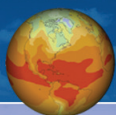


CLIMATE CHANGE IN THE AMERICAN MIND

Americans' Global Warming Beliefs
and Attitudes in March 2012



YALE PROJECT ON
**CLIMATE CHANGE
COMMUNICATION**
BRIDGING SCIENCE + SOCIETY



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George Mason University
Center for Climate Change Communication



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Center for Climate Change Communication

Climate Change in the American Mind: Americans' Global Warming Beliefs and Attitudes in March 2012

Interview dates: March 12, 2012 – March 30, 2012 Interviews: 1,008 Adults (18+)

Margin of error: +/- 3 percentage points at the 95% confidence level.

NOTE: All results show percentages among all respondents, unless otherwise labeled. Totals may occasionally sum to more than 100 percent due to rounding.

This study was conducted by the Yale Project on Climate Change Communication and the George Mason University Center for Climate Change Communication, and was funded by the Surdna Foundation, the 11th Hour Project, the Grantham Foundation for the Protection of the Environment, and the V. Kann Rasmussen Foundation.

Principal Investigators:

Anthony Leiserowitz, PhD
Yale Project on Climate Change Communication
School of Forestry & Environmental Studies, Yale University
(203) 432-4865 anthony.leiserowitz@yale.edu

Edward Maibach, MPH, PhD
Center for Climate Change Communication
Department of Communication, George Mason University
(703) 993-1587 emaibach@gmu.edu

Connie Roser-Renouf, PhD
Center for Climate Change Communication
Department of Communication, George Mason University
(707) 825-0601 croserre@gmu.edu

Jay D. Hmielowski, PhD
Yale Project on Climate Change Communication
School of Forestry & Environmental Studies, Yale University
(203) 432-0773 jay.hmielowski@yale.edu

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<http://environment.yale.edu/climate/files/Climate-Beliefs-March-2012.pdf>

Executive Summary

Overview

Overall, Americans' beliefs and attitudes about global warming have remained relatively stable over the past several months, with a few exceptions. There has been a slight increase in the proportion of people that believe global warming is happening and a slight decrease in the proportion that believe it is caused by mostly by human activities. There has also been a slight decrease in the proportion of people who believe that most scientists think global warming is happening; this decline is at odds with the widespread agreement among scientists that global warming is happening and primarily human caused. The public also overestimates the level of global warming disbelief in the United States.

Finally, in this election year, we find that approximately half of Americans (47%) trust President Obama as a source of information about global warming, which is essentially unchanged since November of 2011. By contrast, only 21 percent of Americans trust Mitt Romney on this issue and his level of trust dropped 5 points since November, with “strong distrust” increasing by 8 points to 39 percent.

Beliefs and Attitudes

- Since November 2011, public belief that global warming is happening increased by 3 points, to 66 percent. However, belief that it is caused mostly by human activities decreased four points, to 46 percent.
- Americans continue to think global warming will harm plant and animal species (64%), future generations of people (65%), and people in developing countries (52%) more than people in the United States (46%), people in their community (34%), their family (33%), or themselves personally (29%).
- 42 percent of Americans think global warming is harming people in the United States now (30%) or will within the next 10 years (12%). By contrast, 45 percent say global warming won't start to harm people in the United States for 50 years (14%), 100 years (15%), or ever (16%).
- 54 percent of Americans worry about global warming, while 61 percent say the issue is personally important to them, both essentially unchanged since November.
- Since November, however, there has been a 6 point decrease (to 35%) in the proportion of Americans who believe that most scientists think global warming is happening, with a 2 point increase (to 41%) in those who believe there is a lot of disagreement among scientists.
- A large majority of Americans (70%) say they need “a lot” (19%), “some” (28%), or “a little” (23%) more information before they make up their mind about global warming.
- A large majority (80%) say they have not changed their opinions about global warming in the past year or two, but 9 percent say they have, while 11 percent say they don't know.

