

Renewable Energy Public Opinion and Strategies for Effective Communication

September 15, 2021

Abel Gustafson, Ph.D.

Asst. Professor of Public Relations & Environmental Communication

Department of Communication

University of Cincinnati

gustafae@ucmail.uc.edu

Research Affiliate

Yale Program on Climate Change Communication

Yale University

Faculty Affiliate

Center for Public Engagement With Science

University of Cincinnati

Co-founder

XandY Analytics



How do people think and act regarding sustainability?

What motivates them to think and act that way?

Which communication strategies are most effective?

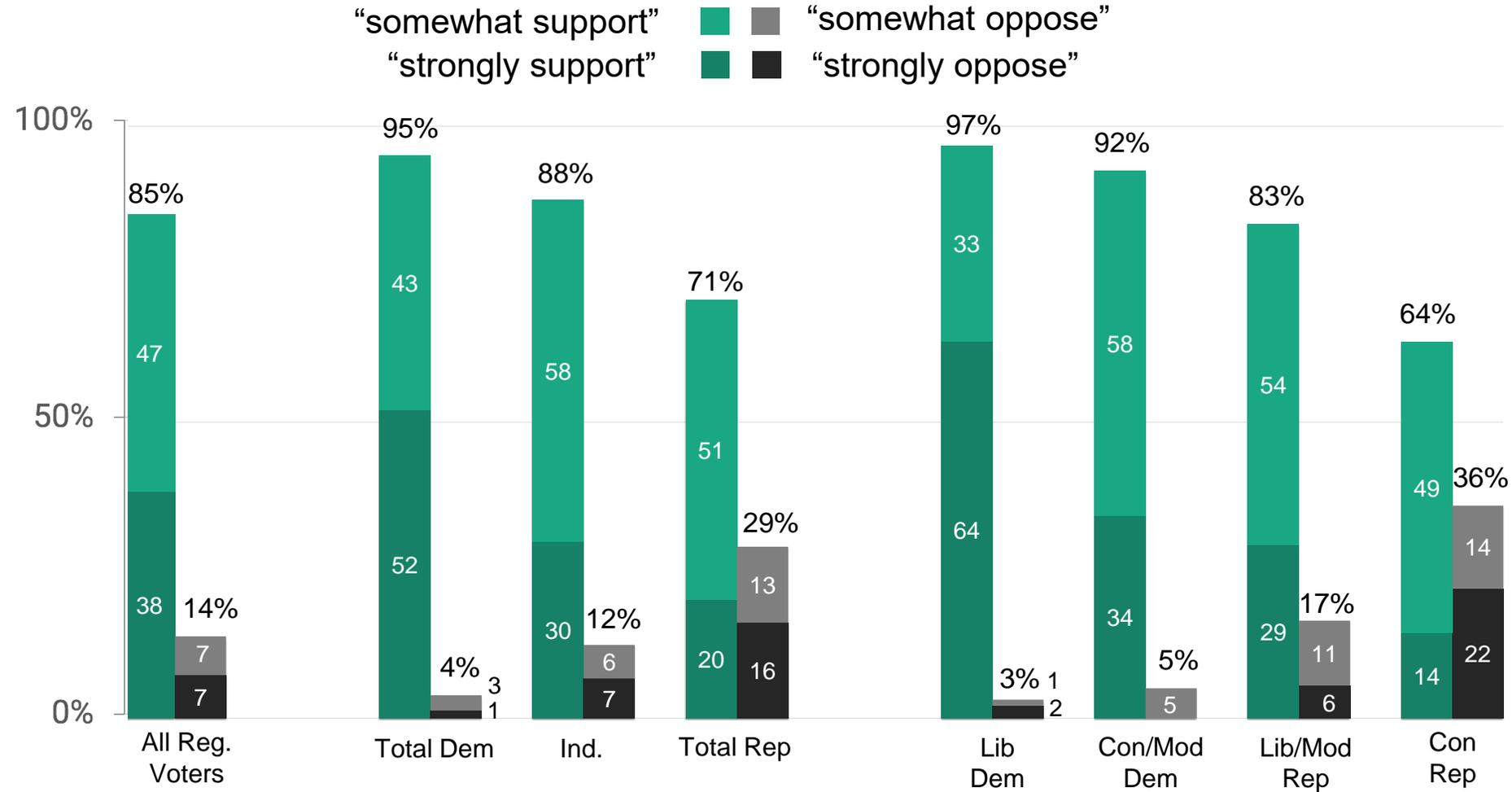
ENERGY

IN THE AMERICAN MIND

December 2018



Most Americans Support Requiring Electric Utilities to Use 100% Clean, Renewable Energy by 2050

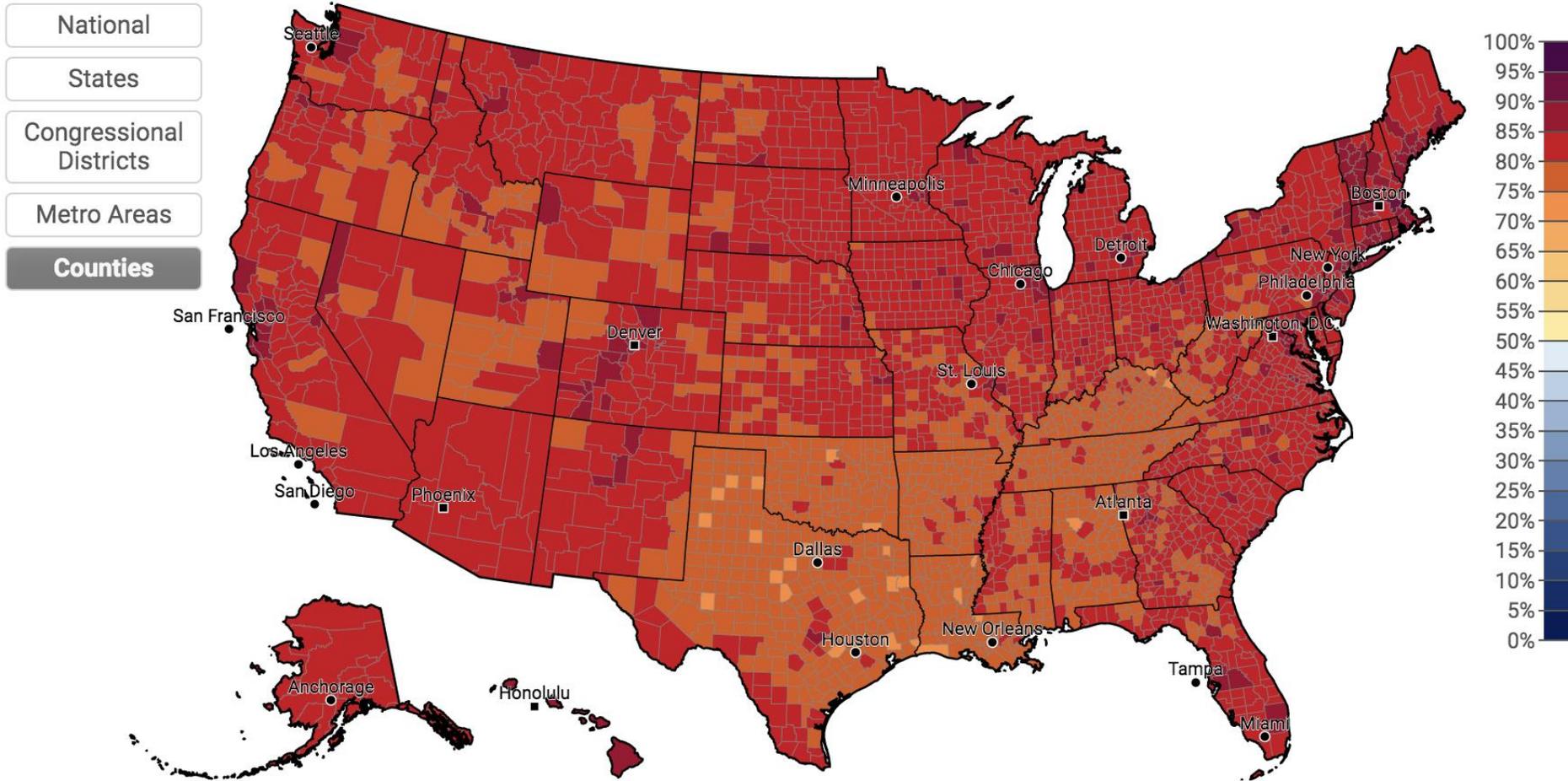


How much do you support or oppose requiring electric utilities in your state to produce 100% of their electricity from clean, renewable energy sources (such as wind and solar) by 2050?

December 2018. Values for political groups include registered voters only.

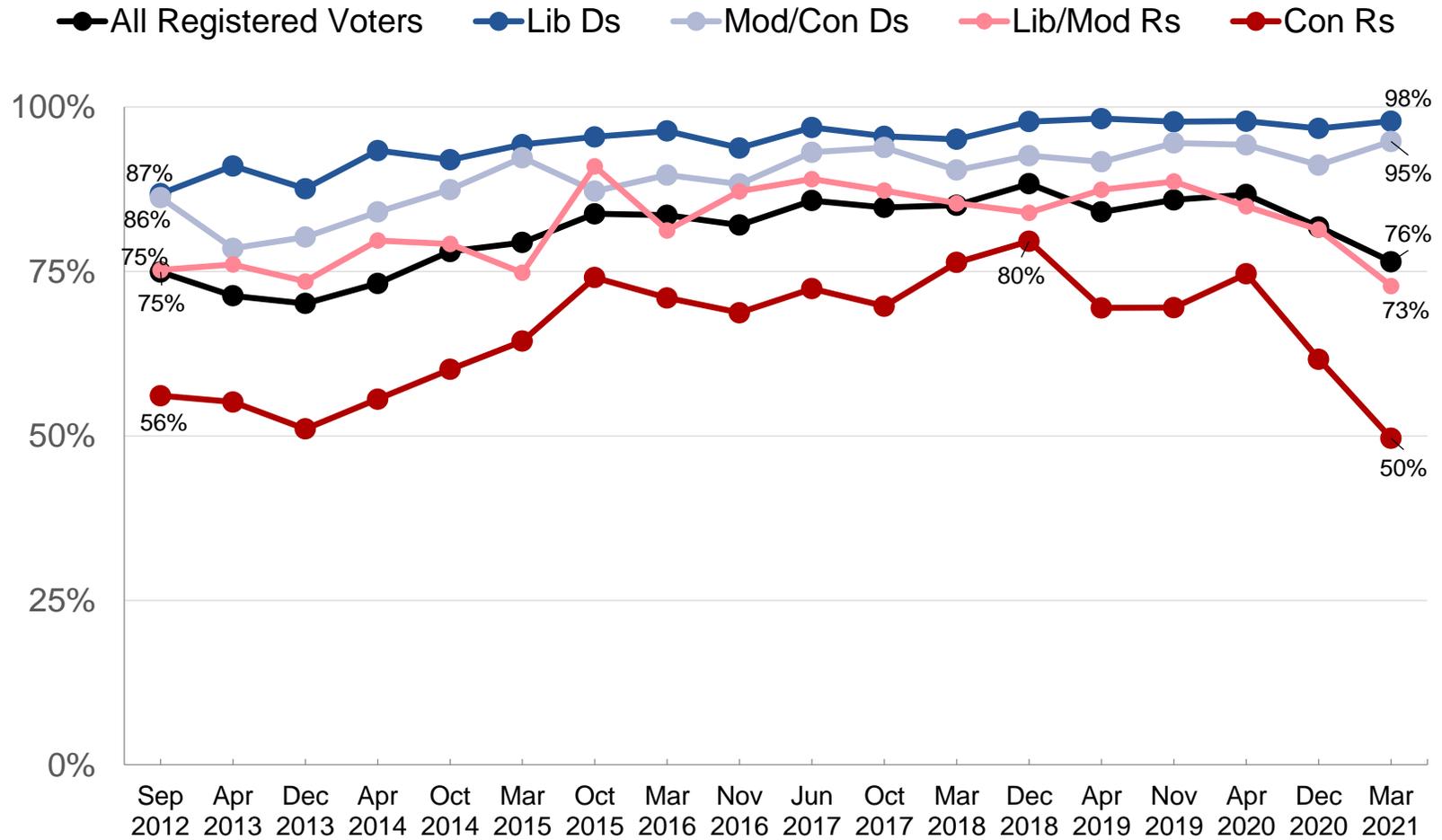
Support for Funding Renewable Energy Research in Each U.S. County

