



GEORGE MASON UNIVERSITY
**CENTER *for* CLIMATE CHANGE
COMMUNICATION**

Public Attitudes about Climate Change and Clean Energy

**Environmental and Energy Study Institute
Hill Briefing Series**

Cannon House Office Building

October 6th, 2016

**Edward Maibach, MPH, PhD
George Mason University**

emaibach@gmu.edu

@MaibachEd

KEY FINDING: U.S. NATIONAL CLIMATE ASSESSMENT

Our Changing Climate

Global climate is changing and this is apparent across the United States in a wide range of observations. The global warming of the past 50 years is primarily due to human activities, predominantly the burning of fossil fuels.

Explore our changing climate.



EXPLORE HIGHLIGHTS

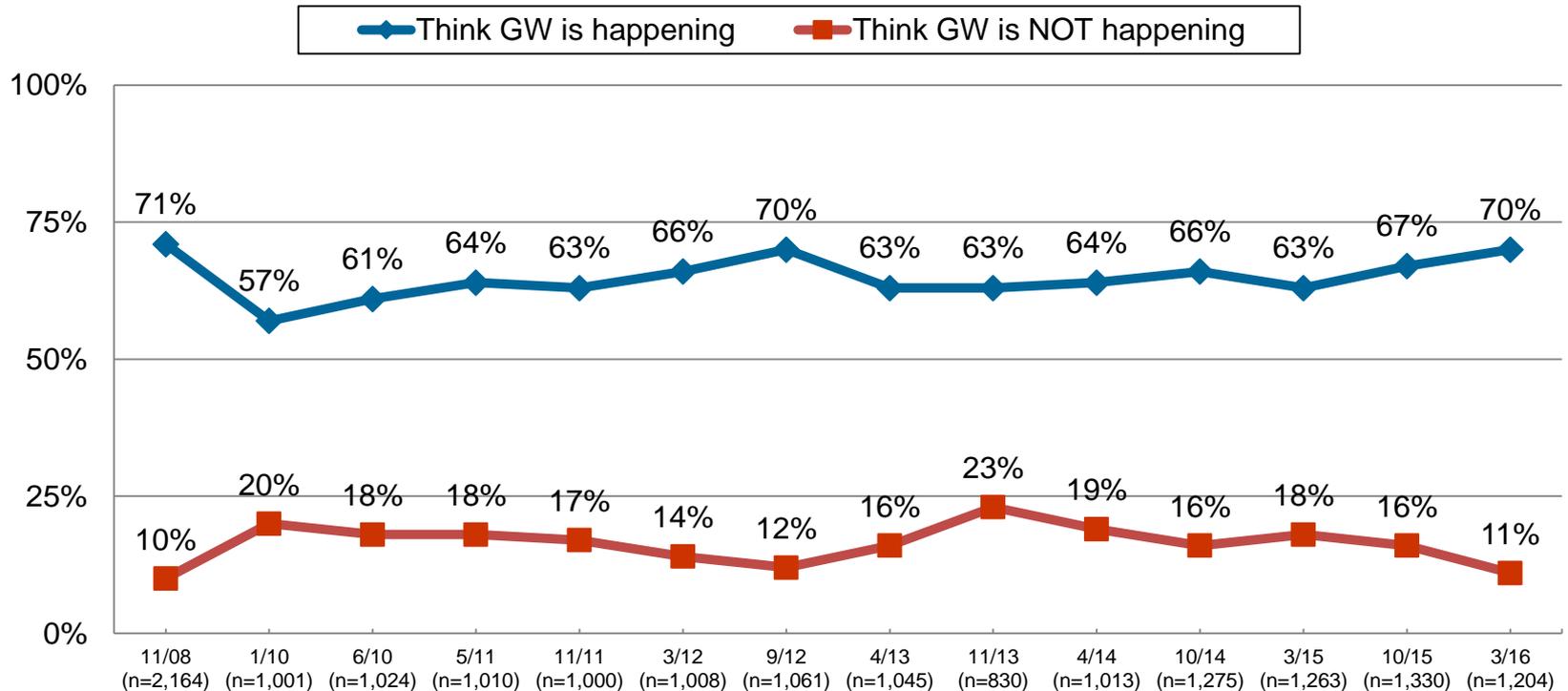


EXPLORE THE REPORT

Key findings from Yale/Mason polling:

- 1. Most Americans are convinced that global warming is happening, but...(fill in caveats here)**
- 2. The times, they are (or may be) a-changin'**
- 3. Public support for clean energy and climate action is stronger than public understanding of climate change**

Seven in ten Americans think global warming is happening



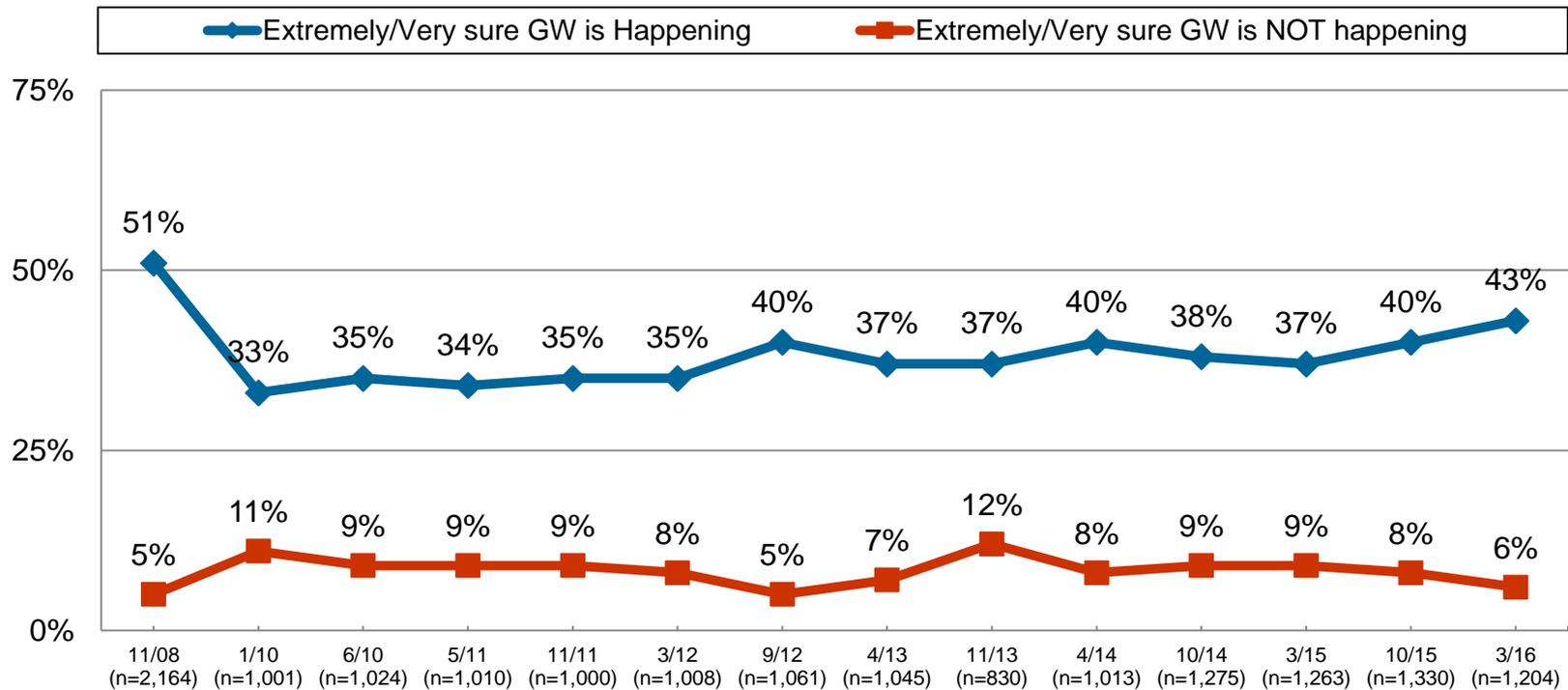
Do you think global warming is happening?

Base: Americans 18+. March, 2016.

Notes: Respondents who either said they “don’t know” or who did not answer the question are not included in the chart. Percentages therefore sum to less than 100%.

Uncertainty reigns:

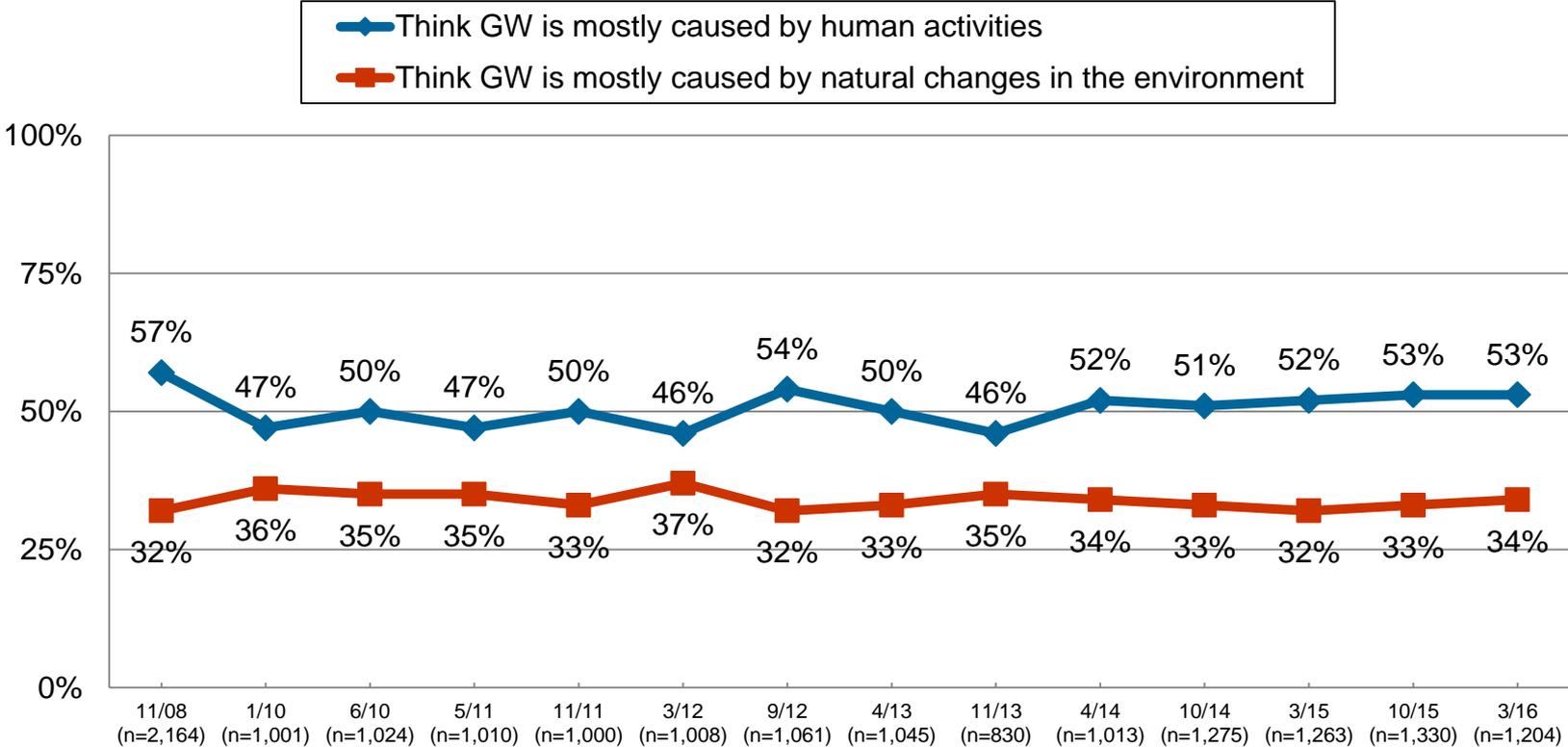
Only 4 in 10 are very/extremely sure it is happening;
>1 in 10 are extremely/very sure it isn't happening;
5 in 10 are at most “somewhat” sure.



How sure are you that global warming is/is not happening?

Base: Americans 18+. March, 2016.

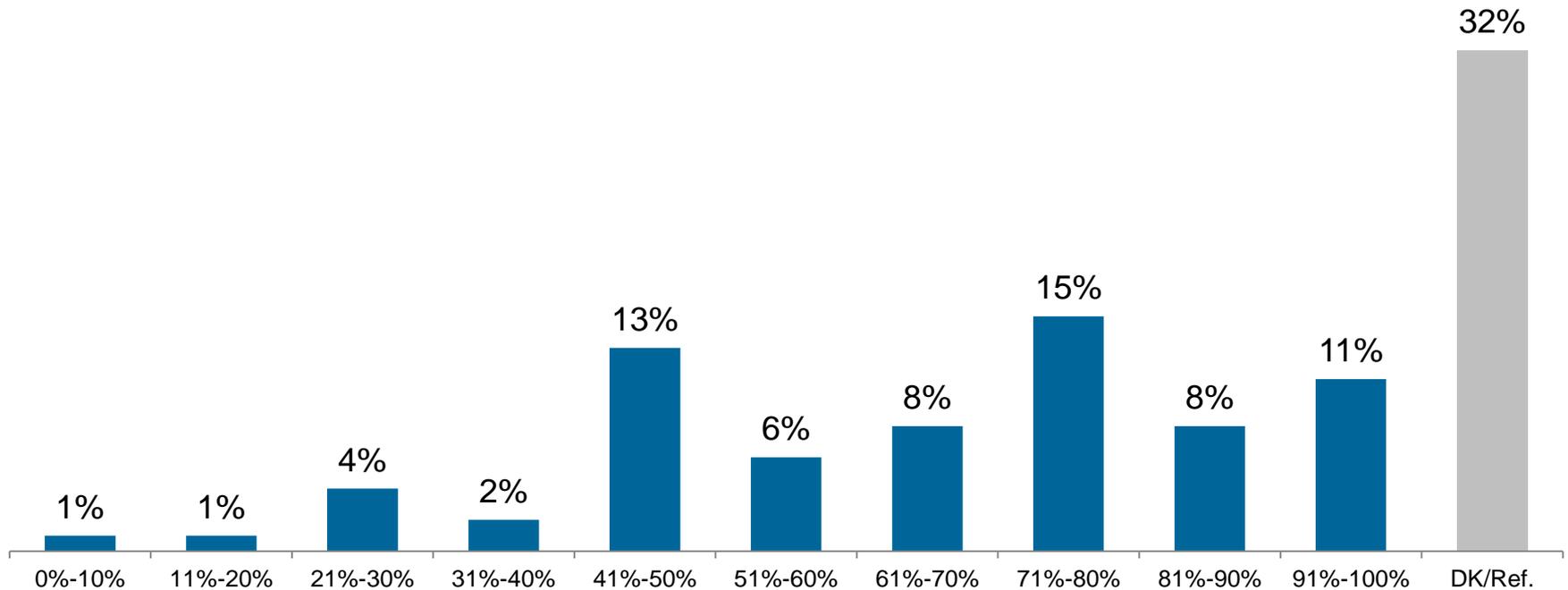
Only half of Americans think that if global warming is happening, it's mostly human caused



Assuming global warming is happening, do you think it is...