- Since November, Americans have become more polarized in their views of the efficacy of individual action, with a 7 point increase (to 18%) in those who strongly agree that “the actions of a single individual won’t make any difference in global warming” while those who strongly disagree with this statement also increased by 6 points to 21 percent.
- Since November, Americans have also become more skeptical that “new technologies can solve global warming, without individuals having to make big changes in their lives” with a 12 point increase in those who strongly disagree with this statement (to 28%).
- In a new question to assess Americans’ perceptions of public opinion on this issue, we asked respondents to estimate how many of their fellow Americans hold several key beliefs about global warming. On average:
 - Respondents correctly estimated that 38 percent of Americans believe global warming is happening due mostly to human activities.¹
 - Respondents correctly estimated that 20 percent of Americans haven’t yet made up their mind about whether or not global warming is happening.
 - Respondents incorrectly estimated that 21 percent of Americans don’t believe that global warming is happening – an overestimate of 7 points (it’s actually 14%).
 - Respondents incorrectly estimated that 25 percent of Americans believe that global warming is happening due mostly to natural causes – an overestimate of 6 points (it’s actually 19%).²

Trust

- Large majorities of Americans continue to trust climate scientists (74%), other kinds of scientists (65%), and television weather reporters (62%) as sources of information about global warming. The mainstream news media is trusted by 43 percent.
- President Obama is trusted by 47 percent of Americans, while Mitt Romney is trusted by only 21 percent as a source of information about global warming. Since November, trust in President Obama has held steady, while trust in Mitt Romney dropped by 5 points, with “strong distrust” increasing by 8 points to 39 percent.
- Only 24 percent of Americans trust consumer good companies (e.g., Levi-Strauss, Nike, and Avon), 20 percent trust car companies (e.g., GM and Toyota) (20%), and only 13 percent trust oil, gas and coal companies (e.g., ExxonMobil and Peabody Energy) as sources of information about global warming.

¹ 38 percent is the proportion of respondents that: 1) said global warming is happening, *and* 2) that it is mostly caused by human activities. The cause question begins, "Assuming global warming is happening, do you think it is..." Some respondents that said they do not believe that global warming is happening, or that they don't know, nonetheless chose either natural or human causes in the cause question and thus were not included in this calculation.

² 19 percent is the proportion that said they believe global warming is happening, *and* that it is mostly caused by natural changes in the environment.

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Beliefs & Attitudes

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?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Yes	66	63	64	61	57	71
No	14	17	18	18	20	10
Don't Know	20	20	18	21	23	19

People who answered yes to the prior question (i.e. those who believe global warming is happening) were asked the following question.

How sure are you that global warming is happening?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Extremely sure	19	22	21	20	24	35
Very sure	34	35	33	37	35	37
Somewhat sure	42	39	40	40	37	24
Not at all sure	5	5	6	3	5	4

People who answered no to the prior question (i.e. those who do not believe global warming is happening) were asked the following question.

How sure are you that global warming is not happening?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Extremely sure	15	21	21	20	28	26
Very sure	41	37	31	31	31	28
Somewhat sure	35	37	38	44	34	38
Not at all sure	8	5	11	4	7	8

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

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Caused mostly by human activities	46	50	47	50	47	57
Caused mostly by natural changes in the environment	37	33	35	34	36	32
None of the above because global warming isn't happening	5	8	8	6	9	4
Caused by both human activities and natural changes (volunteered)	9	6	8	7	6	5
Other	2	2	1	1	1	1
Don't know (volunteered)	1	1	1	1	1	1

