TRUMP VOTERS & GLOBAL WARMING

YALE PROGRAM ON
Climate Change
Communication

GEORGE MASON UNIVERSITY
CENTER *for* CLIMATE CHANGE
COMMUNICATION

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Introduction

In the years prior to his election, President Trump repeatedly referred to climate change as a "hoax" in tweets, speeches, and media interviews.[1] However, as we reported during the primaries,[2] our spring 2016 national survey found that then-candidate Trump was out of sync with many of his supporters on the issue, many of whom said global warming is happening and supported government policies to reduce carbon pollution. Our latest survey, conducted just after Trump's victory in the November election, investigated whether his general election voters agreed with his positions on global warming.

This report is based on findings from a nationally representative survey – *Climate Change in the American Mind* – conducted by the Yale Program on Climate Change Communication (climatecommunication.yale.edu) and the George Mason University Center for Climate Change Communication (climatechangecommunication.org). Interview dates: November 18 – December 1, 2016. Interviews: 1,226 Adults (18+), 1,061 of whom are registered to vote, and 401 of whom are registered voters who voted for Donald Trump in the 2016 general election. Average margin of error for both the full sample and registered voter subset is +/- 3 percentage points, and for Trump voters is +/- 5 percentage points, all at the 95% confidence level. The research was funded by the 11th Hour Project, the Energy Foundation, the Grantham Foundation, and the MacArthur Foundation.

[1] Jacobson, L. (2016, June 3). *Yes, Donald Trump did call climate change a Chinese hoax.* Retrieved from http://www.politifact.com/truth-o-meter/statements/2016/jun/03/hillary-clinton/yes-donald-trump-did-call-climate-change-chinese-h/

[2] Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Rosenthal, S. (2016). *Global Warming and the U.S. Presidential Election, Spring 2016*. Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication.

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Key Findings

- About half of Trump voters (49%) think global warming is happening, while fewer than one in three (30%) think global warming is not happening.
- Almost half of Trump voters (47%) also say the U.S. should participate in the international agreement to limit global warming. By contrast, only 28% say the U.S. should not participate.
- More than six in ten Trump voters (62%) support taxing and/or regulating the pollution that causes global warming, with nearly one in three (31%) supporting both approaches. In contrast, only about one in five (21%) support doing neither.
- More than three in four Trump voters (77%) support generating renewable energy (solar and wind) on public land in the U.S. 72% support more drilling and mining of fossil fuels on public land in the U.S.
- Seven in ten Trump voters (71%) support funding more research into clean energy and providing tax rebates to people who purchase energy efficient vehicles and solar panels (69%).
- Over half of Trump voters (52%) support eliminating all federal subsidies for the fossil fuel industry, nearly half (48%) support requiring fossil fuel companies to pay a carbon tax and using the money to reduce other taxes by an equal amount, and almost half (48%) support setting strict carbon dioxide emissions limits on existing coal-fired power plants to reduce global warming and improve public health, even if the cost of electricity to consumers and companies would likely increase.
- Half of Trump voters say transitioning from fossil fuels toward clean energy will either improve economic growth (29%) or have no impact (21%).
- Nearly three in four Trump voters (73%) say that, in the future, the U.S. should use more renewable energy (solar, wind, and geothermal). One in three (33%) say that the U.S. should use fossil fuels less in the future.

