clean Power Plan, including discussion of possible state responses. The survey builds on prior exploration of public support for various state policy options, some of which may be expanded as possible Clean Power Plan compliance strategies.

Most Americans want their state to submit an implementation plan

When asked how they would like their state to respond to the Clean Power Plan, most Americans (54%) say their state should submit a plan (see *Figure 1*). Nearly a quarter (22%) would prefer that the federal government impose its own plan on their state, while just 6% would refuse to submit a plan and sue the federal government to block the requirement. This seems in contrast to the actions of the majority of states that immediately went to court after the final rule was announced, though many of these states are exploring the possibility of developing state plans concurrently with their lawsuit.[1]

Figure 1
How respondent prefers their state respond to the Clean Power Plan

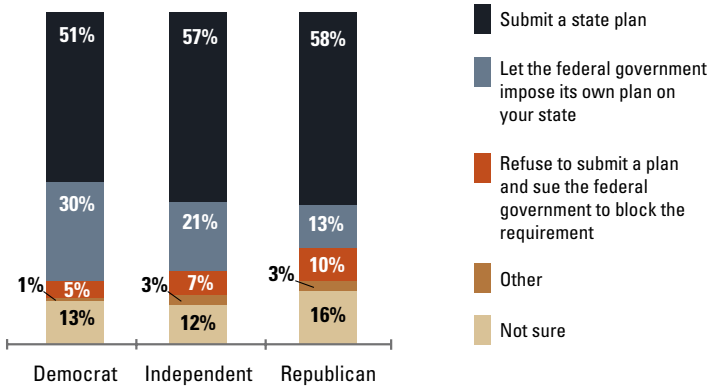


Question: "Each state is required to adopt its own emission reduction plan under the Clean Power Plan, or have one imposed upon it by the federal government. Which approach to this federal requirement would you like your state to take?" [Read list]

Attitudes about the Clean Power Plan are shaded by partisan affiliation

Perhaps unsurprisingly, there are differences based on partisanship. Democrats are less likely than Republicans to suggest suing the government, but more likely to want the federal government to prepare a compliance plan for their state (see *Figure 2*). This finding may reflect broader views on federalism that transcend the particulars of clean air policy, with Republicans maintaining greater confidence in state level action in comparison with federally imposed policies.

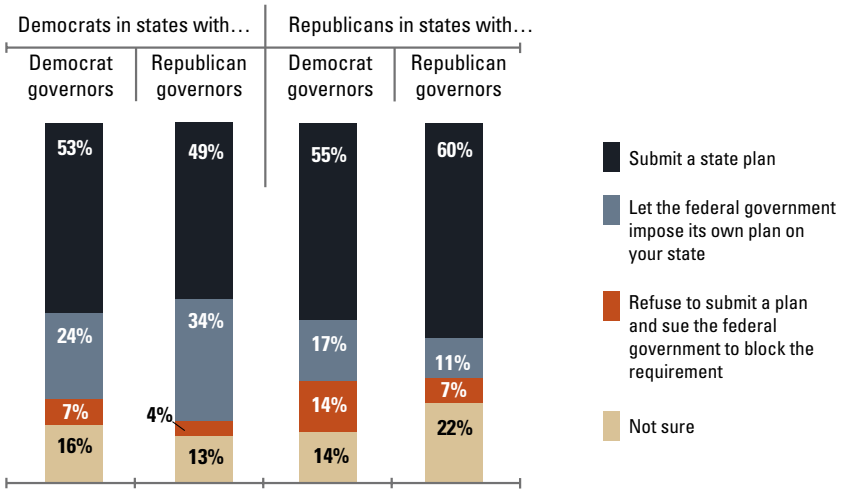
Figure 2
How respondent prefers their state respond to the Clean Power Plan, by partisanship



Question: "Each state is required to adopt its own emission reduction plan under the Clean Power Plan, or have one imposed upon it by the federal government. Which approach to this federal requirement would you like your state to take?" [Read list]

But also at play is whether you live in a state where the governor shares your party affiliation. Democrats are more likely to want the federal government to impose a plan on their state when they live in states that have Republican governors in office than in states with a fellow Democrat in the top office (see *Figure 3*). Of Democrats in states where Republicans control the executive office, 34% would like the federal government to impose a plan on their states compared to only 24% of Democrats living in states that do not have GOP governors. This finding may reflect a belief among Democrats in more conservative states that a stronger plan to reduce greenhouse emissions is more likely to emerge from Washington than from their state capitol. Conversely, Republicans living in states with Republican governors are least likely (11%) to want the federal government to impose a plan, and the most likely (60%) to want their state to submit its own plan. At present, there are 31 states with Republican governors, 18 with Democratic chief executives, and one with an independent in that role.