- % who say “strongly” or “somewhat” support -



Support for Funding Renewable Energy Research Over the Last 10 Years

- % who say “strongly” or “somewhat” support -



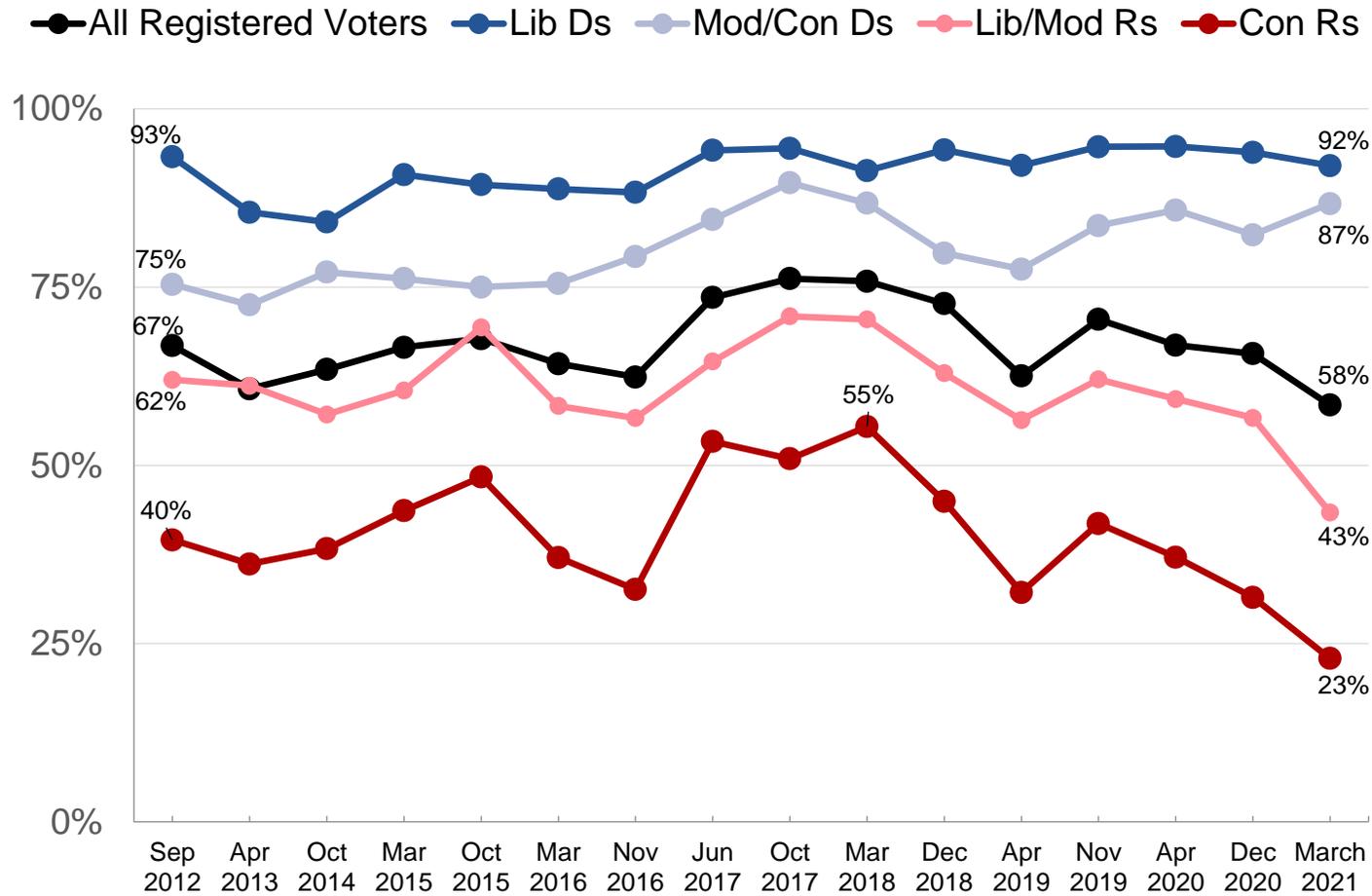
How much do you support or oppose the following policies:
Fund more research into renewable energy sources, such as solar and wind power.

Nov. 2013 to Nov. 2019. Base: Registered American voters (n=16,068).



A Majority of Americans Say Clean Energy Should Be a High Priority

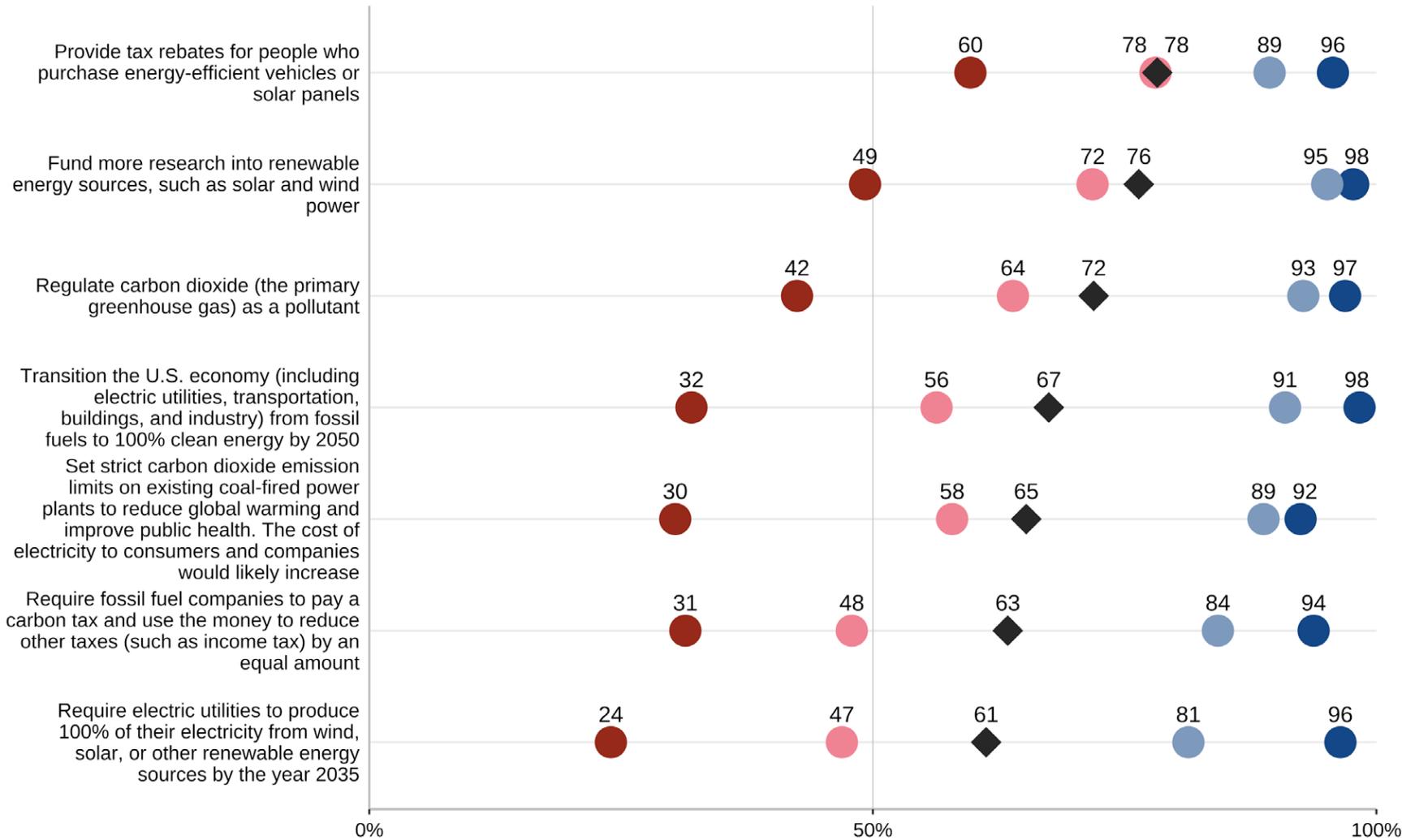
- % who say "very high" or "high" priority -



"Do you think the following should be a low, medium, high, or very high priority for the president and Congress: Developing sources of clean energy."

Sep 2012 to Mar 2021. Registered American voters (n=16,068).

◆ All Reg Voters ● Con R ● Lib/Mod R ● Mod/Con D ● Lib D



Most Registered Voters Support Climate-Friendly Energy Policies
 -- % responding “strongly support” or “somewhat support” --

How much do you support or oppose the following policies?
 March 2021.

LETTERS

<https://doi.org/10.1038/s41558-019-0621-7>

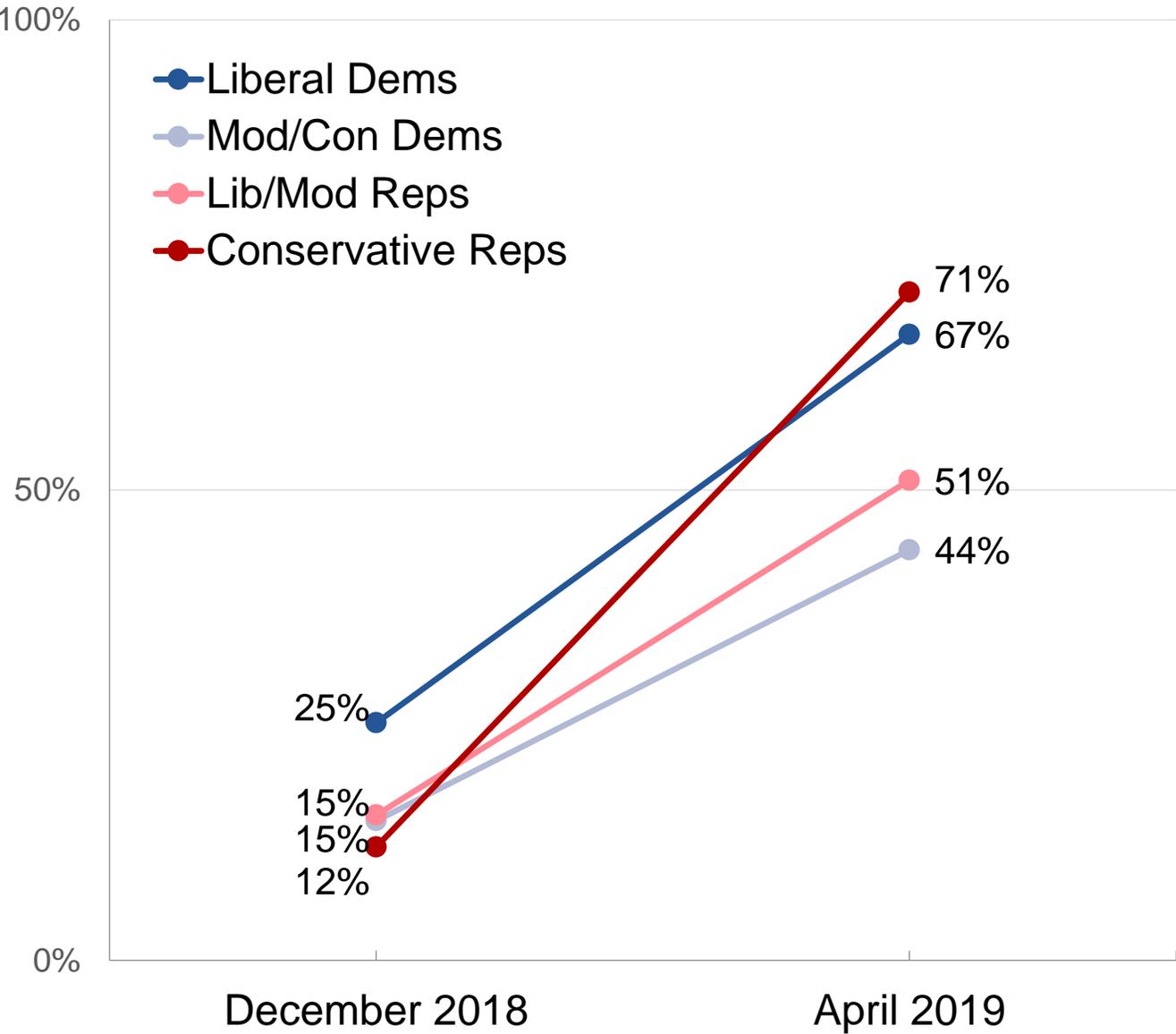
nature
climate change

The development of partisan polarization over the Green New Deal

Abel Gustafson ^{1*}, Seth A. Rosenthal¹, Matthew T. Ballew¹, Matthew H. Goldberg¹,
Parrish Bergquist ¹, John E. Kotcher ², Edward W. Maibach² and Anthony Leiserowitz¹

