CLIMATE CHANGE IN THE AMERICAN MIND

Americans' Global Warming Beliefs and Attitudes in April 2013





George Mason University

Center for Climate Change Communication

Table of Contents

In	troductiontroduction	2
Ex	xecutive Summary	3
1.	Climate Change Beliefs	4
	A majority of Americans believe global warming is happening	
	Those who believe global warming is happening are more certain than those who do not	
	Half of Americans believe global warming is human caused	
	About four in ten Americans believe most scientists think global warming is happening	7
2.	Perceived Threat	8
	Majority of Americans are "worried" about global warming	
	Global warming is still seen as a relatively distant threat	
	Nearly half of Americans perceive global warming as a threat to themselves,	
	their families, and their local communities	10
	Over half of Americans – but fewer than in Fall 2012 – perceive global warming as a	
	threat to others	11
	A majority of Americans perceive global warming as a threat to future generations and	
	other species	12
	One in three Americans believes people in the U.S. are being harmed "right now" by	
	global warming; four in ten believe people around the world are being harmed now	13
3.	Need for More Information	14
	Three in ten Americans say they could easily change their mind about global warming	14
	Fewer Americans say they need more information about global warming	15
Αŗ	ppendix I: Data Tables	16
Αŗ	ppendix II: Survey Method	26
Αŗ	ppendix III: Sample Demographics	27
_	- · · · · · · · · · · · · · · · · · · ·	



Introduction

This report is based on findings from a nationally representative survey – *Climate Change in the American Mind* – conducted by the Yale Project on Climate Change Communication and the George Mason University Center for Climate Change Communication. Interview dates: April 8 – 15. Interviews: 1,045 Adults (18+). Total average margin of error: +/- 3 percentage points at the 95% confidence level. The research was funded by the Surdna Foundation, the 11th Hour Project, the Grantham Foundation, and the V.K. 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
croserre@gmu.edu

Geoff Feinberg
Yale Project on Climate Change Communication
School of Forestry & Environmental Studies
Yale University
(203) 432-7438
geoffrey.feinberg@yale.edu

Peter Howe, PhD Yale Project on Climate Change Communication School of Forestry & Environmental Studies Yale University peter.howe@yale.edu

Cite as: Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Howe, P. (2013) Climate change in the American mind: Americans' global warming beliefs and attitudes in April, 2013. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.





Executive Summary

- Nearly two in three Americans (63%) believe global warming is happening. Relatively few only 16 percent believe it is not. However, since Fall 2012, the percentage of Americans who believe global warming is real has dropped 7 points to 63%, likely influenced by the relatively cold winter of 2012-13 (compared to the prior year) and an unusually cold March just before the survey was conducted. In March of 2012, after an unusually warm winter, 66 percent of Americans believed global warming was happening; thus, seasonal effects may account for at least some of the change we observe.
- Those who believe global warming is happening are more certain of their convictions than those who do not. Of the 63% of Americans who believe global warming is happening, most say they are "very" (33%) or "extremely sure" (27%). By contrast, of the unconvinced, fewer are very (28%) or extremely sure of their view (18%).
- About half of Americans (49%) believe global warming if it is happening is caused mostly by human activities, a decrease of 5 points since Fall 2012, but similar to levels stretching back several years.
- More Americans believe that "most scientists think global warming is happening" than believe there is widespread disagreement among scientists (42% versus 33%, respectively). One in five Americans (20%) continue to feel they "don't know enough to say" and fewer than one in 20 (4%) believe that "most scientists think global warming is not happening."
- About half of Americans (51%) say they are "somewhat" or "very worried" about global warming, a 7 percentage-point decline in worry since Fall 2012.
- At least four out of ten Americans say global warming will harm people in their community (45%), their family (44%), or themselves (42%). Though Americans today, compared to Fall 2012, are slightly less likely to perceive these threats of harm, they are much more likely to do so today than they were a year ago.
- Global warming is also perceived as a threat to people in developing countries (55%, down 9 points since September 2012, but similar to March 2012), in other modern industrialized countries (53%, down 4 points since September, but up 4 points since March 2012), and in the United States (52%, down 5 points since September, but up 6 points since March 2012).
- Today, four in ten Americans say people around the world are being harmed *right now* by climate change (38%), while 34 percent say global warming is currently harming people in the United States.