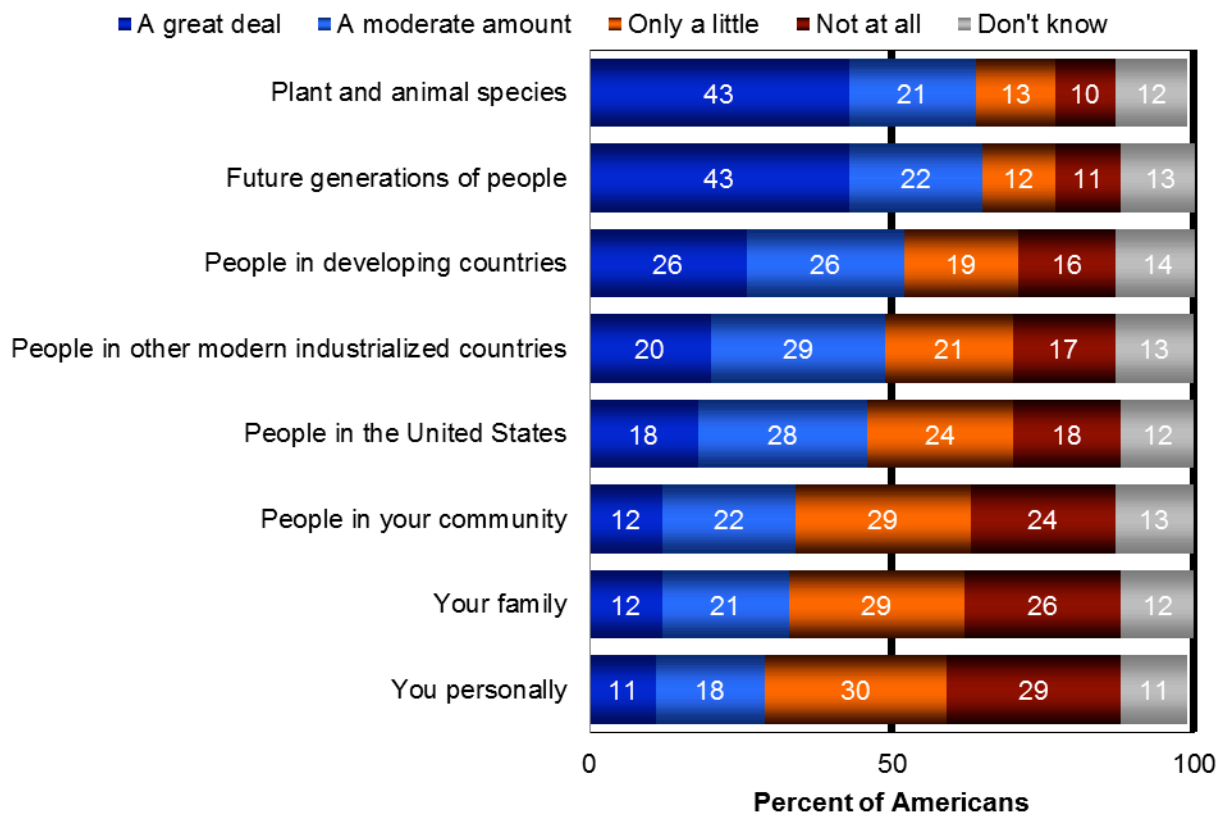
Which comes closer to your own view?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Most scientists think global warming is happening	35	41	39	34	34	47
Most scientists think global warming is not happening	3	3	4	4	5	3
There is a lot of disagreement among scientists about whether or not global warming is happening	41	39	40	45	40	33
Don't know enough to say	21	18	18	17	22	18

How worried are you about global warming?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Very worried	11	12	9	12	12	17
Somewhat worried	43	42	43	41	38	46
Not very worried	30	31	28	30	27	24
Not at all worried	16	15	20	18	23	13

How much do you think global warming will harm:



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

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	11	9	11	10	14	10
A moderate amount	18	21	18	21	23	22
Only a little	30	28	28	27	22	24
Not at all	29	25	25	24	31	22
Don't know	11	17	18	18	11	23

How much do you think global warming will harm your family?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	12	10	13	11	15	11
A moderate amount	21	24	21	25	25	24
Only a little	29	27	26	24	21	23
Not at all	26	21	23	21	28	19
Don't know	12	18	18	19	11	23

How much do you think global warming will harm people in your community?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	12	11	12	11	15	13
A moderate amount	22	24	22	25	27	26
Only a little	29	27	26	24	22	20
Not at all	24	21	22	21	24	17
Don't know	13	18	18	19	12	23

How much do you think global warming will harm people in the United States?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	18	15	16	16	22	21
A moderate amount	28	29	26	28	29	28
Only a little	24	23	23	22	16	15
Not at all	18	17	17	17	22	14
Don't know	12	16	18	18	12	22

How much do you think global warming will harm people in other modern industrialized countries?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	20	17	17	17	23	22
A moderate amount	29	29	25	28	29	28
Only a little	21	22	23	21	16	13
Not at all	17	15	17	15	19	13
Don't know	13	17	19	18	13	24