Awareness Increased More Among Conservative Republicans than Liberal Democrats (Dec-Apr)

- % who say they have heard "a little" or "a lot" -



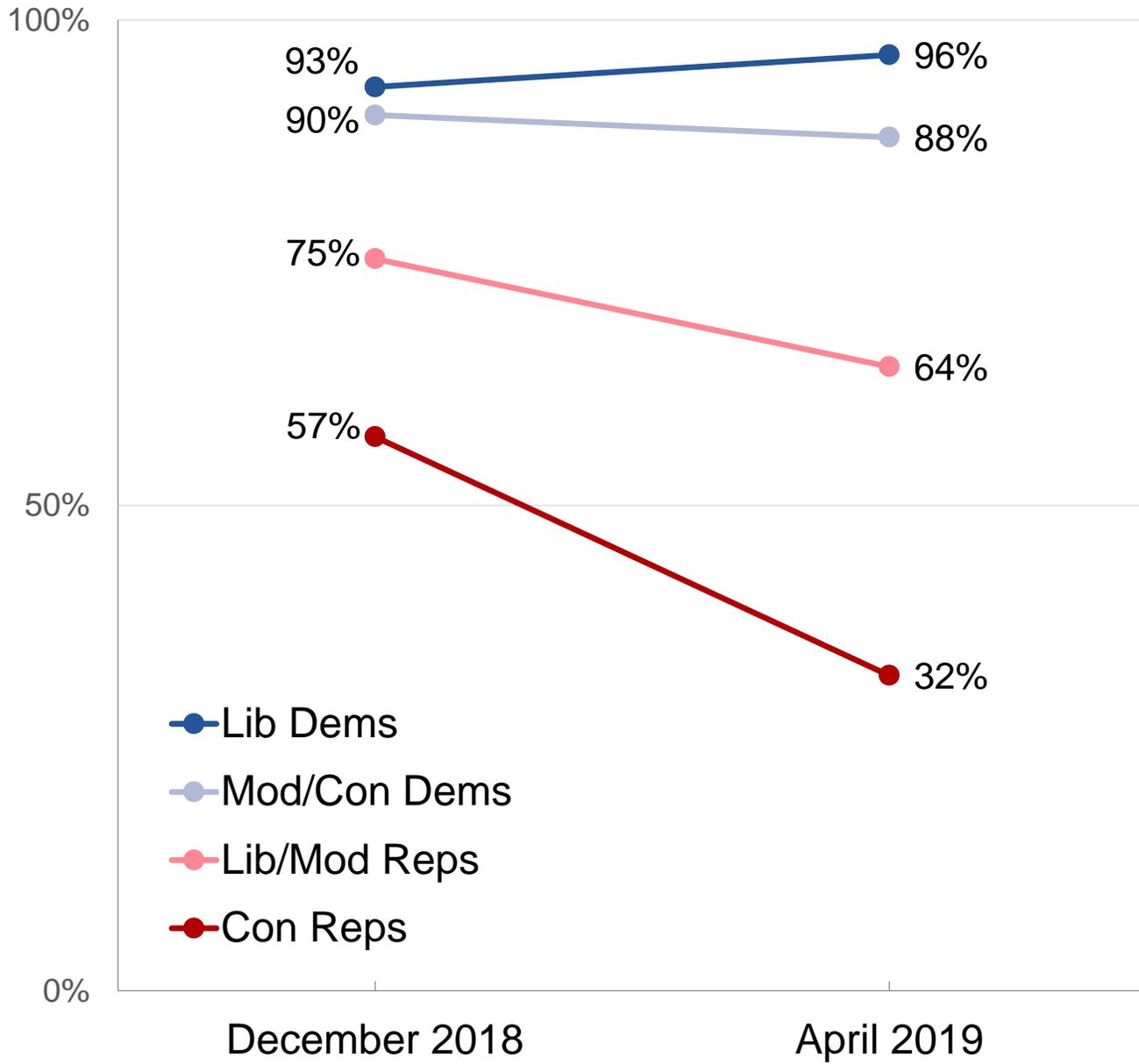
"How much, if anything, have you heard about a policy being proposed by some members of Congress called the Green New Deal?"

December 2018 and April 2019.



Support for the Green New Deal Grew More Politically Polarized

- % who say “strongly” or “somewhat” support -

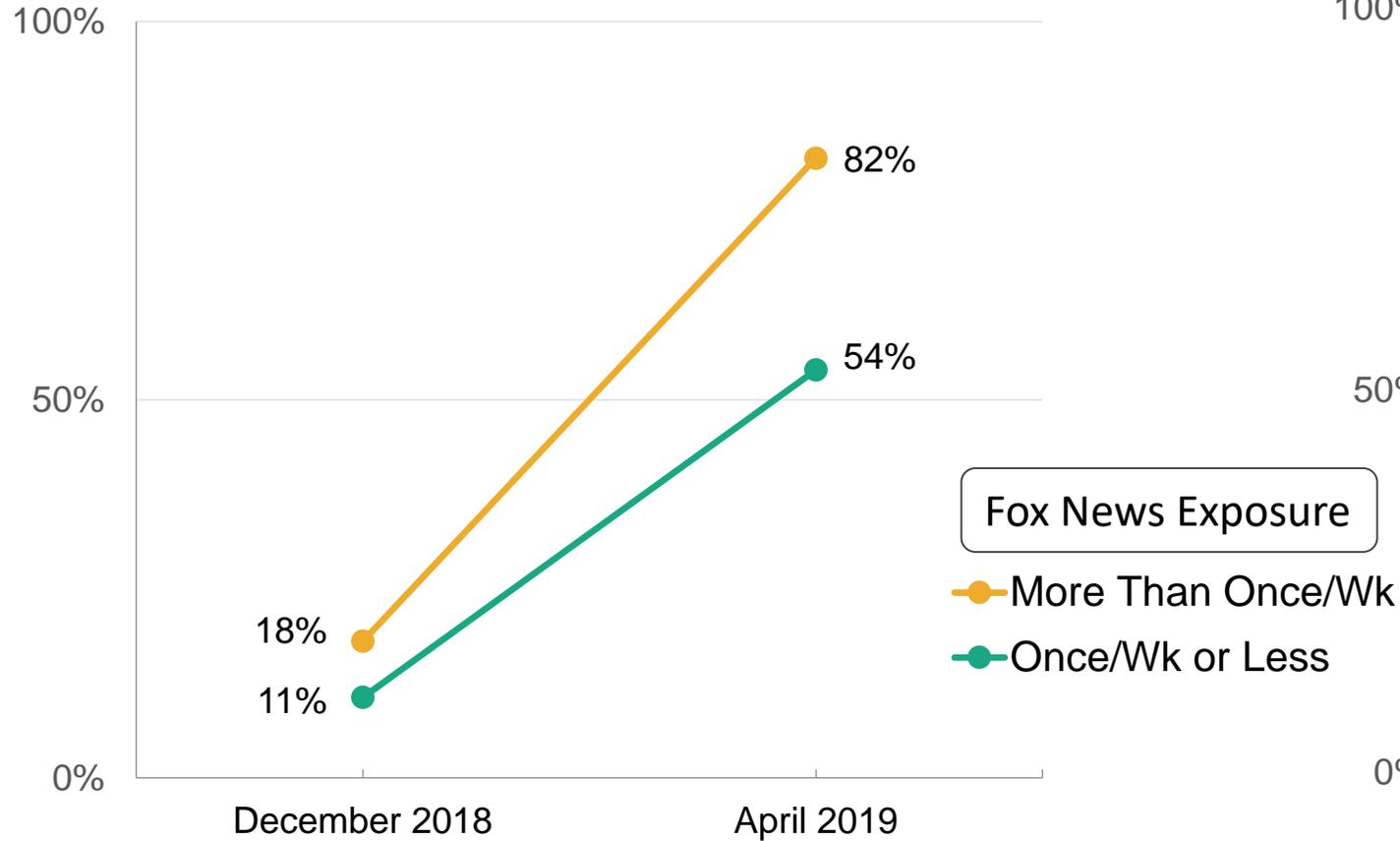


“How much do you support or oppose this idea?”
December 2018 and April 2019.



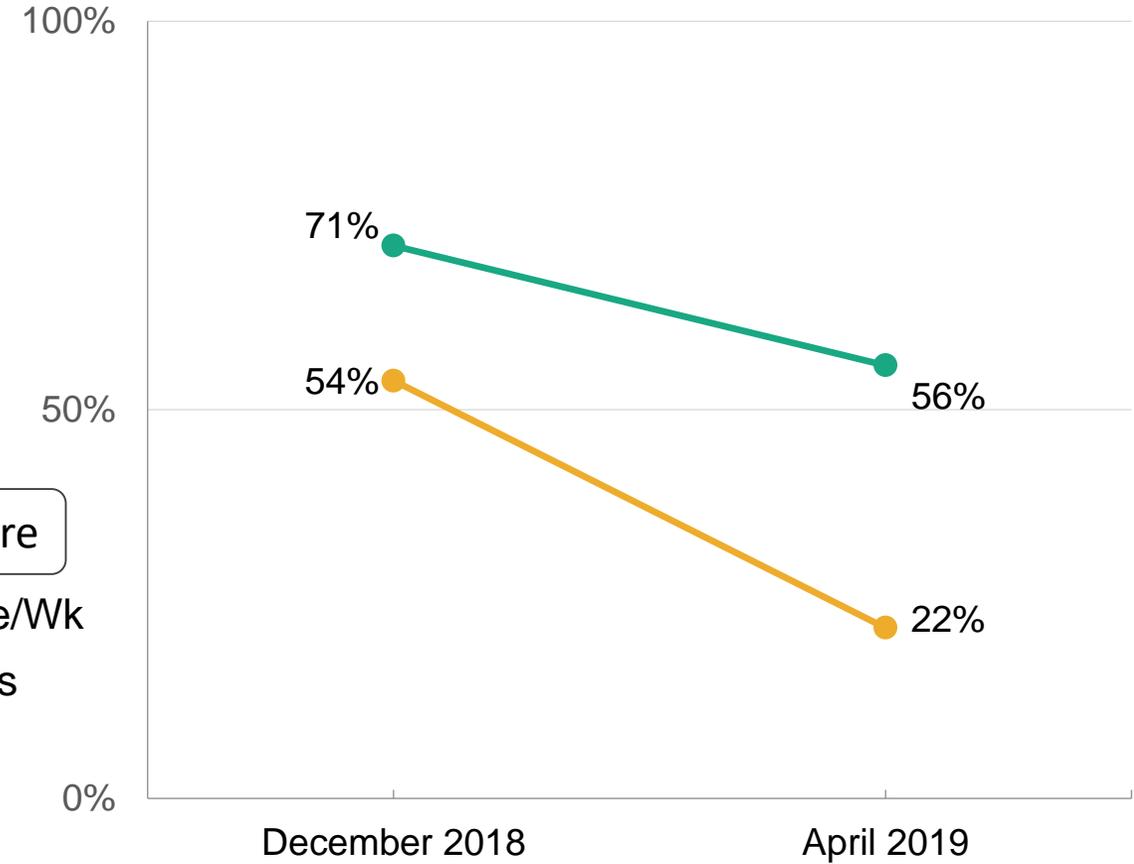
Awareness among Republicans

- % of Republicans who heard "a little" or "a lot" -



Support among Republicans

- % of Republicans who "strongly" or "somewhat" support -



How much, if anything, have you heard about a policy being proposed by some members of Congress called the Green New Deal?"

"How much do you support or oppose this idea?"