Base: Americans 18+. March, 2016.

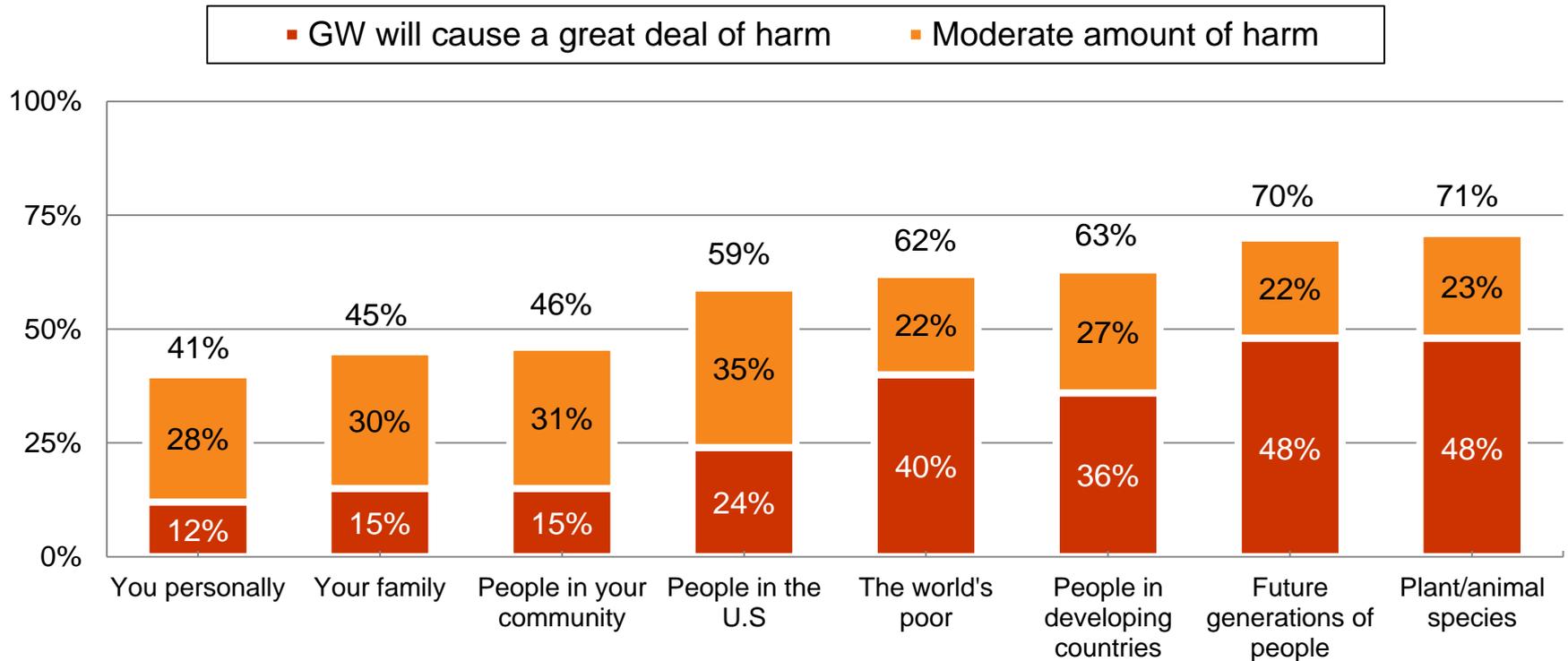
Only 1 in 10 Americans understand that almost all climate scientists (more than 90%) have concluded human-caused global warming is happening



To the best of your knowledge, what percentage of climate scientists think that human-caused global warming is happening? Please click on the slider bar below to indicate your answer. You can slide the indicator to the position that best describes your opinion. If the slider does not work, you can enter a number in the number box.

Base: Americans 18+ (n=1,204). March, 2016.

Most Americans think global warming is a relatively distant threat

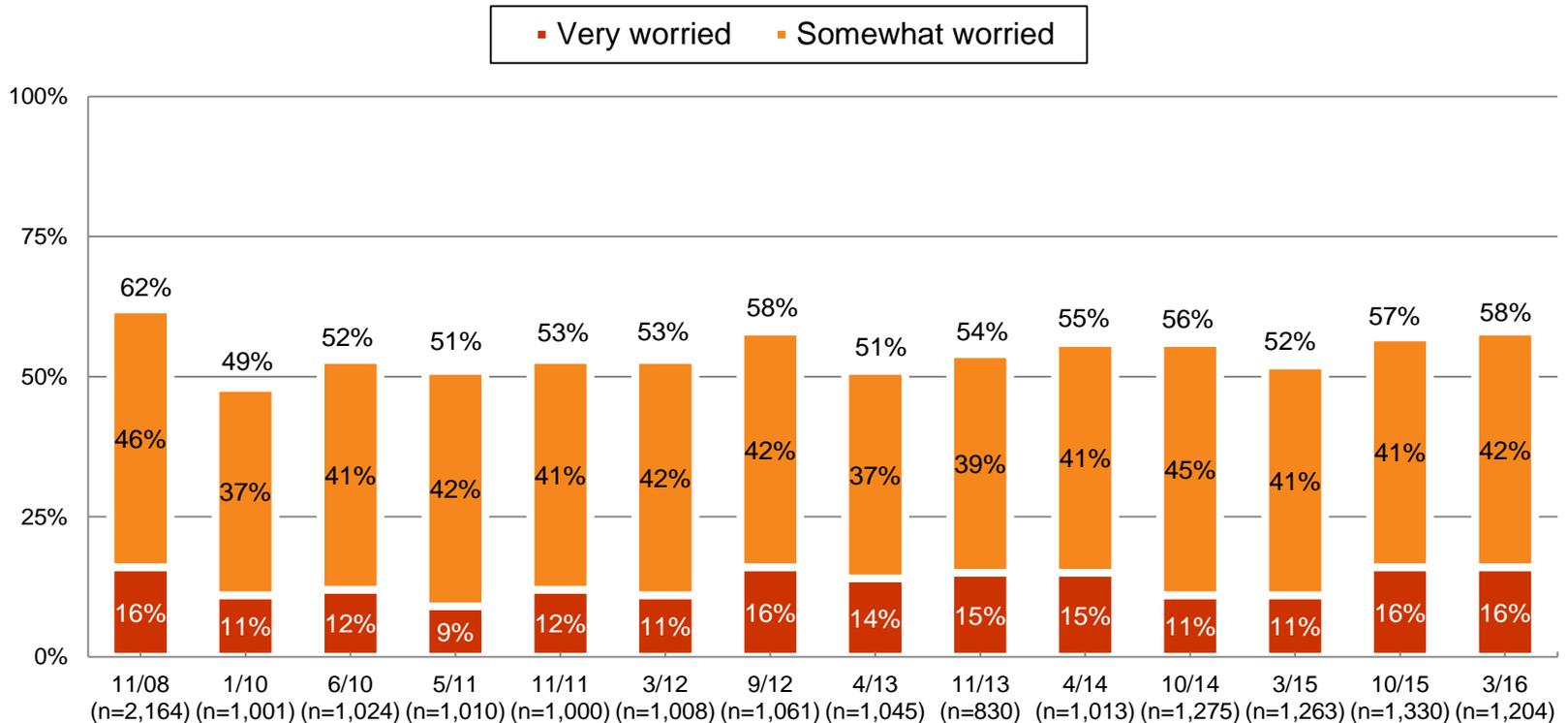


How much do you think global warming will harm...?

Base: Americans 18+ (n=1,204). March, 2016.

Over half of Americans are worried about global warming, but few are “very” worried

- Little change since Fall 2012 -

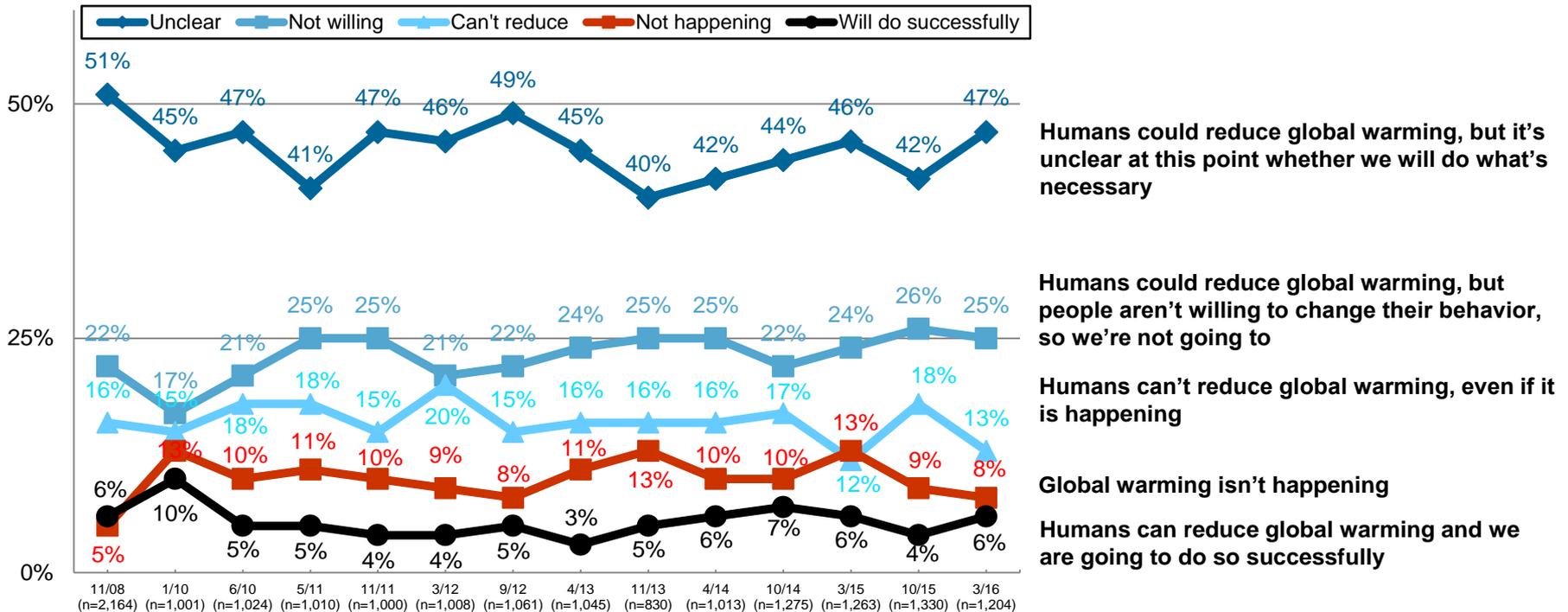


How worried are you about global warming?

Base: Americans 18+. March, 2016.

Few Americans are optimistic that humans can and will reduce global warming

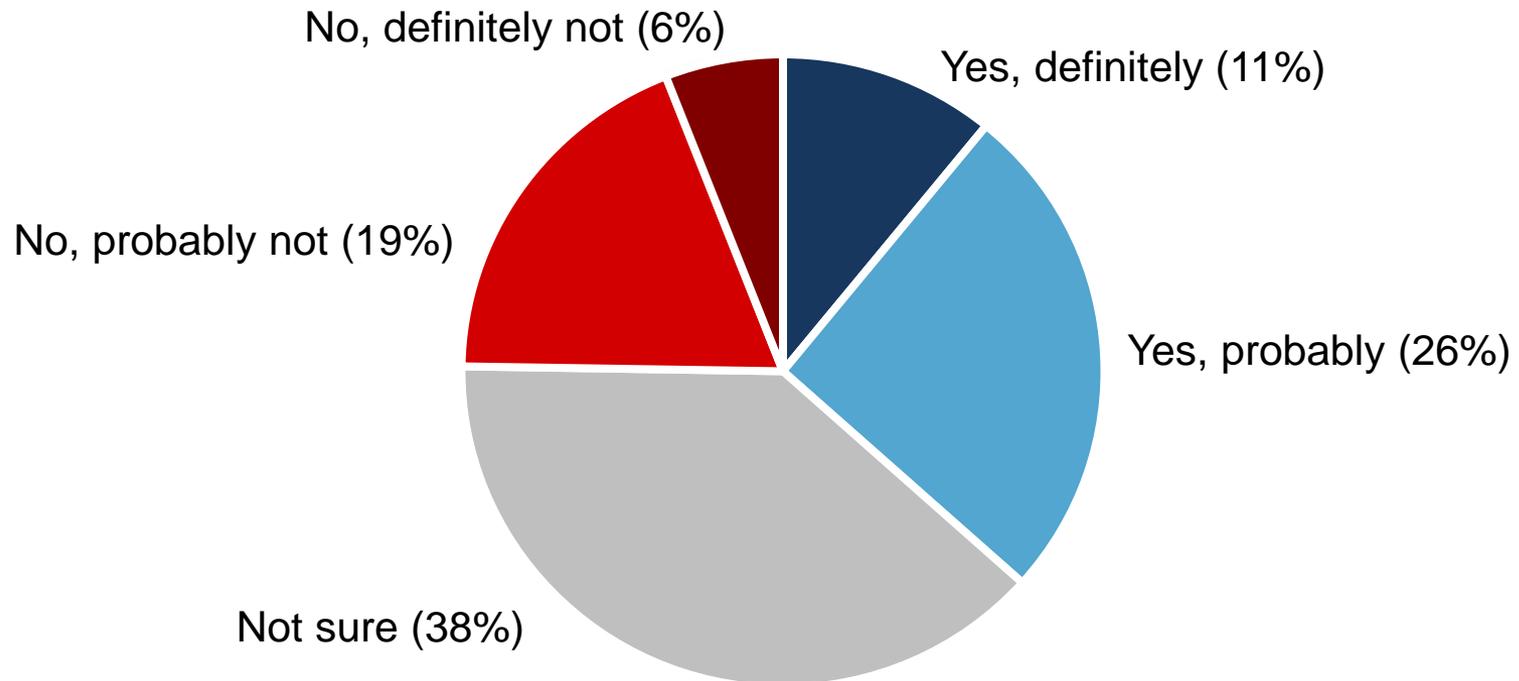
Which of the following statements comes closest to your view?