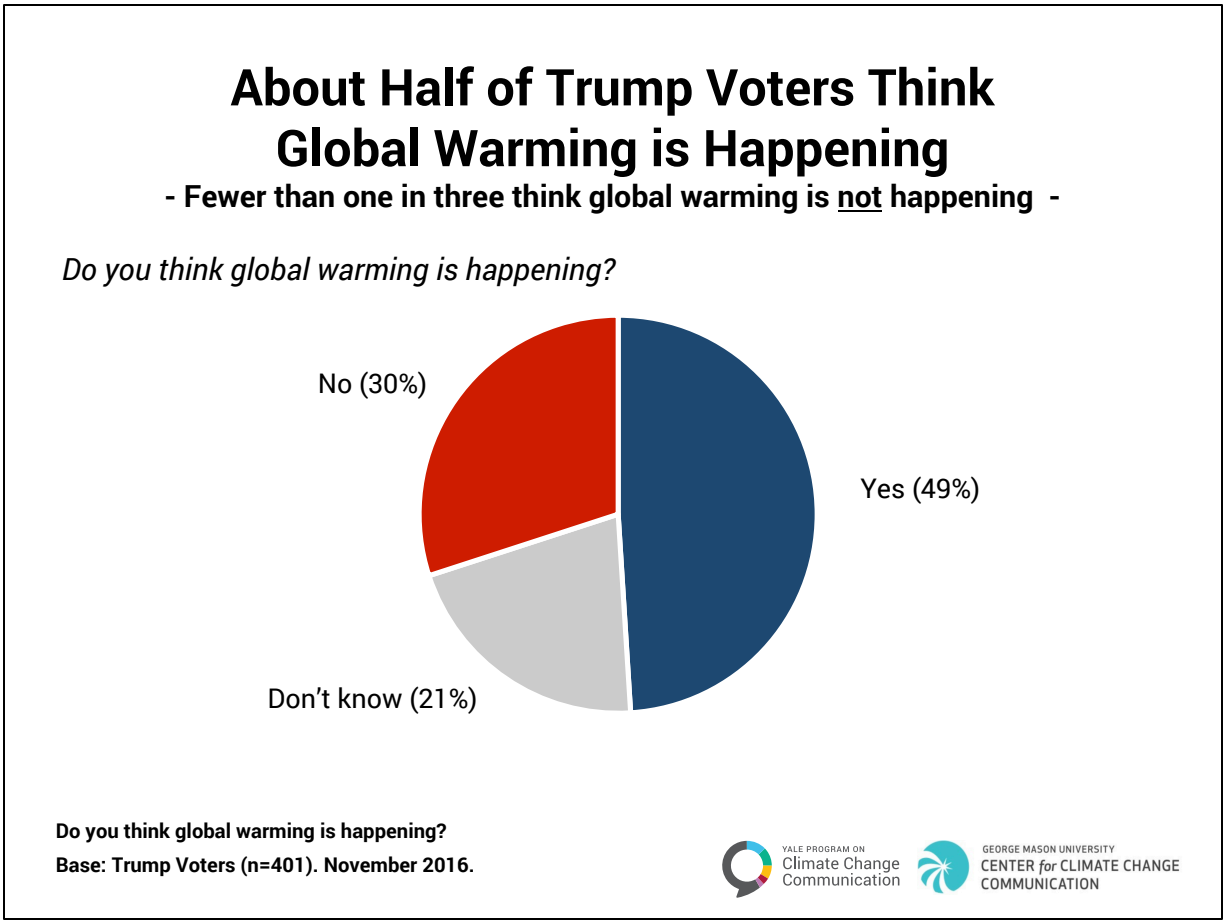
Reading notes

- Results in this report are based on responses of registered voters who said they voted for Donald Trump in the 2016 general election.
- In all tables and charts, bases specified are unweighted, but percentages are calculated after weighting the full survey sample to match U.S. Census Bureau norms (see Appendix I for details).
- For tabulation purposes, percentage points are rounded off to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%. Summed response categories (e.g., “strongly support” + “somewhat support”) are rounded after sums are calculated (e.g., 1.3% + 1.3% = 2.6%, which, after rounding = 3%).

1. Global Warming Belief

About half of Trump voters think global warming is happening.

Nearly half of those who voted for President Trump think global warming is happening (49%). By contrast, fewer than one in three (30%) think global warming is not happening.