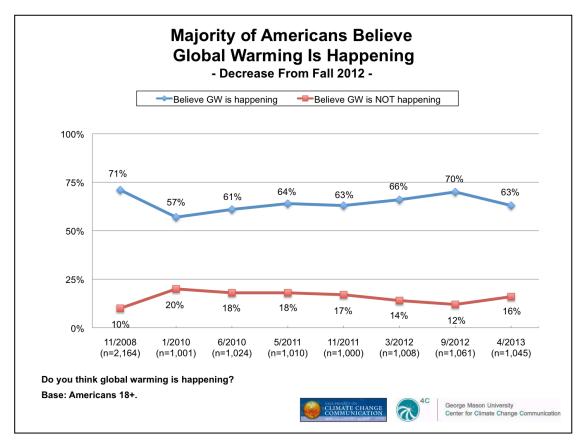


1. Climate Change Beliefs

A majority of Americans believe global warming is happening.

Nearly two in three Americans (63%) believe global warming is happening. Relatively few – only 16 percent – believe it is not. Since Fall 2012, the percentage of Americans who believe global warming is happening has dropped 7 points to 63%. Since March 2012, the proportion has dropped 3 points.

The decrease in the belief that global warming is happening occurred largely in the Northeast and the South, two regions in which respondents were much more likely, compared to Fall 2012, to report having experienced extreme cold temperatures and, in the Northeast, extreme snow storms (e.g., Nemo) over the past year. Further, much of the United States experienced an unusually cold March, just before the survey was conducted. Prior research has found that personal experience with weather, particularly recent weather, can influence how some people think about global warming.²



¹Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Howe, P. (2013) Extreme Weather and Climate Change in the American Mind: April 2013. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.

² c.f., Hamilton, Lawrence C., and Mary D. Stampone. 2013. "Blowin' in the Wind: Short-term Weather and Belief in Anthropogenic Climate Change." *Weather, Climate, and Society.* doi:10.1175/WCAS-D-12 00048.1. http://journals.ametsoc.org/doi/abs/10.1175/WCAS-D-12-00048.1.

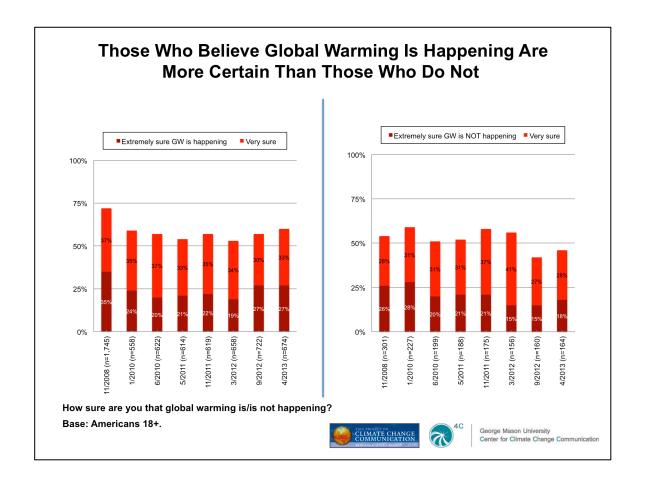




Those who believe global warming is happening are more certain than those who do not.

Of the 63% of Americans who believe global warming is happening, most say they are "very" (33%) or "extremely sure" (27%) it is. More specifically, the proportion of Americans who believe global warming is happening and who say they are "extremely sure" it is is the same as it was last Fall, and has increased by 8 percentage points since March 2012.

By contrast, of those who do *not* believe global warming is happening, fewer are either very (28%) or extremely sure (18%) of their view, which represents a slight increase from Fall 2012, but a decrease of 10 percentage points since Spring 2012.