Which of the following statements comes closest to your view?

Base: Americans 18+. March, 2016.

Fewer than 4 in 10 think the American people can convince the U.S. Congress to pass ambitious legislation to reduce global warming

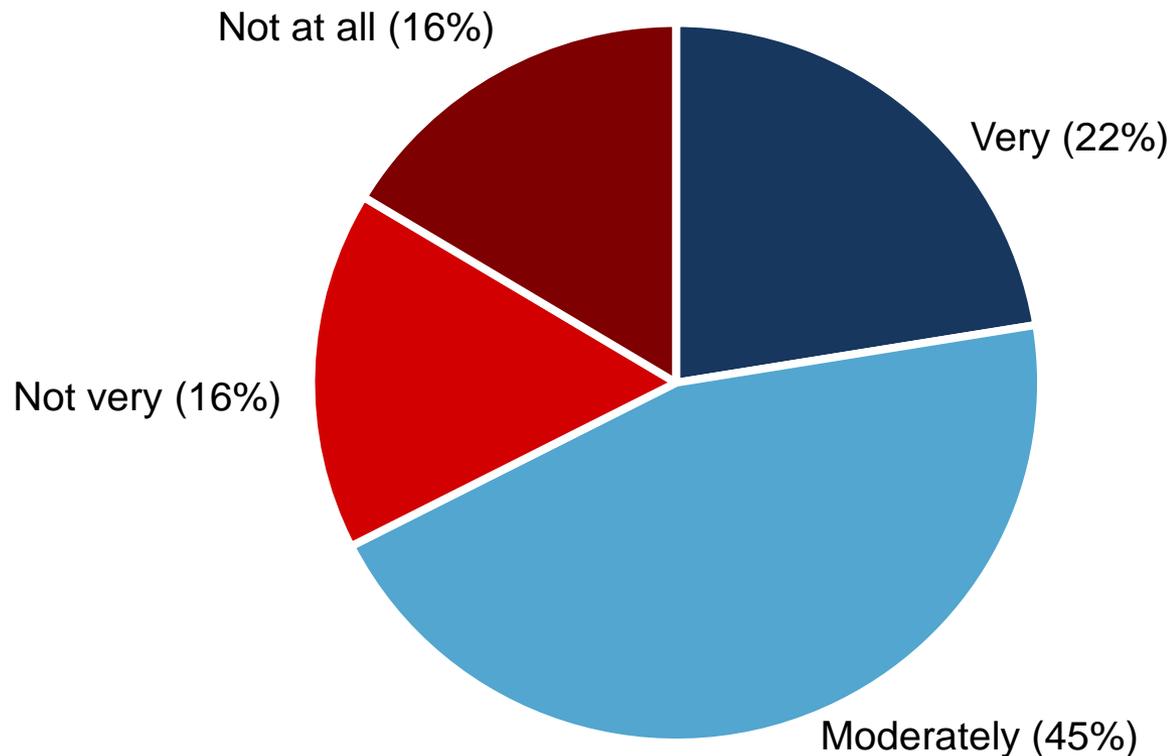


In your opinion, within the next several years, if the American people want to, can they convince the U.S. Congress to pass ambitious legislation to reduce global warming?

Base: Registered American Voters 18+ (n=1,004). March 2016.



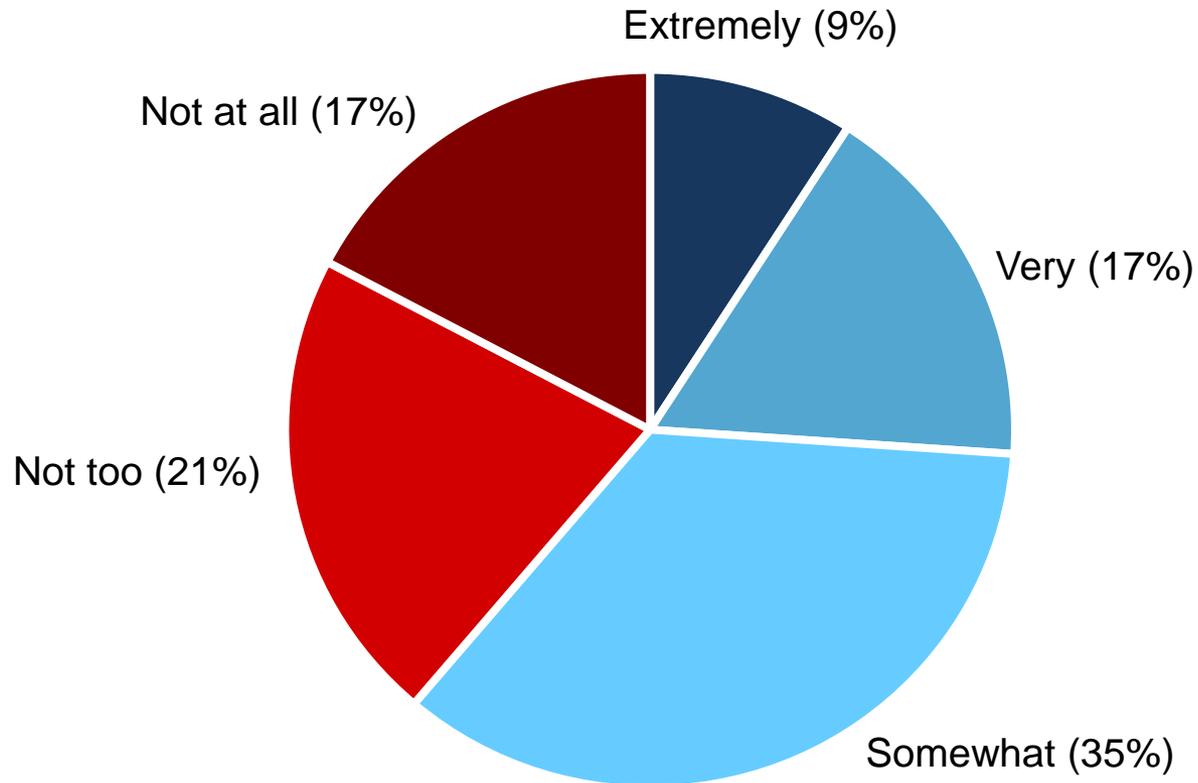
Two in three Americans are moderately or very interested in global warming



[Interested]. How strongly do you feel each of the following emotions when you think about the issue of global warming?

Base: Americans 18+ (n=1,204). March, 2016

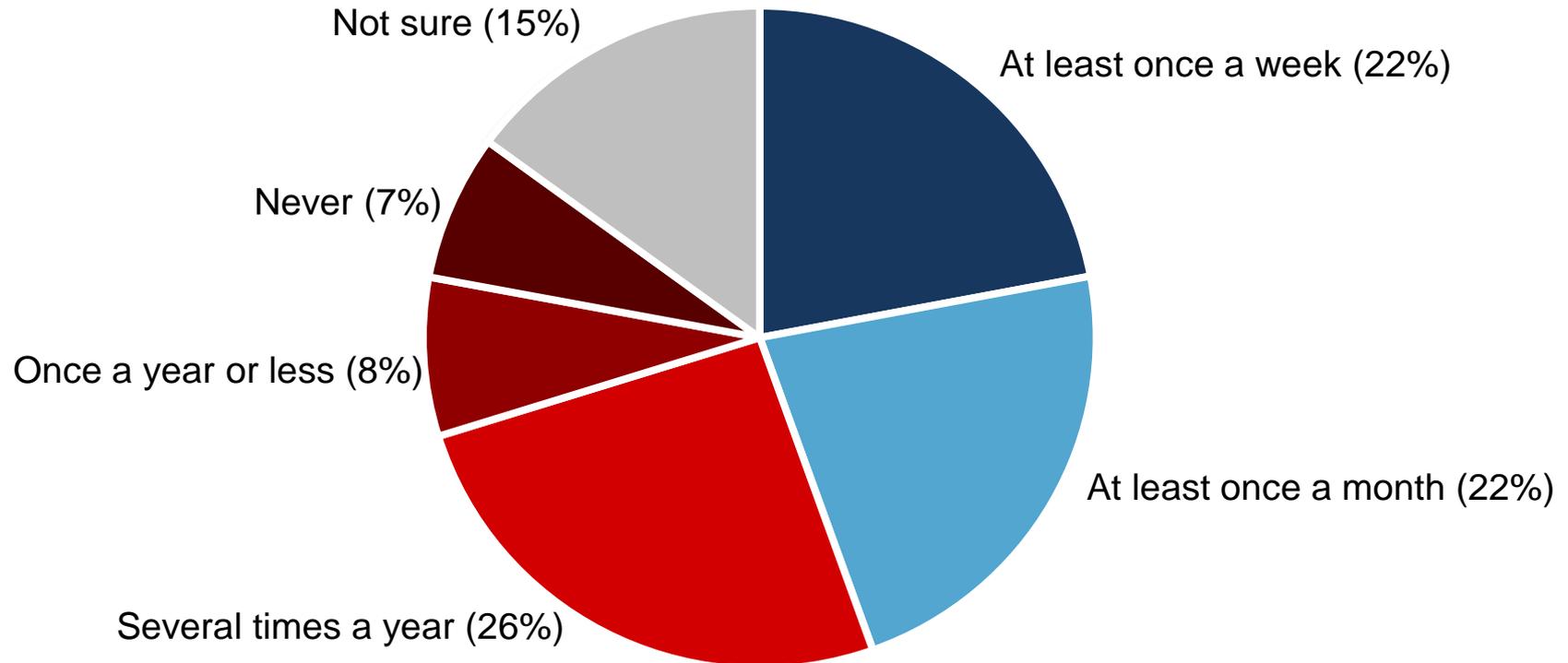
Six in 10 Americans say the issue of global warming is at least somewhat personally important to them



How important is the issue of global warming to you personally?

Base: Americans 18+ (n=1,204). March, 2016

Fewer than half of Americans say they hear global warming discussed in the media once a month or more often

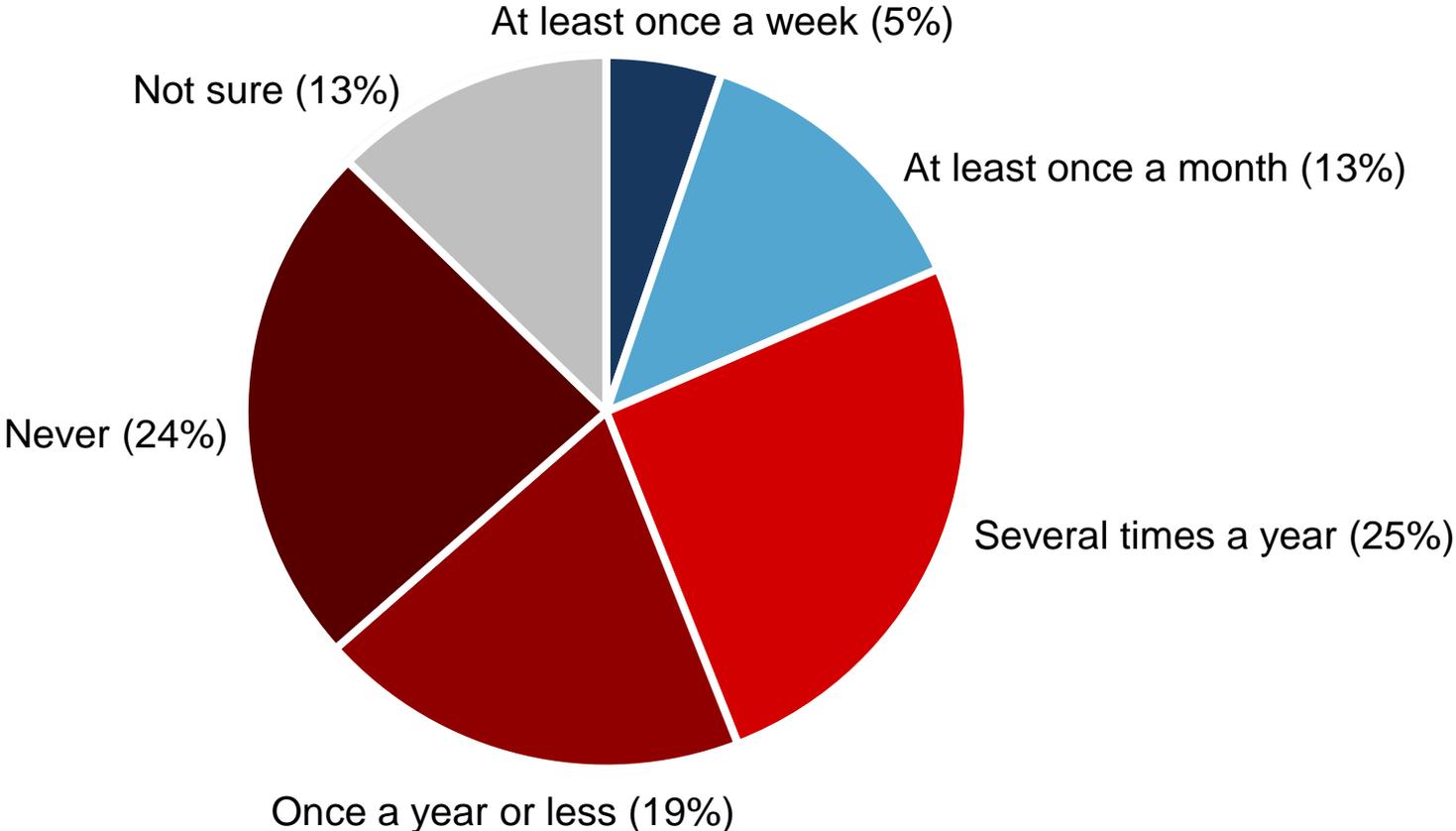


About how often do you hear about global warming in the media (TV, movies, radio, newspapers/news websites, magazines, etc.)?