How much do you think global warming will harm people in developing countries?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	26	22	23	22	29	31
A moderate amount	26	28	22	28	25	22
Only a little	19	17	20	17	14	11
Not at all	16	15	17	15	19	13
Don't know	14	18	19	18	13	24

How much do you think global warming will harm future generations of people?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	43	40	37	39	42	44
A moderate amount	22	22	22	22	22	17
Only a little	12	13	10	11	9	7
Not at all	11	10	12	12	15	10
Don't know	13	16	19	16	12	22

How much do you think global warming will harm plant and animal species?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A great deal	43	41	39	40	43	45
A moderate amount	21	19	19	21	19	17
Only a little	13	16	12	12	11	8
Not at all	10	10	13	13	15	9
Don't know	12	15	18	15	12	20

When do you think global warming will start to harm people in the United States?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
They are being harmed now	30	30	32	29	25	34
In 10 years	12	10	12	12	12	13
In 25 years	14	13	13	12	14	13
In 50 years	14	15	12	13	13	13
In 100 years	15	15	11	15	13	12
Never	16	16	20	19	23	15

When do you think global warming will start to harm other people around the world?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
They are being harmed now	32	35	34	32	28	38
In 10 years	12	9	12	11	13	13
In 25 years	14	14	12	13	12	12
In 50 years	13	13	12	12	12	12
In 100 years	14	14	11	13	13	11
Never	15	15	19	18	22	14

How much had you thought about global warming before today?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
A lot	15	15	12	18	15	20
Some	30	30	33	37	31	35
A little	39	39	38	32	36	33
Not at all	16	16	16	13	18	12

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

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Extremely important	6	6	7	6	5	11
Very important	14	13	15	18	15	21
Somewhat important	41	41	38	39	38	40
Not too important	23	25	25	24	23	18
Not at all important	16	15	14	14	20	11

On some issues people feel that they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind. For global warming, where would you place yourself?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
I need a lot more information	19	18	22	20	22	30
I need some more information	28	28	30	27	23	30
I need a little more information	23	27	25	29	26	22
I do not need any more information	30	27	23	24	29	18

How much do you agree or disagree with the following statement? “I could easily change my mind about global warming.”

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly agree	3	4	6	5	5	5
Somewhat agree	35	34	32	32	30	28
Somewhat disagree	36	36	33	36	31	34
Strongly disagree	26	27	29	27	34	34

I have personally experienced the effects of global warming.

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly agree	5	7	5	5	5	4
Somewhat agree	30	31	29	25	21	29
Somewhat disagree	31	37	34	35	35	43
Strongly disagree	34	25	32	35	40	24

The actions of a single individual won't make any difference in global warming.

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly agree	18	11	15	13	17	9
Somewhat agree	26	31	31	29	29	22
Somewhat disagree	35	43	36	43	37	45
Strongly disagree	21	15	19	15	17	24

New technologies can solve global warming, without individuals having to make big changes in their lives.

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly agree	6	7	7	6	6	4
Somewhat agree	30	40	40	33	42	26
Somewhat disagree	36	37	33	40	33	46
Strongly disagree	28	16	21	21	19	25

Which of the following statements comes closest to your view?

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Humans can reduce global warming, and we are going to do so successfully	4	4	5	5	10	6
Humans could reduce global warming, but it's unclear at this point whether we will do what's needed	46	47	41	47	45	51
Humans could reduce global warming, but people aren't willing to change their behavior, so we're not going to	21	25	25	21	17	22
Humans can't reduce global warming, even if it is happening	20	15	18	18	15	16
Global warming isn't happening	9	10	11	10	13	5

Please estimate the proportion of Americans who hold each of the beliefs shown below. Your answer for each belief should be between 0 percent and 100 percent; your answers should total to 100 percent.

What proportion of Americans...

	Average Percent
Believe that global warming is happening due mostly to human activities?	38
Believe that global warming is happening due mostly to natural causes?	25
Don't believe that global warming is happening?	21
Haven't yet made up their mind about whether or not global warming is happening?	20

Most of my friends are trying to act in ways that reduce global warming.