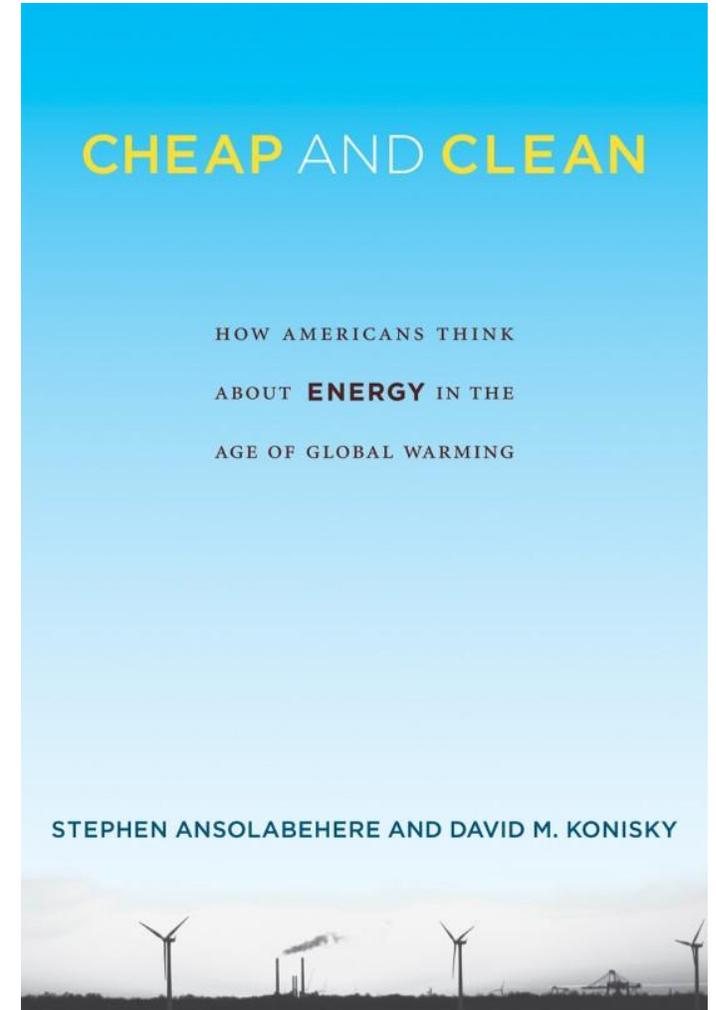
December 2018 and April 2019.

What motivates people to think and act how they do?

What Drives Support for Renewable Energy?

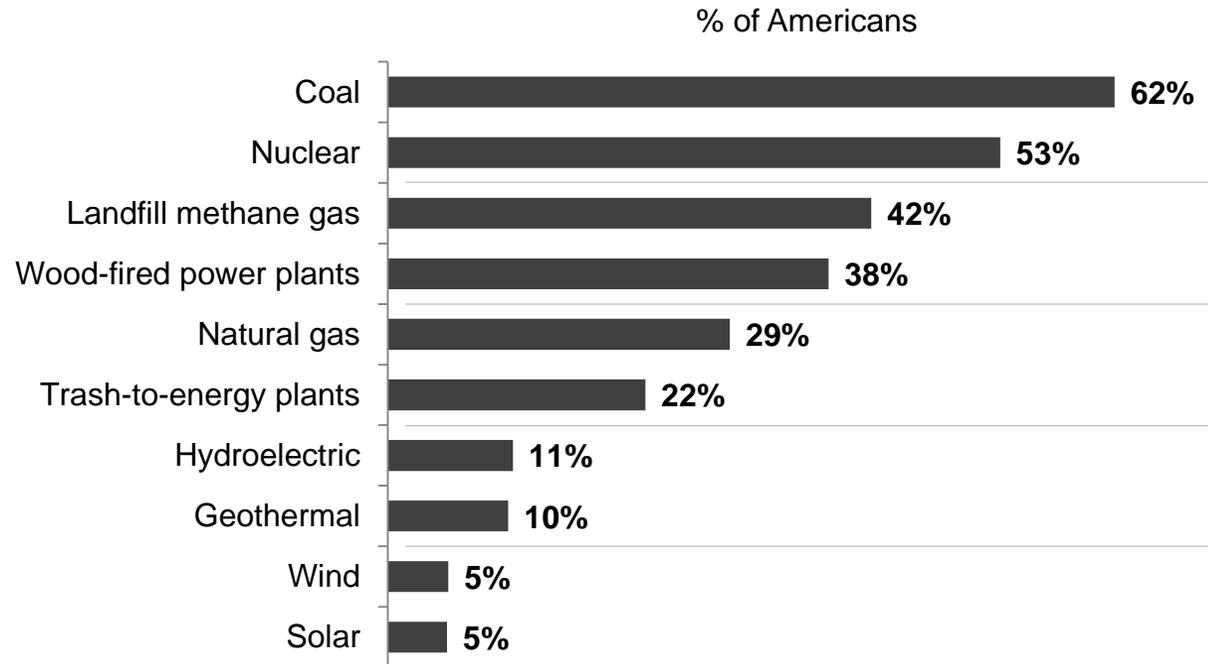
People form their opinions about an energy source from their perceptions of whether it is:

- ✓ Cheap
- ✓ Clean



About Six in Ten Americans View Coal Energy as Harmful to People's Health

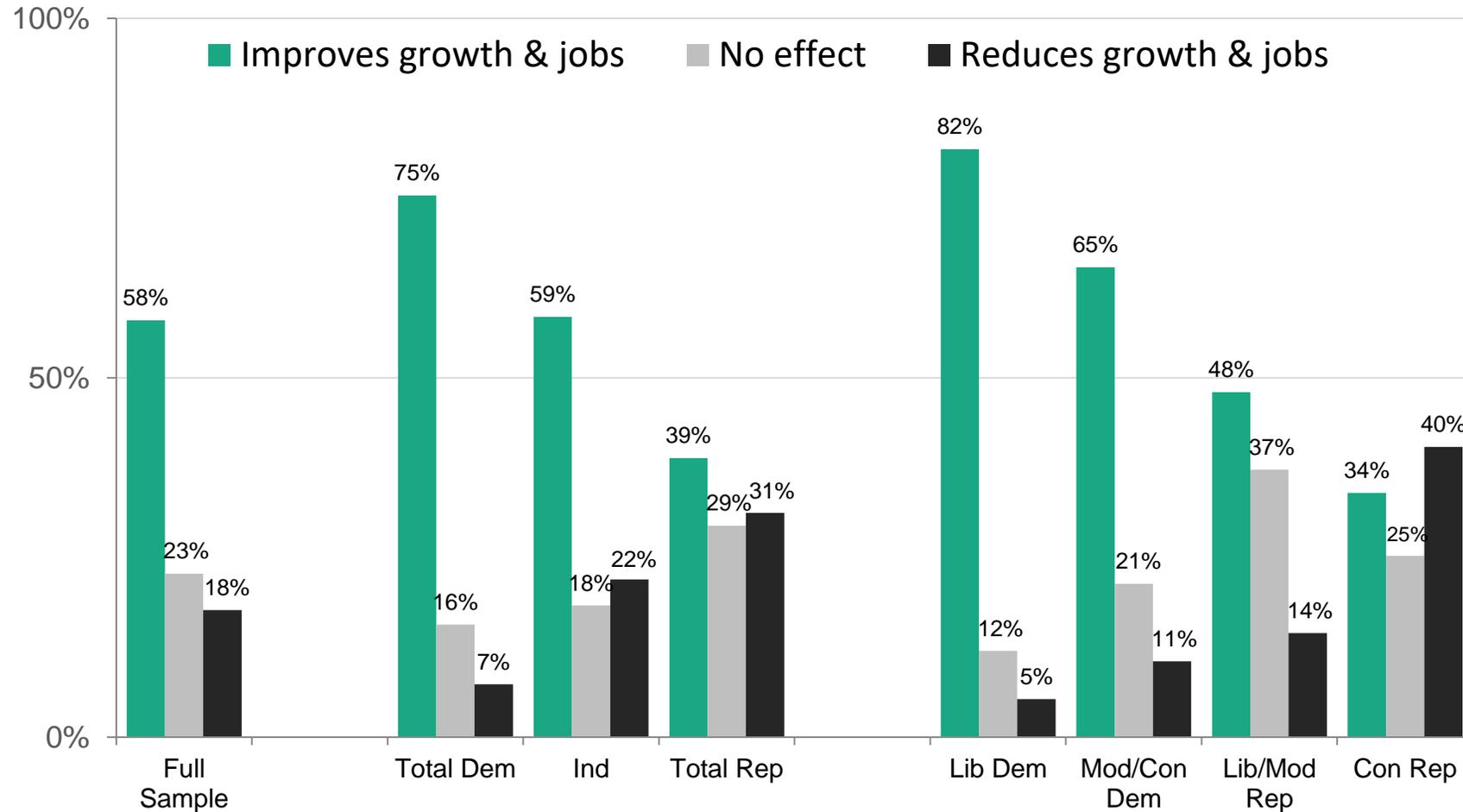
- % responding "Extremely," "Very," or "Moderately" harmful



To the best of your knowledge, how harmful are each of the following energy sources to people's health?
Figure shows % responding "Extremely," "Very," or "Moderately" harmful.

December 2018.
Values for political groups include registered voters only.

Most Americans Think Policies that Promote Renewable Energy Will Improve Economic Growth and Create Jobs

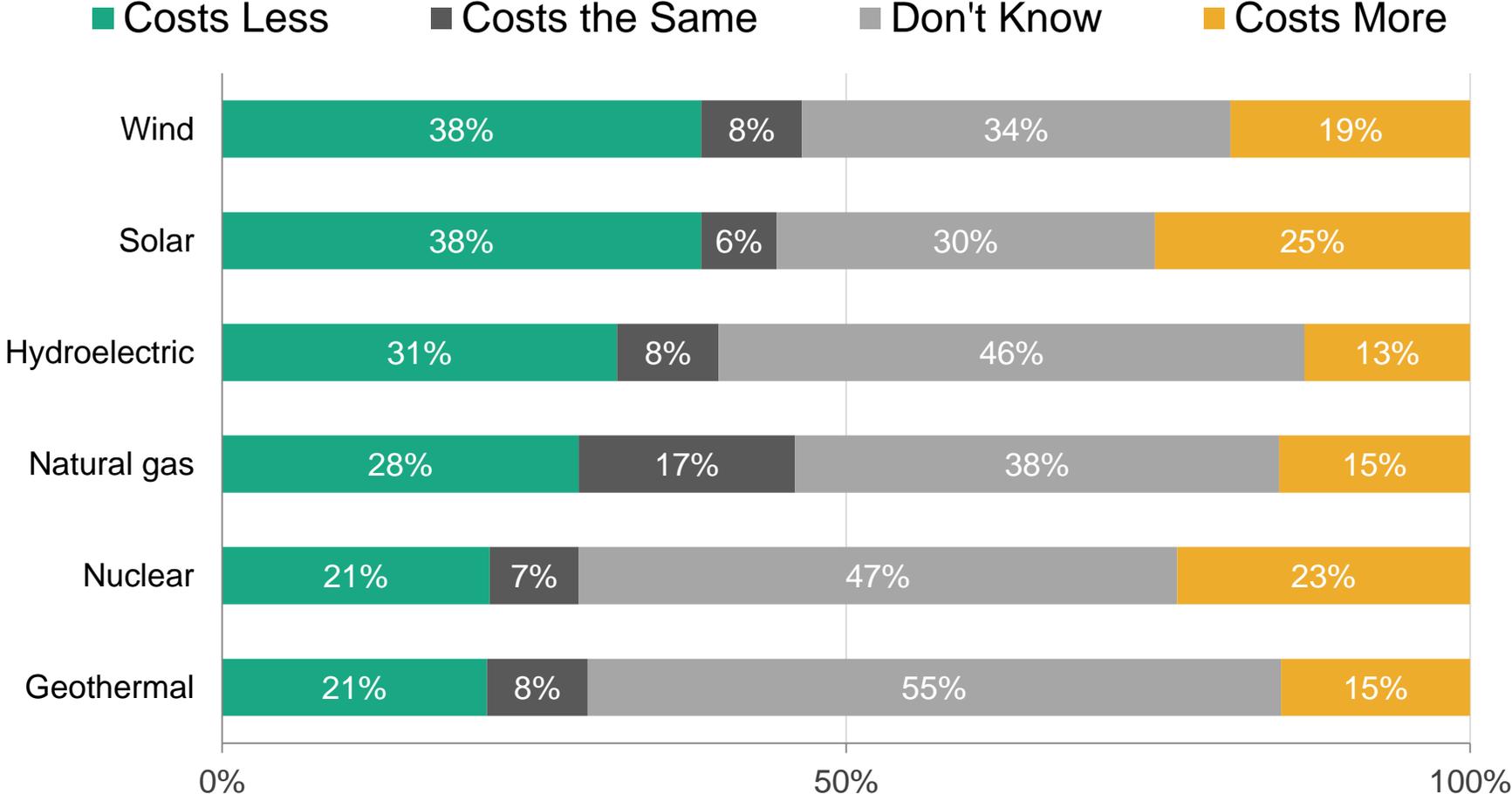


Do you think that government policies intended to transition away from fossil fuels (coal, oil, natural gas) and toward clean energy (solar, wind) will: (a) improve economic growth and provide new jobs, (b) reduce economic growth and cost jobs, (c) have no effect on economic growth or jobs?