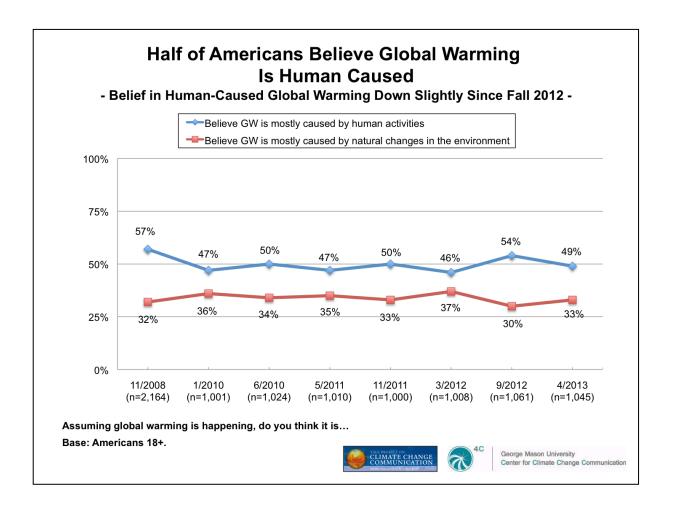




Half of Americans believe that global warming is human caused.

About half of Americans (49%) believe global warming – if it is happening – is caused mostly by human activities, a decrease of 5 points since Fall 2012, but similar to levels stretching back several years.

At the same time, belief that global warming is due mostly to natural changes in the environment is up slightly to 33% (up 3 points since Fall 2012), but also similar to levels stretching back several years.



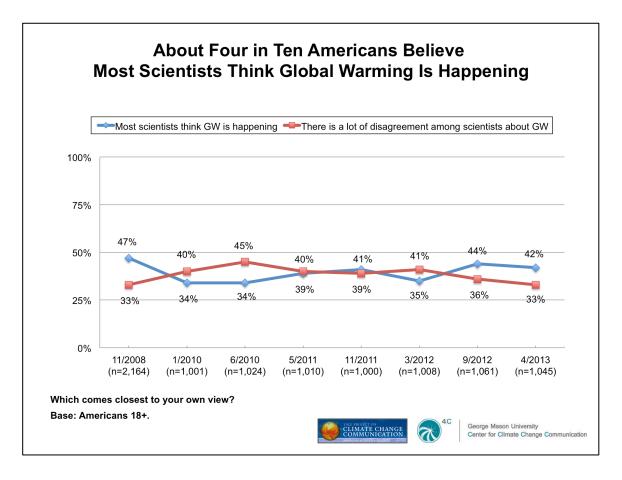




About four in ten Americans believe most scientists think global warming is happening.

The great majority of climate scientists have concluded that global warming is happening, mostly human caused and, if left unchecked, will have serious consequences for human societies and the natural world. Yet, over the years, there has been considerable confusion within the American public about the level of scientific agreement.

In Spring 2013, more Americans believe that "most scientists think global warming is happening" than believe "there is a lot of disagreement among scientists" (42% versus 33%, respectively). This confirms the reversal of a prior trend, in which Americans were more likely to believe scientists disagreed than agreed about the existence of global warming.



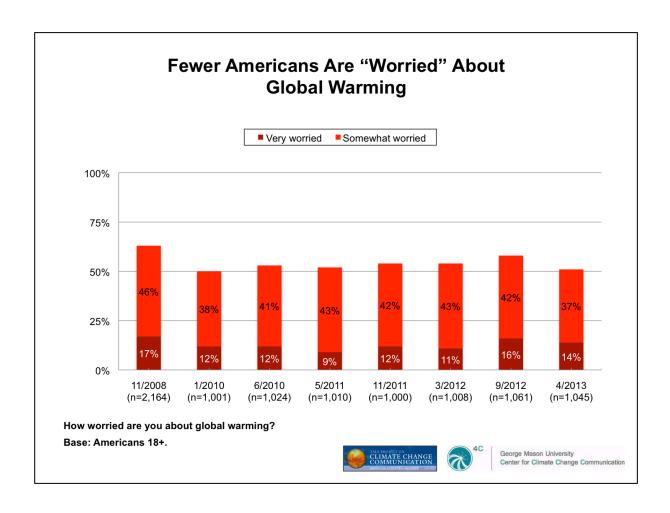




2. Perceived Threat

Fewer Americans are "worried" about global warming.

Today about half of Americans (51%) say they are "somewhat" (37%) or "very worried" (14%) about global warming, a 7 percentage-point decline in worry since Fall 2012.



