# GLOBAL WARMING'S SIX AMERICAS IN MAY 2011













George Mason University Center for Climate Change Communication





George Mason University Center for Climate Change Communication

## **Global Warming's Six Americas in May 2011**

Interview dates: April 23 through May 12, 2011 Interviews: 981 Adults (18+) Margin of error: +/- 3 percentage points at the 95% confidence level for the full sample. NOTE: All results show percentages among all respondents, unless otherwise labeled. Totals may occasionally sum to more than 100 percent due to rounding.

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

Principal Investigators:

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

Connie Roser-Renouf, PhD Center for Climate Change Communication Department of Communication, George Mason University (707) 825-0601 <u>croserre@gmu.edu</u> Edward Maibach, MPH, PhD Center for Climate Change Communication Department of Communication, George Mason University (703) 993-1587 emaibach@gmu.edu

Nicholas Smith, PhD Yale Project on Climate Change Communication School of Forestry and Environmental Studies, Yale University (203) 432-1208 <u>nicholas.smith@yale.edu</u>

Cite as: Leiserowitz, A., Maibach, E., Roser-Renouf, C. & Smith, N. (2011) *Global Warming's Six Americas, May 2011*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. http://environment.yale.edu/climate/files/SixAmericasMay2011.pdf

	TABLE OF CONTENTS						
Page							
5		Executive Summary					
11	Figure 1:	Proportion of the US population in the Six Americas, May 2011					
12	Figure 2:	Changes in segment sizes from Nov. 2008 through May 2011					
13	Figure 3:	Certainty about the Reality of Global Warming, by Segment and Survey					
		PART ONE: BELIEFS AND ATTITUDES					
14	Table 1:	Attitudinal certainty and need for additional information to decide					
15	Table 2:	Questions about global warming					
16	Table 3:	Top question about global warming					
17	Table 4:	Self-perceived knowledge and beliefs about the cause of global warming					
18	Table 5:	Perceptions of scientific agreement					
19	Table 6:	Issue involvement					
20	Table 7:	Inferences about global warming from recent weather					
21	Table 8:	Risk perceptions: Who will be harmed					
23	Table 9:	Local risk perceptions					
25	Table 10:	Concern about health impacts of global warming					
26	Table 11:	Risk perceptions: Human health impacts expected from global warming					
29	Table 12:	Beliefs about current environmental impacts of global warming in the U.S.					
31	Table 13:	Risk perceptions: When harm will occur					
32	Table 14:	Mitigation Efficacy: Perceptions about the effectiveness of collective and individual action					
34	Table 15:	Trust in information sources					
		PART TWO: SUPPORT FOR CLIMATE AND ENERGY POLICIES					
37	Table 16:	National issue priorities					
38	Table 17:	Support for a national response: Conditions for & magnitude of action desired					
39	Table 18:	Support for a national response: Specific climate and energy policies					

41	Table 19:	Support for local climate and energy policies
44	Table 20:	Perceived importance of protecting local resources
		PART THREE: ACTIONS
47	Table 21:	Energy conservation actions
48	Table 22:	Energy conservation intentions
49	Table 23:	Consumer activism
50	Table 24:	Political activism
51	Table 25:	Political activism intentions
		PART FOUR: PROFILING VARIABLES
52	Table 26:	Household income and perceived impact of the economic downturn
53	Table 27:	Social networking
54	Table 28:	Organizational memberships
55	Table 29:	Military service
56	Table 30:	Political party, political ideology and voter registration
57		Methods

		Executive Summary
Introduction		This report extends and updates an ongoing program of research analyzing Americans' interpretations of and responses to climate change. The research segments the American public into six audiences that range along a spectrum of concern and issue engagement from the Alarmed, who are convinced of the reality and danger of climate change, and who are highly supportive of personal and political actions to mitigate the threat, to the Dismissive, who are equally convinced that climate change is <i>not</i> occurring and that no response should be made. The Six Americas are not very different demographically, but are dramatically different in their beliefs and actions, as well as their basic values and political orientations. The groups were first identified in a nationally representative survey conducted in the fall of 2008, and were re-assessed in January and June of 2010. The current report is the fourth in the series; in it we provide new insights into the informational needs of the six groups, their understanding of the health impacts of global warming, beliefs about current environmental impacts of global warming in the U.S., and support for local adaptation and mitigation policies. All prior reports may be accessed at: http://environment.yale.edu/climate/publications/ and http://climatechange.gmu.edu.
Segment Size	Figure 1 Figure 2	The proportion of the population in each of the Six Americas has remained relatively stable over the past year, with 39 percent of Americans in the two groups most concerned about climate change - the Alarmed and the Concerned - and a quarter of the population in the two groups least concerned about the issue - the Dismissive and Doubtful. The high level of concern found in the fall of 2008, on the eve of the recession and prior to the release of stolen emails (known as climategate), remains an unmatched benchmark for engagement with the issue of climate change.
Uncertainty	Table 1	Uncertainty on the issue remains high: More than a third of Americans agreed that they could easily change their minds about global warming – especially those in the Disengaged (73%) and Cautious (58%) segments. While 70 percent of the Dismissive said they do not need any more