December 2018.

Values for political groups include registered voters only.

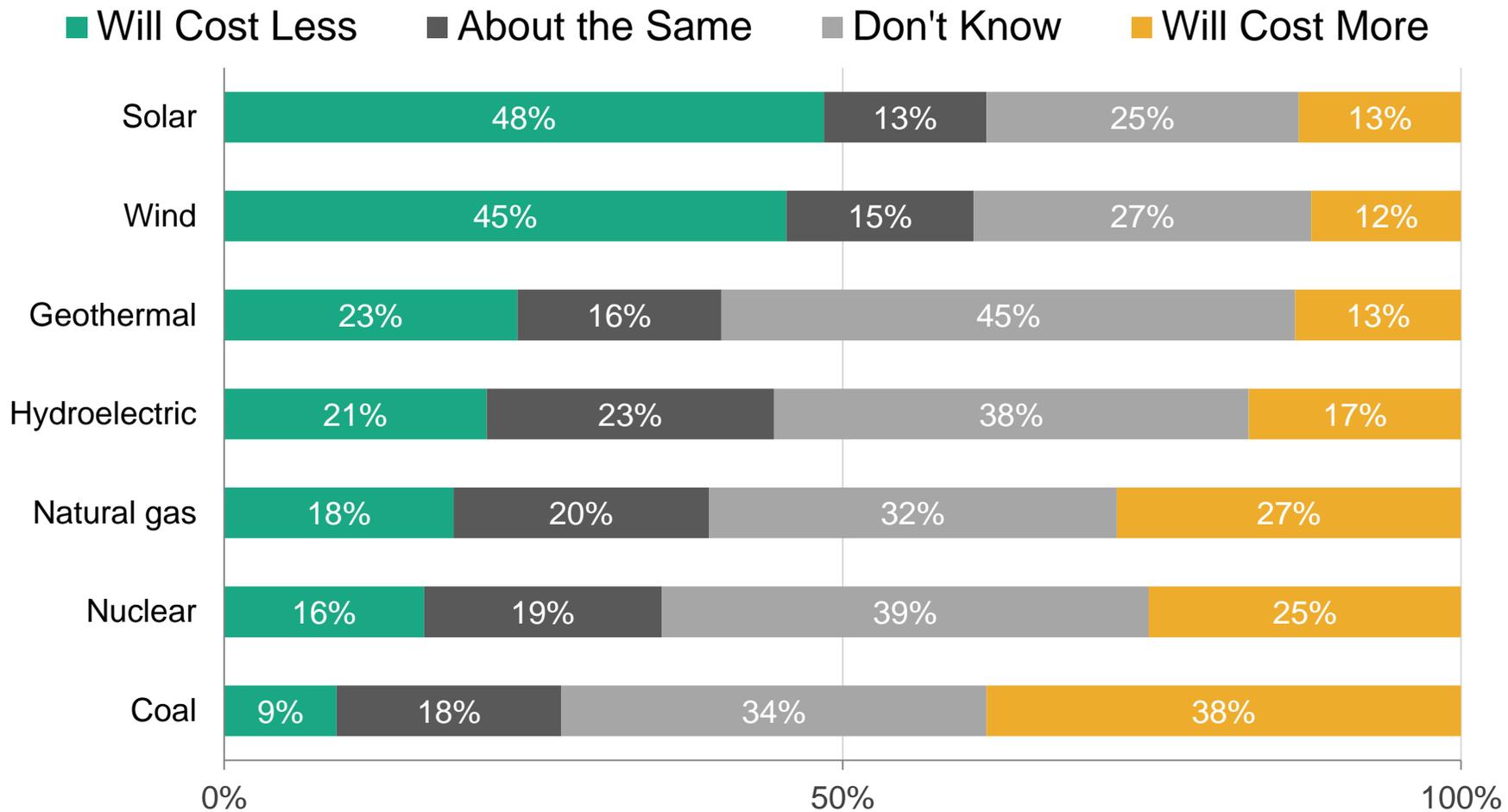
More Than One in Three Americans Think Electricity from Solar and Wind Costs Less than Coal



To the best of your knowledge, does electricity produced from each of the following energy sources cost more, less, or about the same as electricity produced by burning coal? [Values for “Costs Less” are the sum of response options “Much less” and “Somewhat less.” Values for “Costs More” are the sum of response options “Much more” and “Somewhat More.”]

December 2018.

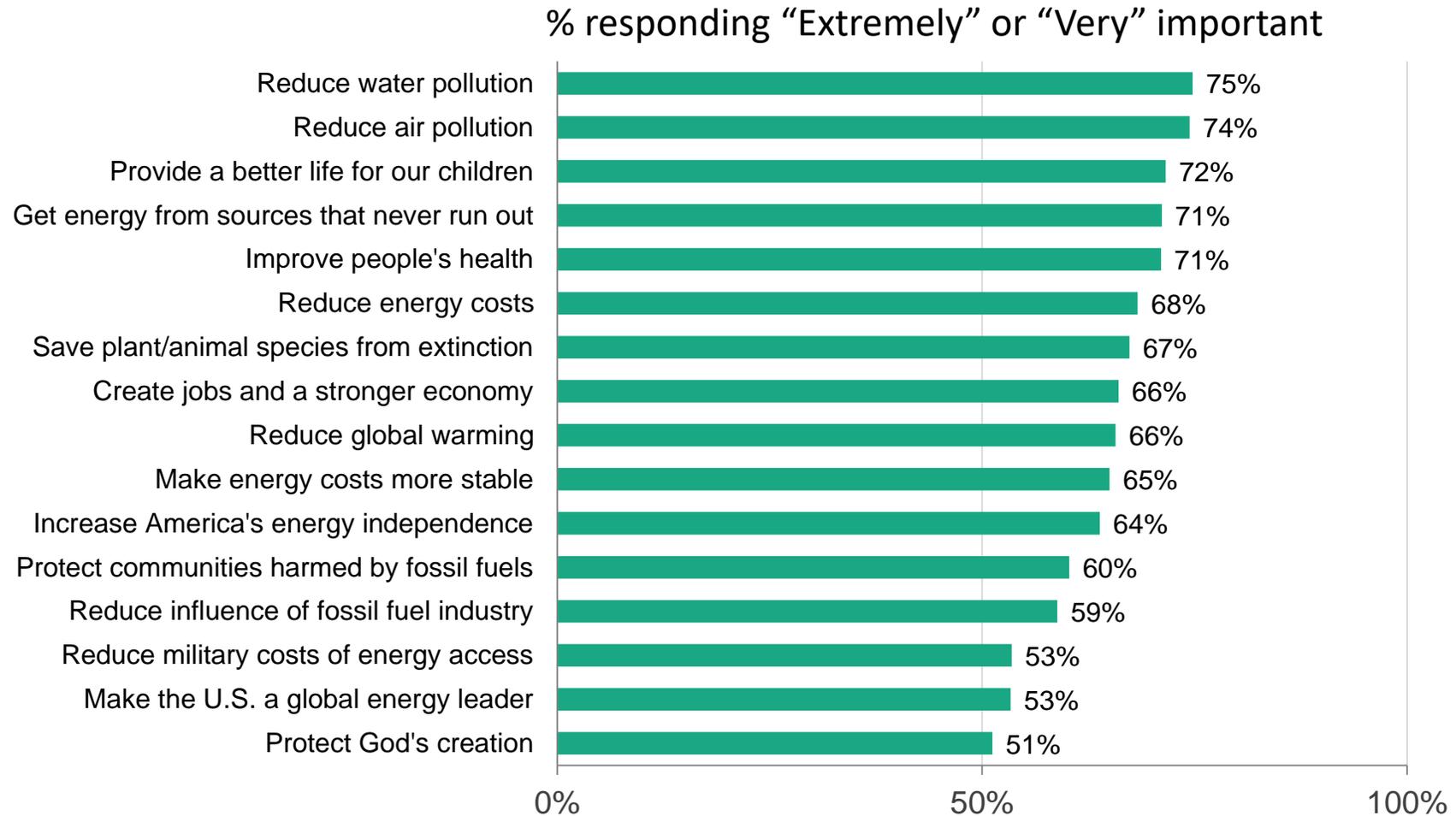
Many Americans Think Electricity from Solar and Wind Will Get Cheaper Over the Next Decade



Over the next 10 years, do you think the cost of producing electricity from each of the following sources will be more expensive, less expensive, or about the same as today?

December 2018.

What Do Americans Say Are the Most Important Reasons To Transition to Renewable Energy?

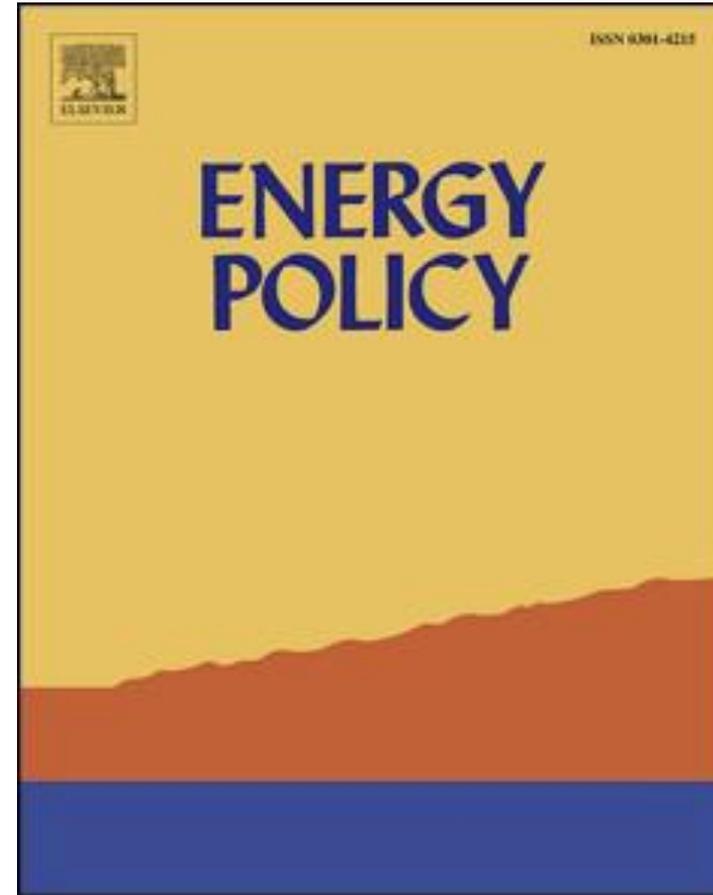


How important to you personally, if at all, are each of the following reasons to transition to clean, renewable energy?

Response options: "Extremely important," "Very...", "Somewhat...", "Only a little...", "Not at all.."