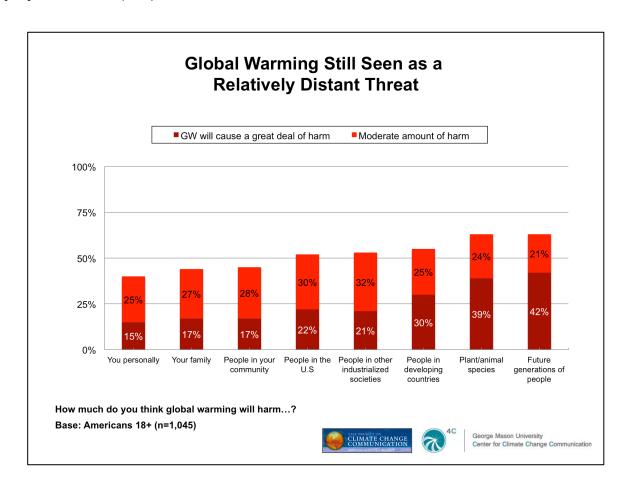




Global warming is still seen as a relatively distant threat.

Over many years of research, we have consistently found that, on average, Americans view climate change as a threat distant in space and time – a risk that will affect far away places, other species, or future generations more than people here and now.

We still find this same pattern, in which fewer than half of Americans (40%) believe they personally will be harmed a "moderate amount" or a "great deal" by global warming. By contrast, half or more believe that global warming will harm future generations of people (63%), plant and animal species (63%), people in developing countries (55%), people in other industrialized societies (53%), or people in the U.S. (52%).



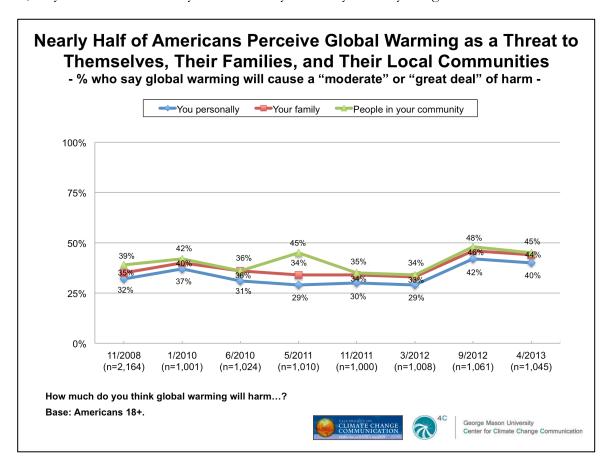




Nearly half of Americans perceive global warming as a threat to themselves, their families, and their local communities.

At least four out of ten Americans say global warming will harm people in their community (45%), their family (44%), or themselves (42%).

Though Americans today, compared to Fall 2012, are slightly less likely to perceive these threats of harm, they are much more likely to do so today than they were a year ago.

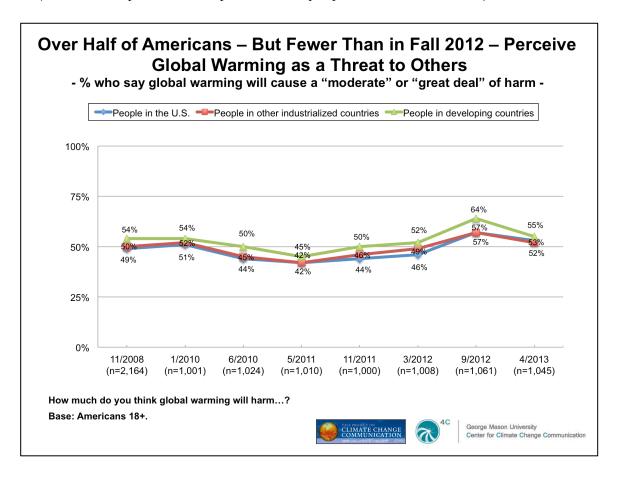






Over half of Americans – but fewer than in Fall 2012 – perceive global warming as a threat to others.

About half of Americans think that global warming will harm people in developing countries (55%, down 9 points since September 2012 and similar to March 2012), in other modern industrialized countries (53%, down 4 points since September but up 4 points since March 2012), or in the United States (52%, down 5 points since September but up 6 points since March 2012).