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly agree	4	3	4	5	5	4
Somewhat agree	41	43	41	47	43	44
Somewhat disagree	38	40	38	36	37	40
Strongly disagree	17	14	18	12	14	11

With the economy in such bad shape, the US can't afford to reduce global warming.

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly agree	12	10	15	13	-	-
Somewhat agree	31	33	37	30	-	-
Somewhat disagree	41	41	33	42	-	-
Strongly disagree	17	16	16	15	-	-

Over the past year or two, have you changed your opinion about global warming?

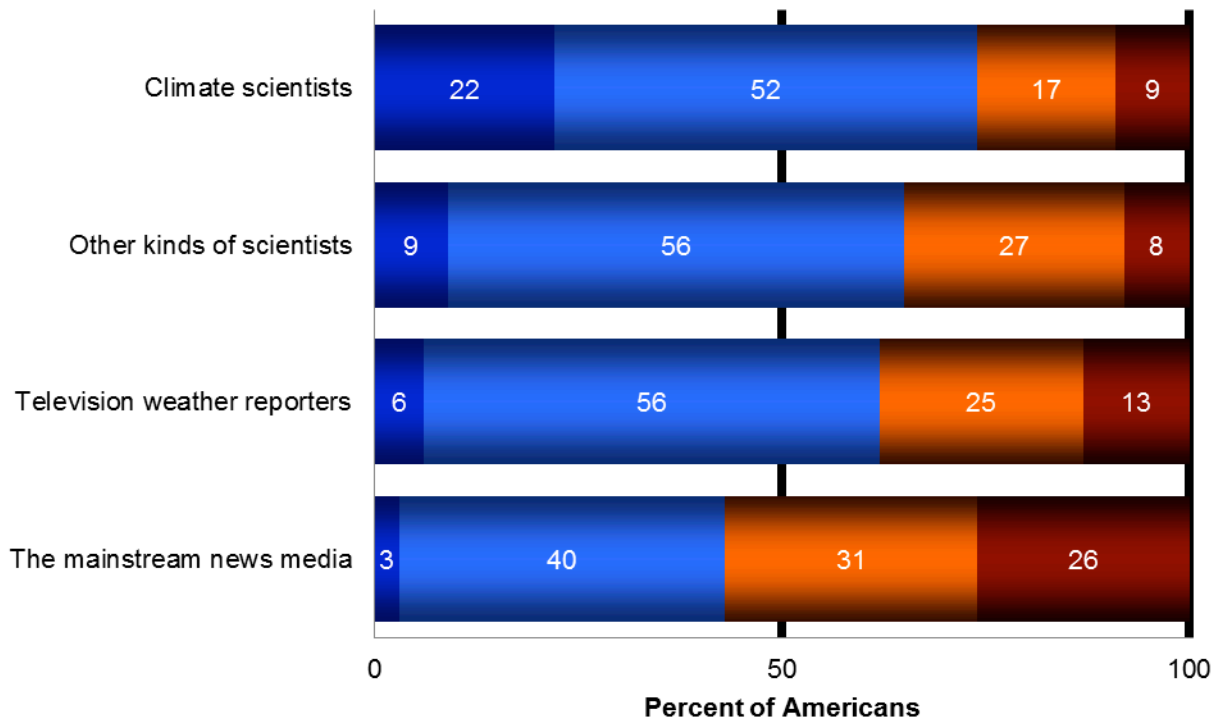
	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Yes	9	-	-	-	-	-
No	80	-	-	-	-	-
Don't Know	11	-	-	-	-	-

Trust

How much do you trust or distrust the following as a source of information about global warming?

How much do you trust or distrust the following as a source of information about global warming?

