# CLIMATE CHANGE IN THE AMERICAN MIND

December 2020





### **Table of Contents**

Int	roduction	3
1	Executive Summary	4
2	Global Warming Beliefs	5
3	Emotional Responses to Global Warming	10
4	Perceived Risks of Global Warming	12
5	Personal and Social Engagement with Global Warming	15
6	Efficacy Beliefs	20
7	How Americans Conceptualize Global Warming	21
8	Global Warming and Severe Weather	22
9	Appendix I: Data Tables	28
10	Appendix II: Survey Method	86
11	Appendix III: Sample Demographics	88





#### Introduction

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 (<u>climatecommunication.yale.edu</u>) and the George Mason University Center for Climate Change Communication (<u>climatechangecommunication.org</u>). Interview dates: December 3 – 16, 2020. Interviews: 1,036 adults in the U.S. (18+). Average margin of error +/- 3 percentage points at the 95% confidence level. The research was funded by the 11th Hour Project, the Energy Foundation, the MacArthur Foundation, and the Grantham Foundation.

#### **Principal Investigators:**

Anthony Leiserowitz, PhD Yale Program on Climate Change Communication anthony.leiserowitz@yale.edu

Edward Maibach, MPH, PhD George Mason University Center for Climate Change Communication emaibach@gmu.edu

Seth Rosenthal, PhD Yale Program on Climate Change Communication seth.rosenthal@yale.edu

John Kotcher, PhD George Mason University Center for Climate Change Communication jkotcher@gmu.edu

#### Cite as:

Leiserowitz, A., Maibach, E., Rosenthal, S., Kotcher, Carman, J., Wang, X., Goldberg, M., Lacroix, K., & Marlon, J. (2021). *Climate Change in the American Mind: December 2020*. Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication.





#### 1 Executive Summary

This survey was fielded from December 3 – 16, 2020, after the results of the 2020 U.S. presidential election were known, but before control of the U.S. Senate was determined.

- Americans who think global warming is happening outnumber those who think it is not happening by a ratio of more than 5 to 1 (72% versus 13%). Those who are "very" or "extremely" sure global warming is happening outnumber those who are "very" or "extremely" sure it is not by more than 8 to 1 (50% versus 6%).
- More than half of Americans (58%) understand that global warming is mostly human-caused. About three in ten (29%) think global warming is due mostly to natural changes in the environment.
- More than half of Americans (58%) understand that most scientists think global warming is happening. However, only one in five (20%) understand how strong the level of consensus among scientists is (i.e., that more than 90% of climate scientists think human-caused global warming is happening).
- Two in three Americans (66%) say they are at least "somewhat worried" about global warming. One in four (27%) are "very worried."
- About four in ten Americans say they feel at least moderately "hopeful" (43%), "disgusted" (42%), or "helpless" (41%) about global warming.
- More than four in ten Americans think people in the United States are being harmed by global warming "right now" (47%) and about four in ten say they have personally experienced the effects of global warming (42%).
- More than four in ten Americans (43%) think they will be harmed by global warming, and nearly half think their family (49%) will be harmed. Half or more Americans think global warming will harm people in their community (52%), people in the U.S. (62%), the world's poor (66%), people in developing countries (67%), future generations of people (72%), and plant and animal species (73%).
- About six in ten Americans (62%) say they "rarely" or "never" discuss global warming with family and friends, while 38% say they do so "occasionally" or "often."
- About half of Americans (51%) say they hear about global warming in the media at least once a month. Fewer (21%) say they hear people they know talk about global warming at least once a month.
- Two in three Americans (66%) say the issue of global warming is either "extremely," "very," or "somewhat" important to them personally, while about one in three (34%) say it is either "not too" or "not at all" personally important.
- Fewer than half of Americans think their friends and family expect them to take action on global warming. Forty-five percent think it is at least "moderately" important to their family and friends that they take action (an injunctive norm), and 36% say their family and friends make at least "a moderate amount of effort" to reduce global warming (a descriptive norm).
- · About two in three Americans (65%) feel a personal sense of responsibility to help reduce global warming.
- Few Americans (14%) agree with the statement that it is too late to do anything about global warming, while about two in three (68%) disagree that it is too late.
- Majorities of Americans think global warming is an environmental issue (80%) or a scientific issue (73%). More than half think global warming is an agricultural (68%), severe weather (66%), economic (66%), health (62%), political (61%), or humanitarian (58%) issue.
- About two in three Americans either "strongly" (33%) or "somewhat" (32%) agree that wildfires have increased around the world as a result of global warming.
- A majority of Americans are worried about harm from environmental hazards in their local area including water and air pollution (both 73%), extreme heat (65%), droughts (64%), agricultural pests and diseases (64%), water shortages (54%), tornados (53%), and flooding (52%).
- About two in three Americans (63%) think global warming is affecting weather in the United States; one in three think it is being affected "a lot" (35%).





#### 2 Global Warming Beliefs

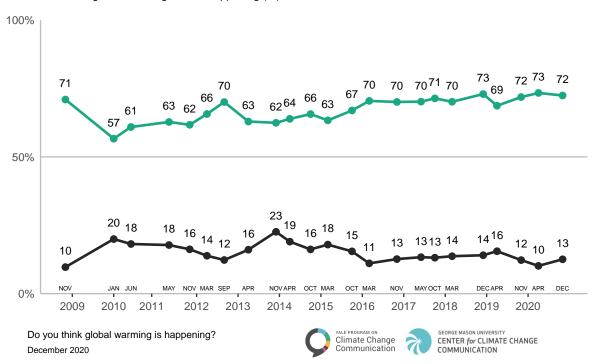
#### 2.1 About seven in ten Americans think global warming is happening.

Americans who think global warming is happening outnumber those who think it is not happening by a ratio of more than 5 to 1.

About seven in ten Americans (72%) think global warming is happening. By contrast, 13% of Americans think global warming is not happening. Over the last five years (since our October 2015 survey), the percentage of Americans who think global warming is happening has increased by five percentage points.

#### About seven in ten Americans think global warming is happening

Think global warming is happening (%)Think global warming is NOT happening (%)







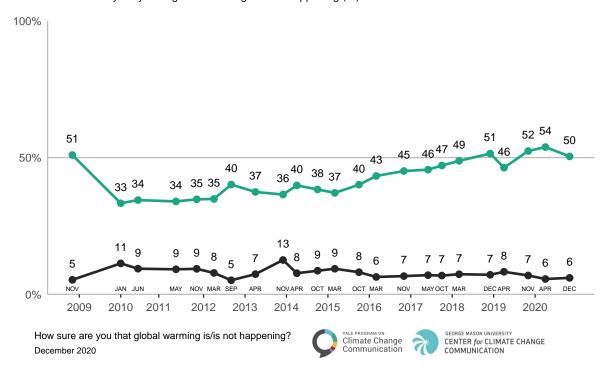
# 2.2 Half of Americans are "extremely" or "very" sure global warming is happening. Fewer than one in ten are as sure it isn't happening.

Half of Americans (50%) are either "extremely" or "very" sure global warming is happening. Far fewer (6%) are "extremely" or "very" sure global warming is not happening.

Over the last five years (since our October 2015 survey), the percentage of Americans who are "extremely" or "very" sure global warming is happening has increased by 10 percentage points.

# Half of Americans are "extremely" or "very" sure global warming is happening

Extremely/Very sure global warming is happening (%)
 Extremely/Very sure global warming is NOT happening (%)







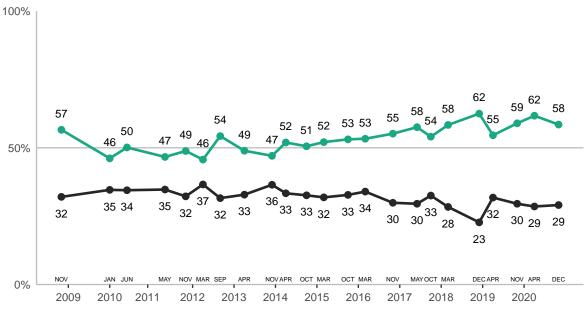
#### 2.3 About six in ten Americans think global warming is mostly human-caused.

The 2018 U.S. National Climate Assessment (written and reviewed by hundreds of climate experts over the course of four years) states: "Greenhouse gas emissions from human activities are the only factors that can account for the observed warming over the last century; there are no credible alternative human or natural explanations supported by the observational evidence" (pp. 39-40).<sup>1</sup>

A majority of Americans (58%) understand that global warming is mostly human-caused, an increase of five percentage points over the past five years (since October 2015). By contrast, three in ten (29%) think it is due mostly to natural changes in the environment.

### About six in ten Americans think global warming is mostly human-caused

Think global warming is caused mostly by human activities (%)
 Think global warming is caused mostly by natural changes in the environment (%)



Assuming global warming is happening, do you think it is... December 2020









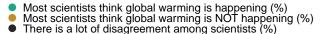
¹http://nca2018.globalchange.gov

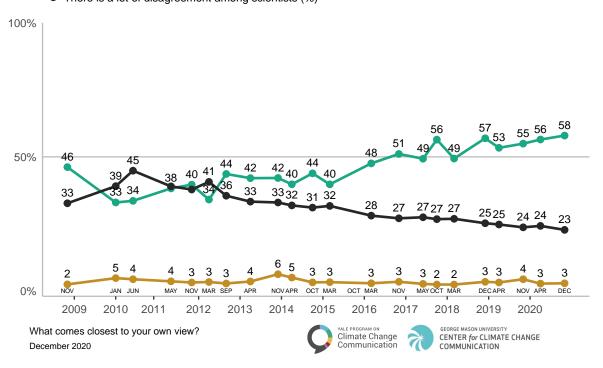
# 2.4 More than half of Americans understand that most scientists think global warming is happening.

A review by John Cook and colleagues<sup>2</sup> found that six independent, peer-reviewed studies examining the extent of the scientific consensus about global warming have concluded that between 90% and 100% of climate scientists are convinced that human-caused global warming is happening. The most rigorous of these studies found that 97% of climate scientists are convinced that global warming is happening and human-caused.

A majority of Americans (58%) understand that most scientists think global warming is happening. By contrast, about one in four Americans (23%) think there is a lot of disagreement among scientists about whether or not global warming is happening, the lowest level since our surveys began. Very few Americans (3%) believe that most scientists think global warming is not happening.

### More than half of Americans understand that most scientists think global warming is happening





<sup>&</sup>lt;sup>2</sup>Cook, J., Oreskes, N., Doran, P. T., Anderegg, W. R. I., Verheggen, B., Maibach, E. W., Carlton, J. S., Lewandowsky, S., Skuce, A. G., Green, S. A., Nuccitelli, D., Jacobs, P., Richardson, M., Winkler, B., Painting, R., & Rice., K. (2016). Consensus on consensus: A synthesis of consensus estimates on human-caused global warming. *Environmental Research Letters* 11(4). doi:10.1088/1748-9326/11/4/048002



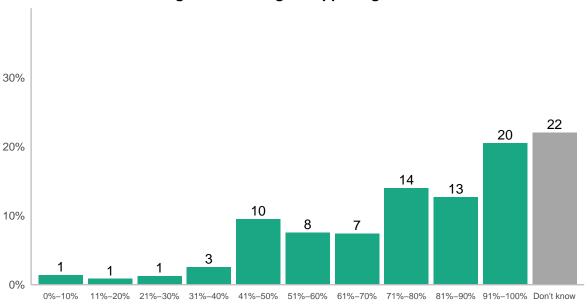


# 2.5 One in five Americans understand that almost all climate scientists (more than 90%) have concluded that human-caused global warming is happening.