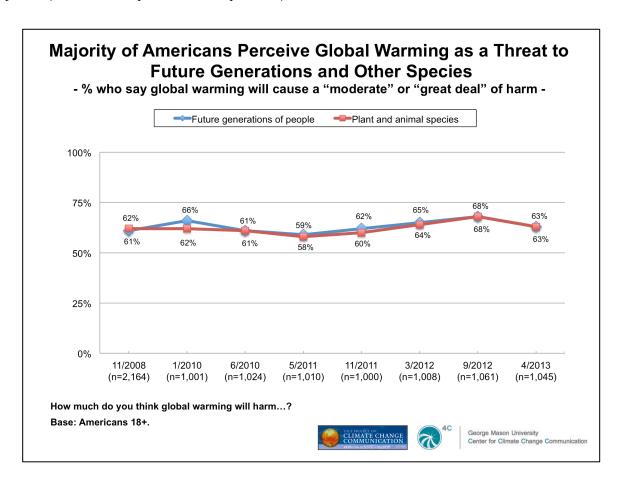






A majority of Americans perceive global warming as a threat to future generations and other species.

Americans also think global warming will cause a "moderate amount" or "great deal of harm" to future generations of people (63%, down 5 points since September 2012) or to plant and animal species (63%, down 5 points since September).



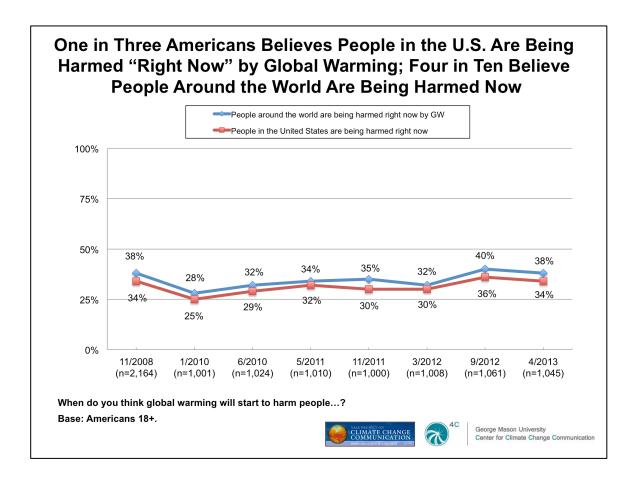




One in three Americans believes people in the U.S. are being harmed "right now" by global warming; four in ten believe people around the world are being harmed now.

Only a minority of Americans believe global warming is already harming people both at home and abroad.

Today, four in ten say people around the world are being harmed *right now* by climate change (38%), while 34 percent say global warming is currently harming people in the United States.



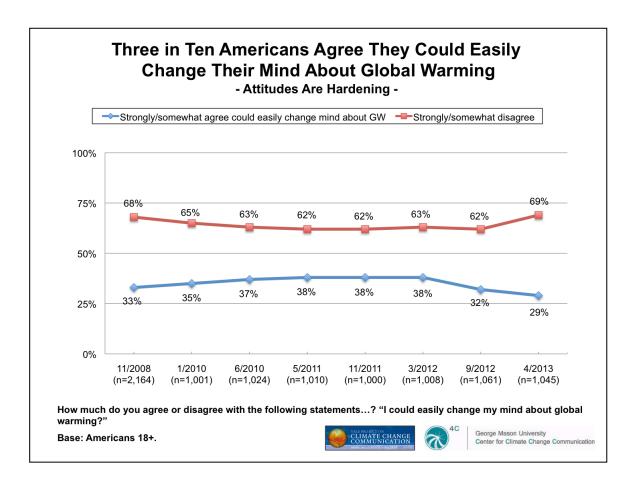




3. Need for More Information

Three in ten Americans agree they could easily change their mind about global warming.

Three in ten Americans (29%) agree that they could easily change their mind about global warming, a 3-point drop since September 2012 and a 9-point drop since March 2012.