		information to form a firm opinion on the issue, majorities of all other groups said they need at least a little more information before making up their minds, including 91 percent of the Concerned, 89 percent of the Cautious, and 86 percent of the Disengaged. Close to half of the Disengaged (47%) said they need a lot more information to form a firm opinion.
Questions about Global Warming	Table 2 Table 3	Most Americans have many questions about global warming: If given the chance to talk to an expert on the issue, four of the Six Americas would ask nine or more questions, out of a possible 13. The question that the largest number of Americans would ask is how experts know that global warming is caused by human activities, rather than natural changes in the environment. The Alarmed and Concerned would most like to know what the nations of the world can do to reduce global warming, and if there's still time to do so. The Disengaged would most like to ask whether global warming is actually occurring, and what harm it will cause. And the Cautious, Doubtful and Dismissive would most like to have an expert explain how experts know that global warming is happening and is caused by human activities.
Self-Perceived Knowledge	Table 4	Of the Six Americas, the Dismissive were the most likely to say they are well-informed about global warming, with 91% saying they were very or fairly well-informed. Among the Alarmed, 85% said they were very or fairly well-informed, followed by two-thirds of the Concerned the Doubtful. The Disengaged were most likely to say they were <i>not</i> well-informed, with only 2% saying they were very well-informed.
Cause of Global Warming	Table 4	Three-quarters or more of the Alarmed and Concerned groups said global warming is caused primarily by human activities, while 85 percent or more of the Doubtful and Dismissive said either it is caused by natural changes in the environment or it is not happening. The Cautious and Disengaged were more divided, with the Cautious almost evenly split between human and natural causes, and the Disengaged more likely to believe that natural changes are responsible (47%) than human activities (36%).

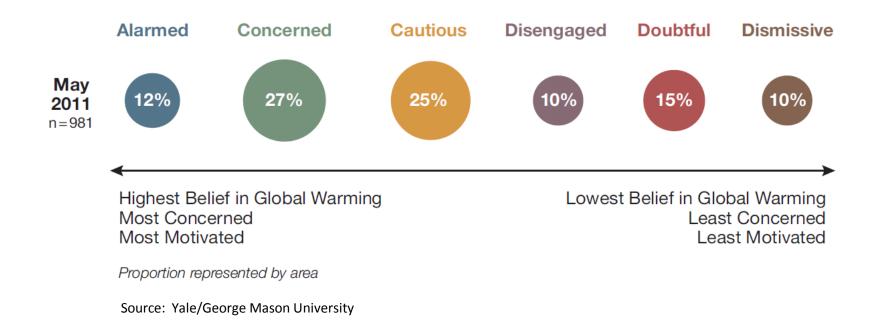
Perceptions of Scientific Agreement	Table 5	Only in the Alarmed and Concerned groups were a majority aware that most scientists think global warming is occurring. Majorities in the other four groups said that either there was a lot of disagreement among scientists or that they didn't know. Even among the Alarmed and Concerned, however, awareness of the <i>strength</i> of scientific agreement is low: While approximately 97% of publishing climate scientists agree that climate change is occurring and that it is caused primarily by human activities, this high level of scientific agreement is recognized by only 44 percent of the Alarmed, 18 percent of the Concerned, 12 percent of the Cautious, and 5 percent or fewer of the Disengaged, Doubtful and Dismissive.
Inferences about Global Warming from Recent Weather	Table 7	Because Americans do not clearly distinguish between weather and climate, they may be inclined to infer whether climate change is occurring from recent weather. The results presented here suggest that the groups that are most undecided about global warming - the Cautious and Disengaged - are the most likely to use weather events in this way: Majorities of both groups agreed that last winter's record snowstorms made them question the reality of global warming, <i>and</i> that last summer's heat waves strengthened their belief in global warming. Conversely, the groups with stronger opinions - the Alarmed, Concerned, Doubtful and Dismissive - were more likely to say that recent weather strengthened what they already believed: The record heat waves last summer strengthened belief in global warming for 83 percent of the Alarmed and 75 percent of the Concerned, but the record snowstorms last winter made only 32 percent of the Alarmed and 39 percent of the Concerned question the reality of global warming. Conversely, 93 percent of the Dismissive and 82 percent of the Doubtful said that the heat waves did not strengthen their belief in global warming. The snowstorms, however, led 53 percent of the Dismissive and 45 percent of the Doubtful to question the reality of global warming.
Risk Perceptions	Table 8	Consistent with prior studies, we found that global warming was perceived as having greater impacts on distant people and places, with the greatest harm expected for people in developing nations, future generations, and other species. Within this general pattern, risk perceptions were much higher among the Alarmed and Concerned, with 100 percent of the Alarmed believing future generations and other species will be harmed a great deal or a moderate amount, as compared to 0 percent of the Dismissives.