Although the majority of Americans now understand that most scientists think global warming is happening, fewer understand just how strong the level of consensus among scientists is. Only one in five Americans (20%) understand that nearly all climate scientists (more than 90%) are convinced that human-caused global warming is happening. However, that number has increased by 12 percentage points over the last five years (since October 2015; see Data Tables).

About one in five Americans (22%) say they "don't know" what percentage of climate scientists think human-caused global warming is happening.<sup>3</sup>

# About one in five Americans understand that almost all climate scientists (more than 90%) have concluded that 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.

December 2020



Public misunderstanding of the scientific consensus – which has been found in each of our surveys since 2008 – has significant consequences. Other research has identified public understanding of the scientific consensus as an important "gateway belief" that influences other important beliefs (i.e., that global warming is happening, human-caused, and worrisome) and support for action.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>For more information, see: van der Linden, S. L., Leiserowitz, A. A., Feinberg, G. D., & Maibach, E. W. (2015). The scientific consensus on climate change as a gateway belief: Experimental evidence. *PLoS ONE*, *10*(2). https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0118489





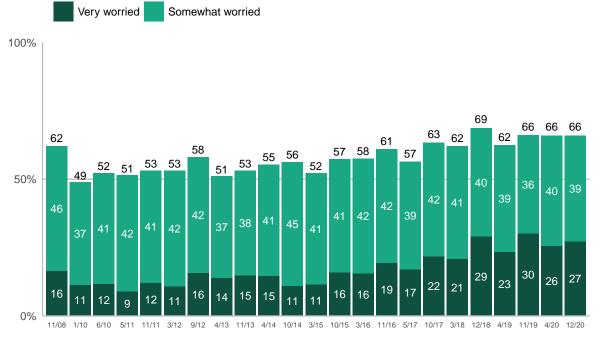
<sup>&</sup>lt;sup>3</sup>Respondents were asked to estimate the percentage of climate scientists who have concluded that human-caused global warming is happening by moving a slider bar which appeared on the screen of their computer. This slider allowed respondents to move the marker from 0% on the left to 100% on the right, or to any whole number between the two. A "don't know" response option appeared below the slider bar.

### 3 Emotional Responses to Global Warming

#### 3.1 Two in three Americans are at least "somewhat worried" about global warming.

Two in three Americans (66%) say they are at least "somewhat worried" about global warming, an increase of nine percentage points over the past five years (since October 2015). About one in four Americans (27%) are "very worried," an increase of 11 percentage points over the past five years.

# Two in three Americans are at least "somewhat worried" about global warming



How worried are you about global warming? December 2020





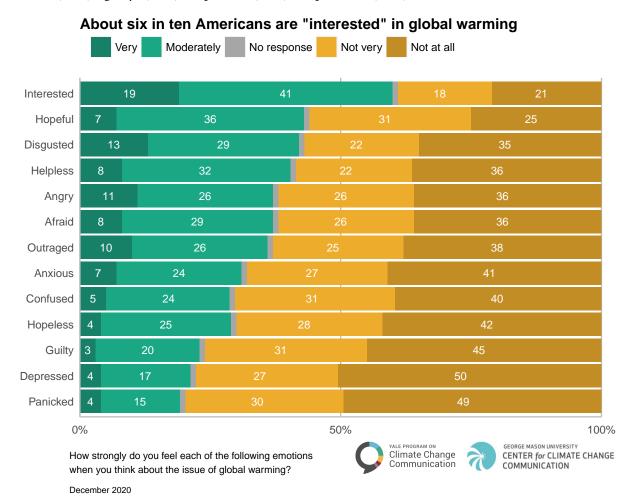




#### 3.2 About six in ten Americans are "interested" in global warming.

When asked how strongly they feel various emotions when thinking about global warming, about six in ten Americans say they feel "very" or "moderately" "interested" in it (61%). Four in ten or more say they feel "hopeful" (43%), "disgusted" (42%), or "helpless" (41%).

Fewer Americans feel "afraid" (37%), "angry" (37%), "outraged" (36%), "anxious" (31%), "hopeless" (29%), "confused" (29%), "guilty" (23%), "depressed" (22%), or "panicked" (19%).







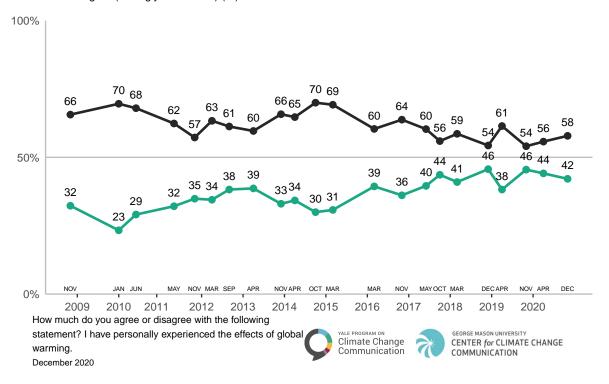
### 4 Perceived Risks of Global Warming

# 4.1 About four in ten Americans say they have personally experienced the effects of global warming.

About four in ten Americans (42%) say they have personally experienced the effects of global warming, while more than half (58%) say they have not.

# About four in ten Americans say they have personally experienced the effects of global warming

Agree (Strongly/Somewhat) (%)Disagree (Strongly/Somewhat) (%)







# 4.2 More than four in ten Americans think people in the U.S. are being harmed "right now" by global warming.

More than four in ten Americans (47%) think people in the U.S. are being harmed by global warming "right now," an increase of 13 percentage points over the last five years (since October 2015).

### More than four in ten Americans think people in the U.S. are being harmed "right now" by global warming

• They are being harmed right now (%) 100% 45 45 47 50% 38 36 35 <sup>34</sup><sub>32</sub> 33 <sub>32</sub> 34 33 31 29 29 28 24 MAY NOV MAR SEP APR NOV APR OCT MAR OCT MAR NOV MAYOCT MAR DECAPR NOV APR 0% 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 When do you think global warming will start to harm people CENTER for CLIMATE CHANGE COMMUNICATION Climate Change Communication in the United States? December 2020

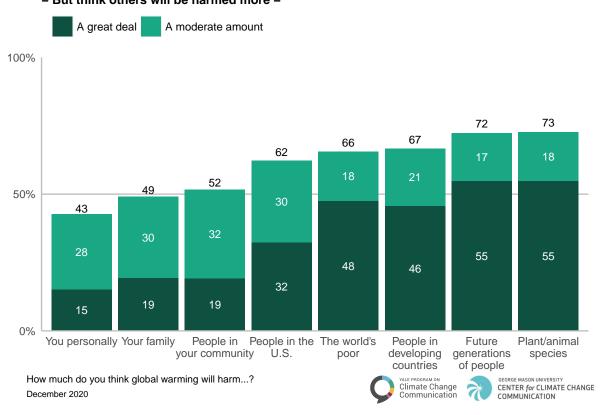




### 4.3 Many Americans think they will be harmed by global warming, but think others will be harmed more.

Many Americans understand that global warming will cause harm. Americans are most likely to think that plant and animal species (73%) and future generations of people (72%) will be harmed "a great deal" or "a moderate amount" by global warming. Six in ten or more think people in developing countries (67%), the world's poor (66%), and people in the U.S. (62%) will be harmed, and about half think people in their community (52%) will be harmed. Four in ten or more think their family (49%), and they themselves (43%) will be harmed.

### Many Americans think they will be harmed by global warming – But think others will be harmed more –







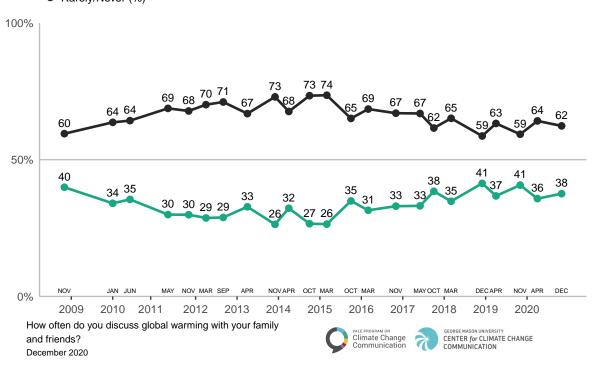
### 5 Personal and Social Engagement with Global Warming

# 5.1 Most Americans "rarely" or "never" discuss global warming with family and friends.

About six in ten Americans (62%) say they "rarely" or "never" discuss global warming with family and friends. Only about four in ten (38%) say they discuss global warming "occasionally" or "often."

# Most Americans "rarely" or "never" discuss global warming with family and friends

Often/Occasionally (%)Rarely/Never (%)



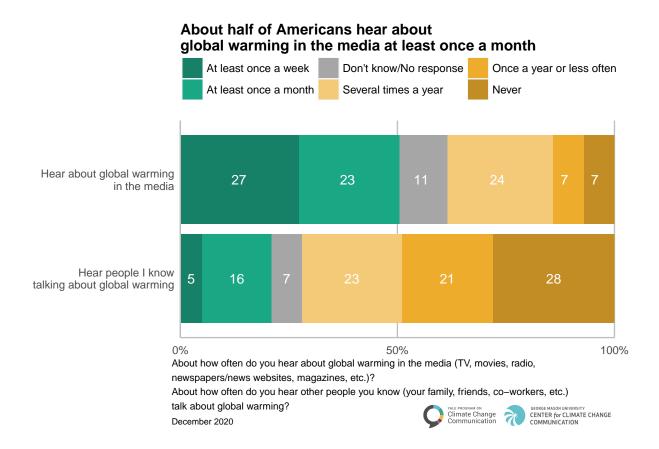




# 5.2 About half of Americans hear about global warming in the media at least once a month; fewer hear people they know talking about it at least once a month.

About half of Americans (51%) say they hear about global warming in the media once a month or more frequently, while 39% say they hear about global warming in the media several times a year or less often, including seven percent who say they never hear about global warming in the media.

Only about one in five Americans (21%) say they hear people they know talk about global warming once a month or more frequently. In contrast, about seven in ten (72%) say they hear people they know talk about it several times a year or less often, including 28% who say they never hear people they know talk about global warming.







#### 5.3 Two in three Americans say the issue of global warming is personally important.

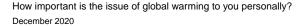
Two in three Americans (66%) say the issue of global warming is either "extremely" (13%), "very" (24%), or "somewhat" (30%) important to them personally. One in three (34%) say global warming is either "not too" (17%) or "not at all" (16%) personally important.