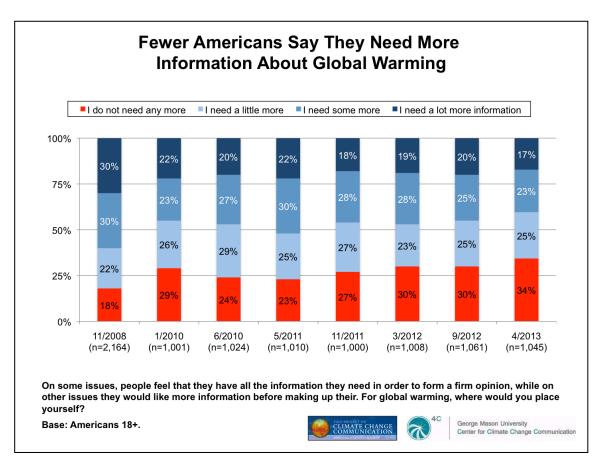


Fewer Americans say they need more information about global warming.

Over the past two years, a growing number of Americans have said that they have all the information they need to form a firm opinion about global warming, from 23 percent in May 2011 to 34 percent today.

In the same time period, the number who say they need "some" or "a lot more" information on the subject declined 12 percentage points, from 52 percent in May 2011, to 40 percent today. These findings suggest that more people are making up their minds about global warming.

Nonetheless, a solid majority of Americans – 65 percent – say they would like at least a "little more" information about the subject.







Appendix I: Data Tables

Questions cited in the report

(Base: Americans 18+)

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?

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	0/0	%	%	$^{0}\!/_{\!0}$
Yes	63	70	66	63	64	61	57	71
No	16	12	14	17	18	18	20	10
Don't know	20	18	20	20	18	21	23	19

(Base: Americans 18+ who say global warming is happening) How sure are you that global warming is happening?

	Sept	Sept	March	Nov	May	June	Jan	Nov
	2012	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(674)	(722)	(658)	(619)	(614)	(622)	(558)	(1,745)
	%	0/0	0/0	%	0/0	0/0	%	%
Extremely sure	27	27	19	22	21	20	24	35
Very sure	33	30	34	35	33	37	35	37
Somewhat sure	37	40	42	39	40	40	37	24
Not at all sure	4	3	5	5	6	3	5	4

(Base: Americans 18+ who say global warming is <u>not</u> happening) How sure are you that global warming is not happening?

	Sept	Sept	March	Nov	May	June	Jan	Nov
	2012	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(164)	(160)	(156)	(175)	(188)	(199)	(227)	(301)
	0/0	0/0	0/0	0/0	0/0	%	0/0	%
Extremely sure	18	15	15	21	21	20	28	26
Very sure	28	27	41	37	31	31	31	28
Somewhat sure	42	45	35	37	38	44	34	38
Not at all sure	12	13	8	5	11	4	7	8





(Base: Americans 18+) Assuming global warming is happening, do you think it is...

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	0/0	%
Caused mostly by human activities	49	54	46	50	47	50	47	57
Caused mostly by natural changes in the environment	33	30	37	33	35	34	36	32
None of the above because global warming isn't happening	8	7	5	8	8	6	9	4
Caused by both human activities and natural changes (volunteered)	10	6	9	6	8	7	6	5
Other	1	2	2	2	1	1	1	1

(Base: Americans 18+)

Which comes closest to your own view?

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	%
Most scientists think global warming is happening	42	44	35	41	39	34	34	47
Most scientists think global warming is not happening	4	3	3	3	4	4	5	3
There is a lot of disagreement among scientists about whether or not global warming is happening	33	36	41	39	40	45	40	33
Don't know enough to say	20	18	21	18	18	17	22	18



(Base: Americans 18+) How worried are you about global warming?

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	%	%	%	0/0
Very worried	14	16	11	12	9	12	12	17
Somewhat worried	37	42	43	42	43	41	38	46
Not very worried	30	25	30	31	28	30	27	24
Not at all worried	19	17	16	15	20	18	23	13

(Base: Americans 18+)

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

You personally

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	%	$^{0}\!/_{\!0}$	%	0/0
A great deal	15	16	11	9	11	10	14	10
A moderate amount	25	26	18	21	18	21	23	22
Only a little	26	25	30	28	28	27	22	24
Not at all	23	20	29	25	25	24	31	22
Don't know	11	13	11	17	18	18	11	23

Your family

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	%
A great deal	17	18	12	10	13	11	15	11
A moderate amount	27	28	21	24	21	25	25	24
Only a little	23	23	29	27	26	24	21	23
Not at all	20	17	26	21	23	21	28	19
Don't know	12	14	12	18	18	19	11	23





(Base: Americans 18+) How much do you think global warming will harm...? (Cont'd.)