Figure 3
How respondent prefers their state respond to the Clean Power Plan, by partisanship and party of respondent's Governor

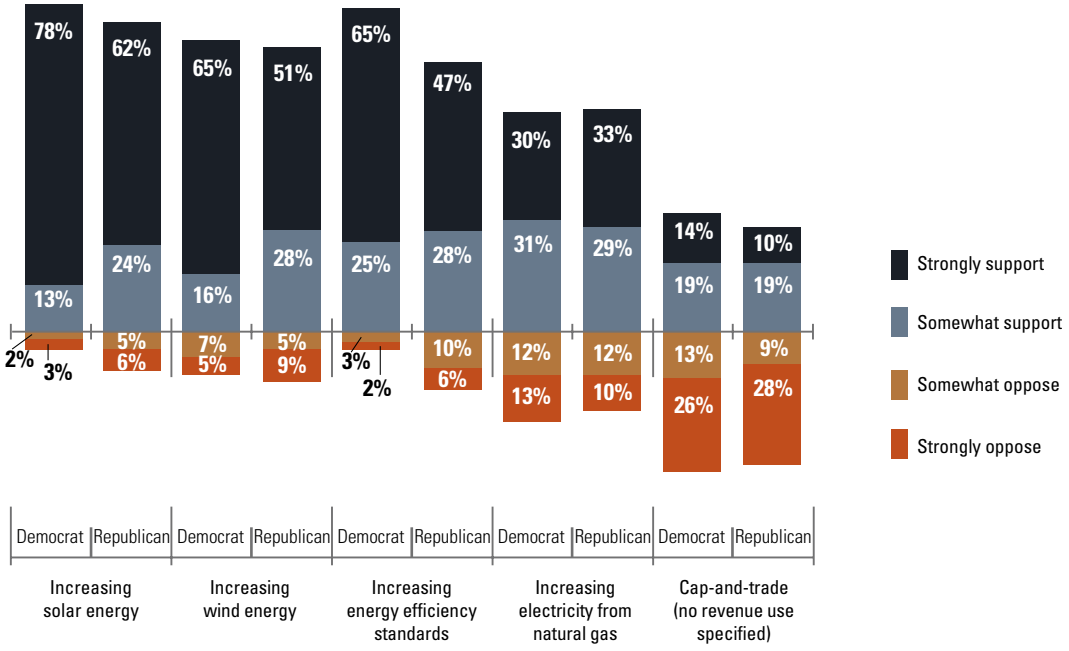


Question: "Each state is required to adopt its own emission reduction plan under the Clean Power Plan, or have one imposed upon it by the federal government. Which approach to this federal requirement would you like your state to take?" [Read list]
Note: Excludes respondents who gave some other answer

Wide agreement among Republicans and Democrats on specific energy policies

However, the partisan differences that are so evident in comparing broader responses to the Clean Power Plan decline markedly when turning to particular policies that states might use in attempting to comply. As shown in *Figure 4*, there are relatively few partisan differences for each of the emissions reduction policies. Democrats and Republicans have nearly identical opinions of increasing natural gas-based electricity, and similarly matched opinions of cap-and-trade. While Democrats are more likely than Republicans to say they "strongly support" increases in solar and wind energy, the overall level of support between the two groups for these technologies is virtually indistinguishable. The only place where there are differences in the overall level of support is on increasing energy efficiency standards. While a large majority of Republicans (75%) do support such increases, support is even greater among Democrats (90%).