### Two in three Americans say the issue of global warming is personally important

- Extremely/Very/Somewhat important (%)Not too/Not at all important (%)
- 100% 70 67 67 66 66 62 61 62 61 60 59 60 60 58 58 56 50% 38 39 38 40 38 39 39 38 37 33 33 34 33 29 NOV NOVAPR OCT MAR OCT MAR NOV MAYOCT MAR DECAPR NOV APR NOV MAR SEP 0%

2014

2015



2012

2013

2011

2010

2009



2016

2017



2019

2020

2018

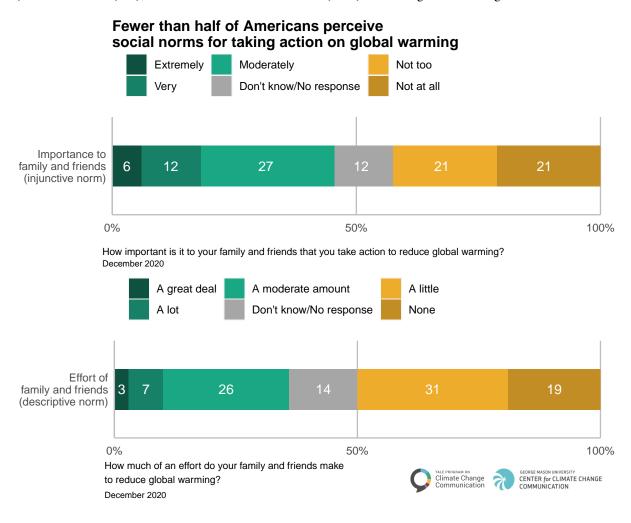




# 5.4 Fewer than half of Americans perceive social norms for taking action on global warming.

Social science research has shown that two types of social norms can have a powerful influence on people's behavior: injunctive norms – the belief that friends and family expect you to behave in a given way; and descriptive norms – the belief that friends and family are themselves behaving in that way.<sup>5</sup>

Forty-five percent of Americans perceive an injunctive norm, saying it is either "extremely" (6%), "very" (12%), or "moderately" important (27%) to their family and friends that they take action to reduce global warming. Fewer Americans (36%) perceive a descriptive norm, saying their family and friends make either "a great deal of effort" (3%), "a lot of effort" (7%), or "a moderate amount of effort" (26%) to reduce global warming.



<sup>&</sup>lt;sup>5</sup>Schultz, P. W., Nolan, J. M., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science*, 18(5), 429-434. https://journals.sagepub.com/doi/10.1111/j.1467-9280.2007.01917.x

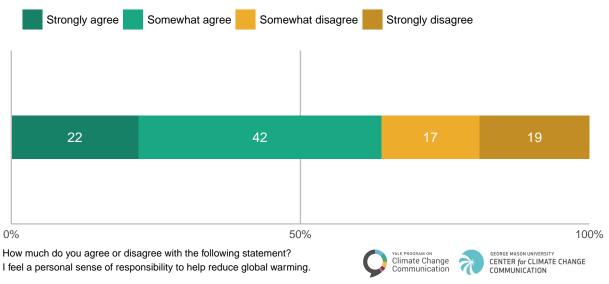




# 5.5 About two in three Americans feel a personal sense of responsibility to help reduce global warming.

About two in three Americans (65%) agree either "strongly" (22%) or "somewhat" (42%) that they feel a personal sense of responsibility to help reduce global warming.

# About two in three Americans feel a personal sense of responsibility to help reduce global warming



December 2020



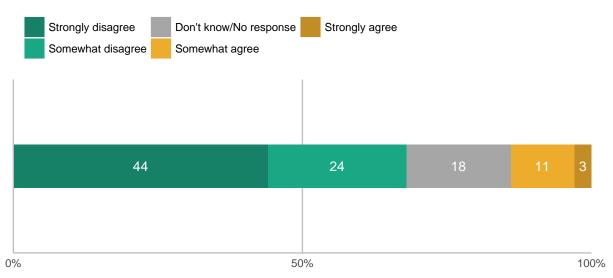


### 6 Efficacy Beliefs

#### 6.1 Few Americans think it is too late to do anything about global warming.

Only 14% of Americans agree either "strongly" (3%) or "somewhat" (11%) that it is too late to do anything about global warming. In contrast, about two in three Americans (68%) are more optimistic – they either "strongly" (44%) or "somewhat" (24%) disagree that it is too late to do anything about global warming.

#### Few Americans think it is too late to do anything about global warming



Please indicate how strongly you agree or disagree with the following statement: It's already too late to do anything about global warming.











### 7 How Americans Conceptualize Global Warming

December 2020

# 7.1 Americans are most likely to think of global warming as an environmental and/or scientific issue.

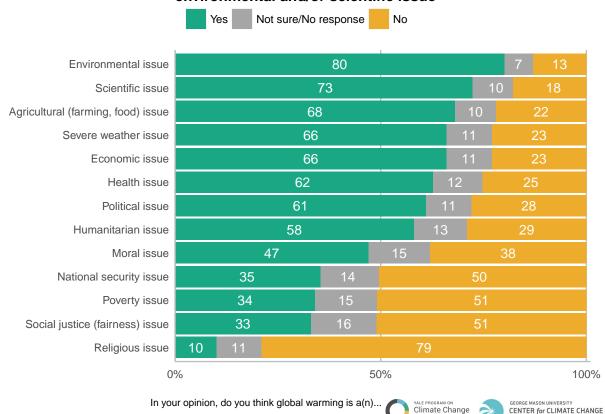
Global warming is a complex challenge with many dimensions. Understanding how people conceptualize the issue is critical to formulating effective communication strategies.

A large majority of Americans think global warming is an environmental issue (80%) and a scientific issue (73%). More than half think global warming is an agricultural (68%), severe weather (66%), economic (66%), health (62%), political (61%), or humanitarian (58%) issue.

Fewer think global warming is a moral (47%), national security (35%), poverty (34%), social justice (33%), and/or religious (10%) issue.

Over the past five years (since October 2015), the proportion of Americans who consider global warming a national security issue has increased by 12 percentage points (see Data Tables). Among the other items that were asked in both the current survey and in October 2015, the proportion of Americans who view global warming as a poverty issue (+9 percentage points), moral issue (+6 points), or social justice (fairness) issue (+6 points) issue has also increased.

### Americans are most likely to think of global warming as an environmental and/or scientific issue





Communication

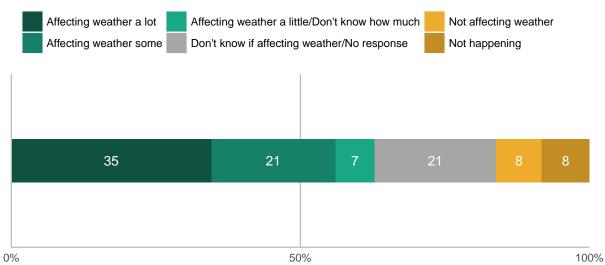


### 8 Global Warming and Severe Weather

# 8.1 About six in ten Americans think global warming is affecting weather in the United States.

About six in ten Americans (63%) think global warming is affecting weather in the United States, including more than half (56%) who think global warming is affecting U.S. weather either "a lot" (35%) or "some" (21%).

### About six in ten Americans think global warming is affecting weather in the United States



Which statement best reflects your view?

- (a) Global warming is affecting weather in the U.S.; (b) Global warming is not affecting weather in the U.S.;
- (c) Global warming isn't happening; (d) Don't know; (e) Prefer not to answer

[If (a) selected]: How much do you think global warming

is affecting weather in the U.S.?

December 2020





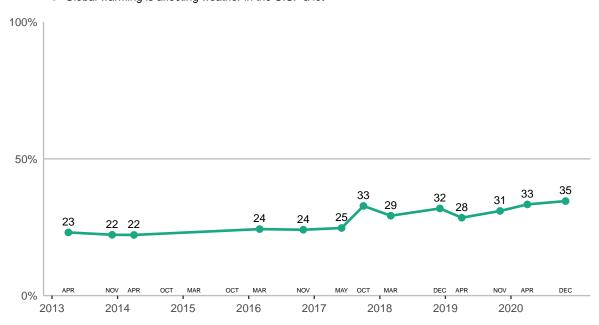




As noted above, 35% of Americans think global warming is affecting weather "a lot." The percentage of Americans who think global warming is affecting the weather "a lot" has increased by 12 percentage points since we first asked this question in April 2013.

#### One in three Americans think global warming is affecting weather "a lot"

Global warming is affecting weather in the U.S. "a lot"



Which statement best reflects your view?

- $(a) \ Global \ warming \ is \ affecting \ weather \ in \ the \ U.S.; \ (b) \ Global \ warming \ is \ not \ affecting \ weather \ in \ the \ U.S.;$
- (c) Global warming isn't happening; (d) Don't know; (e) Prefer not to answer
- [If (a) selected]: How much do you think global warming is affecting weather in the U.S.?

December 2020





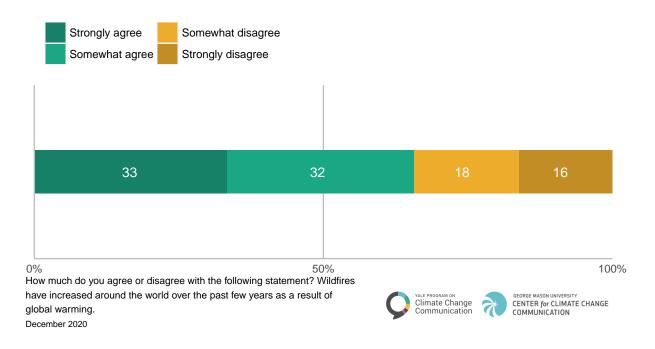




# 8.2 Two in three Americans think wildfires have increased as a result of global warming.

About two in three Americans either "strongly" (33%) or "somewhat" (32%) agree that wildfires have increased around the world as a result of global warming.

### Two in three Americans think wildfires have increased as a result of global warming

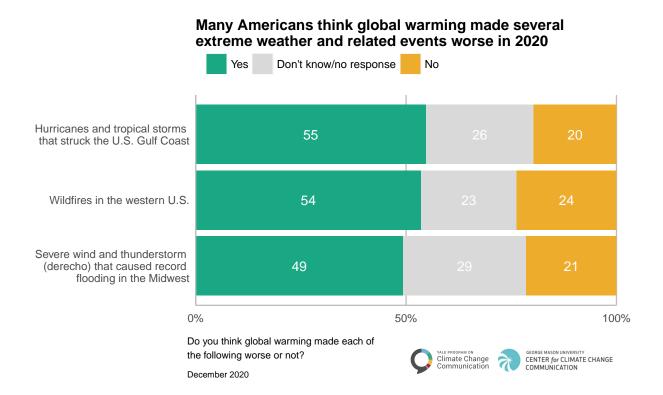






### 8.3 Many Americans think global warming made several extreme weather and related events worse in 2020.

More than half of Americans think global warming made the hurricanes and tropical storms that struck the U.S. Gulf Coast in 2020 (55%) and wildfires in the western U.S. (54%) worse, and about half think global warming made the derecho that caused record flooding in the Midwest (49%) worse.