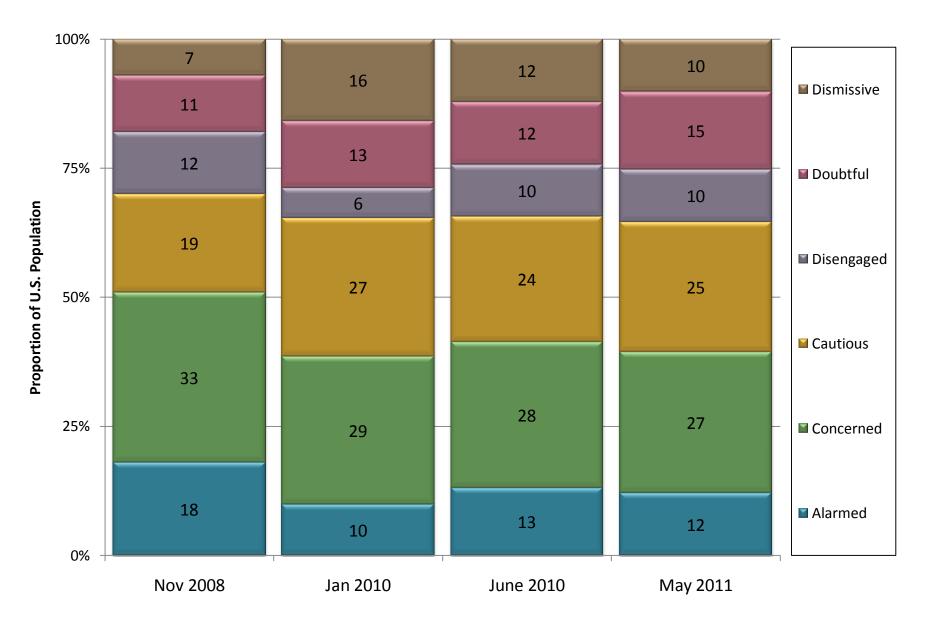
Local Risk Perceptions	Table 9	When asked about types of <i>local</i> harm expected from global warming, respondents said they expected the greatest impacts to be on agriculture, followed by native plants and wild birds and animals. More than half of the Cautious, Concerned and Alarmed expected that these four will experience moderate to great harm, and among the Alarmed, the proportions rose to more than 95 percent.
Human Health Impacts	Table 11	The majority of Americans expected that global warming will increase deaths and injuries in the U.S. due to floods, hurricanes, winter storms and wildfires; 53 percent also expected increases in heat stroke, and half anticipated increased malnutrition due to spikes in food prices. Fewer than half said there will be increases in lung diseases, such as asthma, and in infectious diseases carried by insects and infected water. Within the segments, the anticipation of these health impacts was very high among the Alarmed and Concerned, and relatively high among the Cautious. Very few of the Disengaged, Doubtful and Dismissive expected health impacts from global warming, however. Roughly two-thirds of the Disengaged said that they don't know whether global warming will have each of these impacts, while the Doubtful and Dismissive said there will be no impacts.
Current Impacts in the U.S.	Table 12	Close to half of Americans believe that global warming is already causing or worsening a variety of environmental problems in the U.S. The current impacts most likely to be perceived were coastline erosion and flooding (52%), droughts (50%), hurricanes (49%), rivers flooding (48%) and wildfires (45%). As with health impacts, attribution of these impacts to global warming was higher among the Alarmed and Concerned. Two-thirds or more of the Disengaged said they didn't know; half of the Doubtful said the impacts are not happening and another third said they didn't know; and about 90 percent of the Dismissive said the impacts are not happening.