Figure 4
Public support and opposition to alternate emissions reduction policies, by partisanship



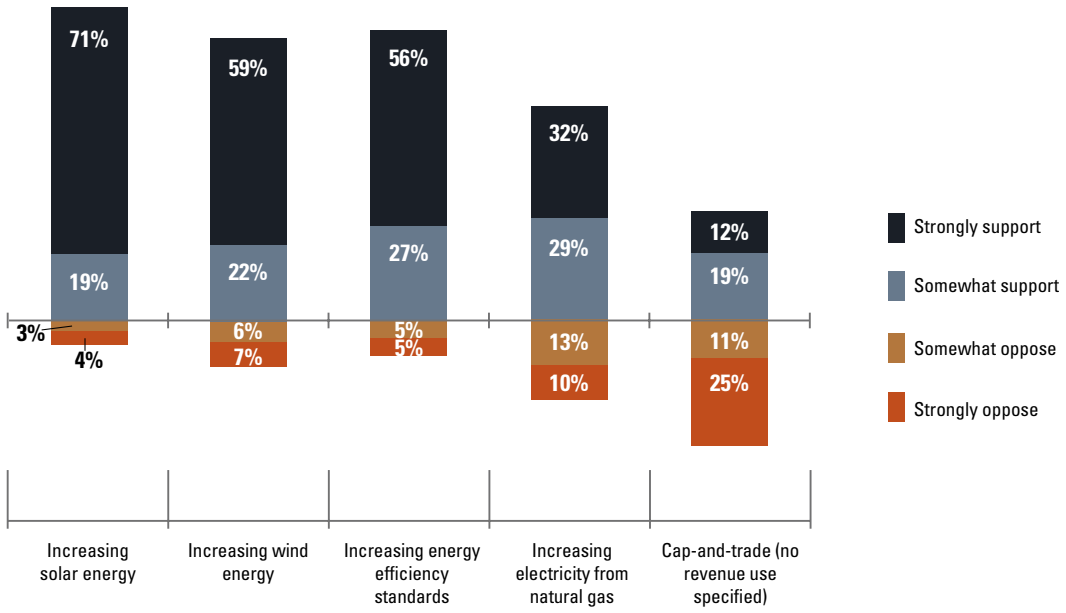
Question: "For each of the following policy options I read, please indicate if you strongly support, somewhat support, somewhat oppose, or strongly oppose your state adopting that policy as a means of reducing emissions."
Note: "Not sure" responses not shown.

Renewables and efficiency beat out natural gas and cap-and-trade

When looking at opinions about the various emissions reduction options in aggregate among all Americans (including Independents), public support is highest for increasing renewable energy (see *Figure 5*). Most often (and on all previous NSEE surveys), different renewable energy technologies have been lumped together. In the most recent survey, however, the NSEE asked about solar and wind energy—the two technologies featured for possible bonus credits for early adoption—separately to find that there are small but statistically significant differences in public support for each of these. Specifically, 90% of Americans say they support increasing solar energy in their state, while slightly fewer (81%) say the same about wind. Even so, more than half of Americans strongly support expanding the use of both of these technologies within their state.

Looking beyond renewables, most Americans (83%) are also in support of increasing energy efficiency standards, with over half (56%) strongly supporting increased standards. While a majority of Americans (61%) also support increasing electricity from natural gas, fewer Americans (32%) are *strongly* in support of natural gas increases. A cap-and-trade program, where businesses buy and sell permits to release greenhouse gases, has slightly more opposition (36%) than support (31%) among Americans, though a full third of Americans (34%) say they aren't sure how they feel about such a policy.

Figure 5
Public support and opposition to alternate emissions reduction policies

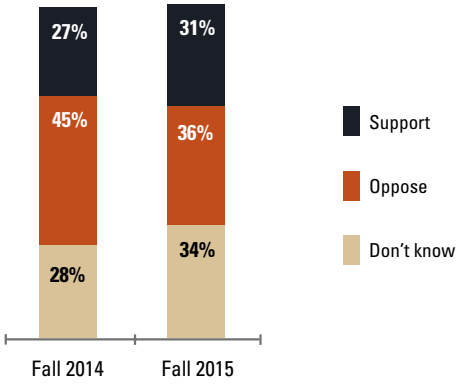


Question: "For each of the following policy options I read, please indicate if you strongly support, somewhat support, somewhat oppose, or strongly oppose your state adopting that policy as a means of reducing emissions."
Note: "Not sure" responses not shown.