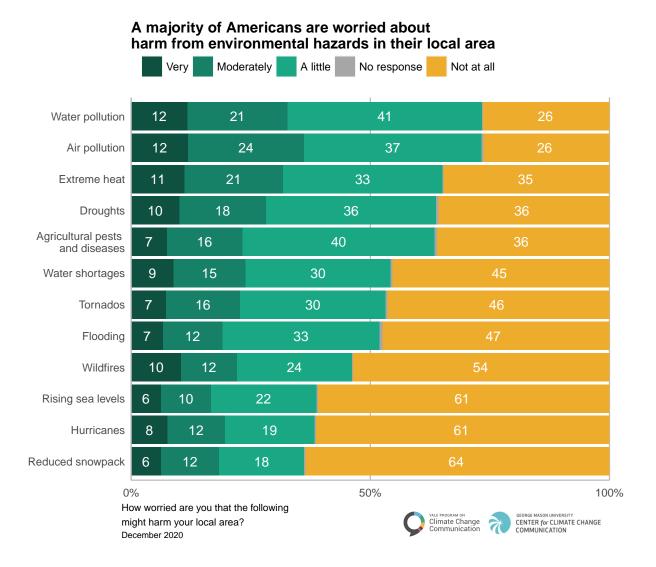






### 8.4 A majority of Americans are worried about harm from environmental hazards in their local area.

A majority of Americans are at least "a little worried" about environmental hazards in their local areas, including water pollution (73%), air pollution (73%), extreme heat (65%), droughts (64%), agricultural pests and diseases (64%), water shortages (54%), tornados (53%), and flooding (52%). Fewer are worried about wildfires (46%), rising sea levels (39%), hurricanes (38%), or reduced snowpack (36%).



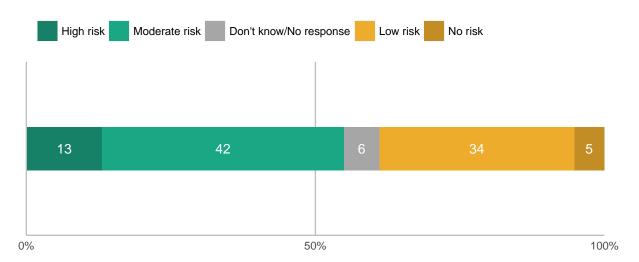




#### 8.5 A majority of Americans think extreme weather poses a risk to their community.

A majority of Americans (55%) think extreme weather poses either a "high" (13%) or "moderate" (42%) risk to their community over the next 10 years. Fewer think extreme weather poses either a "low" risk (34%) or "no" risk (5%).

#### A majority of Americans think extreme weather poses a risk to their community



In your opinion, over the next 10 years how much risk does extreme weather pose to your community?

December 2020









### 9 Appendix I: Data Tables

Note: NaN = "No available number" (i.e., the question was not asked in that survey wave).

(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?

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Yes (%)	71	57	61	63	62	66	70	63
No (%)	10	20	18	18	16	14	12	16
Don't Know (%)	19	22	21	18	19	20	18	20
Refused (%)	0	1	0	1	3	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
Yes (%)	62	64	66	63	67	70	70	70
No (%)	23	19	16	18	15	11	13	13
Don't Know (%)	14	17	18	19	18	18	17	16
Refused (%)	1	0	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Yes (%)	71	70	73	69	72	73	72
No (%)	13	14	14	16	12	10	13
Don't Know (%)	15	16	13	16	16	16	15
Refused (%)	0	0	0	0	0	0	0





#### (Base: Americans 18+ who say global warming is happening)

#### How sure are you that global warming is happening?

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	1,537	567	624	634	617	662	743	658
Extremely sure (%)	35	24	20	21	22	19	27	27
Very sure (%)	37	35	36	33	34	34	30	33
Somewhat sure (%)	24	37	40	40	38	42	40	37
Not at all sure (%)	4	5	3	6	5	5	3	4
Refused (%)	0	0	1	0	1	0	0	0

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	518	647	837	800	891	849	859	889
Extremely sure (%)	27	30	24	27	28	30	35	31
Very sure (%)	31	32	34	31	32	31	30	34
Somewhat sure (%)	39	33	38	38	37	34	32	33
Not at all sure (%)	3	4	4	3	3	4	4	2
Refused (%)	0	0	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	931	897	813	887	937	755	751
Extremely sure (%)	34	41	42	39	43	44	42
Very sure (%)	31	29	28	28	30	29	27
Somewhat sure (%)	32	27	27	29	24	24	28
Not at all sure (%)	2	3	3	3	3	3	2
Refused (%)	0	0	0	0	0	0	0





#### (Base: Americans 18+ who say global warming is <u>not</u> happening)

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

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	210	200	186	179	162	140	131	168
Extremely sure (%)	26	27	20	21	21	15	14	18
Very sure (%)	28	30	31	30	37	41	27	28
Somewhat sure (%)	38	33	44	38	36	35	45	42
Not at all sure (%)	8	7	4	11	5	8	13	12
Refused (%)	0	4	0	0	1	0	0	0

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	188	193	206	227	206	133	155	169
Extremely sure (%)	20	15	23	21	21	20	24	26
Very sure (%)	35	26	30	31	32	37	29	26
Somewhat sure (%)	36	47	35	37	36	34	39	41
Not at all sure (%)	9	12	11	11	12	9	8	7
Refused (%)	0	0	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	171	175	156	200	160	104	130
Extremely sure (%)	19	15	20	22	32	17	19
Very sure (%)	33	39	30	31	24	38	28
Somewhat sure (%)	39	35	41	36	38	36	33
Not at all sure (%)	9	12	8	11	5	9	18
Refused (%)	0	0	0	0	1	0	1





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

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Caused mostly by human activities (%)	57	46	50	47	49	46	54	49
Caused mostly by natural changes (%)	32	35	34	35	32	37	32	33
Neither, because it isn't happening (%)	4	9	6	8	8	5	7	8
Other (caused by human activities and natural changes) (%)	5	6	7	7	6	9	5	7
Other (unclassified) (%)	1	1	1	1	2	2	1	2
Don't know (%)	1	1	1	1	1	1	1	0
Refused (%)	1	2	1	1	3	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
Caused mostly by human	47	52	51	52	53	53	55	58
activities (%)								
Caused mostly by natural	36	33	33	32	33	34	30	30
changes (%)								
Neither, because it isn't	8	7	9	10	8	7	8	6
happening (%)								
Other (caused by human	5	5	6	4	5	5	5	6
activities and natural								
changes) (%)								
Other (unclassified) (%)	3	1	1	1	1	1	1	1
Don't know (%)	0	1	1	1	0	1	1	1
Refused (%)	1	1	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Caused mostly by human	54	58	62	55	59	62	58
activities (%)							
Caused mostly by natural	33	28	23	32	30	29	29
changes (%)							
Neither, because it isn't	6	7	8	6	5	5	5
happening (%)							
Other (caused by human	6	5	6	6	5	5	6
activities and natural							
changes) (%)							
Other (unclassified) (%)	1	1	0	1	1	0	1
Don't know (%)	0	0	0	1	0	0	0
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)

#### What comes closest to your view?

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Most scientists think global	46	33	34	38	40	34	44	42
warming is happening (%)								
Most scientists think global	2	5	4	4	3	3	3	4
warming is not happening (%)								
There is a lot of disagreement	33	39	45	39	38	41	36	33
among scientists about whether								
or not global warming is								
happening (%)								
Don't know enough to say (%)	18	21	17	18	17	21	18	20
Refused (%)	1	2	0	1	2	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	0	1,204	1,226	1,266
Most scientists think global	42	40	44	40	NaN	48	51	49
warming is happening (%)								
Most scientists think global	6	5	3	3	NaN	3	3	3
warming is not happening (%)								
There is a lot of disagreement	33	32	31	32	NaN	28	27	27
among scientists about whether								
or not global warming is								
happening (%)								
Don't know enough to say (%)	18	23	22	25	NaN	21	18	21
Refused (%)	1	0	0	0	NaN	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Most scientists think global	56	49	57	53	55	56	58
warming is happening (%)							
Most scientists think global	2	2	3	3	4	3	3
warming is not happening (%)							
There is a lot of disagreement	27	27	25	25	24	24	23
among scientists about whether							
or not global warming is							
happening (%)							
Don't know enough to say (%)	14	21	14	19	17	16	16
Refused (%)	0	0	0	0	0	0	0





#### (Base: Americans 18+)

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.

	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	1,013	1,275	1,263	1,330	1,204	1,226	1,266
0%-10% (%)	1	1	1	2	1	2	2
11%-20% (%)	1	1	1	2	1	1	1
21%-30% (%)	5	4	4	4	4	7	4
31%-40% (%)	3	2	2	2	2	3	3
41%-50% (%)	15	15	14	12	13	13	13
51%-60% (%)	8	7	6	5	6	6	7
61%-70% (%)	7	7	8	6	8	7	6
71%-80% (%)	14	17	15	18	15	17	14
81%-90% (%)	7	7	8	10	8	9	10
91%-100% (%)	9	9	9	12	11	15	13
Don't know enough to say	28	29	31	27	32	21	28

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,113	1,291	1,303	1,029	1,036
0%-10% (%)	1	1	1	1	2	1	1
11%-20% (%)	1	1	1	1	1	1	1
21%-30% (%)	5	4	1	2	2	2	1
31%-40% (%)	3	1	2	3	3	2	3
41%-50% (%)	13	10	15	17	10	11	10
51%-60% (%)	5	4	6	7	8	10	8
61%-70% (%)	5	5	6	7	8	6	7
71%-80% (%)	17	15	15	12	12	13	14
81%-90% (%)	10	10	11	10	11	11	13
91%-100% (%)	15	15	20	17	22	21	20
Don't know enough to say	24	34	22	21	21	22	22





(Base: Americans 18+)

#### How worried are you about global warming?

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Very worried (%)	16	11	12	9	12	11	16	14
Somewhat worried (%)	46	37	41	42	41	42	42	37
Not very worried (%)	24	27	30	28	30	30	25	30
Not at all worried (%)	13	22	18	20	15	16	17	19
Refused (%)	1	2	0	1	2	1	0	0

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
Very worried (%)	15	15	11	11	16	16	19	17
Somewhat worried (%)	38	41	45	41	41	42	42	39
Not very worried (%)	26	27	26	29	27	25	24	27
Not at all worried (%)	20	18	18	19	16	18	15	17
Refused (%)	1	0	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	22	21	29	23	30	26	27
Somewhat worried (%)	42	41	40	39	36	40	39
Not very worried (%)	23	22	19	23	19	22	20
Not at all worried (%)	14	16	13	14	15	12	14
Refused (%)	0	0	0	0	0	0	0





#### (Base: Americans 18+)

### How strongly do you feel each of the following emotions when you think about this issue of global warming?

#### Interested

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	20	19	22	NaN	NaN	NaN	NaN
Moderately (%)	NaN	42	47	42	NaN	NaN	NaN	NaN
Not very (%)	NaN	15	15	15	NaN	NaN	NaN	NaN
Not at all (%)	NaN	18	15	18	NaN	NaN	NaN	NaN
Refused (%)	NaN	5	3	3	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	1,330	1,204	1,226	0
Very (%)	21	NaN	NaN	NaN	23	22	23	NaN
Moderately (%)	38	NaN	NaN	NaN	43	45	43	NaN
Not very (%)	19	NaN	NaN	NaN	18	16	15	NaN
Not at all (%)	19	NaN	NaN	NaN	14	16	18	NaN
Refused (%)	3	NaN	NaN	NaN	1	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	24	19	25	NaN	23	19	19
Moderately (%)	43	42	44	NaN	41	44	41
Not very (%)	20	20	18	NaN	17	17	18
Not at all (%)	12	15	12	NaN	18	18	21
Refused (%)	1	2	1	NaN	1	1	1