Trust in Sources	Table 15	Three-quarters of Americans said they trust the National Oceanic and Atmospheric Administration (NOAA) and scientists as sources of information on global warming. While three-quarters or more of the Disengaged, Cautious, Concerned and Alarmed said they trust these two sources, only half of the Doubtful said they trust them. Among the Dismissive, only a quarter trusted NOAA and 30 percent trusted scientists, and yet these were their two most trusted sources of the 10 assessed. Overall, majorities trusted a number of other government agencies: The U.S. Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the National Park Service, and the Department of Energy (DOE). Trust in President Obama was highly polarized, with 77 percent of the Alarmed saying they trusted him, as compared to 21 percent of the Doubtful and 3 percent of the Dismissive. The mainstream news media and congressional representatives were the least trusted sources, with fewer than 10 percent of any audience segment saying they strongly trusted them.
Issue Priorities	Table 16	Two-thirds of Americans said that developing sources of clean energy should be a high or very high priority for the president and Congress, and half said that global warming should be. Both issues were marked by polarization among the six audiences, although the differences were smaller for clean energy: 98 percent of the Alarmed said that clean energy should be a high or very high priority, as compared to 24 percent of the Dismissive. By comparison, 96% of the Alarmed said global warming should be a priority, but none of the Dismissive thought it should be.
Support for Local Climate and Energy Policies	Table 19	Three-quarters of Americans said they would like their communities to build more bike paths and bike lanes, and to increase the availability of public transportation. This support extended across the six audience groups, with 60 percent of the Dismissive saying they supported these policies, as compared to more than 90 percent of the Alarmed. A number of other policies received support from majorities of four of the six segments: Majorities of the Alarmed, Concerned, Cautious and Disengaged supported requiring new homes to be more energy efficient; changing zoning rules to reduce the need for a car and commuting times; and promoting the construction of energy-efficient apartment buildings. The one policy receiving stronger support from the Dismissive than other groups was building a local nuclear power plant. A majority of the Dismissive (57%) supported this, while majorities of all other groups opposed it.

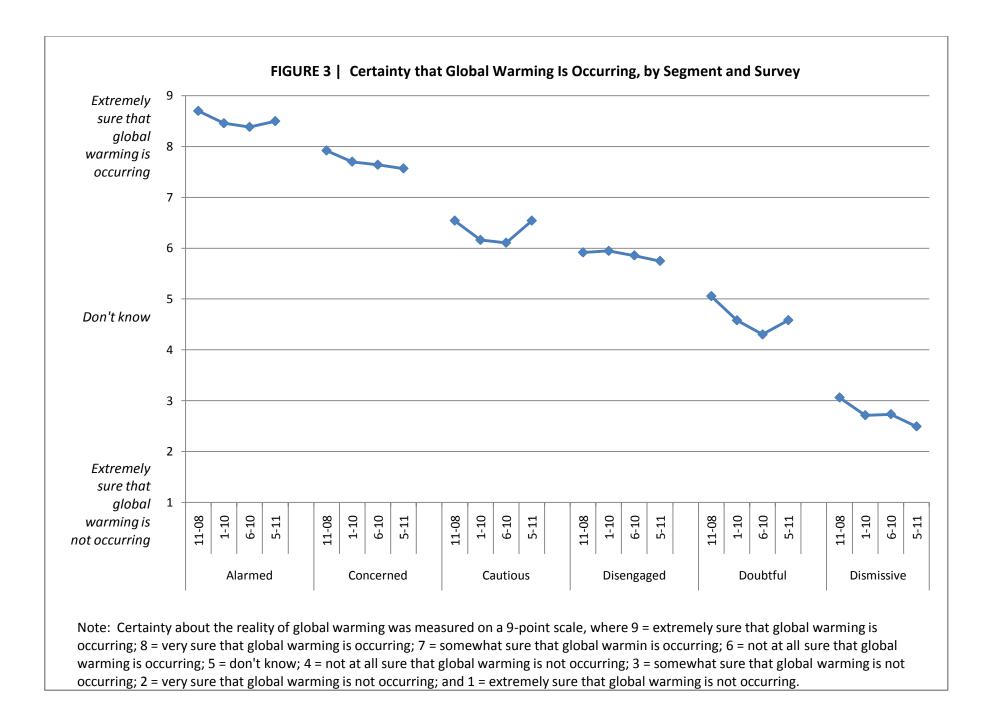
Protecting Local Resources	Table 20	Because they do not perceive climate change to be a danger, few of the Dismissive or Doubtful favored local community action to protect their resources; fewer than a third of the Doubtful and 11 percent or less of the Dismissive expressed support for protecting any local resource. Among the other four groups, however, protecting local resources was perceived as important: Half or more of each group expressed support for protecting <i>all</i> of the resources that applied to their communities, including the water supply, public health, agriculture, natural resources, the sewer system and public property.					
Political Activism	Table 24	Political activism around the issue of global warming appears to be more prevalent among the groups that favor national action on the issue than among the groups that oppose it: 28 percent of the Alarmed and 10 percent of the Concerned said that they have contacted a political official about global warming, and almost all of these contacts were in support of action to reduce warming. By comparison, 7 percent of the Dismissive and 5 percent of the Doubtful had contacted officials to express opposition to mitigation policies. The Alarmed and Concerned were also more likely to have posted comments online about global warming than the Doubtful and Dismissive. A majority of the Alarmed (54%) and 22 percent of the Concerned have supported organizations working to reduce global warming; few members of the other four groups have supported global warming organizations.					