Base: Americans 18+ (n=1,204). March, 2016

Less than 2 in 10 Americans hear people they know talk about global warming at least once a month

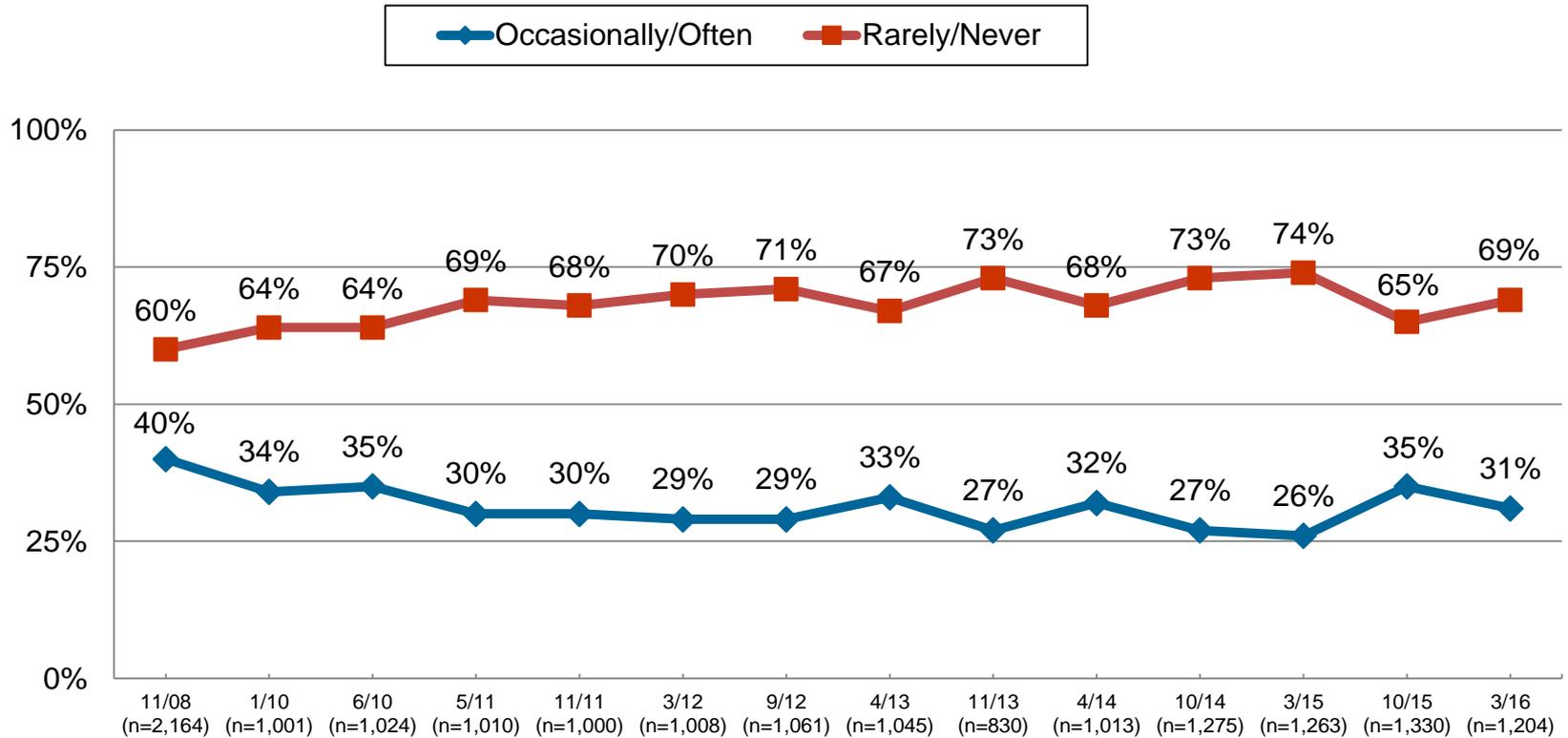
- 4 in 10 hear it discussed once a year at most -



About how often do you hear other people you know (your family, friends, co-workers, etc.) talk about global warming?

Base: Americans 18+ (n=1,204). March, 2016

Only 3 in 10 Americans discuss global warming with family and friends



How often do you discuss global warming with your family and friends?

Base: Americans 18+.

THE TIMES

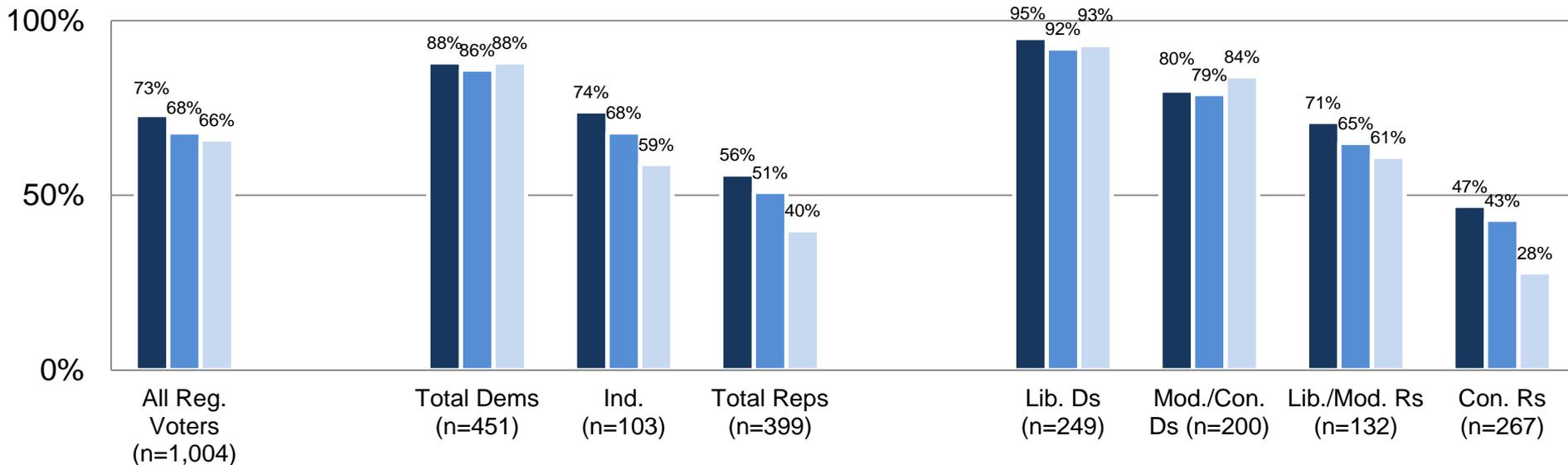
*They
Are*

A-CHANGIN'

An increasing number of Americans think global warming is happening, especially conservative Republicans

- % who say "yes," global warming is happening -

■ March 2016 ■ October 2015 ■ April 2014

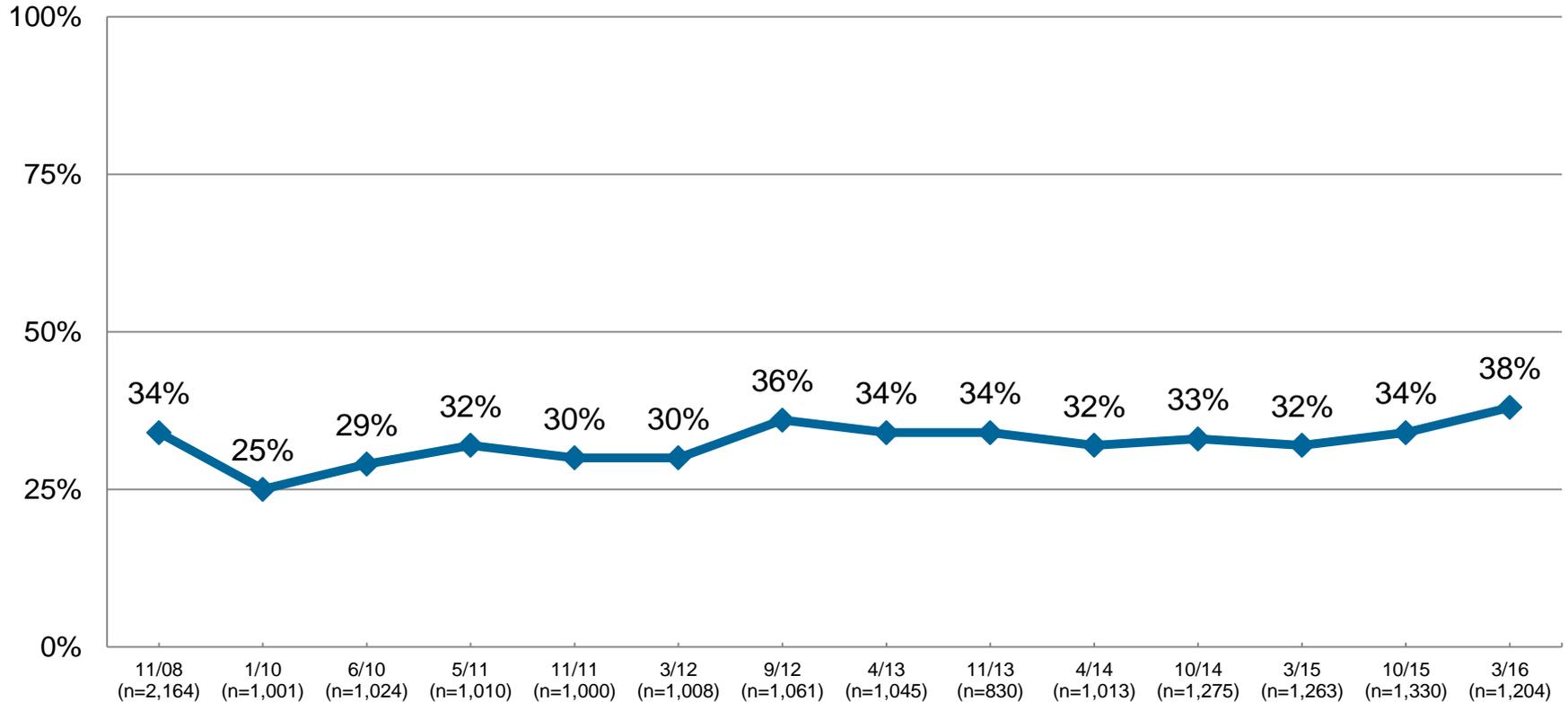


Recently, you may have noticed that *global warming* has been getting some attention in the news. Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate may change as a result. What do you think: Do you think that global warming is happening?

Bases: Registered American Voters 18+.

More Americans than ever think people in the U.S. are being harmed “right now” by global warming

- 6 point rise in past year -



When do you think global warming will start to harm people...?

Base: Americans 18+ (n=1,204). March, 2016.