#### (Base: Americans 18+)

# How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Hopeful

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	9	10	9	NaN	NaN	NaN	NaN
Moderately (%)	NaN	34	35	34	NaN	NaN	NaN	NaN
Not very (%)	NaN	29	29	27	NaN	NaN	NaN	NaN
Not at all (%)	NaN	23	24	25	NaN	NaN	NaN	NaN
Refused (%)	NaN	5	3	4	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	1,330	1,204	1,226	0
Very (%)	9	NaN	NaN	NaN	11	10	11	NaN
Moderately (%)	33	NaN	NaN	NaN	39	38	38	NaN
Not very (%)	31	NaN	NaN	NaN	32	30	30	NaN
Not at all (%)	24	NaN	NaN	NaN	17	20	21	NaN
Refused (%)	3	NaN	NaN	NaN	1	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	7	7	10	NaN	9	10	7
Moderately (%)	37	35	38	NaN	33	35	36
Not very (%)	39	36	34	NaN	34	30	31
Not at all (%)	16	19	17	NaN	22	23	25
Refused (%)	2	3	1	NaN	1	2	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

### Disgusted

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	20	14	15	NaN	NaN	NaN	NaN
Moderately (%)	NaN	29	33	31	NaN	NaN	NaN	NaN
Not very (%)	NaN	22	23	22	NaN	NaN	NaN	NaN
Not at all (%)	NaN	24	27	28	NaN	NaN	NaN	NaN
Refused (%)	NaN	5	4	4	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	0	1,204	1,226	0
Very (%)	17	NaN	NaN	NaN	NaN	14	15	NaN
Moderately (%)	25	NaN	NaN	NaN	NaN	34	28	NaN
Not very (%)	26	NaN	NaN	NaN	NaN	25	28	NaN
Not at all (%)	29	NaN	NaN	NaN	NaN	26	28	NaN
Refused (%)	3	NaN	NaN	NaN	NaN	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	22	14	19	NaN	20	16	13
Moderately (%)	33	33	34	NaN	30	30	29
Not very (%)	25	26	24	NaN	21	20	22
Not at all (%)	19	25	22	NaN	28	33	35
Refused (%)	2	3	1	NaN	1	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Helpless

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	13	11	12	NaN	NaN	NaN	NaN
Moderately (%)	NaN	29	32	33	NaN	NaN	NaN	NaN
Not very (%)	NaN	23	23	20	NaN	NaN	NaN	NaN
Not at all (%)	NaN	30	30	32	NaN	NaN	NaN	NaN
Refused (%)	NaN	4	3	3	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	1,330	1,204	1,226	0
Very (%)	15	NaN	NaN	NaN	14	13	12	NaN
Moderately (%)	27	NaN	NaN	NaN	39	36	34	NaN
Not very (%)	24	NaN	NaN	NaN	25	23	26	NaN
Not at all (%)	30	NaN	NaN	NaN	21	27	26	NaN
Refused (%)	3	NaN	NaN	NaN	1	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	15	10	14	NaN	17	10	8
Moderately (%)	37	35	37	NaN	36	29	32
Not very (%)	26	27	25	NaN	20	24	22
Not at all (%)	20	25	24	NaN	26	35	36
Refused (%)	2	3	1	NaN	1	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Angry

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	15	10	12	NaN	NaN	NaN	NaN
Moderately (%)	NaN	28	30	25	NaN	NaN	NaN	NaN
Not very (%)	NaN	26	28	28	NaN	NaN	NaN	NaN
Not at all (%)	NaN	27	30	32	NaN	NaN	NaN	NaN
Refused (%)	NaN	4	3	3	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	0	1,204	1,226	0
Very (%)	13	NaN	NaN	NaN	NaN	12	12	NaN
Moderately (%)	22	NaN	NaN	NaN	NaN	29	26	NaN
Not very (%)	30	NaN	NaN	NaN	NaN	29	31	NaN
Not at all (%)	32	NaN	NaN	NaN	NaN	29	30	NaN
Refused (%)	3	NaN	NaN	NaN	NaN	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	16	11	15	NaN	16	13	11
Moderately (%)	32	28	33	NaN	29	27	26
Not very (%)	28	31	27	NaN	23	23	26
Not at all (%)	22	28	24	NaN	31	35	36
Refused (%)	2	2	1	NaN	1	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### **Afraid**

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	9	9	12	NaN	NaN	NaN	NaN
Moderately (%)	NaN	26	28	27	NaN	NaN	NaN	NaN
Not very (%)	NaN	27	27	25	NaN	NaN	NaN	NaN
Not at all (%)	NaN	34	34	33	NaN	NaN	NaN	NaN
Refused (%)	NaN	5	3	4	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	0	1,204	1,226	0
Very (%)	10	NaN	NaN	NaN	NaN	11	12	NaN
Moderately (%)	25	NaN	NaN	NaN	NaN	31	30	NaN
Not very (%)	27	NaN	NaN	NaN	NaN	26	27	NaN
Not at all (%)	34	NaN	NaN	NaN	NaN	30	29	NaN
Refused (%)	3	NaN	NaN	NaN	NaN	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	14	10	13	NaN	15	7	8
Moderately (%)	34	28	36	NaN	31	28	29
Not very (%)	28	31	26	NaN	23	26	26
Not at all (%)	22	28	24	NaN	30	38	36
Refused (%)	2	3	1	NaN	1	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Outraged

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	0	0	1,204	1,226	0
Very (%)	NaN	NaN	NaN	NaN	NaN	12	12	NaN
Moderately (%)	NaN	NaN	NaN	NaN	NaN	29	24	NaN
Not very (%)	NaN	NaN	NaN	NaN	NaN	28	32	NaN
Not at all (%)	NaN	NaN	NaN	NaN	NaN	30	31	NaN
Refused (%)	NaN	NaN	NaN	NaN	NaN	1	1	NaN

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	0	1,303	1,029	1,036
Very (%)	15	11	14	NaN	17	13	10
Moderately (%)	28	26	29	NaN	28	27	26
Not very (%)	32	32	29	NaN	22	22	25
Not at all (%)	23	29	27	NaN	32	37	38
Refused (%)	2	3	1	NaN	1	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### **Anxious**

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,029	1,036
Very (%)	NaN	NaN	NaN	NaN	NaN	7	7
Moderately (%)	NaN	NaN	NaN	NaN	NaN	27	24
Not very (%)	NaN	NaN	NaN	NaN	NaN	26	27
Not at all (%)	NaN	NaN	NaN	NaN	NaN	39	41
Refused (%)	NaN	NaN	NaN	NaN	NaN	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Confused

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,029	1,036
Very (%)	NaN	NaN	NaN	NaN	NaN	5	5
Moderately (%)	NaN	NaN	NaN	NaN	NaN	21	24
Not very (%)	NaN	NaN	NaN	NaN	NaN	31	31
Not at all (%)	NaN	NaN	NaN	NaN	NaN	41	40
Refused (%)	NaN	NaN	NaN	NaN	NaN	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Hopeless

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,029	1,036
Very (%)	NaN	NaN	NaN	NaN	NaN	5	4
Moderately (%)	NaN	NaN	NaN	NaN	NaN	23	25
Not very (%)	NaN	NaN	NaN	NaN	NaN	30	28
Not at all (%)	NaN	NaN	NaN	NaN	NaN	40	42
Refused (%)	NaN	NaN	NaN	NaN	NaN	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Guilty

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	1,001	1,024	1,010	0	0	0	0
Very (%)	NaN	4	3	4	NaN	NaN	NaN	NaN
Moderately (%)	NaN	20	23	22	NaN	NaN	NaN	NaN
Not very (%)	NaN	31	31	29	NaN	NaN	NaN	NaN
Not at all (%)	NaN	40	40	41	NaN	NaN	NaN	NaN
Refused (%)	NaN	5	3	4	NaN	NaN	NaN	NaN

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	0	0	0	0	0	0	0
Very (%)	4	NaN						
Moderately (%)	22	NaN						
Not very (%)	29	NaN						
Not at all (%)	42	NaN						
Refused (%)	3	NaN						

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	1,303	1,029	1,036
Very (%)	NaN	NaN	NaN	NaN	6	4	3
Moderately (%)	NaN	NaN	NaN	NaN	27	22	20
Not very (%)	NaN	NaN	NaN	NaN	30	31	31
Not at all (%)	NaN	NaN	NaN	NaN	36	42	45
Refused (%)	NaN	NaN	NaN	NaN	1	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Depressed

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,029	1,036
Very (%)	NaN	NaN	NaN	NaN	NaN	5	4
Moderately (%)	NaN	NaN	NaN	NaN	NaN	19	17
Not very (%)	NaN	NaN	NaN	NaN	NaN	27	27
Not at all (%)	NaN	NaN	NaN	NaN	NaN	48	50
Refused (%)	NaN	NaN	NaN	NaN	NaN	1	1





## How strongly do you feel each of the following emotions when you think about the issue of global warming? (Cont'd)

#### Panicked

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	0	0	0	0	0
Very (%)	NaN							
Moderately (%)	NaN							
Not very (%)	NaN							
Not at all (%)	NaN							
Refused (%)	NaN							

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,029	1,036
Very (%)	NaN	NaN	NaN	NaN	NaN	4	4
Moderately (%)	NaN	NaN	NaN	NaN	NaN	16	15
Not very (%)	NaN	NaN	NaN	NaN	NaN	32	30
Not at all (%)	NaN	NaN	NaN	NaN	NaN	47	49
Refused (%)	NaN	NaN	NaN	NaN	NaN	1	1





#### How much do you agree with the following statements?

#### I have personally experienced the effects of global warming.

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Strongly Agree (%)	4	4	5	5	7	5	4	6
Somewhat Agree (%)	28	19	24	27	28	30	34	33
Somewhat Disagree (%)	42	32	34	32	34	30	30	29
Strongly Disagree (%)	24	37	34	30	23	33	31	31
Refused (%)	2	7	3	6	8	2	0	2

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	0	1,204	1,226	1,266
Strongly Agree (%)	6	5	4	4	NaN	7	7	5
Somewhat Agree (%)	27	29	26	27	NaN	33	29	34
Somewhat Disagree (%)	30	29	29	29	NaN	29	29	29
Strongly Disagree (%)	36	35	41	40	NaN	31	35	31
Refused (%)	1	1	0	0	NaN	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Strongly Agree (%)	8	5	11	6	10	9	12
Somewhat Agree (%)	36	36	35	32	35	35	30
Somewhat Disagree (%)	30	27	24	28	23	26	24
Strongly Disagree (%)	26	32	31	33	31	30	34
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)
When do you think global warming will start to harm people in the United States?