#### FIGURE 1 | Proportion of the U.S. Population in the Six Americas, May 2011





#### FIGURE 2 | Changes in Segment Sizes from Nov. 2008 through May 2011



#### TABLE 1 | Attitudinal Certainty and Need for Additional Information to Decide

How much do you agree or disagree with the following statement? "I could easily change my mind about global warming."	National Average	4161 med (128)	Concerned (230)	Caurious (258)	Diseilaseed (105)	Doubteul (158)	Dismissive (1000)
Strongly agree	6	3	7	6	15	3	1
Somewhat agree	32	2	28	52	58	26	10
Somewhat disagree	33	16	40	35	20	43	30
Strongly disagree	29	79	26	7	7	28	59

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?

I need a lot more information	22	16	17	21	47	25	11
I need some more information	30	22	50	39	19	7	6
I need a little more information	26	35	24	29	19	29	13
I do not need any more information	23	28	9	11	14	39	70

## TABLE 2 | Questions about Global Warming

If you had the opportunity to talk to an expert on global warming, which of the following questions would you like to ask?	National Average	Aldrined (12.8)	Concerned (236)	Gutious (25%)	Disensaged (105)	Doubtin (1358)	Dismissive (20%)
How do you know that global warming is caused mostly by human activities, not natural changes in the environment?	82	78	84	91	79	79	65
How do you know that global warming is happening?	77	71	76	85	82	73	71
What harm will global warming cause?	74	79	86	85	87	49	35
What causes global warming?	74	74	80	81	83	65	44
What can the nations of the world do to reduce global warming?	73	92	92	81	77	46	20
Is there still time to reduce global warming, or is it too late?	71	85	89	81	78	43	16
When will global warming begin to harm people?	71	78	85	78	79	55	25
What can the United States do to reduce global warming?	70	89	88	79	76	41	13
What can I do to reduce global warming?	69	86	87	78	78	39	11
Is global warming really happening?	68	58	69	81	81	61	40
How much would it cost the United States to reduce global warming?	67	77	80	77	71	47	25
Will global warming harm people?	66	61	76	80	76	46	27
Is global warming a hoax?	53	22	38	66	64	61	77
Average number of questions would ask	8.4	9.1	9.8	9.4	9.2	6.3	3.8

Note: The three most frequently selected questions for each segment have been highlighted in blue in the table.