■ Strongly trust ■ Somewhat trust ■ Somewhat distrust ■ Strongly distrust



Television weather reporters

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	6	6	5	5	5	6
Somewhat trust	56	52	47	56	51	60
Somewhat distrust	25	30	34	28	30	25
Strongly distrust	13	12	14	11	14	10

The mainstream news media

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	3	2	4	3	3	3
Somewhat trust	40	36	34	42	33	43
Somewhat distrust	31	40	37	34	35	33
Strongly distrust	26	22	25	22	29	20

Climate scientists

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	22	24	-	-	-	-
Somewhat trust	52	50	-	-	-	-
Somewhat distrust	17	19	-	-	-	-
Strongly distrust	9	8	-	-	-	-

Other kinds of scientists

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	9	8	-	-	-	-
Somewhat trust	56	57	-	-	-	-
Somewhat distrust	27	28	-	-	-	-
Strongly distrust	8	7	-	-	-	-

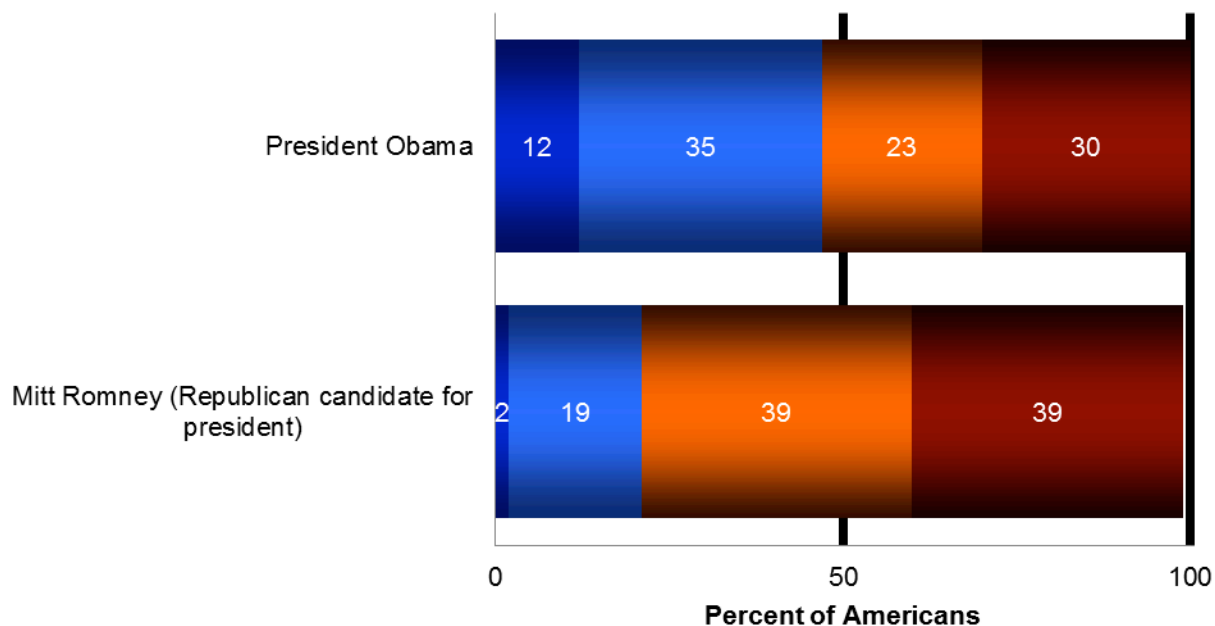
Scientists³

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	-	-	21	26	22	28
Somewhat trust	-	-	55	55	52	54
Somewhat distrust	-	-	19	15	19	14
Strongly distrust	-	-	5	4	7	4

³ We have included this data from the May 2011 report to serve as a reference point for our new trust in scientists items. The new items split scientist into two groups: Climate scientists and other kinds of scientists.

How much do you trust or distrust the following as a source of information about global warming?