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
They are being harmed now (%)	33	24	28	31	29	29	36	34
In 10 years (%)	13	12	12	11	10	11	13	11
In 25 years (%)	13	13	11	13	13	13	11	12
In 50 years (%)	13	12	13	12	15	14	12	12
In 100 years (%)	12	13	14	11	15	15	13	13
Never (%)	14	23	19	19	16	15	15	17
Refused (%)	3	2	3	2	3	2	1	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
They are being harmed now (%)	34	32	33	32	34	38	36	35
In 10 years (%)	10	9	10	10	13	12	14	11
In 25 years (%)	14	14	14	13	14	13	15	13
In 50 years (%)	11	15	12	11	11	12	10	13
In 100 years (%)	12	14	13	13	10	10	9	13
Never (%)	18	16	18	20	18	14	16	15
Refused (%)	2	1	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
They are being harmed now (%)	42	39	48	38	45	45	47
In 10 years (%)	12	11	7	10	12	13	12
In 25 years (%)	12	12	14	13	12	12	10
In 50 years (%)	11	12	7	11	9	9	9
In 100 years (%)	11	11	9	12	9	8	9
Never (%)	12	15	14	15	14	13	14
Refused (%)	0	0	0	0	0	0	0





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

#### You personally

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	9	13	10	11	9	11	16	15
Moderate amount (%)	22	23	21	18	20	18	26	25
Only a little (%)	24	21	27	27	28	30	25	26
Not at all (%)	22	30	24	25	24	29	20	23
Don't know (%)	23	11	18	17	16	11	13	11
Refused (%)	1	2	0	2	3	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
A great deal (%)	13	13	12	10	14	12	14	13
Moderate amount (%)	25	25	24	26	27	28	27	29
Only a little (%)	27	26	26	26	26	24	25	26
Not at all (%)	26	25	27	25	20	23	25	22
Don't know (%)	8	10	11	13	12	12	8	9
Refused (%)	1	1	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	16	14	22	14	18	13	15
Moderate amount (%)	33	28	27	29	26	29	28
Only a little (%)	24	27	20	24	24	26	24
Not at all (%)	19	20	20	25	22	21	23
Don't know (%)	7	11	10	8	11	10	10
Refused (%)	0	0	0	0	0	0	0





## How much do you think global warming will harm...? (Cont'd)

#### Your family

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	11	15	11	12	10	12	18	17
Moderate amount (%)	24	25	25	21	23	21	28	27
Only a little (%)	23	21	23	25	27	28	23	23
Not at all (%)	18	27	21	23	21	26	17	20
Don't know (%)	23	11	19	17	17	12	14	11
Refused (%)	1	2	0	2	2	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	0	1,204	1,226	1,266
A great deal (%)	17	16	15	13	NaN	15	17	16
Moderate amount (%)	25	27	28	28	NaN	30	30	31
Only a little (%)	25	24	23	23	NaN	22	24	25
Not at all (%)	24	21	23	22	NaN	21	21	19
Don't know (%)	8	11	11	13	NaN	12	8	9
Refused (%)	1	1	0	0	NaN	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	19	17	27	18	21	16	19
Moderate amount (%)	35	30	29	30	28	30	30
Only a little (%)	22	25	17	22	22	24	20
Not at all (%)	16	17	17	22	18	19	21
Don't know (%)	8	12	9	9	11	11	10
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)

## How much do you think global warming will harm...? (Cont'd)

#### People in your community

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	13	15	11	12	10	12	19	17
Moderate amount (%)	26	27	25	21	23	21	29	28
Only a little (%)	20	21	23	25	26	29	23	23
Not at all (%)	17	24	21	21	20	24	15	18
Don't know (%)	23	11	19	18	17	13	13	13
Refused (%)	1	3	0	2	3	2	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	0	1,204	1,226	1,266
A great deal (%)	14	16	16	14	NaN	15	19	16
Moderate amount (%)	29	28	27	29	NaN	31	30	32
Only a little (%)	24	24	23	24	NaN	23	22	23
Not at all (%)	23	20	22	20	NaN	19	20	18
Don't know (%)	9	11	11	14	NaN	12	9	10
Refused (%)	1	1	0	0	NaN	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	21	17	27	19	22	17	19
Moderate amount (%)	34	32	30	30	29	31	32
Only a little (%)	22	22	16	22	20	23	19
Not at all (%)	15	16	16	21	17	17	19
Don't know (%)	8	12	10	8	11	11	10
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)

## How much do you think global warming will harm...? (Cont'd)

#### People in the United States

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	21	22	16	16	15	18	26	22
Moderate amount (%)	28	28	28	26	28	28	31	30
Only a little (%)	15	15	21	22	23	23	17	18
Not at all (%)	13	21	17	17	16	17	12	16
Don't know (%)	22	12	17	18	16	12	13	12
Refused (%)	1	3	0	2	3	2	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
A great deal (%)	23	23	23	19	23	24	28	25
Moderate amount (%)	30	30	30	30	33	35	32	33
Only a little (%)	19	18	20	20	18	16	17	19
Not at all (%)	20	18	17	17	14	15	15	15
Don't know (%)	7	10	11	14	12	10	8	9
Refused (%)	1	1	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	34	28	38	30	35	29	32
Moderate amount (%)	33	30	27	28	30	33	30
Only a little (%)	14	18	12	15	12	16	14
Not at all (%)	11	12	13	17	13	12	13
Don't know (%)	7	12	10	9	10	10	11
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)

## How much do you think global warming will harm...? (Cont'd)

#### People in developing countries

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	31	28	22	23	22	26	35	30
Moderate amount (%)	21	24	27	21	27	25	29	25
Only a little (%)	10	14	17	19	17	18	10	18
Not at all (%)	13	19	15	16	15	16	11	13
Don't know (%)	24	13	18	18	17	14	15	13
Refused (%)	1	2	0	2	3	2	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
A great deal (%)	32	31	29	27	34	36	40	37
Moderate amount (%)	24	24	26	26	27	27	25	25
Only a little (%)	17	17	16	17	13	12	12	16
Not at all (%)	19	16	17	15	13	13	13	13
Don't know (%)	8	11	12	15	13	12	11	9
Refused (%)	1	1	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	47	38	48	42	48	44	46
Moderate amount (%)	25	24	20	22	19	22	21
Only a little (%)	10	12	8	11	8	10	10
Not at all (%)	10	12	11	15	12	10	10
Don't know (%)	9	13	13	10	12	14	13
Refused (%)	0	0	0	0	0	0	0





## How much do you think global warming will harm...? (Cont'd)

#### The world's poor

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	0	0	0	0	0	0	0	0
A great deal (%)	NaN							
Moderate amount (%)	NaN							
Only a little (%)	NaN							
Not at all (%)	NaN							
Don't know (%)	NaN							
Refused (%)	NaN							

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	0	0	0	1,259	1,330	1,204	1,226	1,266
A great deal (%)	NaN	NaN	NaN	30	36	40	43	39
Moderate amount (%)	NaN	NaN	NaN	23	25	22	21	23
Only a little (%)	NaN	NaN	NaN	16	12	12	11	15
Not at all (%)	NaN	NaN	NaN	16	13	13	13	13
Don't know (%)	NaN	NaN	NaN	15	13	14	12	10
Refused (%)	NaN	NaN	NaN	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	49	40	50	44	50	46	48
Moderate amount (%)	21	22	17	20	16	21	18
Only a little (%)	10	13	8	11	9	11	10
Not at all (%)	10	12	12	15	13	10	12
Don't know (%)	9	13	13	10	12	12	13
Refused (%)	0	0	0	0	0	0	0





## How much do you think global warming will harm...? (Cont'd)

#### Future generations of people

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	43	41	39	36	40	42	47	42
Moderate amount (%)	17	21	22	22	21	22	21	21
Only a little (%)	7	9	11	10	13	12	9	12
Not at all (%)	10	15	12	11	9	11	8	12
Don't know (%)	22	12	16	18	15	13	14	12
Refused (%)	2	3	1	3	2	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
A great deal (%)	46	49	46	42	51	48	53	50
Moderate amount (%)	19	18	18	21	19	22	18	20
Only a little (%)	11	10	11	10	8	8	9	10
Not at all (%)	15	11	13	12	11	10	10	11
Don't know (%)	9	11	13	15	11	11	10	8
Refused (%)	1	1	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	54	52	59	52	57	53	55
Moderate amount (%)	21	18	16	17	15	20	17
Only a little (%)	8	9	6	9	7	9	8
Not at all (%)	9	9	9	13	10	7	8
Don't know (%)	8	12	10	9	11	11	12
Refused (%)	0	0	0	0	0	0	0





## How much do you think global warming will harm...? (Cont'd)

#### Plant and animal species

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
A great deal (%)	45	41	40	38	40	43	43	39
Moderate amount (%)	17	19	20	18	18	21	25	24
Only a little (%)	8	10	12	12	15	13	11	13
Not at all (%)	9	15	13	12	9	10	8	13
Don't know (%)	20	12	15	17	14	12	13	10
Refused (%)	2	3	1	2	3	1	0	1

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	0	1,204	1,226	1,266
A great deal (%)	46	47	44	42	NaN	48	50	49
Moderate amount (%)	19	19	20	21	NaN	23	19	22
Only a little (%)	11	12	10	12	NaN	9	10	10
Not at all (%)	15	12	13	12	NaN	11	11	11
Don't know (%)	7	10	12	13	NaN	10	9	8
Refused (%)	1	1	0	0	NaN	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
A great deal (%)	54	53	58	52	57	54	55
Moderate amount (%)	21	18	16	19	16	19	18
Only a little (%)	9	9	8	10	7	9	9
Not at all (%)	8	9	9	11	10	8	8
Don't know (%)	7	10	9	8	10	10	10
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)
How often do you discuss global warming with your family and friends?

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Often (%)	5	6	5	4	4	5	3	4
Occasionally (%)	35	29	30	26	26	24	26	28
Rarely (%)	33	34	39	41	39	40	38	39
Never (%)	26	30	25	28	29	30	34	28
Refused (%)	1	2	0	1	2	1	0	0

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
Often (%)	3	4	3	3	5	4	6	5
Occasionally (%)	23	28	24	23	29	27	27	28
Rarely (%)	38	39	36	38	33	36	36	36
Never (%)	34	29	37	36	32	32	31	31
Refused (%)	1	0	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Often (%)	6	5	8	6	9	5	6
Occasionally (%)	32	30	34	31	32	31	32
Rarely (%)	37	34	33	33	32	38	31
Never (%)	25	31	26	30	27	26	32
Refused (%)	0	0	0	0	0	0	0





(Base: Americans 18+)
About how often do you hear about global warming in the media (TV, movies, radio, newspapers/news websites, magazines, etc.)?

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	0	1,266	1,304	1,278
At least once a week (%)	19	25	22	NaN	23	24	20
At least once a month (%)	21	23	22	NaN	20	28	23
Several times a year (%)	30	26	26	NaN	26	25	28
Once a year or less often (%)	8	8	8	NaN	9	7	9
Never (%)	6	6	7	NaN	9	3	7
Not sure (%)	15	11	15	NaN	11	13	12
Refused (%)	0	1	0	NaN	1	1	1

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,114	1,291	1,303	1,029	1,036
At least once a week (%)	34	31	35	24	27
At least once a month (%)	22	20	21	24	23
Several times a year (%)	22	21	19	24	24
Once a year or less often (%)	5	6	6	8	7
Never (%)	6	8	6	8	7
Not sure (%)	8	13	13	12	10
Refused (%)	2	1	1	1	1





(Base: Americans 18+)
About how often do you hear people you know (your family, friends, co-workers, etc.) talk about global warming?