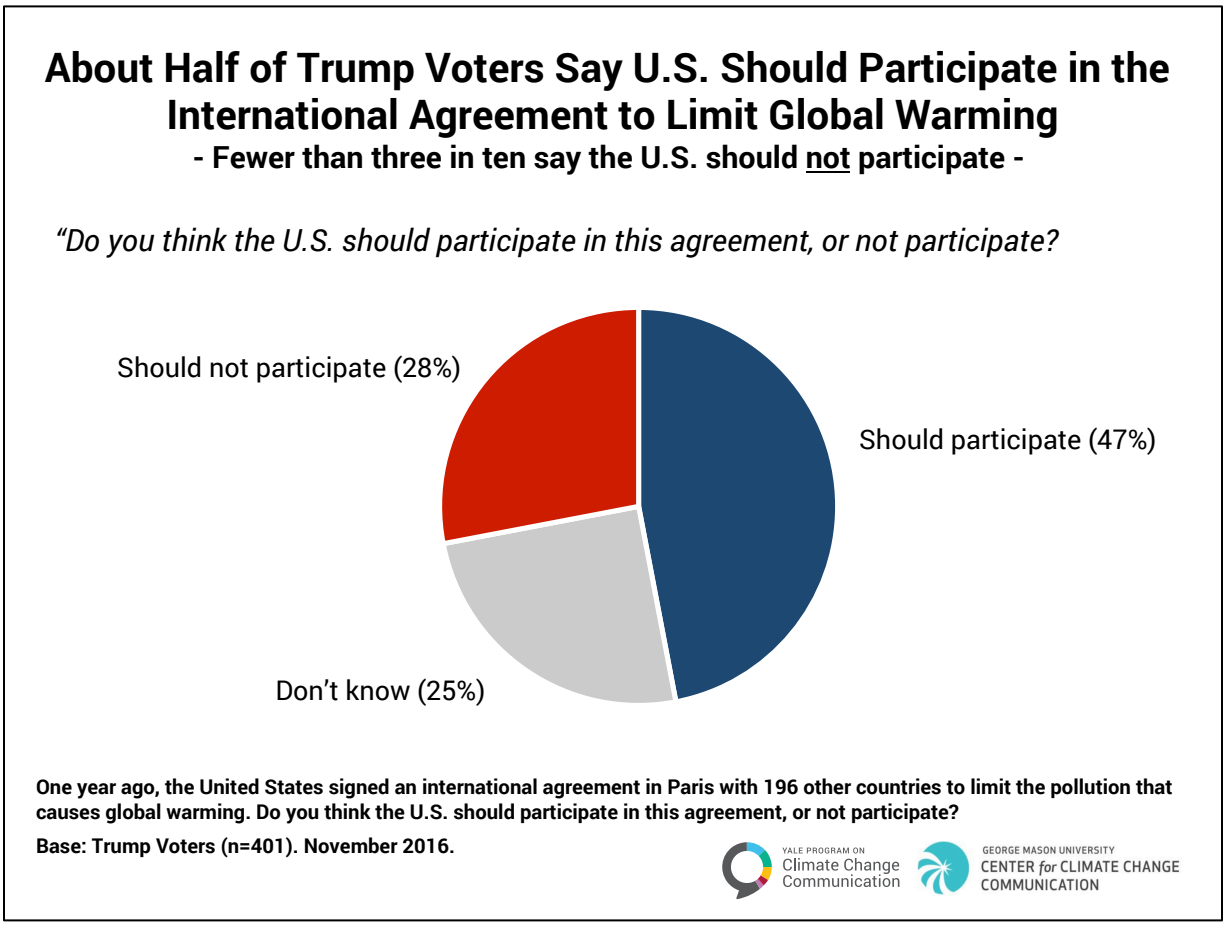


2. Support for Climate Change Policies

2.1. About half of Trump voters say the U.S. should participate in the international agreement to limit global warming.

In December 2015, officials from 197 countries (almost every country in the world) met in Paris at the United Nations Climate Change Conference and negotiated an international agreement to limit global warming. On Earth Day, in April 2016, the U.S. and 174 other countries signed the agreement, with most of the others following suit since then. During the U.S. presidential campaign of 2016, however, then candidate-Trump said he would cancel U.S. participation in the Paris agreement.[3]