■ Strongly trust
 ■ Somewhat trust
 ■ Somewhat distrust
 ■ Strongly distrust



President Obama

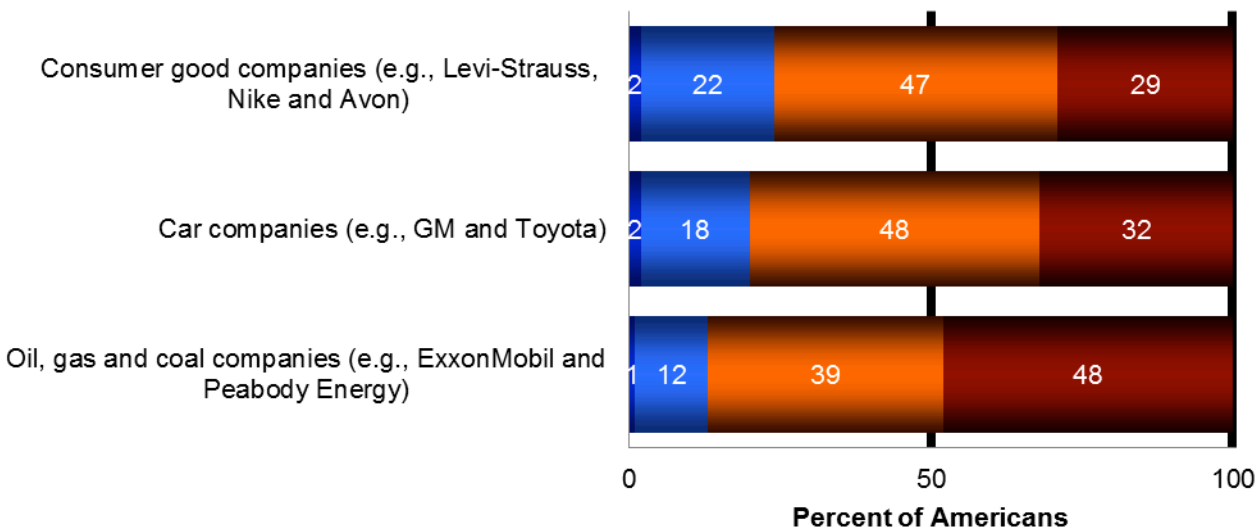
	March 2011	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	12	10	11	-	16	13
Somewhat trust	35	38	35	-	35	38
Somewhat distrust	23	26	24	-	21	23
Strongly distrust	30	26	30	-	28	26

Mitt Romney (Republican candidate for president)

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	2	2	-	-	-	-
Somewhat trust	19	24	-	-	-	-
Somewhat distrust	39	44	-	-	-	-
Strongly distrust	39	31	-	-	-	-

How much do you trust or distrust the following as a source of information about global warming?

■ Strongly trust ■ Somewhat trust ■ Somewhat distrust ■ Strongly distrust



Oil, gas and coal companies (e.g., ExxonMobil and Peabody Energy)

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	1	-	-	-	-	-
Somewhat trust	12	-	-	-	-	-
Somewhat distrust	39	-	-	-	-	-
Strongly distrust	48	-	-	-	-	-

Car companies (e.g., GM and Toyota)

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	2	-	-	-	-	-
Somewhat trust	18	-	-	-	-	-
Somewhat distrust	48	-	-	-	-	-
Strongly distrust	32	-	-	-	-	-

Consumer good companies (e.g., Levi-Strauss, Nike and Avon)

	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
Strongly trust	2	-	-	-	-	-
Somewhat trust	22	-	-	-	-	-
Somewhat distrust	47	-	-	-	-	-
Strongly distrust	29	-	-	-	-	-

Methodology

These results come from nationally representative surveys of American adults, aged 18 and older. The samples were weighted to correspond with US Census Bureau parameters for the United States. The surveys were designed by Anthony Leiserowitz of Yale University and Edward Maibach and Connie Roser-Renouf of George Mason University and conducted by Knowledge Networks, using an online research panel of American adults.

- March 2012: Fielded March 12 through March 30, 2012 with 1,008 American adults. The margin of sampling error is plus or minus 3 percent, with 95 percent confidence.
- November 2011: Fielded October 20 through November 16 with 1,000 American adults. The margin of sampling error is plus or minus 3 percent, with 95 percent confidence.
- May 2011: Fielded April 23 through May 12 with 1,010 American adults. The margin of sampling error is plus or minus 3 percent, with 95 percent confidence.
- June 2010: Fielded May 14 through June 1 with 1,024 American adults. The margin of sampling error is plus or minus 3 percent, with 95 percent confidence.
- January 2010: Fielded December 24, 2009 through January 3, 2010 with 1,001 American adults. The margin of sampling error is plus or minus 3 percent, with 95 percent confidence.
- November 2008: Fielded October 7 through November 12 with 2,164 American adults. Data was collected in two waves: wave 1 from October 7 through October 20 and wave 2 from October 24 through November 12. The margin of sampling error is plus or minus 2 percent, with 95 percent confidence.