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	0	1,266	1,304	1,278
At least once a week (%)	4	6	5	NaN	6	7	5
At least once a month (%)	12	15	13	NaN	13	17	15
Several times a year (%)	23	22	25	NaN	21	24	24
Once a year or less often (%)	21	22	19	NaN	22	21	20
Never (%)	25	26	24	NaN	28	18	22
Not sure (%)	14	9	13	NaN	10	12	13
Refused (%)	0	1	1	NaN	1	1	1

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,114	1,291	1,303	1,029	1,036
At least once a week (%)	9	8	8	6	5
At least once a month (%)	17	15	16	16	16
Several times a year (%)	24	23	23	24	23
Once a year or less often (%)	19	16	15	23	21
Never (%)	22	24	25	24	28
Not sure (%)	7	12	12	8	7
Refused (%)	1	1	1	1	0





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

	Nov 2008	Jan 2010	Jun 2010	May 2011	Nov 2011	Mar 2012	Sep 2012	Apr 2013
(Unweighted Base)	2,164	1,001	1,024	1,010	1,000	1,008	1,061	1,045
Extremely important (%)	10	5	6	7	6	6	6	8
Very important (%)	20	14	18	15	13	14	17	13
Somewhat important (%)	39	37	38	37	40	40	36	36
Not too important (%)	18	23	24	24	24	23	24	24
Not at all important (%)	11	19	14	14	15	16	17	18
Refused (%)	1	2	0	2	2	2	0	0

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	830	1,013	1,275	1,263	1,330	1,204	1,226	1,266
Extremely important (%)	8	8	5	6	7	9	10	10
Very important (%)	14	17	16	15	18	17	17	16
Somewhat important (%)	33	38	37	35	37	35	34	38
Not too important (%)	25	21	24	24	21	21	22	22
Not at all important (%)	18	16	18	20	17	17	16	15
Refused (%)	1	0	0	0	0	0	0	0

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Extremely important (%)	12	10	16	12	18	13	13
Very important (%)	19	18	24	18	24	24	24
Somewhat important (%)	37	35	32	33	26	29	30
Not too important (%)	19	22	15	19	18	20	17
Not at all important (%)	14	15	14	17	16	13	16
Refused (%)	0	0	0	0	0	0	0





# (Base: Americans 18+) How important is it to your family and friends that you take action to reduce global warming?

	May 2017	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,266	0	0	1,114	1,291	1,303	1,029	1,036
Extremely important (%)	5	NaN	NaN	6	5	6	5	6
Very important (%)	13	NaN	NaN	13	14	11	12	12
Somewhat important (%)	27	NaN	NaN	27	26	26	30	27
Not too important (%)	23	NaN	NaN	19	17	20	20	21
Not at all important (%)	20	NaN	NaN	18	19	19	17	21
Don't know (%)	11	NaN	NaN	16	17	17	15	12
Refused (%)	0	NaN	NaN	1	2	1	0	0

#### (Base: Americans 18+)

#### How much of an effort do your family and friends make to reduce global warming?

	May 2017	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,266	0	0	1,114	1,291	1,303	1,029	1,036
A great deal of effort (%)	3	NaN	NaN	4	3	3	2	3
A lot of effort (%)	8	NaN	NaN	7	8	7	6	7
A moderate amount of effort (%)	31	NaN	NaN	29	30	30	37	26
A little effort (%)	29	NaN	NaN	29	24	28	29	31
No effort (%)	19	NaN	NaN	16	19	16	12	19
Don't know (%)	10	NaN	NaN	14	15	15	14	13
Refused (%)	0	NaN	NaN	1	1	1	0	0





#### Please indicate how strongly you agree or disagree with the following statement:

#### I feel a personal sense of responsibility to help reduce global warming

	May 2017	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	0	1,029	1,036
Strongly agree (%)	NaN	NaN	NaN	NaN	NaN	NaN	22	22
Somewhat agree (%)	NaN	NaN	NaN	NaN	NaN	NaN	44	42
Somewhat disagree (%)	NaN	NaN	NaN	NaN	NaN	NaN	18	17
Strongly disagree (%)	NaN	NaN	NaN	NaN	NaN	NaN	16	19
Refused (%)	NaN	NaN	NaN	NaN	NaN	NaN	0	0





(Base: Americans 18+)

#### Please indicate how strongly you agree or disagree with the following statement:

#### It's already too late to do anything about global warming

	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017
(Unweighted Base)	726	0	0	0	0	0	0	0
Strongly disagree (%)	30	NaN						
Somewhat disagree (%)	32	NaN						
Somewhat agree (%)	12	NaN						
Strongly agree (%)	2	NaN						
Don't know (%)	17	NaN						
Prefer not to answer (%)	3	NaN						
Refused (%)	3	NaN						

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	1,114	1,291	1,303	1,029	1,036
Strongly disagree (%)	NaN	NaN	38	39	38	44	44
Somewhat disagree (%)	NaN	NaN	28	25	28	24	24
Somewhat agree (%)	NaN	NaN	12	9	9	9	11
Strongly agree (%)	NaN	NaN	2	3	3	2	3
Don't know (%)	NaN	NaN	15	17	16	14	15
Prefer not to answer (%)	NaN	NaN	4	5	5	6	3
Refused (%)	NaN	NaN	1	1	1	0	0





## In your opinion, do you think global warming is a(n)...

#### **Environmental Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	76	77	78	76	NaN	78	74
No (%)	11	11	10	11	NaN	11	11
Not sure (%)	12	11	12	11	NaN	10	14
Refused (%)	1	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	75	NaN	82	80
No (%)	NaN	13	NaN	9	13
Not sure (%)	NaN	11	NaN	8	6
Refused (%)	NaN	1	NaN	1	1





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### Scientific Issue

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	71	73	71	70	NaN	71	68
No (%)	13	13	14	15	NaN	15	14
Not sure (%)	15	14	14	14	NaN	13	16
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	69	NaN	74	73
No (%)	NaN	17	NaN	14	18
Not sure (%)	NaN	13	NaN	11	9
Refused (%)	NaN	1	NaN	1	1





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### Agricultural (Farming, Food) Issue

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	64	65	62	65	NaN	66	62
No (%)	19	17	22	20	NaN	19	19
Not sure (%)	16	16	15	15	NaN	14	16
Refused (%)	2	1	1	1	NaN	1	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	63	NaN	67	68
No (%)	NaN	22	NaN	19	22
Not sure (%)	NaN	14	NaN	13	9
Refused (%)	NaN	1	NaN	0	0





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### Severe Weather Issue

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	0	0	1,204	1,226	0	1,304	1,278
Yes (%)	NaN	NaN	63	61	NaN	65	61
No (%)	NaN	NaN	19	23	NaN	19	19
Not sure (%)	NaN	NaN	17	15	NaN	15	17
Refused (%)	NaN	NaN	1	1	NaN	1	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	64	NaN	64	66
No (%)	NaN	21	NaN	22	23
Not sure (%)	NaN	13	NaN	13	11
Refused (%)	NaN	1	NaN	0	0





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Economic Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	60	63	61	60	NaN	60	57
No (%)	22	19	23	23	NaN	23	22
Not sure (%)	16	17	15	16	NaN	15	19
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	54	NaN	64	66
No (%)	NaN	29	NaN	22	23
Not sure (%)	NaN	15	NaN	14	11
Refused (%)	NaN	1	NaN	1	0





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Humanitarian Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	0	0	0	0	0	0	0
Yes (%)	NaN						
No (%)	NaN						
Not sure (%)	NaN						
Refused (%)	NaN						

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	51	NaN	61	58
No (%)	NaN	33	NaN	24	29
Not sure (%)	NaN	15	NaN	15	13
Refused (%)	NaN	1	NaN	1	0





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Health Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	58	62	61	62	NaN	62	60
No (%)	23	21	22	22	NaN	23	21
Not sure (%)	17	16	16	15	NaN	13	17
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	58	NaN	60	62
No (%)	NaN	27	NaN	25	25
Not sure (%)	NaN	14	NaN	14	11
Refused (%)	NaN	1	NaN	1	1





## In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Political Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	54	56	56	56	NaN	60	58
No (%)	27	26	27	28	NaN	24	23
Not sure (%)	17	17	16	15	NaN	14	17
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	57	NaN	60	61
No (%)	NaN	28	NaN	27	28
Not sure (%)	NaN	14	NaN	13	11
Refused (%)	NaN	1	NaN	0	0





# In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Moral Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	35	41	39	37	NaN	41	41
No (%)	44	39	41	45	NaN	42	36
Not sure (%)	19	19	19	17	NaN	15	20
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	38	NaN	50	47
No (%)	NaN	44	NaN	33	38
Not sure (%)	NaN	17	NaN	16	14
Refused (%)	NaN	1	NaN	1	0





# In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Poverty Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	24	25	27	25	NaN	28	28
No (%)	53	50	51	54	NaN	52	47
Not sure (%)	21	24	22	20	NaN	18	23
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	29	NaN	32	34
No (%)	NaN	54	NaN	50	51
Not sure (%)	NaN	16	NaN	17	15
Refused (%)	NaN	1	NaN	1	0





# In your opinion, do you think global warming is a(n)...(Cont'd)

#### **National Security Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	26	23	26	27	NaN	29	25
No (%)	53	50	51	53	NaN	50	49
Not sure (%)	20	26	21	19	NaN	19	24
Refused (%)	1	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	27	NaN	31	35
No (%)	NaN	55	NaN	49	50
Not sure (%)	NaN	17	NaN	19	14
Refused (%)	NaN	1	NaN	1	1





# In your opinion, do you think global warming is a(n)...(Cont'd)

#### Social Justice (Fairness) Issue

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	23	27	23	24	NaN	26	29
No (%)	53	46	51	52	NaN	51	46
Not sure (%)	22	25	25	22	NaN	20	24
Refused (%)	2	1	1	1	NaN	2	2

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	24	NaN	29	33
No (%)	NaN	56	NaN	48	51
Not sure (%)	NaN	19	NaN	22	16
Refused (%)	NaN	1	NaN	1	1





# In your opinion, do you think global warming is a(n)...(Cont'd)

#### **Religious Issue**

	Mar 2015	Oct 2015	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018
(Unweighted Base)	1,263	1,330	1,204	1,226	0	1,304	1,278
Yes (%)	10	12	10	8	NaN	9	13
No (%)	71	67	71	73	NaN	77	64
Not sure (%)	18	20	17	17	NaN	12	20
Refused (%)	2	1	1	1	NaN	2	3

	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,291	0	1,029	1,036
Yes (%)	NaN	9	NaN	9	10
No (%)	NaN	75	NaN	77	79
Not sure (%)	NaN	15	NaN	14	10
Refused (%)	NaN	1	NaN	0	1





Which statement best reflects your view?

[(a) Global warming is affecting weather in the U.S.; (b) Global warming is not affecting weather in the U.S.; (c) Global warming isn't happening; (d) Don't know; (e) Prefer not to answer]

[For those who respond "global warming is affecting weather in the United States"] How much do you think global warming is affecting weather in the United States?