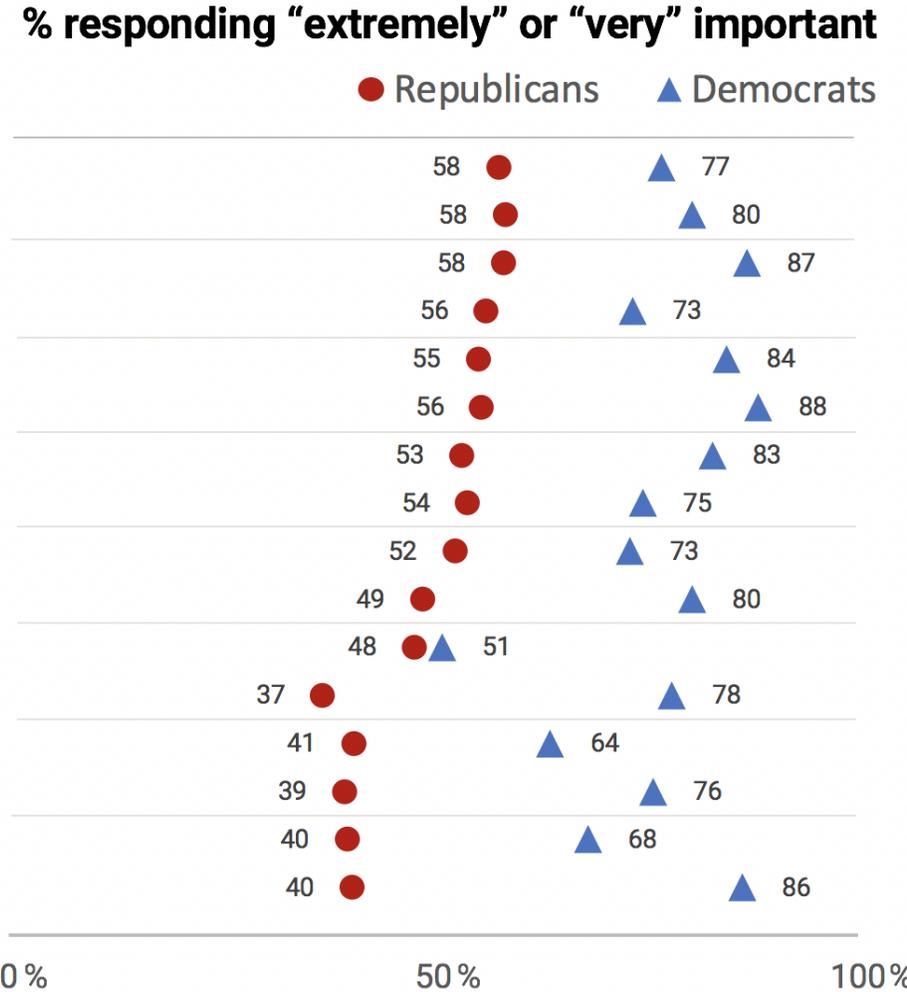
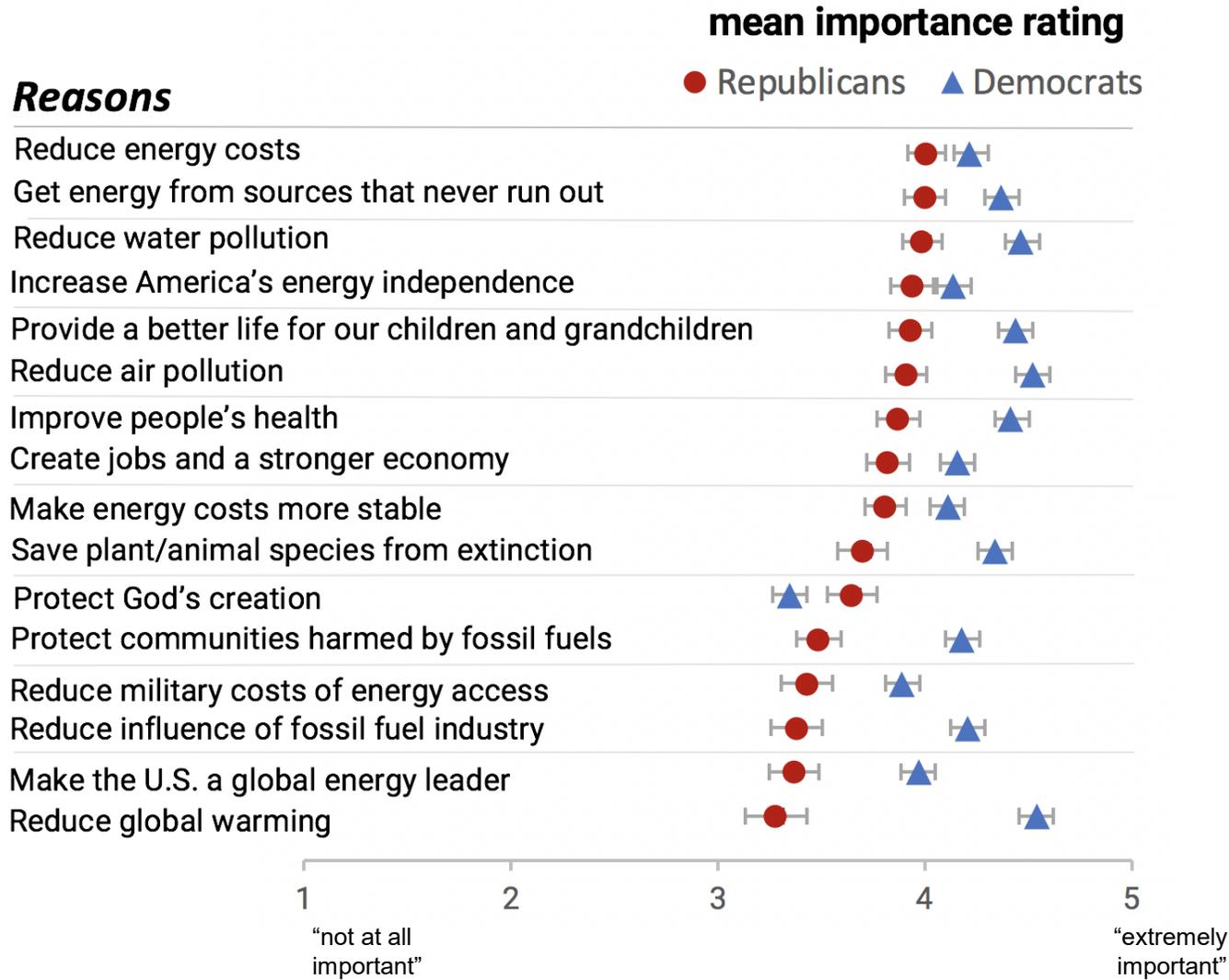
December 2018.

Republicans and Democrats Differ in Why They Support Renewable Energy

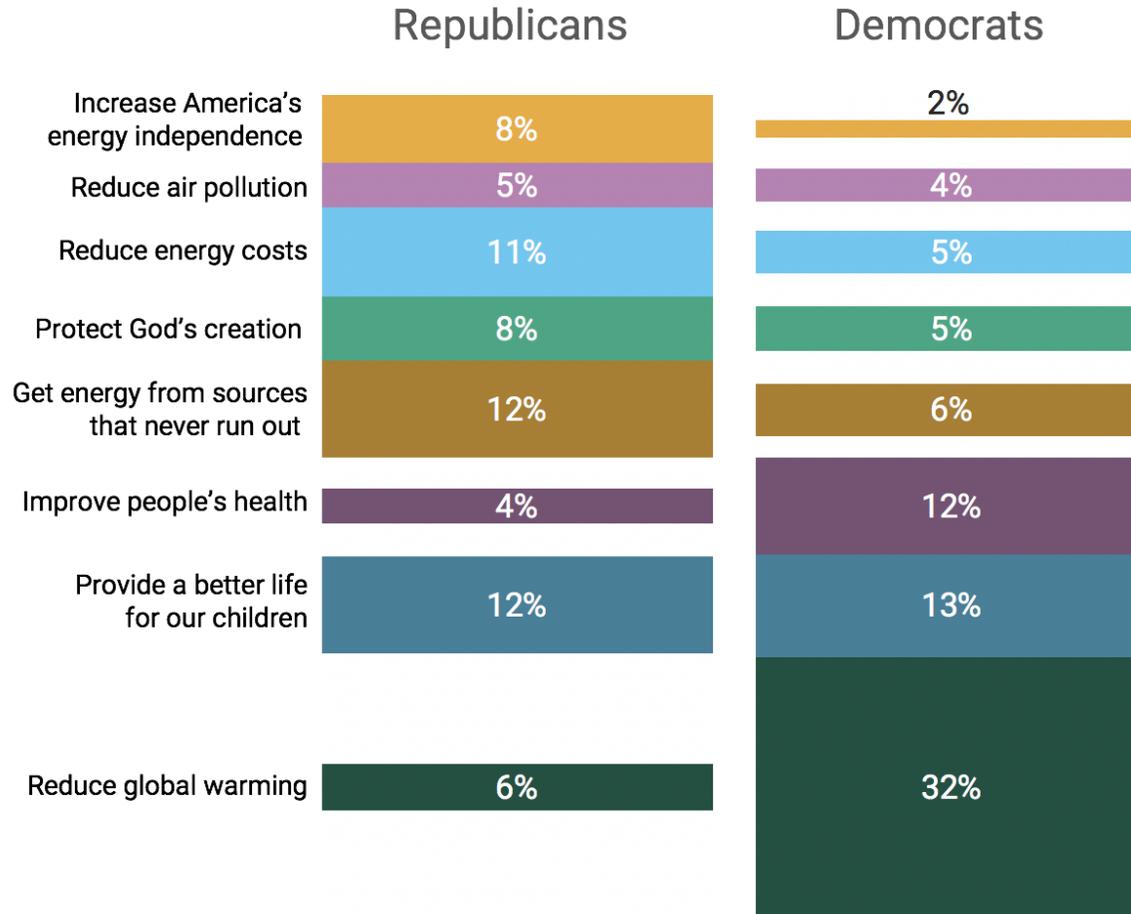


Gustafson et al. (2020). Republicans and Democrats differ in why they support renewable energy. *Energy Policy*, 141.

Reasons



Which Reason to Transition to 100% Renewable Energy Do Republicans and Democrats Say Is The Single Most Important?



Which one of these reasons to transition to 100% clean, renewable energy is most important to you? [list of 16 reasons]
Energy in the American Mind, December 2018.

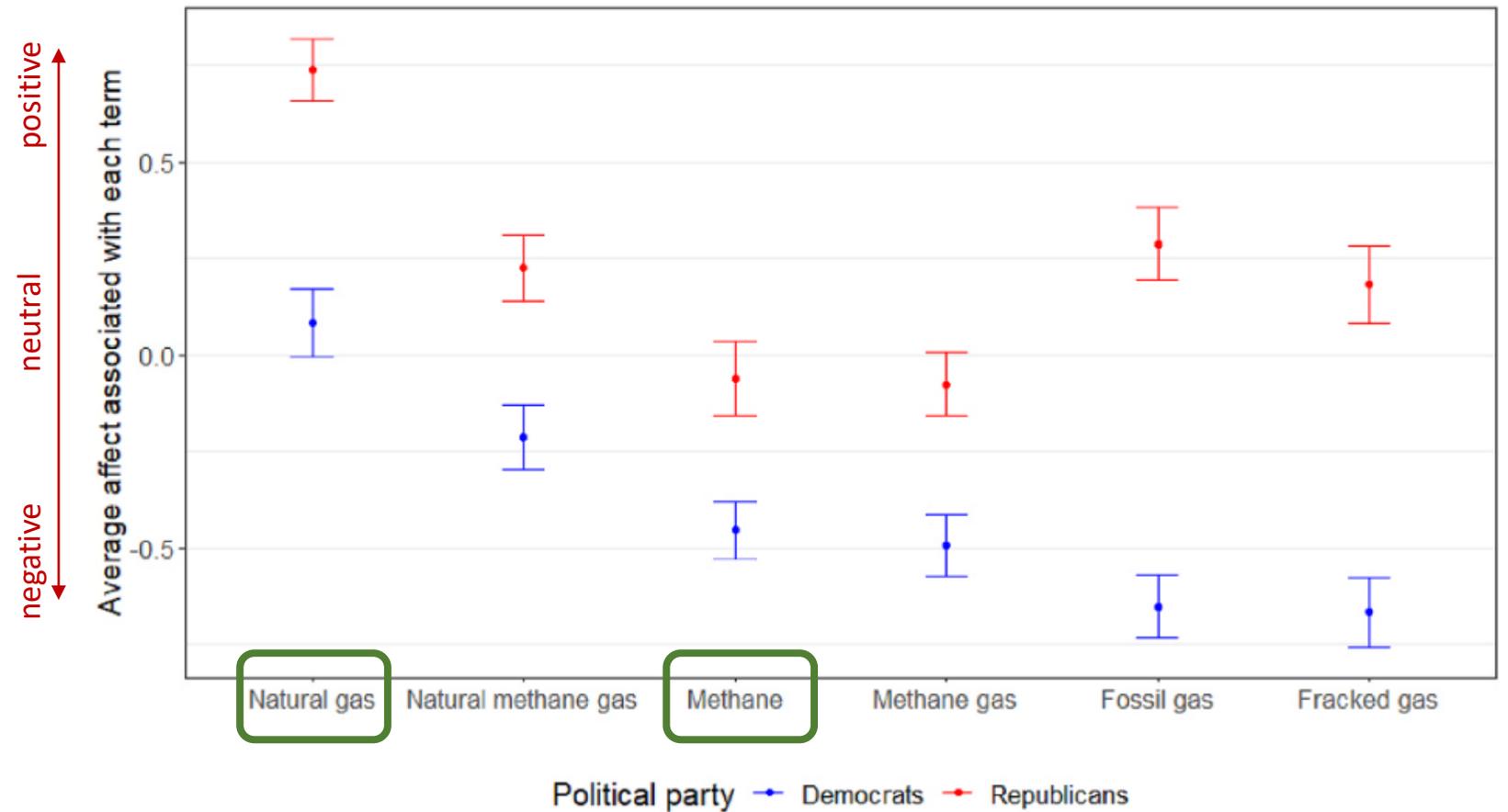
How can we use our knowledge of psychology to improve strategic communication?