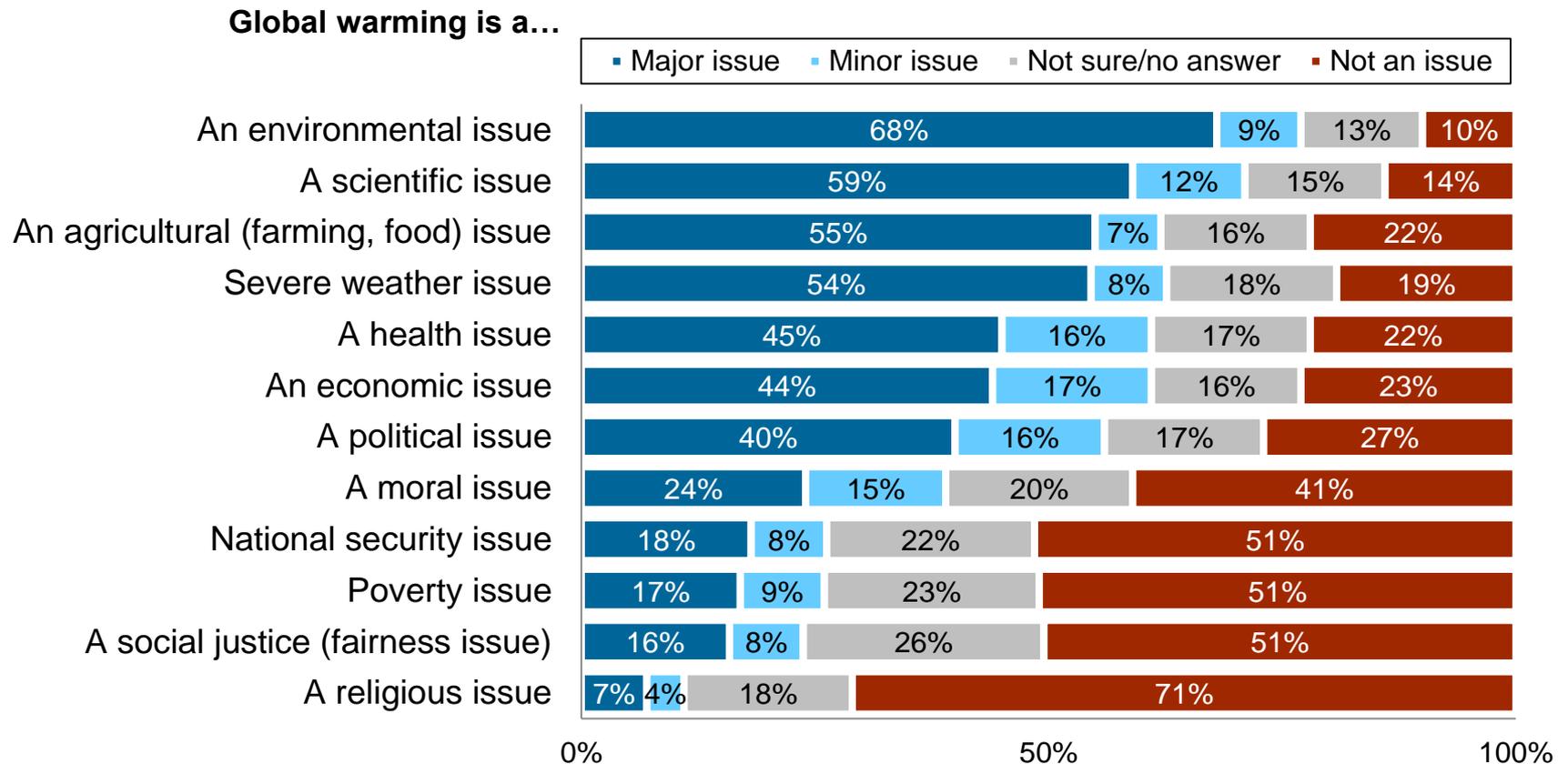


The Francis Effect

How Pope Francis changed the conversation
about global warming

NOVEMBER 2015

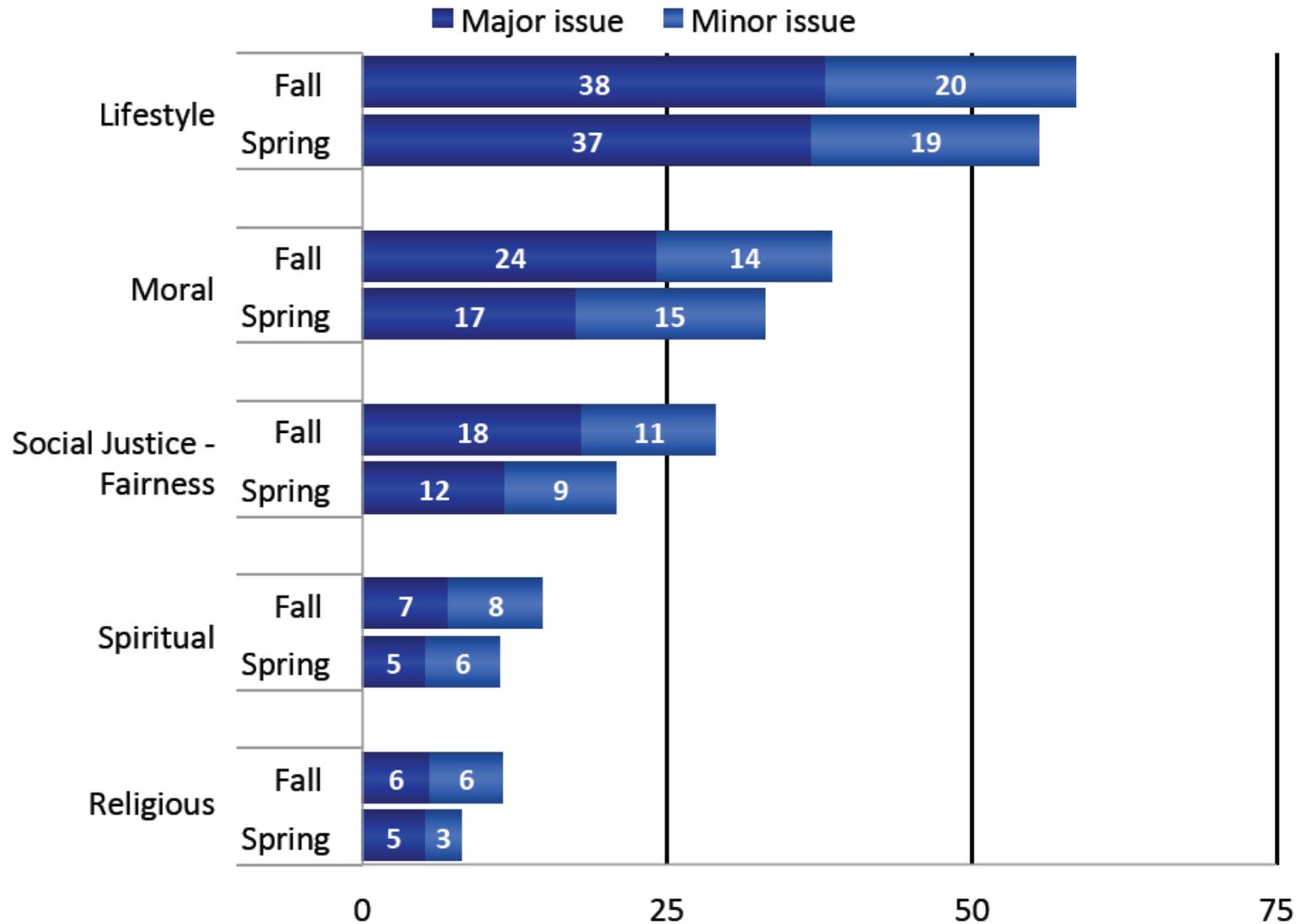
Majorities of Americans think global warming is a major environmental, scientific, agricultural, and/or severe weather issue



In your opinion, do you think global warming is...; Do you think global warming is a *major* or *minor*...

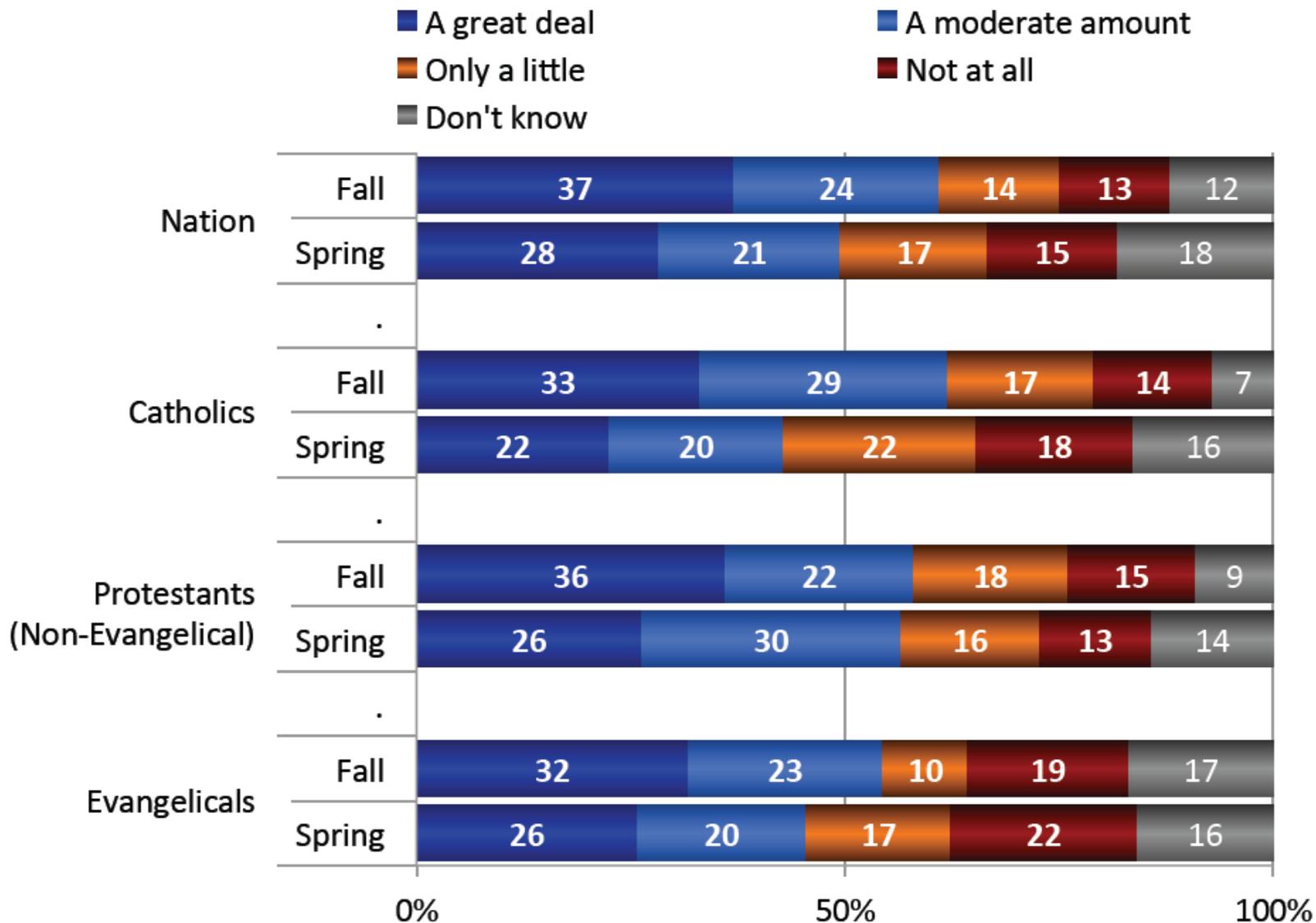
Base: Americans 18+ (n=1,204). March, 2016.

***In your opinion, do you think global warming is a ...?
(if yes) Do you think global warming is a major of minor issue?***



Base: Americans 18+ (n=905). March, 2015 & Oct. 2015.

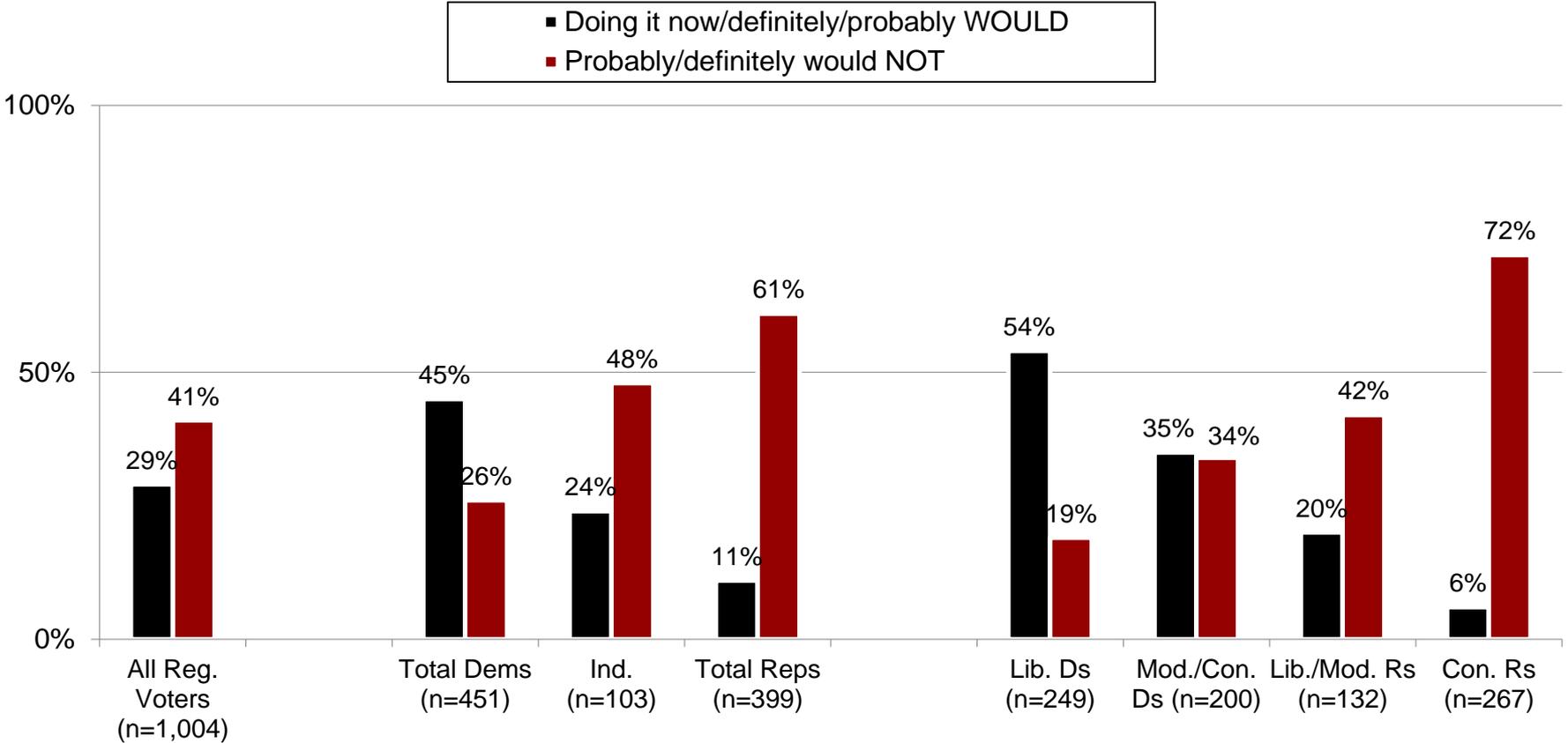
How much do you think global warming will harm the world's poor?