	Apr 2013	Nov 2013	Apr 2014	Oct 2014	Mar 2015	Oct 2015	Mar 2016	Nov 2016
(Unweighted Base)	510	406	1,013	0	0	0	1,204	1,226
Global warming is	58	56	57	NaN	NaN	NaN	60	59
affecting weather in the								
United States (%)								
Affecting weather a lot (%)	23	22	22	NaN	NaN	NaN	24	24
Affecting weather some (%)	27	26	25	NaN	NaN	NaN	28	26
Affecting weather a little (%)	6	6	8	NaN	NaN	NaN	7	8
Don't know/refused (%)	2	2	2	NaN	NaN	NaN	1	2
Prefer not to answer (%)	0	0	0	NaN	NaN	NaN	0	0
Global warming is not	7	7	8	NaN	NaN	NaN	5	7
affecting weather in the								
United States (%)								
Global warming isn't	10	13	10	NaN	NaN	NaN	9	9
happening (%)								
Don't know (%)	19	17	19	NaN	NaN	NaN	20	21
Prefer not to	6	7	6	NaN	NaN	NaN	6	4
answer/refused (%)								

	May 2017	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,266	1,304	1,278	1,114	1,291	1,303	1,029	1,036
Global warming is	59	64	61	65	60	64	66	63
affecting weather in the								
United States (%)								
Affecting weather a lot (%)	25	33	29	32	28	31	33	35
Affecting weather some (%)	27	23	25	26	22	25	25	21
Affecting weather a little (%)	5	6	6	5	7	6	6	6
Don't know/refused (%)	2	2	1	2	2	2	1	0
Prefer not to answer (%)	0	0	0	0	0	0	0	0
Global warming is not	5	6	5	6	7	6	5	8
affecting weather in the								
United States (%)								
Global warming isn't	10	8	9	8	11	9	7	8
happening (%)								
Don't know (%)	21	18	18	15	18	16	17	18
Prefer not to	5	5	7	5	5	5	5	3
answer/refused (%)								





How much do you agree or disagree with the following statement: Wildfires have increased around the world over the past few years as a result of global warming.

	Oct 2017	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,029	1,036
Strongly disagree (%)	NaN	NaN	NaN	NaN	NaN	15	16
Somewhat disagree (%)	NaN	NaN	NaN	NaN	NaN	18	18
Somewhat agree (%)	NaN	NaN	NaN	NaN	NaN	38	32
Strongly agree (%)	NaN	NaN	NaN	NaN	NaN	28	33
Refused (%)	NaN	NaN	NaN	NaN	NaN	0	0





# (Base: Americans 18+) Do you think global warming made each of the following worse or not?

	The record number of hurricanes and tropical storms that struck the U.S. Gulf Coast in the summer and fall of 2020	The severe wind and thunderstorm (derecho) that caused record flooding in the Midwest in August 2020	Wildfires in the western U.S.
(Unweighted Base)	1,036	1,036	1,036
Yes (%)	55	49	54
No (%)	20	21	24
Don't know (%)	25	29	22
Refused (%)	1	1	1





#### How worried are you that the following might harm your local area?

#### Water pollution

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,036
Very worried (%)	NaN	NaN	NaN	NaN	NaN	12
Moderately worried (%)	NaN	NaN	NaN	NaN	NaN	21
A little worried (%)	NaN	NaN	NaN	NaN	NaN	41
Not at all worried (%)	NaN	NaN	NaN	NaN	NaN	26
Refused (%)	NaN	NaN	NaN	NaN	NaN	0

#### Air pollution

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,036
Very worried (%)	NaN	NaN	NaN	NaN	NaN	12
Moderately worried (%)	NaN	NaN	NaN	NaN	NaN	24
A little worried (%)	NaN	NaN	NaN	NaN	NaN	37
Not at all worried (%)	NaN	NaN	NaN	NaN	NaN	26
Refused (%)	NaN	NaN	NaN	NaN	NaN	0

#### Extreme heat

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	13	11	13	14	12	11
Moderately worried (%)	21	21	23	22	22	21
A little worried (%)	29	29	34	28	32	33
Not at all worried (%)	36	39	30	36	33	35
Refused (%)	1	0	0	0	0	0





#### How worried are you that the following might harm your local area?

#### Drought

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	11	10	10	11	9	10
Moderately worried (%)	19	17	21	20	17	18
A little worried (%)	31	31	34	30	39	36
Not at all worried (%)	39	42	35	39	35	36
Refused (%)	1	0	0	1	0	0

#### Agricultural pests and diseases

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,036
Very worried (%)	NaN	NaN	NaN	NaN	NaN	7
Moderately worried (%)	NaN	NaN	NaN	NaN	NaN	16
A little worried (%)	NaN	NaN	NaN	NaN	NaN	40
Not at all worried (%)	NaN	NaN	NaN	NaN	NaN	36
Refused (%)	NaN	NaN	NaN	NaN	NaN	0

#### Water shortages

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	9	8	10	9	10	9
Moderately worried (%)	17	14	17	18	15	15
A little worried (%)	25	29	31	27	31	30
Not at all worried (%)	48	49	41	45	44	45
Refused (%)	1	0	0	0	0	0





#### How worried are you that the following might harm your local area? (Cont'd)

#### **Tornados**

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,036
Very worried (%)	NaN	NaN	NaN	NaN	NaN	7
Moderately worried (%)	NaN	NaN	NaN	NaN	NaN	16
A little worried (%)	NaN	NaN	NaN	NaN	NaN	30
Not at all worried (%)	NaN	NaN	NaN	NaN	NaN	46
Refused (%)	NaN	NaN	NaN	NaN	NaN	0

#### Flooding

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	7	6	9	9	6	7
Moderately worried (%)	22	17	19	19	17	12
A little worried (%)	31	38	32	30	37	33
Not at all worried (%)	39	39	40	41	40	47
Refused (%)	1	0	0	1	1	1

#### Wildfires

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	9	9	9	10	9	10
Moderately worried (%)	12	13	14	13	12	12
A little worried (%)	21	20	25	20	25	24
Not at all worried (%)	57	59	51	56	52	54
Refused (%)	1	0	0	0	1	0





#### How worried are you that the following might harm your local area? (Cont'd)

#### Rising sea levels

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	0	0	0	0	1,036
Very worried (%)	NaN	NaN	NaN	NaN	NaN	6
Moderately worried (%)	NaN	NaN	NaN	NaN	NaN	10
A little worried (%)	NaN	NaN	NaN	NaN	NaN	22
Not at all worried (%)	NaN	NaN	NaN	NaN	NaN	61
Refused (%)	NaN	NaN	NaN	NaN	NaN	0

#### Hurricanes

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	9	8	9	9	8	8
Moderately worried (%)	12	12	14	13	13	12
A little worried (%)	17	20	16	18	20	19
Not at all worried (%)	62	59	60	59	58	61
Refused (%)	1	0	0	1	1	O

#### Reduced snowpack

	Mar 2018	Dec 2018	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	1,278	1,114	1,291	1,303	1,029	1,036
Very worried (%)	5	5	4	5	5	6
Moderately worried (%)	10	11	10	12	10	12
A little worried (%)	16	21	19	20	23	18
Not at all worried (%)	68	63	66	62	62	64
Refused (%)	1	0	0	1	0	0





(Base: Americans 18+)
In your opinion, over the next 10 years how much risk does extreme weather pose to your community?

	Mar 2016	Nov 2016	May 2017	Oct 2017	Mar 2018	Dec 2018
(Unweighted Base)	1,204	0	0	1,304	0	0
High risk (%)	10	NaN	NaN	15	NaN	NaN
Moderate risk (%)	40	NaN	NaN	42	NaN	NaN
Low risk (%)	33	NaN	NaN	30	NaN	NaN
No risk (%)	5	NaN	NaN	5	NaN	NaN
Don't know (%)	11	NaN	NaN	8	NaN	NaN
Refused (%)	0	NaN	NaN	0	NaN	NaN

	Apr 2019	Nov 2019	Apr 2020	Dec 2020
(Unweighted Base)	0	1,303	1,029	1,036
High risk (%)	NaN	18	16	13
Moderate risk (%)	NaN	38	40	42
Low risk (%)	NaN	31	33	34
No risk (%)	NaN	7	5	5
Don't know (%)	NaN	7	5	6
Refused (%)	NaN	0	0	0





# 10 Appendix II: Survey Method

The data in this report are based on a nationally representative survey of 1,036 American adults, aged 18 and older. The survey was conducted December 3 – 16, 2020. All questionnaires were self-administered by respondents in a web-based environment. The survey took, on average, 24 minutes to complete. The sample was drawn from the Ipsos (formerly GfK) 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 U.S. Census Bureau norms.

From November 2008 to December 2018, no KnowledgePanel® member participated in more than one *Climate Change in the American Mind* (CCAM) survey. Beginning with the April 2019 survey, panel members who have participated in CCAM surveys in the past, excluding the most recent two surveys, may be randomly selected for participation. In the current survey, 265 respondents participated in a previous CCAM survey.

The survey instrument was designed by Anthony Leiserowitz, Seth Rosenthal, Jennifer Carman, Matthew Goldberg, Karine Lacroix, and Jennifer Marlon of Yale University, and Edward Maibach and John Kotcher of George Mason University. The automated report was designed by Xinran Wang and Jennifer Carman of Yale University, Parrish Bergquist of Georgetown University, and Matto Mildenberger of the University of California, Santa Barbara.





#### Sample details and 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 were interviewed. Average margins of error for each wave, at the 95% confidence level, are plus or minus 3 percentage points except where noted.

- December 2020: Fielded December 3 16 (n = 1,036)
- April 2020: Fielded April 7 17 (n = 1,029)
- November 2019: Fielded November 8 November 20 (n = 1,303)
- April 2019: Fielded March 29 April 8 (n = 1,291)
- December 2018: Fielded November 28 December 11 (n = 1,114)
- March 2018: Fielded March 7 March 24 (n = 1,278)
- October 2017: Fielded October 20 November 1 (n = 1,304)
- May 2017: Fielded May 18 June 6 (n = 1,266)
- November 2016: Fielded November 18 December 1 (n = 1,226)
- March 2016: Fielded March 18 31 (n = 1,204)
- October 2015: Fielded September 30 October 19 (n = 1,330)
- March 2015: Fielded February 27 March 10 (n = 1,263)
- October 2014: Fielded October 17 28 (n = 1,275)
- April 2014: Fielded April 15 22 (n = 1,013)
- November 2013: Fielded November 23 December 9 (n = 830)
- April 2013: Fielded April 10 15 (n = 1,045)
- September 2012: Fielded August 31 September 12 (n = 1,061)
- March 2012: Fielded March 12 March 30 (n = 1,008)
- November 2011: Fielded October 20 November 16 (n = 1,000)
- May 2011: Fielded April 23 May 12 (n = 1,010)
- June 2010: Fielded May 14 June 1 (n = 1,024)
- January 2010: Fielded December 24, 2009 January 3, 2010 (n = 1,001).
- November 2008: Fielded October 7 November 12 (n = 2,164).
  - Data were collected over two periods: from October 7 October 20 and from October 24 November 12. Margin of
    error plus or minus 2 percentage points.

#### Rounding error

For tabulation purposes, percentage points are rounded 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 agree" + "somewhat agree") are rounded after sums are calculated (e.g., 25.3% + 25.3% = 50.6%, which, after rounding, would be reported as 25% + 25% = 51%).





# 11 Appendix III: Sample Demographics

	n (unweighted)	% (weighted)
Total	1,036	100
Male	498	48
Female	538	52
iGen (1997 - )	41	7
Millennials (1981 - 1996)	234	29
Generation X (1965 - 1980)	239	25
Baby Boomers (1946 - 1964)	418	31
Silent (1928 - 1945)	104	7
Less than high school	53	11
High school	280	27
Some college	269	30
Bachelor's degree or higher	434	31
<\$25K	92	11
\$25K-<\$50K	165	18
\$50K-<\$75K	185	18
\$75K-<\$100K	138	14
\$100K-<\$125K	116	11
\$125K+	331	28
White, Non-Hispanic	732	63
Black, Non-Hispanic	101	12
Hispanic	117	16
2+ Races, Non-Hispanic	32	2
Other, Non-Hispanic	54	7
Northeast	174	17
Midwest	238	21
South	381	38
West	243	24