Considerable uncertainty about cap-and-trade

This high level of uncertainty for a cap-and-trade program in one's own state where revenue use from emission allowance auctions is not specified is consistent with previous NSEE surveys (see *Figure 6*). Previous NSEE reports have found that there is less uncertainty among Americans when more details are given about how any government revenues generated by such a program would be used.[2] State discussions of possible design for such programs remain in very early stages and have generally not begun to address whether or not allowances would be allocated to utilities at no charge or auctioned with revenues then reallocated by government. California and the nine Northeastern states that comprise the Regional Greenhouse Gas Initiative do auction their allowances but they use revenues in very different ways.[3] We intend to return to this issue in future rounds of the NSEE, providing alternative scenarios for cap-and-trade programs that include revenue allocation from auctioning.

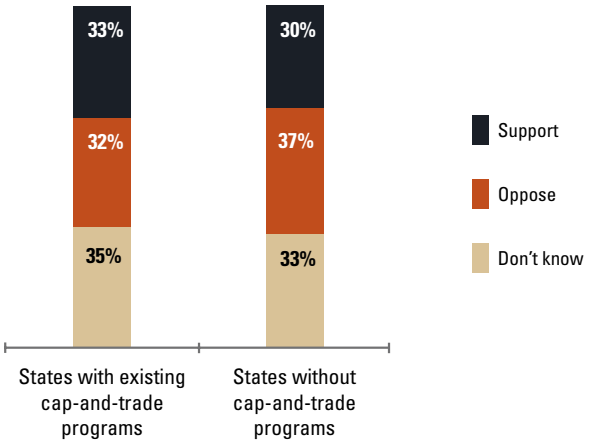
Figure 6
Citizen support for a cap-and-trade policy in their state (with no details about the program), by NSEE survey wave



Note: The introductory question text varied slightly in each of these waves. The full text for each wave is given in Note 4 at the end of the report.

One might hypothesize that this high level of uncertainty about cap-and-trade policy is because of relatively low familiarity with such a program nationwide. However, residents of the 10 states[5] that currently have active carbon cap-and-trade markets are just as uncertain about their support for such programs as Americans in all other states (see *Figure 7*). Further, the levels of public support and opposition to such a policy is nearly indistinguishable from those elsewhere in the country.

Figure 7
Citizen support for a cap-and-trade policy in their state, by current status of a cap-and-trade policy

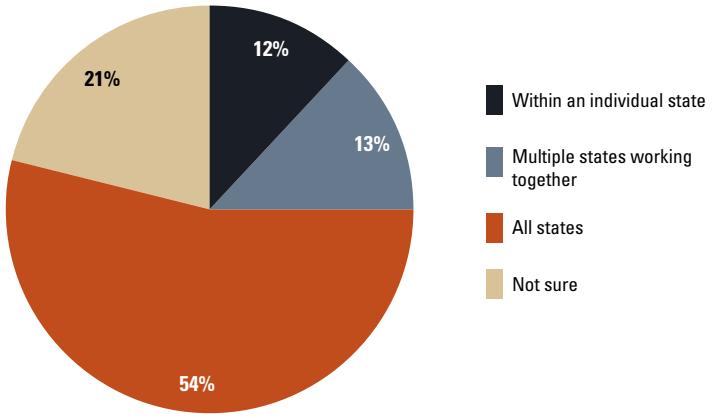


Note: From the Fall 2015 survey only. Question text in Note 4 at the end of the report.

Most Americans would prefer a nationwide trading program to a state or regional approach

While there is high uncertainty about whether they support or oppose a cap-and-trade policy, there is less uncertainty among Americans about whether such a program should be coordinated at the state, regional, or federal level (see *Figure 8*). More than half of Americans (54%) think that any cap-and-trade program should be organized nationwide, while roughly equal numbers (12% and 13%, respectively) think that such programs should be done state-by-state or by multiple states working together.

Figure 8
Preferred level of coordination for a cap-and-trade program



Question: "If a cap and trade system was to be used to reduce greenhouse gas emissions under the Clean Power Plan, would you prefer that it be done only within an individual state, by multiples states working together, or with all states working together?"