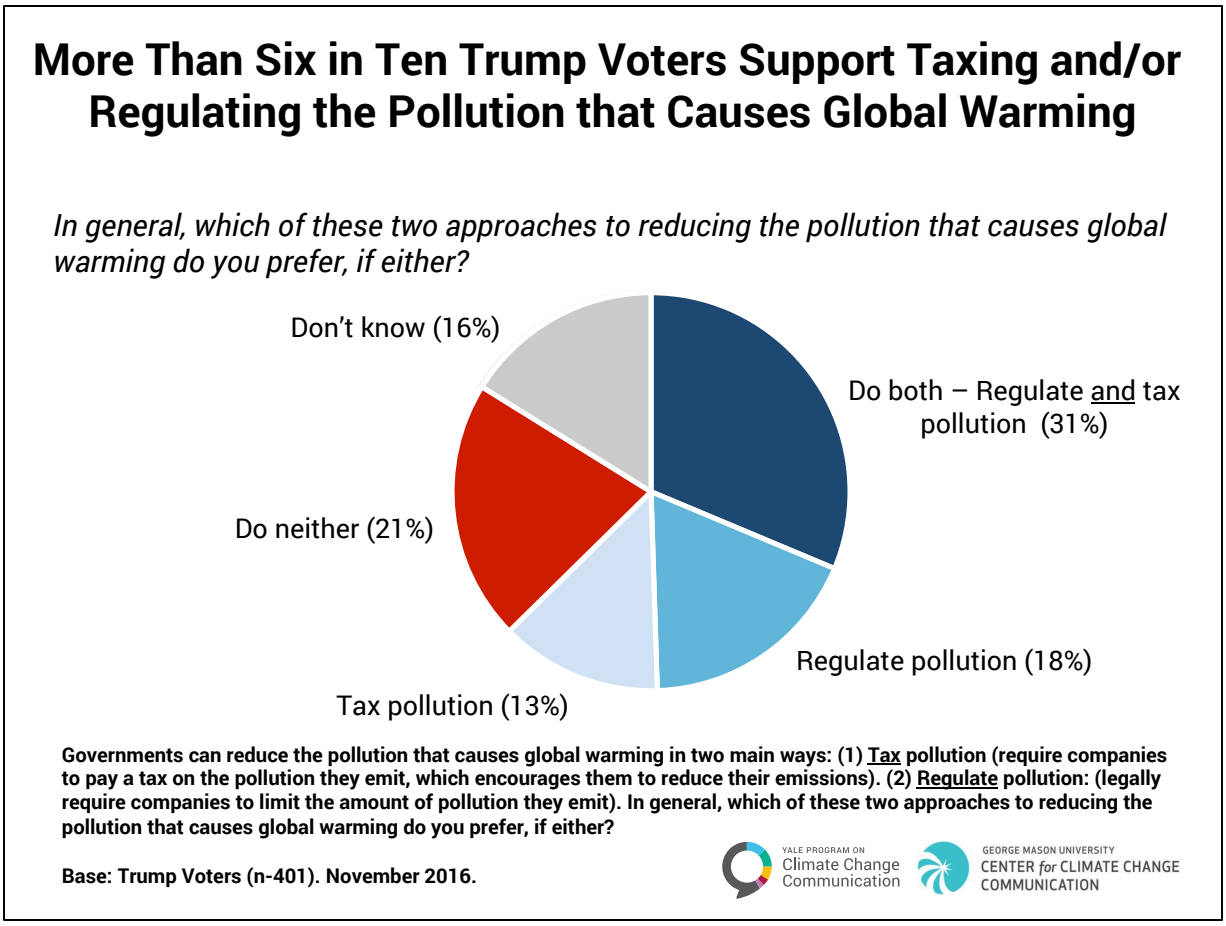
However, almost half of Trump's voters (47%) say the U.S. should participate in the Paris agreement, compared with only 28% who say the U.S. should not.



[3] Volcovici, V., & Stephenson, E. (2016, May 27). *Trump vows to undo Obama's climate agenda in appeal to oil sector.* Retrieved from http://www.reuters.com/article/us-usa-election-trump-energy-idUSKCN0YH2D9

2.2. More than six in ten Trump voters support taxing and/or regulating the pollution that causes global warming.

More than six out of ten Trump voters (62%) support taxing and/or regulating the pollution that causes global warming, and nearly one in three (31%) support doing both. By contrast, only one in five (21%) support neither approach.