Different names for “natural gas” influence public perception of it

Karine Lacroix^{a,*}, Matthew H. Goldberg^a, Abel Gustafson^b, Seth A. Rosenthal^a, Anthony Leiserowitz^a

^a Yale Program on Climate Change Communication, Yale University, New Haven, CT, USA
^b Department of Communication, University of Cincinnati, Cincinnati, OH, USA

How do you feel about _____?



Relevant Prior Research

nature energy **ARTICLES**
PUBLISHED: 30 JUNE 2017 | VOLUME: 2 | ARTICLE NUMBER: 17107

Renewable energy policy design and framing influence public support in the United States

Leah C. Stokes¹ and Christopher Warshaw^{2*}

Contents lists available at [ScienceDirect](#)



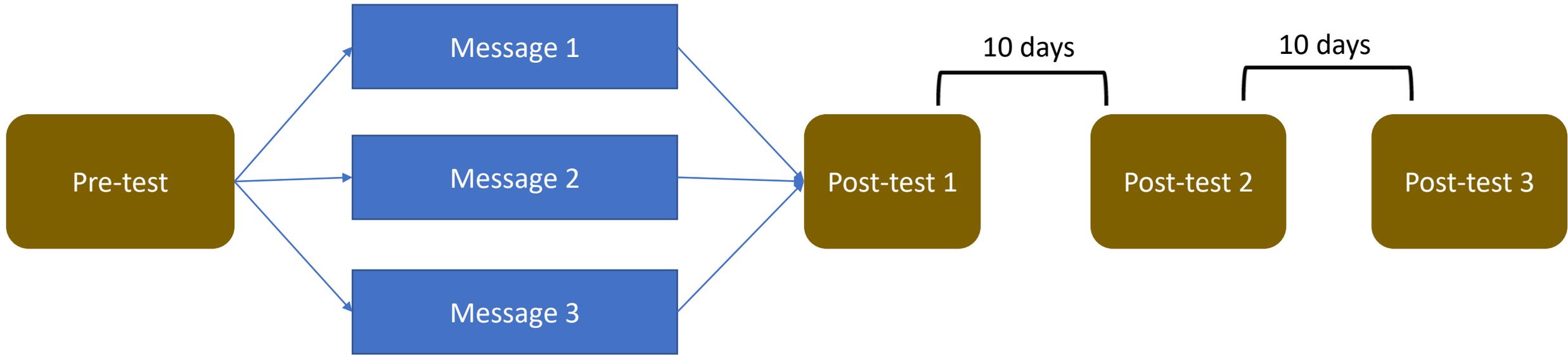
Global Environmental Change

journal homepage: www.elsevier.com/locate/gloenvcha

Climate change as a polarizing cue: Framing effects on public support for low-carbon energy policies

[Lauren Feldman](#)^{a,*}, [P. Sol Hart](#)^b

^a School of Communication & Information, Rutgers University, 4 Huntington Street, New Brunswick, NJ 08901, USA
^b Department of Communication Studies, University of Michigan, 5370 North Quad, 105 South State Street, Ann Arbor, MI 48109, USA



Economy/Jobs Message

ATR AMERICAN TECHNOLOGY REPORT 2020 American Technology Report



Energy Sector:
Renewable Energy Creates More Jobs, Adds Billions to Economy

Solar panels and wind turbines convert energy from the sun and wind into electricity.

Experts say **generating electricity from renewable energy (instead of from coal) helps create new jobs and boosts economic growth.** As one of the fastest-growing industries, it adds billions of dollars to the U.S. economy each year. The renewable energy industry now employs three times more Americans than the coal industry. Many of these renewable energy jobs, such as installing and maintaining solar panels and wind turbines, are based in local communities.

If consumers support the use of more renewable energy, utility companies could produce 100% of their electricity from renewable energy by the year 2050. Producing electricity from renewable energy would create more local jobs and boost the economy.

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Cost Savings Message

ATR AMERICAN TECHNOLOGY REPORT 2020 American Technology Report



Energy Sector:
Renewable Energy Saves Consumers Money

Solar panels and wind turbines convert energy from the sun and wind into electricity.

Experts say **electricity generated from renewable energy is now cheaper than electricity from coal power plants.** This is because solar panels and wind turbines have become cheaper to produce and maintain, and their sources of energy (the sun and wind) are free and unlimited. Many Americans are now saving money by getting their electricity from renewable energy sources instead of from coal power.

If consumers support the use of more renewable energy, utility companies could produce 100% of their electricity from renewable energy by the year 2050. Producing electricity from renewable energy would allow even more people to save even more money.

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Global Warming Message

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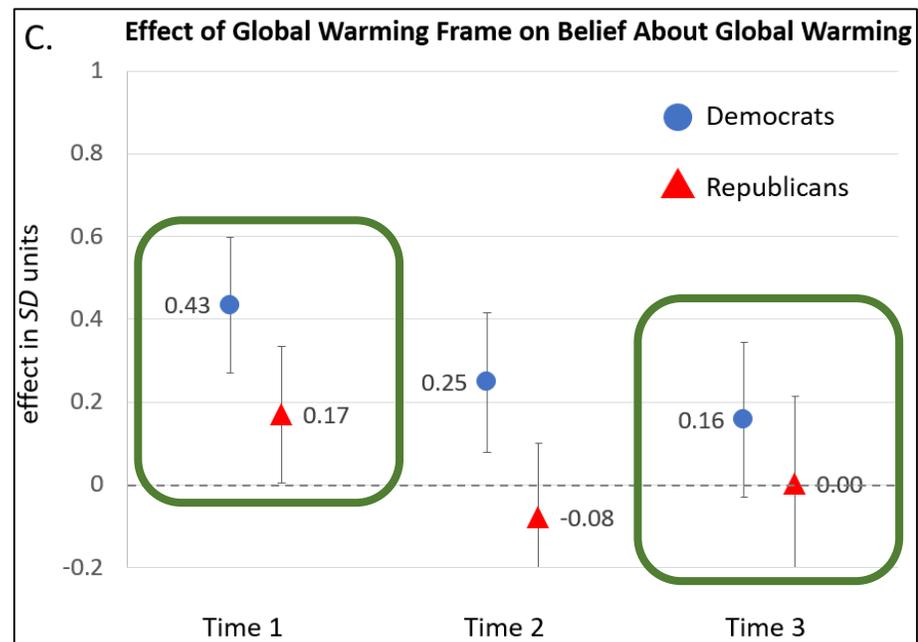
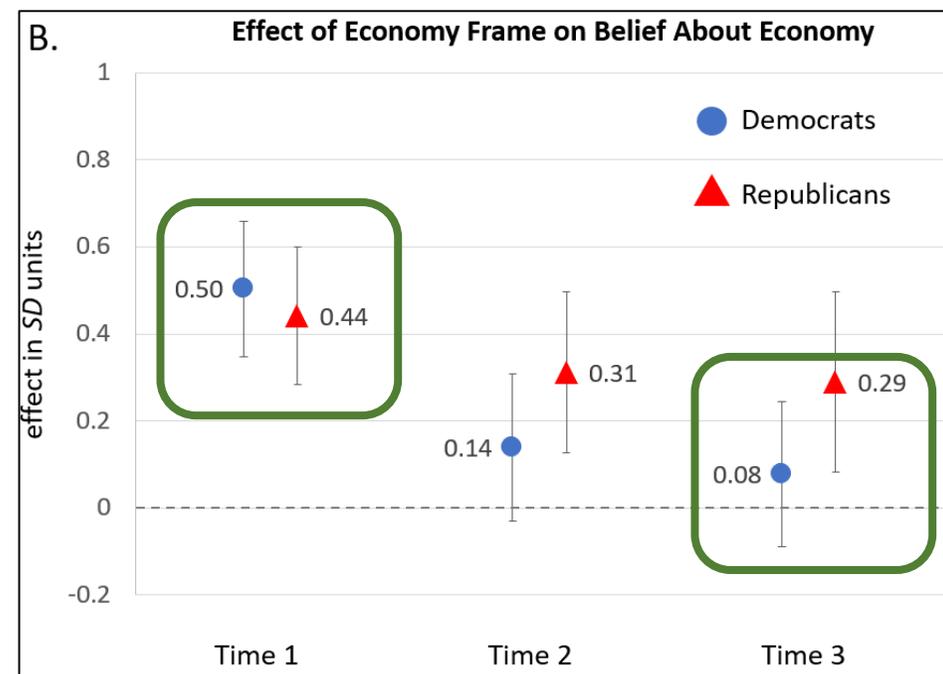
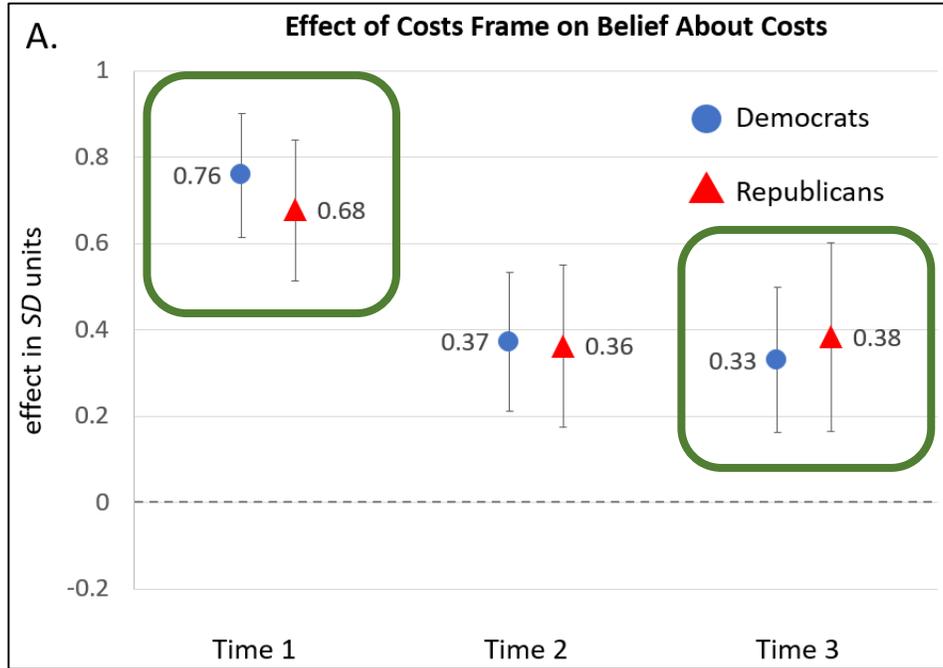
Energy Sector:
Renewable Energy Can Help Stop Global Warming

Solar panels and wind turbines convert energy from the sun and wind into electricity.