Conclusion

A majority of Americans want their state to develop a plan to comply with the Clean Power Plan, rather than sue the federal government to block it (as 28 of the 50 states have recently done). There are some partisan differences to preferred responses, with Democrats—particularly those in states with Republican governors—more likely than others to want the federal government to develop a plan for their state. Partisan differences disappear, though, when Americans are asked about the energy policies that are most likely to appear in state implementation plans. Large majorities of both Democrats and Republicans say they would support increasing solar and wind energy within their state, while both groups have more opposition than support for cap-and-trade. Over a third of Americans, though, are uncertain of their stance on cap-and-trade, though most would prefer that any program be organized nationwide. The NSEE will continue to track opinion related to the Clean Power Plan, and the options for state compliance, in future survey waves.

Methods

The following report contains the results of a telephone survey of 911 adult (age 18 or older) residents of the United States between September 2 and September 24, 2015. Respondents were interviewed in English on both landlines (353) and cell phones (558) 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. Of the 558 cell phone respondents, 428 had no landlines in their household. Both the landline and cell phone samples were provided by the Marketing Systems Group (MSG), Horsham, Pennsylvania. Both landline and cell phones were chosen randomly from sampling frames of United States landline and cell numbers provided by MSG.

With a randomly selected sample of 911 respondents the margin of error for the surveys is +/- 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 2013 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 12%. Due to rounding, the totals provided in tables may not equal 100. The full instrument is available on CLOSUP's website at www.closup.umich.edu/nsee.php. The instrument was designed by Christopher Borick of Muhlenberg College, Barry Rabe of the University of Michigan, Erick Lachapelle of the University of Montreal, and Sarah Mills 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

Funding for the NSEE surveys has been provided by general revenues of the University of Michigan Center for Local, State, and Urban Policy, and the Muhlenberg College Institute of Public Opinion. The authors did not accept any stipend or supplemental income in the completion of the survey or this report.

The NSEE is committed to transparency in all facets of our work, including timely release and posting of data from each survey wave. A grant from the Office of the Provost at the University of Michigan will enable us to expand and accelerate this work, including providing online access to NSEE frequency tables and survey instruments, followed by datasets.

Notes

1. Warrick, J. (2015, October 23). States sue to block EPA's pollution rule—even as some try to comply. *Washington Post*. Retrieved from https://www.washingtonpost.com/national/health-science/states-sue-to-block-epas-pollution-rules--even-as-some-try-to-comply/2015/10/23/1002a1de-79c6-11e5-b9c1-f03c48c96ac2_story.html

2. Mills, S., Rabe, B.G., & Borick, C. (2015). *Cap-and-Trade Support Linked to Revenue Use*. 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/23/cap-and-trade-support-linked-to-revenue-use/

3. Rabe, B.G. (2015). The Durability of Carbon Cap-and-Trade Policy. Governance. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/gove.12151/abstract

4. Fall 2014: The new federal Clean Power Plan lets state pick from a series of options in deciding on how to reduce power plant emissions. For each of the following policy options I read, please indicate if you support or oppose your state adopting that policy as a means of reducing emissions… Allowing businesses to buy and sell permits to release greenhouse gases to reduce greenhouse gases. This policy is commonly referred to as cap and trade.

   Fall 2015: The federal government has introduced a Clean Power Plan that is designed to reduce greenhouse gases from power plants. The plan lets states pick from a series of options in deciding on how to reduce power plant 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 mean dos reducing emissions… Allowing businesses to buy and sell permits to release greenhouse gases to reduce greenhouse gases. This policy is commonly referred to as cap and trade.

5. States with existing cap and trade programs are California, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Thirteen other states adopted cap-and-trade programs between 2002 and 2008 but abandoned them by 2012. One Canadian province, Quebec, has formally entered into a cap-and-trade partnership with California and another, Ontario, has announced plans to join as well. For recent public opinion findings on climate change in Canada, see Lachapelle, E., et al. (2015). Mind the Gap: Climate Change Opinions in Canada and the United States. Woodrow Wilson International Center for Scholars. October 13. Retrieved from http://closup.umich.edu/files/mind_the_gap_report_barry_rabe.pdf.

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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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