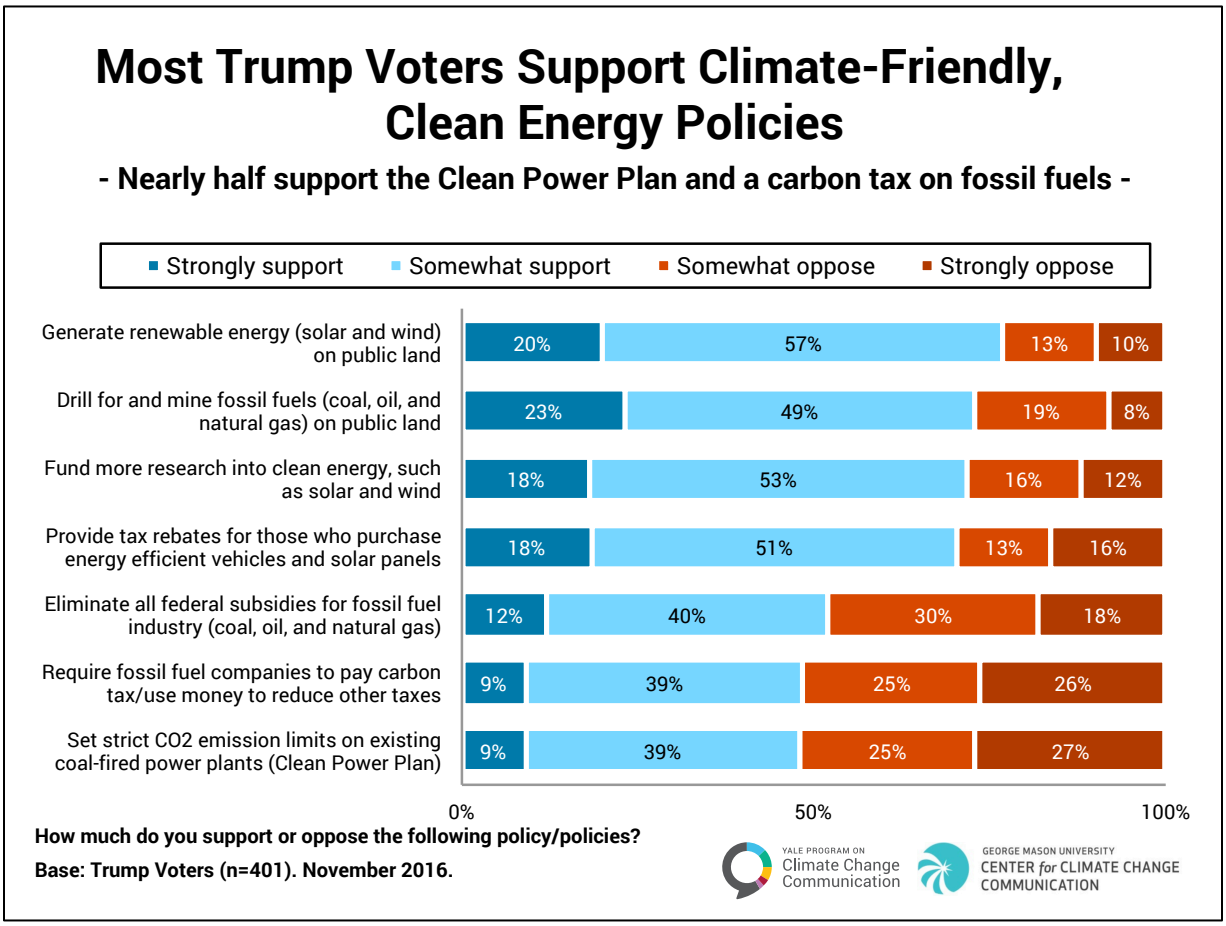


3. Support for Energy Policies

3.1. Most Trump voters support climate-friendly, clean energy policies

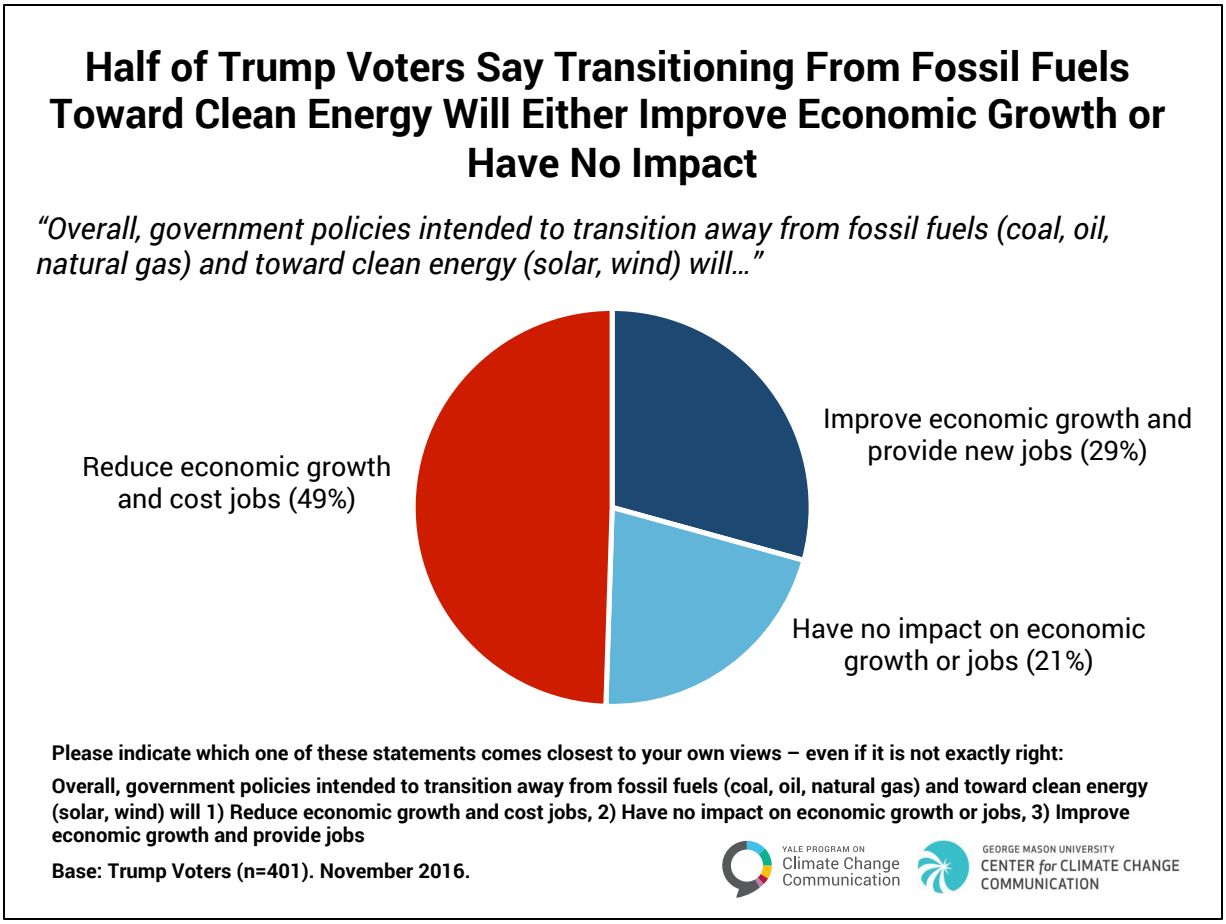
More than three in four Trump voters (77%) support generating renewable energy (solar and wind) on public land in the U.S. However, a majority also support drilling and mining for fossil fuels on public land (72%). Seven in ten support funding more research into clean energy (71%) and providing tax rebates to people who purchase energy efficient vehicles and solar panels (69%).

Over half of Trump voters (52%) support eliminating all federal subsidies for the fossil fuel industry, and nearly half (48%) support requiring fossil fuel companies to pay a carbon tax and using the money to reduce other taxes by an equal amount – a plan often referred to as a "revenue neutral carbon tax." Finally, almost half (48%) support setting strict carbon dioxide emissons limits on existing coal-fired power plants to reduce global warming and improve public health, even if the cost of electricity to consumers and companies would likely increase. This policy is the core of the EPA's Clean Power Plan.