Base: Americans 18+ (n=905). March, 2015 & Oct. 2015.



3 in 10 registered voters are willing to join a campaign to convince elected officials to reduce global warming



How willing or unwilling would you be to join a campaign to convince elected officials to take action to reduce global warming?

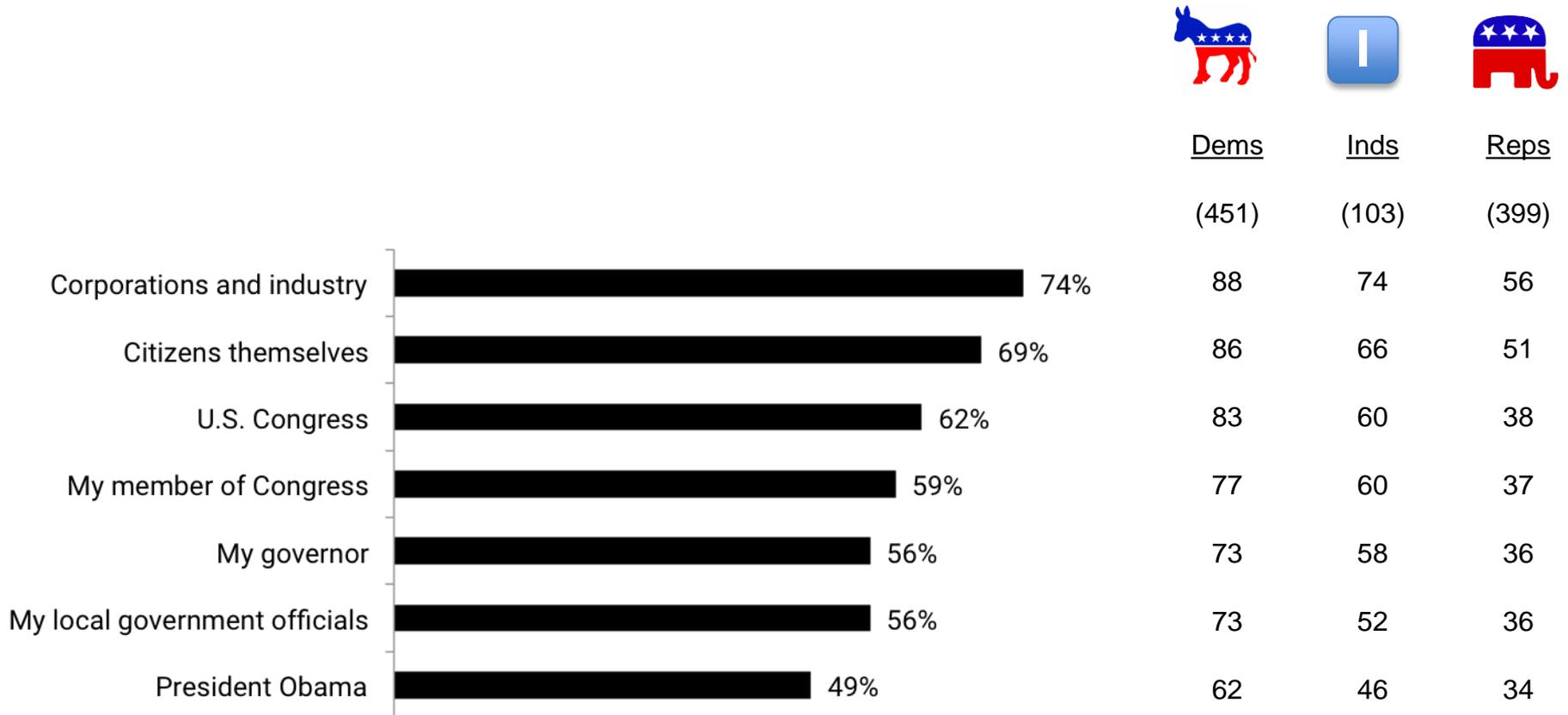
Base: Registered American Voters 18+. March 2016.

Key findings from Yale/Mason polling:

1. Most Americans are convinced that global warming is happening, but...(fill in caveats here)
2. The times, they are (or may be) a-changing'
3. **Public support for clean energy and climate action is stronger than public understanding of climate change**

Most American voters want corporations, Congress, their state & local govt., and citizens themselves to do more to address global warming

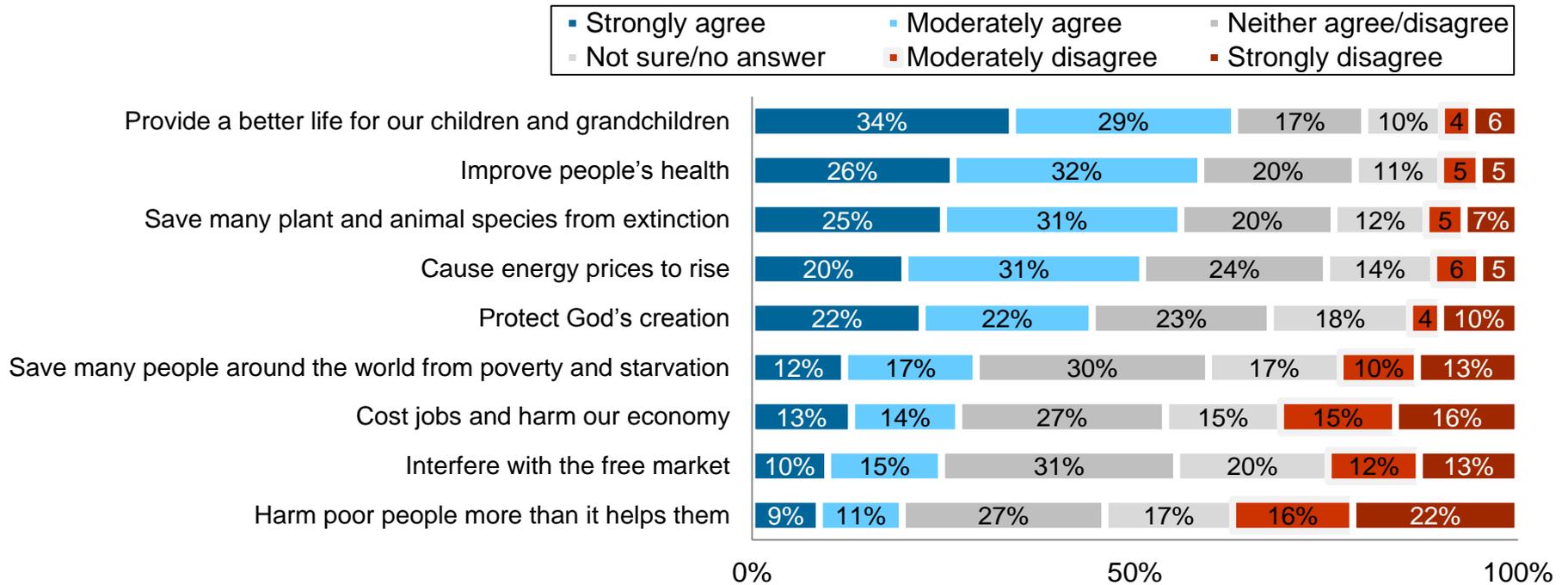
- % of registered voters who say should be doing “much more” or “more” -



Do you think each of the following should be doing more or less to address global warming?

Base: Registered American voters 18+ (n=1,004). March 2016.

More than half of Americans think that if the U.S. takes steps to reduce global warming it will provide a better life for our children/grandchildren, improve people's health, and save many plant/animal species from extinction. Few disagree.



Please indicate whether you agree or disagree with the following statements... If our nation takes steps to reduce global warming, it will...

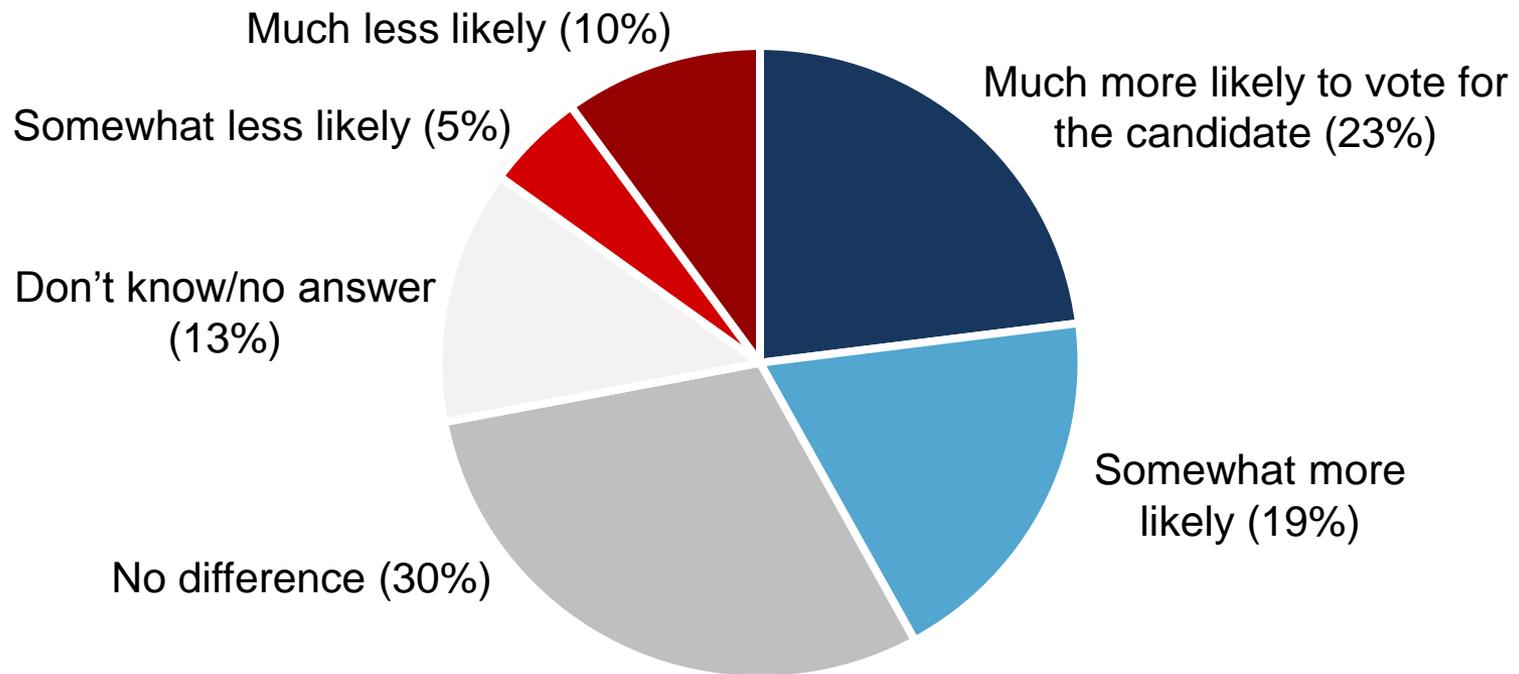
Base: Americans 18+ (n=1,204). March, 2016.

Global warming is a much more important voting issue to Democrats than to Republicans

Rank by "very imp."	Liberal Democrats	Moderate/Conservative Democrats	Liberal/Moderate Republicans	Conservative Republicans
1	The economy	The economy	The economy	The economy
2	Health care	Social Security	Terrorism	Terrorism
3	Income gap between rich and poor	Health care	Federal budget deficit	Federal budget deficit
4	Protecting the environment	Terrorism	Immigration reform	Immigration reform
5	Education	Education	Health care	Supreme Court nominations
6	Global warming	Income gap between rich and poor	Social Security	Tax reform
7	Race relations	Federal budget deficit	Tax reform	Foreign policy
8	Developing sources of clean energy	Improving the nation's roads, bridges, and powerlines	Gun control/rights	Health care
9	Social Security	Protecting the environment	Education	Gun control/rights
10	Improving the nation's roads, bridges, and powerlines	Tax reform	Foreign policy	Social Security
11	Gun control/rights	Developing sources of clean energy	Improving the nation's roads, bridges, and powerlines	Abortion
12	Terrorism	Foreign policy	Energy independence	Education
13	Energy independence	Global warming	Protecting the environment	Energy independence
14	Supreme Court nominations	Energy independence	Income gap between rich and poor	International trade
15	Campaign finance reform	Gun control/rights	Developing sources of clean energy	Same-sex marriage
16	Foreign policy	Race relations	International trade	Improving the nation's roads, bridges, and powerlines
17	Reforming Wall Street	Reforming Wall Street	Race relations	Campaign finance reform
18	Federal budget deficit	Supreme Court nominations	Supreme Court nominations	Income gap between rich and poor
19	Tax reform	Immigration reform	Abortion	Race relations
20	Abortion	Campaign finance reform	Reforming Wall Street	Reforming Wall Street
21	Immigration reform	Abortion	Global warming	Protecting the environment
22	Same-sex marriage	International trade	Campaign finance reform	Developing sources of clean energy
23	International trade	Same-sex marriage	Same-sex marriage	Global warming

How important will the following issues be when you decide who you will vote for in the 2016 Presidential election?
 Base: Registered American Voters 18+. March 2016.