## TABLE 3 | Top Question about Global Warming

If you could ask the expert on global warming ONLY ONE QUESTION, which question would you ask?	National Average	Aldrined (228)	Concerned (228)	Cautious (25%)	Disensessed (205)	Doubtiul (155%)	Osmissie 108
How do you know that global warming is caused mostly by human activities, not natural changes in the environment?	18	2	13	18	7	38	34
What can the nations of the world do to reduce global warming?	11	28	16	8	3	0	0
Is there still time to reduce global warming, or is it too late?	11	27	16	7	6	2	0
How do you know that global warming is happening?	11	1	4	11	9	17	38
Is global warming really happening?	10	4	4	14	20	14	5
What harm will global warming cause?	9	9	10	11	17	2	0
What causes global warming?	7	5	7	8	13	8	0
What can I do to reduce global warming?	7	8	11	8	6	0	0
Is global warming a hoax?	5	0	1	4	6	11	22
When will global warming begin to harm people?	4	3	6	3	7	5	0
What can the United States do to reduce global warming?	4	11	8	2	1	2	0
Will global warming harm people?	3	1	3	4	4	2	0
How much would it cost the United States to reduce global warming?	1	2	1	2	1	2	1

Note: The three most frequently selected questions for each segment have been highlighted in blue in the table.

## TABLE 4 | Self-Perceived Knowledge and Beliefs about the Cause of Global Warming

Personally, how well informed do you feel you are about global warming?	Vational Average	Aldrined (228)	Concerned (238	Gutious (25%)	Disensessed (108)	Doubter (1558)	Dismissive (108)
Very well informed	10	25	3	3	2	9	38
Fairly well informed	51	60	65	41	12	58	53
Not very well informed	34	13	29	52	69	26	8
Not at all informed	5	2	2	4	17	7	1
Assuming global warming is happening, do you think it is <sup>1</sup>							
Caused mostly by human activities	47	79	75	48	36	11	1
Caused mostly by natural changes in the environment	36	8	9	45	47	70	51
Caused by human activities and natural changes <sup>2</sup>	2	3	0	0	2	3	4
None of the above because global warming isn't happening	8	0	0	1	6	15	43
Other (Please specify)	7	9	15	6	5	1	0
Don't know <sup>2</sup>	1	0	1	0	5	0	1

<sup>1</sup>First and second response options were rotated in the survey.

<sup>2</sup>Volunteered.

## TABLE 5 | Perceptions of Scientific Agreement

			National Average	461med (228)	Concerned (2)es	Gutious (25%)	Disertessed (105)	Doubtur (258)	Dismissile (2020)
Which comes	Most scient	ists think global warming is happening	39	72	63	38	13	14	4
closer to your	Most scientists	think global warming is not happening	3	3	0	3	1	3	16
, , , , , , , , , , , , , , , , , , , ,		<sup>E</sup> disagreement among scientists about er or not global warming is happening	40	23	27	41	28	59	76
		Don't know enough to say	18	3	11	18	58	24	4
To the best of y	our	81 to 100%	13	36	19	11	1	3	0
knowledge, wh	at	61 to 80%	19	37	26	20	6	7	7
proportion of cl		41 to 60%	23	12	24	28	15	27	27
scientists think		21 to 40%	12	2	5	14	10	20	26
global warming happening?	IS	0 to 20%	3	0	1	2	2	3	17
		Don't know enough to say	30	14	25	26	66	39	23
To the best of y		04 + - 4000/	45		10	40			
To the best of y knowledge, what		81 to 100%	15	44	18	12	4	4	5
proportion of cl		61 to 80%	17	20	22	21	6	12	11
scientists think that		41 to 60%	18	14	24	19	11	21	10
global warming is caused	21 to 40%	12	3	6	15	5	16	27	
mostly by huma	an	0 to 20%	7	2	3	6	8	7	21
activities?		Don't know enough to say	31	18	25	26	66	40	25

<sup>1</sup>First and second response option were rotated.

# TABLE 6| Issue Involvement

		National Average	4191, 112, 12, 12, 12, 12, 12, 12, 12, 12,	Concerned (23e	Gutious (258)	Disenses ed 1200-	Doubitul (252)	Dismissive (10%)
How important is the issue of global	Extremely important	8	46	3	1	4	1	2
warming to you personally?	Very important	15	44	29	5	6	1	1
	Somewhat important	38	9	60	55	50	9	5
	Not too important	25	0	7	38	31	55	19
	Not at all important	14	1	1	2	9	34	72
How much had you thought about	A lot	13	54	6	2	0	7	27
global warming before today?	Some	34	43	54	23	14	24	28
	A little	38	3	37	59	39	44	21
	Not at all	16	1	3	15	46	26	23
How worried are you about global	Very worried	9	49	8	4	1	0	0
warming?	Somewhat worried	43	49	80	42	42	6	0
	Not very worried	28	1	12	48	46	43	12
	Not at all worried	20	2	0	7	10	51	88
I have personally experienced the	Strongly agree	5	22	5	3	1	1	5
effects of global warming	Somewhat agree	29	48	38	35	25	6	2
	Somewhat disagree	34	18	43	38	40	36	13
	Strongly disagree	32	12	15	25	34	57	80