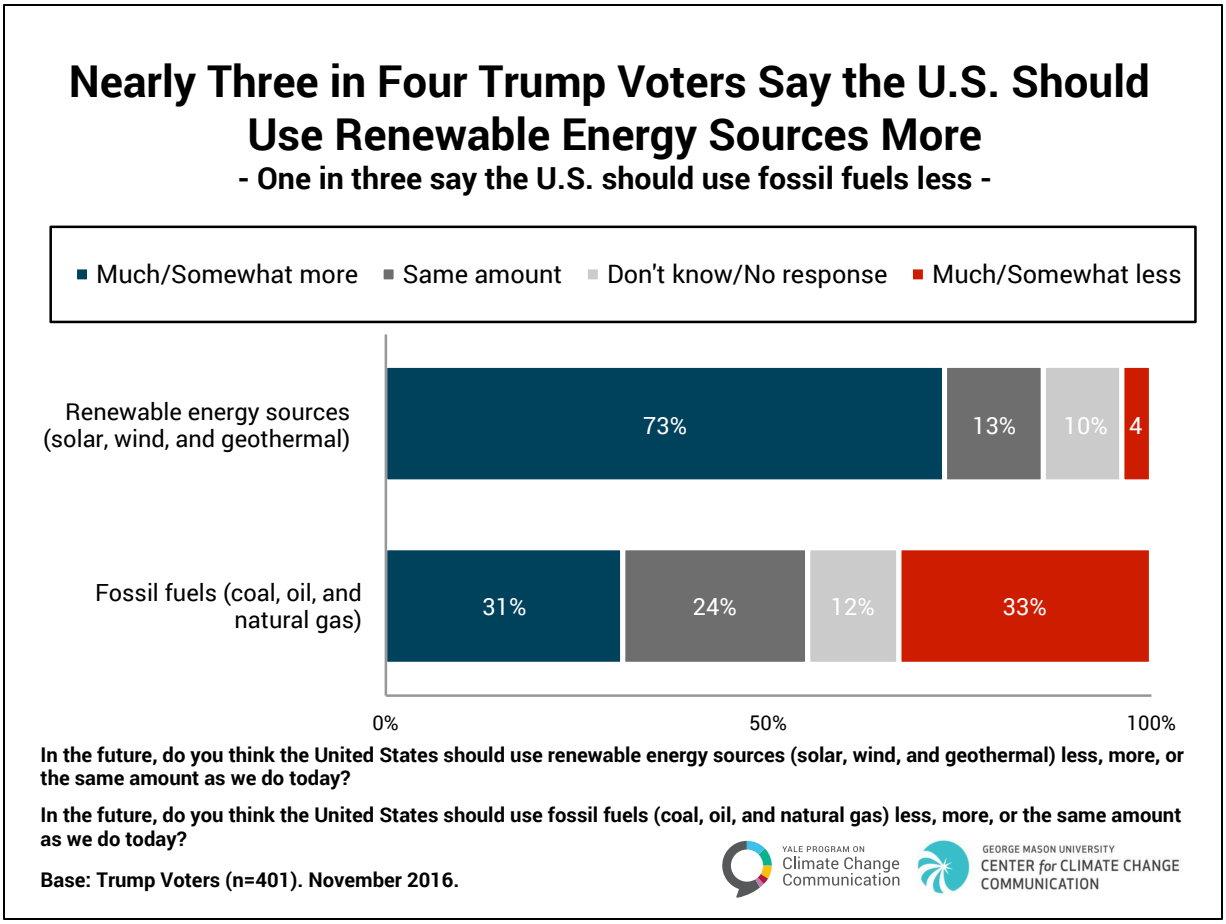
3.2. Half of Trump voters say transitioning from fossil fuels to clean energy will either improve economic growth or have no impact.

About half of the people who voted for President Trump think that government policies intended to transition away from fossil fuels and toward clean energy will either improve economic growth and provide new jobs (29%), or will have no impact on economic growth or jobs (21%). The other half (49%), however, think these policies will reduce economic growth and cost jobs.



3.3. Nearly three in four Trump voters say the U.S. should use renewable energy sources more.

Almost three in four Trump voters (73%) say that, in the future, the U.S. should use more renewable energy sources (solar, wind, and geothermal). Additionally, one in three (33%) say that the U.S. should use fossil fuels less in the future, while nearly one in three (31%) would like the U.S. to use fossil fuels more.



Appendix I: Survey Method

The data in this report are based on a nationally representative survey of 1,226 American adults, aged 18 and older, 1,061 of whom are registered to vote and 401 of whom voted for Donald Trump in the 2016 Presidential General Election. The survey was conducted November 18 – December 1, 2016. All questionnaires were self-administered by respondents in a web-based environment. The survey took, on average, about 26 minutes to complete.