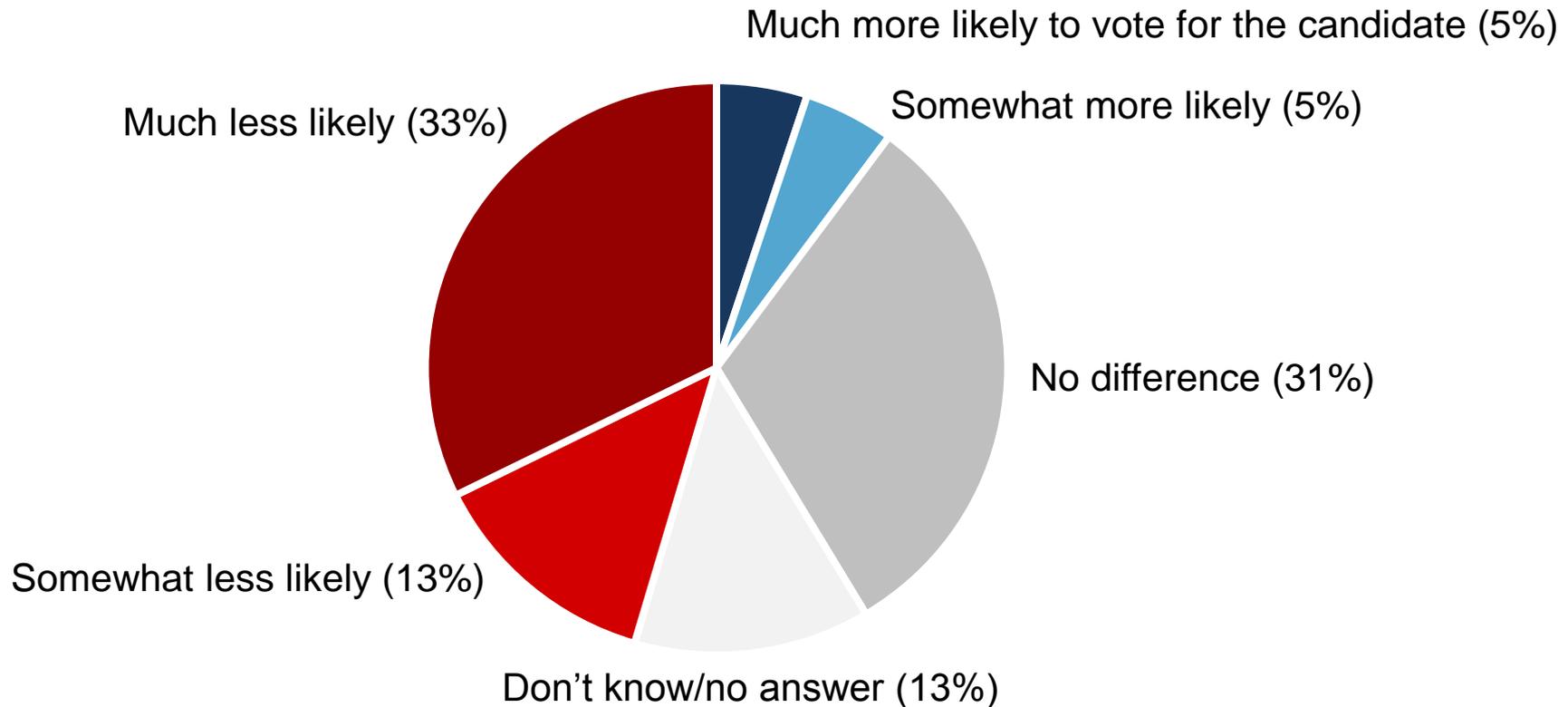
By a 3 to 1 margin, Americans are more likely to vote for a presidential candidate who strongly supports taking action to reduce global warming



If a candidate for U.S. president strongly supports taking action to reduce global warming, would you be more or less likely to do each of the following, or would it make no difference... Vote for the candidate?

Base: Registered American Voters 18+ (n=1,004). March 2016.

By a 4 to 1 margin, Americans are less likely to vote for a presidential candidate who strongly opposes action to reduce global warming

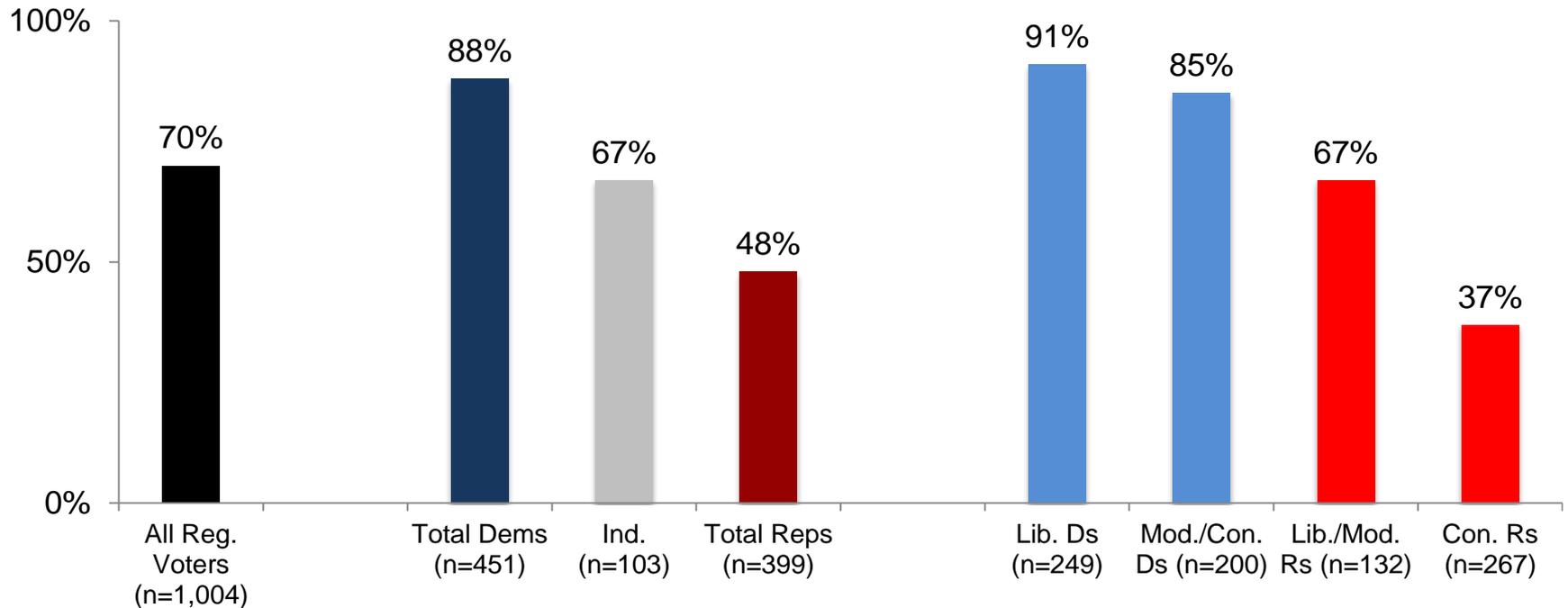


If a candidate for U.S. president strongly opposes taking action to reduce global warming, would you be more or less likely to do each of the following, or would it make no difference... Vote for the candidate??

Base: Registered American Voters 18+ (n=1,004). March 2016.

A large majority of registered voters, except conservative Republicans, support setting strict CO₂ emission limits on existing coal power plants

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

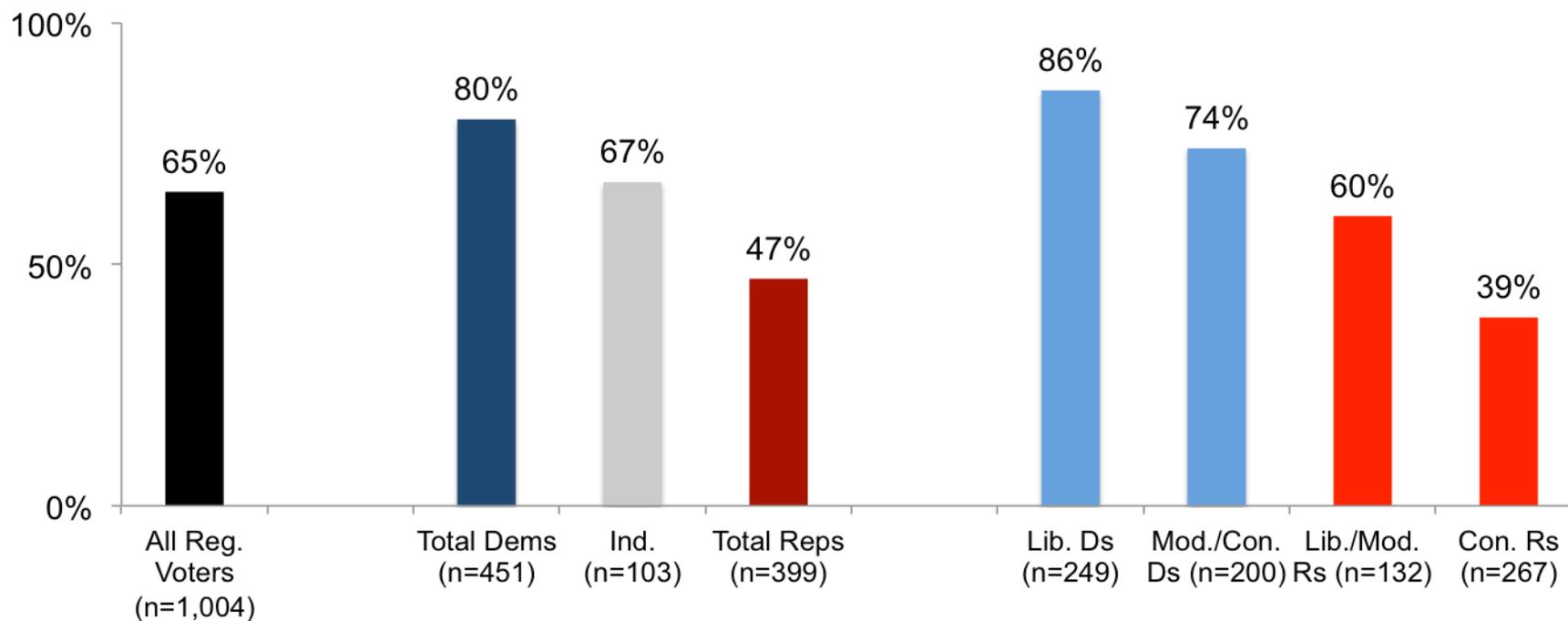


How much do you support or oppose the following policy? Set strict carbon dioxide emission limits on existing coal-fired power plants to reduce global warming and improve public health. Power plants would have to reduce their emissions and/or invest in renewable energy and energy efficiency. The cost of electricity to consumers and companies would likely increase.

Base: Registered American Voters 18+. March 2016.

A large majority of registered voters, except conservative Republicans, say the U.S. should reduce its CO₂ emissions regardless of what other countries do

- % who say “regardless of what other countries do” -



The United States should reduce its greenhouse gas emissions...
Base: Registered American Voters 18+. March 2016.

Large majorities of registered voters support a variety of clean energy policies

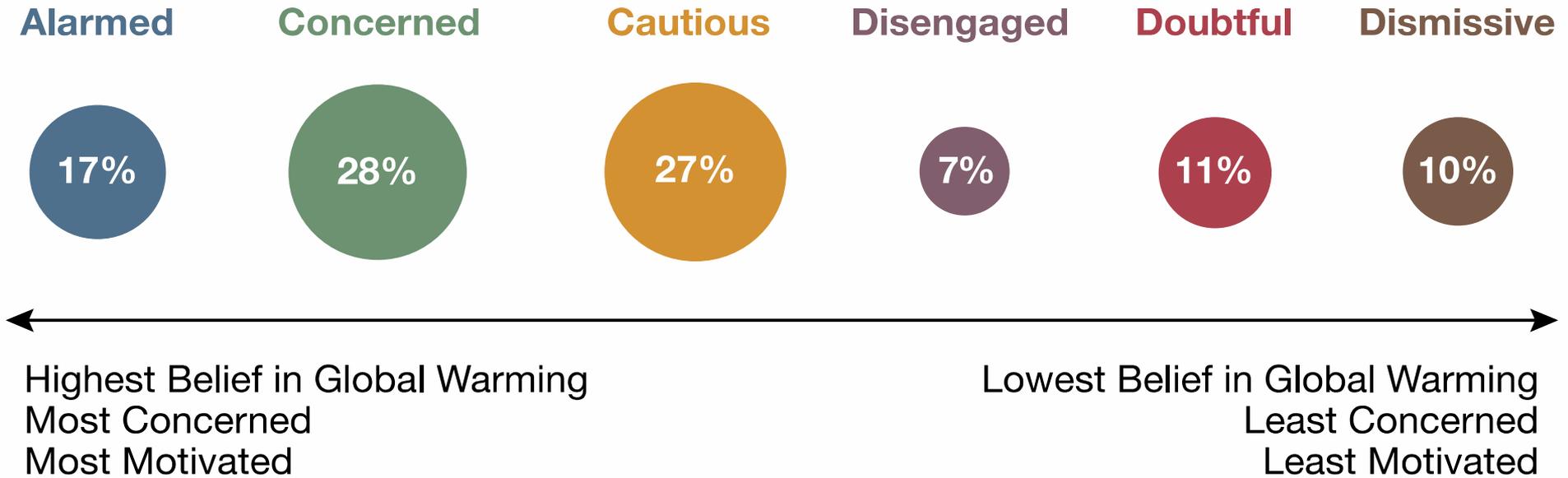
- % who say “strongly” or “somewhat support” policy -

(Unweighted base)	Democrats				Republicans			
	All Reg. Voters	Total	Lib.	Mod./Con.	Ind.	Total	Lib./Mod.	Con.
	(1,004)	(451)	(249)	(200)	(103)	(399)	(132)	(267)
	%	%	%	%	%	%	%	%
Fund more research into renewable energy sources, such as solar and wind power	84	91	95	87	87	75	82	72
Provide tax rebates for people who purchase energy-efficient vehicles or solar panels	81	91	94	87	84	70	79	65
Regulate carbon dioxide (the primary greenhouse gas) as a pollutant	75	88	93	82	78	61	74	53
Require fossil fuel companies to pay a carbon tax and use the money to reduce other taxes (such as income tax) by an equal amount	68	86	88	84	66	47	65	37
Expand offshore drilling for oil and natural gas off the U.S. coast	58	42	36	49	57	78	71	82

How much do you support or oppose the following policies?