People in your community

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	%	%	%	0/0
A great deal	17	19	12	11	12	11	15	13
A moderate amount	28	29	22	24	33	25	27	26
Only a little	23	23	29	27	26	24	22	20
Not at all	18	15	24	21	22	21	24	17
Don't know	13	13	13	18	18	19	12	23

People in the United States

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	0/0	0/0
A great deal	22	26	18	15	16	16	22	21
A moderate amount	30	31	28	29	26	28	29	28
Only a little	19	17	24	23	23	22	16	15
Not at all	16	12	18	17	17	17	22	14
Don't know	12	13	12	16	18	18	12	22

People in other modern industrialized countries

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	0/0
A great deal	21	26	20	17	17	17	23	22
A moderate amount	32	31	29	29	25	28	29	28
Only a little	18	18	21	22	23	21	16	13
Not at all	15	11	17	15	17	15	19	13
Don't know	13	15	13	17	19	18	13	24





(Base: Americans 18+) How much do you think global warming will harm...? (Cont'd.)

People in developing countries

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	%	%	%	0/0
A great deal	30	35	26	22	23	22	29	31
A moderate amount	25	29	26	28	22	28	25	22
Only a little	18	10	19	17	20	17	14	11
Not at all	13	11	16	15	17	15	19	13
Don't know	13	15	14	18	19	18	13	24

Future generations of people

	April	Sept	March	Nov	May	June	Jan	Nov
. <u>.</u>	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	0/0
A great deal	42	47	43	40	37	39	42	44
A moderate amount	21	21	22	22	22	22	22	17
Only a little	12	9	12	13	10	11	9	7
Not at all	12	8	11	10	12	12	15	10
Don't know	12	14	13	16	19	16	12	22

Plant and animal species

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	0/0
A great deal	39	43	43	41	39	40	43	45
A moderate amount	24	25	21	19	19	21	19	17
Only a little	13	11	13	16	12	12	11	8
Not at all	13	8	10	10	13	13	15	9
Don't know	10	13	12	15	18	15	12	20





(Base: Americans 18+) When do you think global warming will start to harm...?

People in the United States

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	$^{0}\!/_{0}$	%	%	%	%	%	%	0/0
They are being harmed now	34	36	30	30	32	29	25	34
In 10 years	11	13	12	10	12	12	12	13
In 25 years	12	11	14	13	13	12	14	13
In 50 years	12	12	14	15	12	13	13	13
In 100 years	13	13	15	15	11	15	13	12
Never	17	15	16	16	20	19	23	15

People around the world

	April	Sept	March	Nov	May	June	Jan	Nov
. <u>.</u>	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	0/0
They are being harmed now	38	40	32	35	34	32	28	38
In 10 years	11	11	12	9	12	11	13	13
In 25 years	11	10	14	14	12	13	12	12
In 50 years	13	12	13	13	12	12	12	12
In 100 years	11	12	14	14	11	13	13	11
Never	16	14	15	15	19	18	22	14

(Base: Americans 18+)

How much do you agree or disagree with the following statements?

I could easily change my mind about global warming

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	0/0
Strongly agree	2	3	3	4	6	5	5	5
Somewhat agree	27	29	35	34	32	32	30	28
Somewhat disagree	37	40	36	36	33	36	31	34
Strongly disagree	32	29	26	27	29	27	34	34





(Base: Americans 18+)

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?

	April 2013	Sept 2012	March 2012	Nov 2011	May 2011	June 2010	Jan 2010	Nov 2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
I need a lot more information	17	20	19	18	22	20	22	30
I need some more information	23	25	28	28	30	27	23	30
I need a little more information	25	25	23	27	25	29	26	22
I do not need any more information	34	30	30	27	23	24	29	18



Other questions

(Base: Americans 18+)
How much had you thought about global warming before today?

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	%	%	%	%
A lot	16	17	15	15	12	18	15	20
Some	30	32	30	30	33	37	31	35
A little	37	34	39	39	38	32	36	33
Not at all	16	17	16	16	16	13	18	12

(Base: Americans 18+) How important is the issue of global warming to you personally?