Experts say **generating electricity from renewable energy (instead of coal) is a very effective way to limit global warming.** Burning coal to generate electricity produces carbon dioxide, which causes global warming. Renewable energy sources like solar and wind, however, do not produce carbon dioxide. That is why switching from coal to renewable energy would reduce global warming.

If consumers support the use of more renewable energy, utility companies could produce 100% of their electricity from renewable energy by the year 2050. Using renewable energy instead of coal to make electricity would be a very effective way to limit global warming.

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Economy/Jobs Message



Energy Sector: *Renewable Energy Creates More Jobs, Adds Billions to Economy*



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Cost Savings Message



Energy Sector: *Renewable Energy Saves Consumers Money*



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Global Warming Message



Energy Sector: *Renewable Energy Can Help Stop Global Warming*

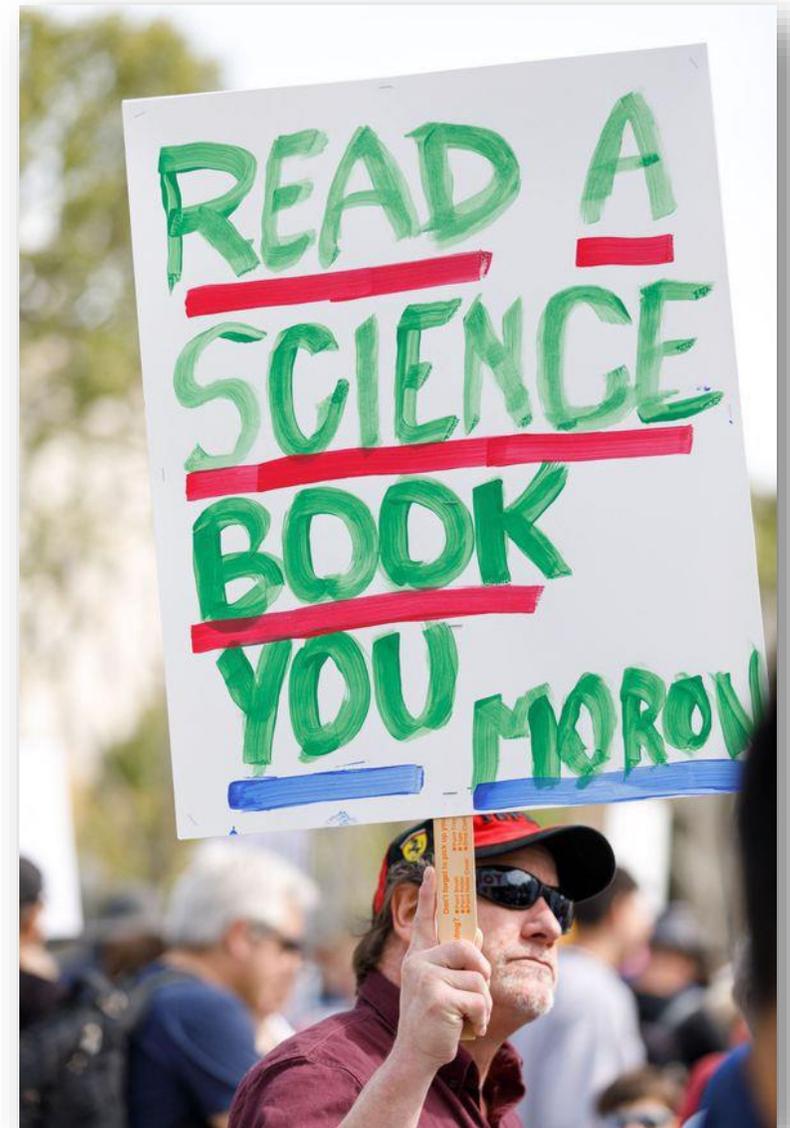
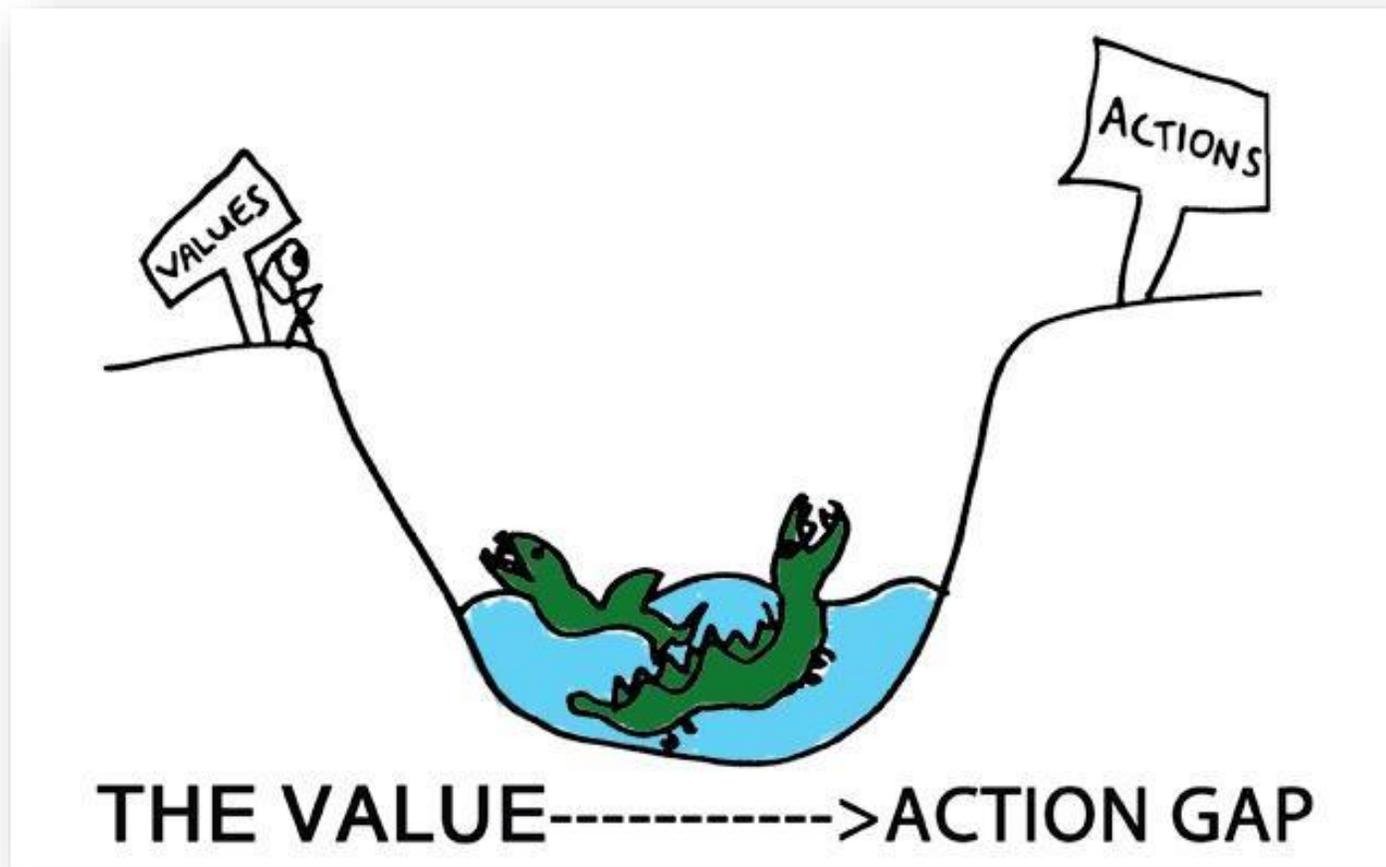


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How can we use our knowledge of psychology to improve strategic communication?



March for Science | Washington D.C., 2017

Thank you!

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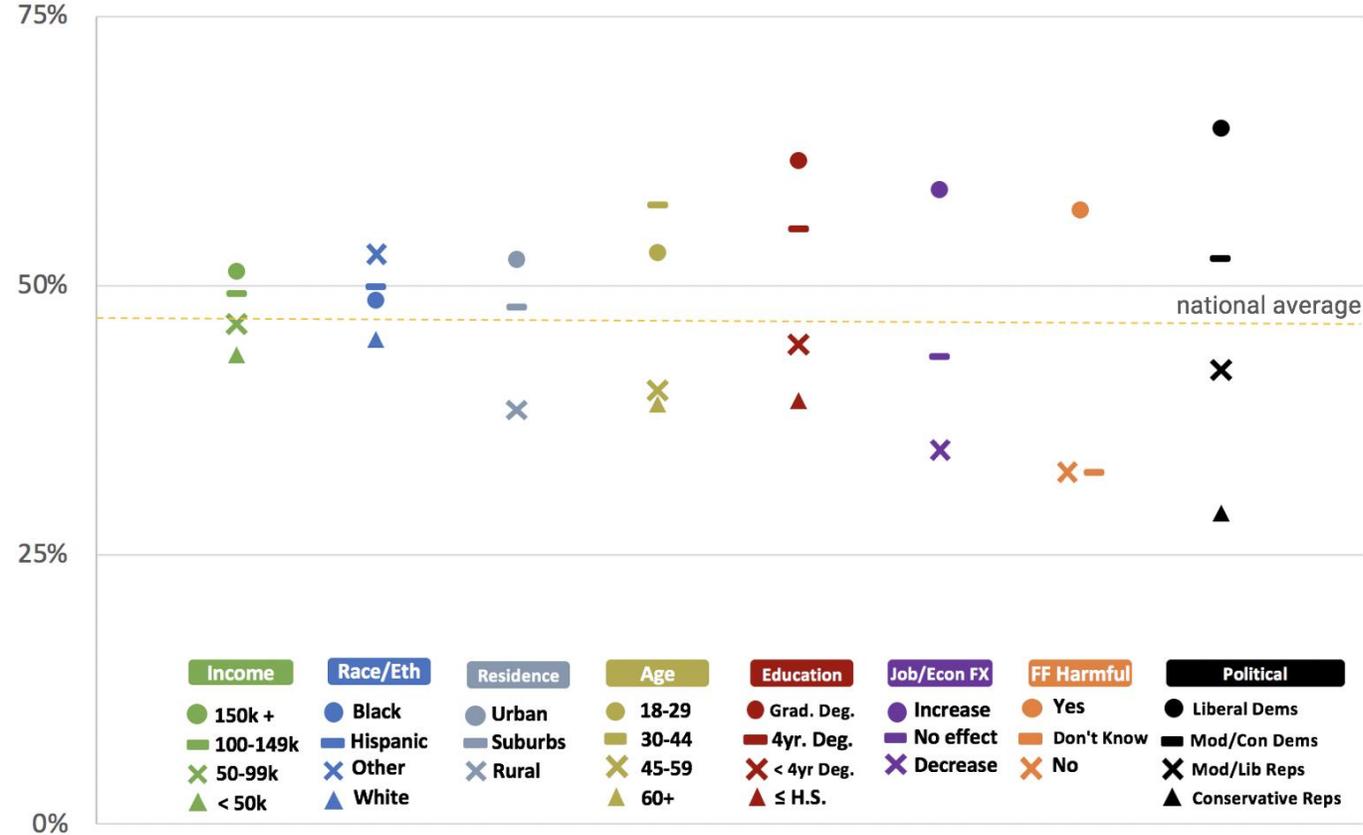
University of Cincinnati

Co-founder

XandY Analytics



% of Americans Who Would Pay More for Renewable Energy



Base: American adults. Dec. 2018 *N* = 1,114; April 2019 *N* = 1,291. Analyses exclude outliers who responded >\$200. Demographics and political ideology values combine December and April samples. Perceptions of the harm of fossil fuels ("FF Harmful") and the economic costs/benefits of renewable energy ("Job/Econ FX") use only the December sample.



Interactive Visualizations to Explore



Yale Climate Opinion Maps

<https://climatecommunication.yale.edu/visualizations-data/ycom-us/>



Democratic & Republican Climate Opinion Maps

<https://climatecommunication.yale.edu/visualizations-data/partisan-maps-2018>



Factsheet Generator

<https://climatecommunication.yale.edu/visualizations-data/factsheets/>



Interactive CCAM Explorer Tool

<https://climatecommunication.yale.edu/visualizations-data/americans-climate-views/>