Base: Registered American Voters 18+. March 2016.

Global Warming's "Six Americas"

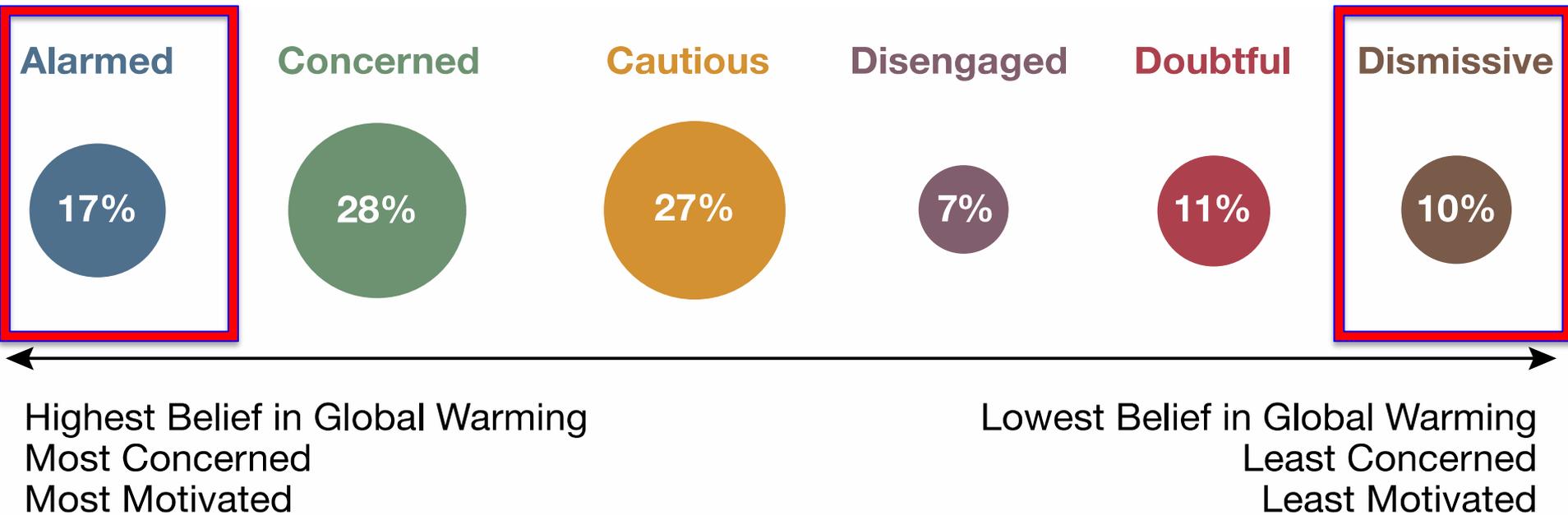


Proportion represented by area



Source: Yale/George Mason, March 2016; N=1,203

Global Warming's "Six Americas"

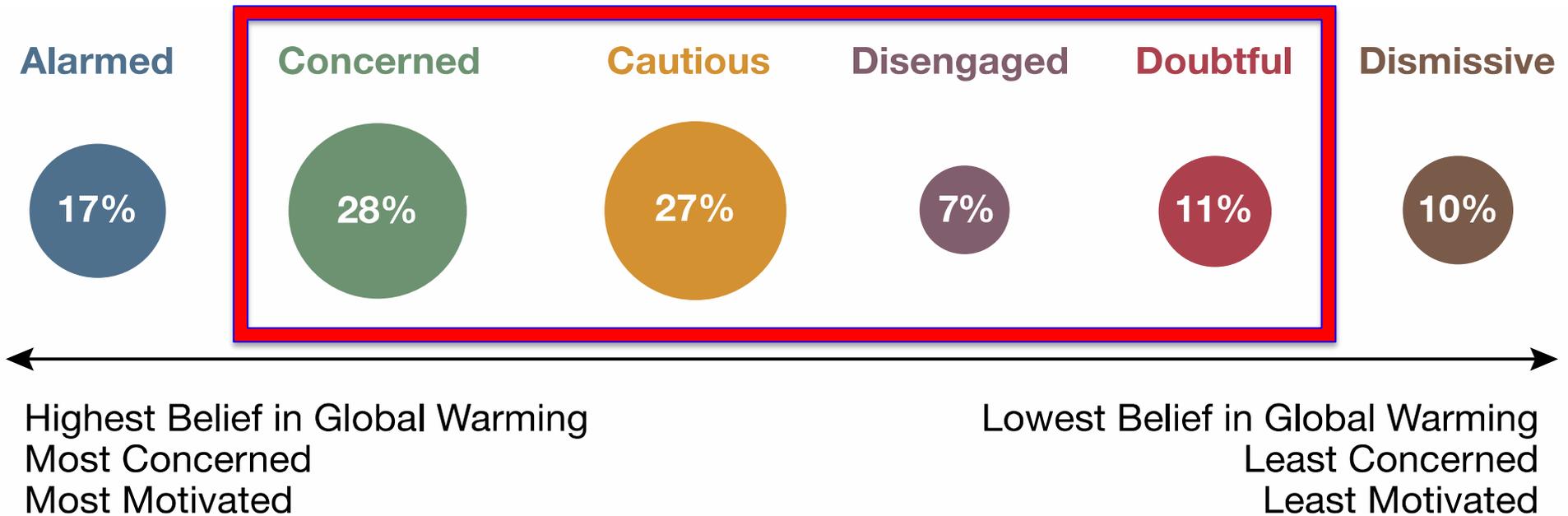


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Global Warming's "Six Americas"



Proportion represented by area

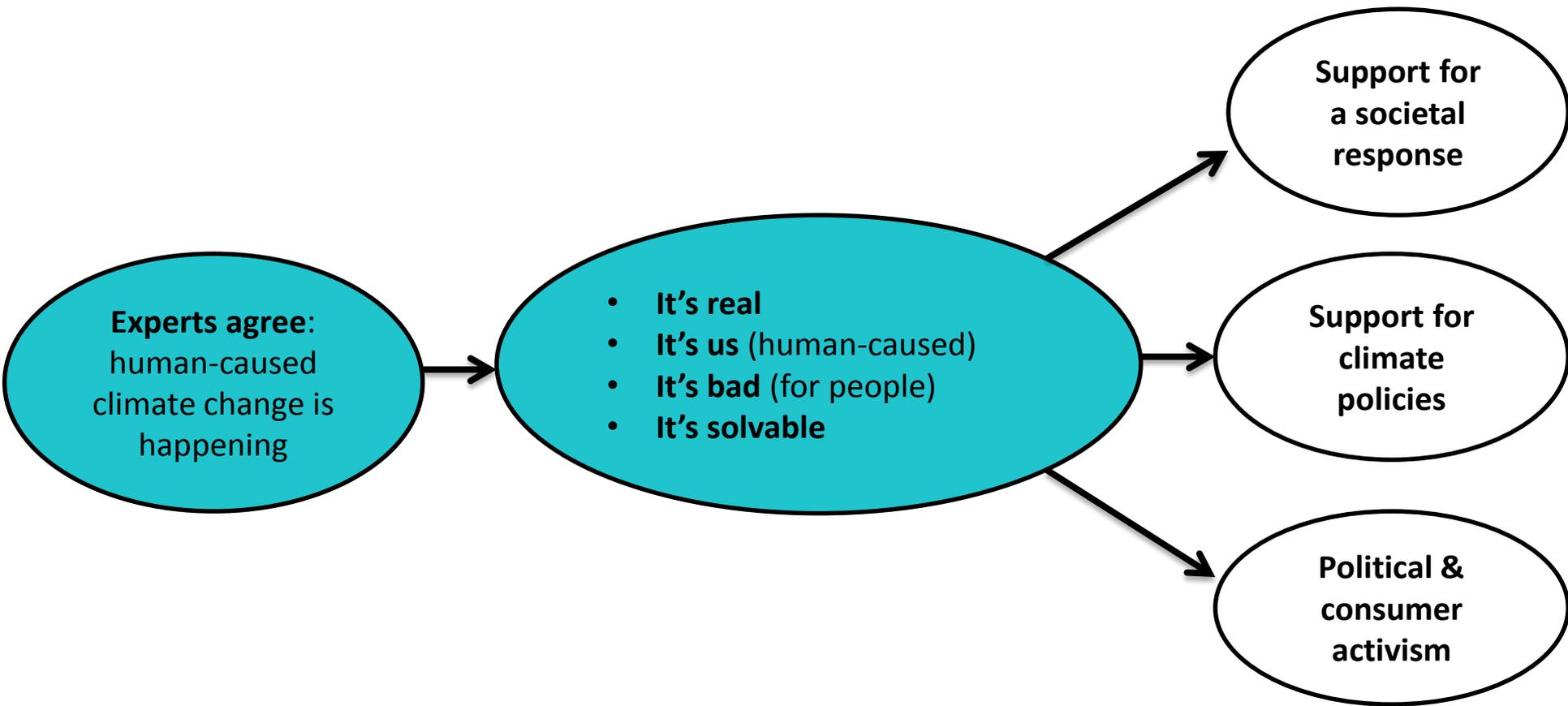


Source: Yale/George Mason, March 2016; N=1,203

**Five key beliefs
about climate change**



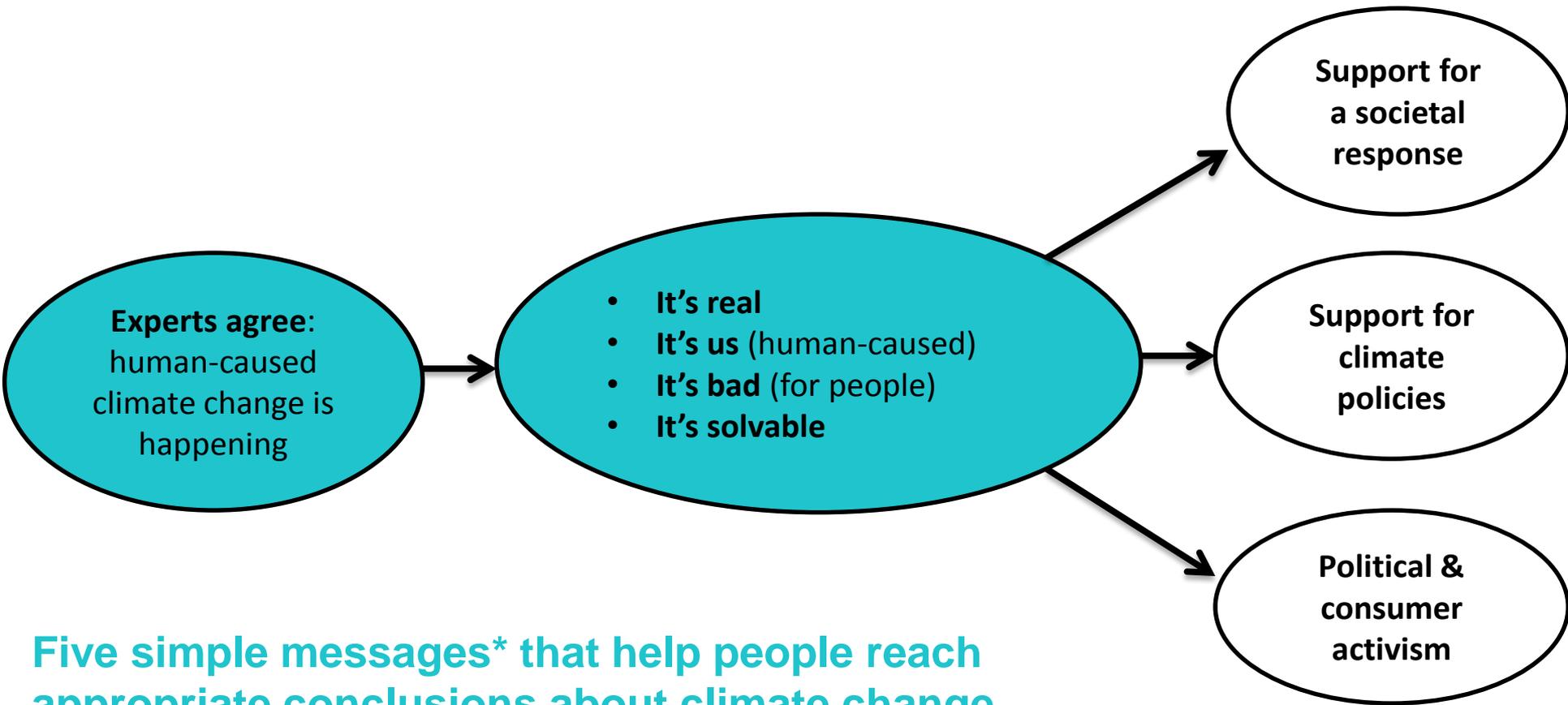
**Various appropriate
attitudes & actions**



**Five key beliefs
about climate change**



**Various appropriate
attitudes & actions**



Five simple messages* that help people reach appropriate conclusions about climate change.

* Formula for effective campaigns: Simple clear messages, repeated often, by a variety of trusted voices.



Research

Our Mission

Our mission at 4C is to develop and apply social science insights to help society make informed decisions that will stabilize the earth's life-sustaining climate, and prevent further harm from climate change.

WHAT WE DO

RECEIVE OUR REPORTS