The sample was drawn from GfK's KnowledgePanel®, an online panel of members drawn using probability sampling methods. Prospective members are recruited using a combination of random digit dial and address-based sampling techniques that cover virtually all (non-institutional) resident phone numbers and addresses in the United States. Those contacted who would choose to join the panel but do not have access to the Internet are loaned computers and given Internet access so they may participate.

The sample therefore includes a representative cross-section of American adults – irrespective of whether they have Internet access, use only a cell phone, etc. Key demographic variables were weighted, post survey, to match US Census Bureau norms. Data were weighted by gender, age, race/Hispanic ethnicity, education, census region; household income, home ownership status, and whether or not the respondent lives in a metropolitan or non-metropolitan area.

The survey instrument was designed by Anthony Leiserowitz, Seth Rosenthal, and Matthew Cutler of Yale University, and Edward Maibach and Connie Roser-Renouf of George Mason University.

Margins of error

All samples are subject to some degree of sampling error – that is, statistical results obtained from a sample can be expected to differ somewhat from results that would be obtained if every member of the target population was interviewed. Average margins of error, at the 95% confidence level, are as follows:

- Total sample: Plus or minus 3 percentage points.
- Total registered voters: Plus or minus 3 percentage points.
- Registered voters who voted for Donald Trump in the November 2016 General Election: Plus or minus 5 percentage points.

Rounding error

For tabulation purposes, percentage points are rounded off to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%. Summed response categories (e.g., "strongly support" + "somewhat support") are rounded after sums are calculated (e.g., 1.3% + 1.3% = 2.6%, which, after rounding = 3%).

Appendix II: Demographics

Trump General Election Voters

	N (unweighted)	% (weighted)
Total	**401**	**100**
Men	224	54
Women	177	46
Millennial (18-34)	50	17
Generation X (35-50)	73	23
Baby Boomer (51-69)	204	45
WWII (70+)	74	14
Less than high school	20	8
High school graduate	123	32
Some college/Associate degree/Technical degree	123	32
College graduate	80	17
Post graduate	55	12
<$25K	24	6
$25K - <$50K	86	22
$50K - <$75K	85	20
$75K - <$100K	68	15
$100K - <$125K	56	15
$125K+	82	23
Hispanic	17	6
White, non-Hispanic	367	88
Black, African-American non-Hispanic	1	*
Other non-Hispanic	16	5
Northeast	73	20
Midwest	95	22
South	152	38
West	81	21

Registered Voters

	N (unweighted)	% (weighted)
Total	**1,061**	**100**
Men	537	48
Women	524	52
Millennial (18-34)	204	27
Generation X (35-50)	188	21
Baby Boomer (51-69)	486	40
WWII (70+)	183	13
Less than high school	52	8
High school graduate	263	27
Some college/Associate degree/Technical degree	315	31
College graduate	232	18
Post graduate	199	16
<$25K	118	13
$25K - <$50K	196	19
$50K - <$75K	213	18
$75K - <$100K	171	14
$100K - <$125K	126	12
$125K+	237	24
Hispanic	102	13
White, non-Hispanic	829	70
Black, African-American non-Hispanic	71	11
Other non-Hispanic	59	6
Northeast	194	19
Midwest	257	22
South	378	36
West	232	22

Full Sample

	N (unweighted)	% (weighted)
Total	**1,226**	**100**
Men	625	48
Women	601	52
Millennial (18-34)	268	30
Generation X (35-50)	237	23
Baby Boomer (51-69)	528	36
WWII (70+)	193	11
Less than high school	90	12
High school graduate	326	29
Some college/Associate degree/Technical degree	351	29
College graduate	247	16
Post graduate	212	15
<$25K	166	16
$25K - <$50K	246	21
$50K - <$75K	236	17
$75K - <$100K	190	14
$100K - <$125K	140	12
$125K+	248	21
Hispanic	145	16
White, non-Hispanic	909	64
Black, African-American non-Hispanic	92	12
Other non-Hispanic	80	8
Northeast	212	18
Midwest	283	21
South	449	37
West	282	24