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	0/0	%	%	%	%	%	%	$^{0}\!/_{\!0}$
Extremely important	8	6	6	6	7	6	5	11
Very important	13	17	14	13	15	18	15	21
Somewhat important	36	36	41	41	38	39	38	40
Not too important	24	24	23	25	25	24	23	18
Not at all important	18	17	16	15	14	14	20	11





(Base: Americans 18+) How much do you agree or disagree with the following statements?

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

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	$^{0}\!/_{\!0}$
Strongly agree	16	19	18	11	15	13	17	9
Somewhat agree	29	28	26	31	31	29	29	22
Somewhat disagree	35	34	35	43	36	43	37	45
Strongly disagree	19	19	21	15	19	15	17	24

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

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	%	%	%	%	%
Strongly agree	6	5	6	7	7	6	6	4
Somewhat agree	32	34	30	40	40	33	42	26
Somewhat disagree	35	35	36	37	33	40	33	46
Strongly disagree	25	25	28	16	21	21	19	25

I have personally experienced the effects of global warming

	April	Sept	March	Nov	May	June	Jan	Nov
	2013	2012	2012	2011	2011	2010	2010	2008
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
	%	%	%	0/0	%	%	%	$^{0}\!/_{\!0}$
Strongly agree	6	4	5	7	5	5	5	4
Somewhat agree	33	34	30	31	29	25	21	29
Somewhat disagree	29	30	31	37	34	35	35	43
Strongly disagree	31	31	34	25	32	35	40	24





(Base: Americans 18+)
Which of the following statements comes closest to your view?

	April	Sept	March	Nov	May	June	Jan 2010	Nov
(Unweighted base)	(1,045)	(1,061)	(1,008)	(1,000)	(1,010)	(1,024)	(1,001)	(2,164)
Humans can reduce global warming, and we are going to do so successfully	3	% 5	% 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	45	49	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	24	22	21	25	25	21	17	22
Humans can't reduce global warming, even if it is happening	16	15	20	15	18	18	15	16
Global warming isn't happening	11	8	9	10	11	10	13	5





Appendix II: Survey Method

The data in this report are based on a nationally representative survey of 1,045 American adults, aged 18 and older, conducted from April 8 – 15, 2013. All questionnaires were self-administered by respondents in a web-based environment. The survey took, on average, about 27 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.

The survey instrument was designed by Anthony Leiserowitz and Geoff Feinberg 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:

- April 2013: Fielded April 8-15 with 1,045 American adults. The margin of sampling error is plus or minus 3 percentage points.
- September 2012: Fielded August 31 through September 12, 2012 with 1,061 American adults. The margin of sampling error is plus or minus 3 percentage points.
- March 2012: Fielded March 12 through March 30, 2012 with 1,008 American adults. The margin of sampling error is plus or minus 3 points.
- November 2011: Fielded October 20 through November 16 with 1,000 American adults. The margin of sampling error is plus or minus 3 points.
- May 2011: Fielded April 23 through May 12 with 1,010 American adults. The margin of sampling error is plus or minus 3 points.
- June 2010: Fielded May 14 through June 1 with 1,024 American adults. The margin of sampling error is plus or minus 3 points.
- 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 points.
- 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 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%.





Appendix III: Sample Demographics

	N	0/0
777 1	(unweighted)	(weighted)
Total	1,045	100
Sex Men	520	48%
Women	520 525	52%
Age	323	<i>32</i> / 0
Generation Y (18-30)	145	22%
Generation X (31-48)	268	30%
Baby Boomers (49-67)	444	36%
WWII (68+)	188	12%
Education	100	1270
Less than high school	74	12%
High school graduate	311	30%
Some college/tech	289	29%
College graduate	228	18%
Post graduate	143	12%
Household Income		
<\$25K	167	19%
\$25K - <\$50K	244	24%
\$50K - <\$75K	216	19%
\$75K - <\$100K	153	15%
\$100K - <\$125K	125	12%
\$125K+	140	12%
Hispanic		
Yes	82	14%
Race/Ethnicity		
White, non-Hispanic	808	67%
Black, African-American non-Hispanic	94	12%
Other non-Hispanic	61	7%
Region	100	1.00/
Northeast	180	18%
Midwest	253	22%
South	378	37%
West	234	23%