## TABLE 7 | Inferences about Global Warming from Recent Weather

The record snowstorms this winter in the United States make me question whether global warming is occurring.	National Average	Aldrined (228)	Concerned (238	Cautious (258)	Diseres Reserved 106,)	Doubtul (258)	Dismissive 1205
Strongly Agree	13	15	8	7	3	17	37
Somewhat Agree	34	17	31	48	60	28	16
Somewhat Disagree	30	15	35	36	30	32	13
Strongly Disagree	23	53	25	9	7	23	35

#### The record heat waves last summer in the United States

strengthened my belief that global warming is occurring.

U	,	0 0 0							
		Strongly Agree	13	50	17	5	3	2	3
		Somewhat Agree	41	33	58	51	57	16	4
		Somewhat Disagree	26	7	20	34	32	41	16
		Strongly Disagree	20	11	5	10	8	41	77

# TABLE 8 | Risk Perceptions: Who Will Be Harmed

How much do you think glo	bal warming will harm:	National Average	4191 med (12.5%)	Concerned (236)	Gutious (25%)	Disenses sea (10%)	Doubrail 1258	Dismissive (2050)
You personally	A great deal	11	53	11	7	0	1	0
	A moderate amount	18	25	42	13	0	3	0
	Only a little	28	17	35	54	0	21	0
	Not at all	25	3	5	22	0	53	99
	Don't know	17	3	7	5	100	22	1
Your family	A great deal	13	59	12	8	0	1	0
	A moderate amount	21	28	49	16	0	4	0
	Only a little	26	10	29	53	0	24	0
	Not at all	23	1	2	19	0	50	99
	Don't know	17	3	8	5	100	21	1
Your community	A great deal	12	58	13	5	0	1	0
	A moderate amount	22	28	48	19	0	3	0
	Only a little	26	10	28	55	0	24	0
	Not at all	22	1	3	17	0	45	99
	Don't know	18	3	8	5	100	27	1
	A great deal	16	66	22	7	0	1	0
People in the United	A moderate amount	26	28	56	29	0	5	0
States	Only a little	23	5	17	51	0	33	2
	Not at all	17	0	1	10	1	31	97
	Don't know	17	1	5	5	99	29	1

# TABLE 8 | Risk Perceptions: Who Will Be Harmed, Continued

How much do you think global	warming will harm:	National Alerage	41017960 (1285)	Concerned (278)	Gutious (25%)	Oisen Bester (205)	Doubtiul (15%)	Dismissive (20%)
People in other modern	A great deal	17	65	27	6	0	1	0
industrialized countries	A moderate amount	25	27	50	29	0	7	0
	Only a little	23	6	16	50	3	32	2
	Not at all	17	0	2	10	0	27	96
	Don't know	18	2	5	5	97	33	2
People in developing	A great deal	23	85	36	10	0	4	0
countries	A moderate amount	22	9	43	33	0	7	0
	Only a little	20	5	14	44	3	30	1
	Not at all	17	0	1	8	0	28	97
	Don't know	18	1	6	6	97	31	2
Future generations of	A great deal	38	97	75	18	0	5	0
people	A moderate amount	22	3	17	63	0	13	0
	Only a little	10	0	2	17	0	35	2
	Not at all	12	0	1	1	0	10	95
	Don't know	18	1	5	1	100	37	3
Plant and animal species	A great deal	39	98	76	22	1	5	0
	A moderate amount	19	2	17	50	1	13	0
	Only a little	12	0	3	22	3	35	0
	Not at all	13	0	0	4	0	11	99
	Don't know	17	0	5	2	95	35	1

# TABLE 9 | Local Risk Perceptions

How much do you think global wa	irming will harm:	National Auerge	414 med (228)	Concerned (226)	Cautious (258)	Die Beer 100	Doubtiul 1358	Dismissile (10%)
Crops in your area	A great deal	28	81	47	17	1	5	0
	A moderate amount	23	16	36	37	1	10	0
	Only a little	19	3	10	40	7	32	1
	Not at all	15	0	0	5	0	21	97
	Don't Know	16	0	6	1	91	33	2
Native plants in your area	A great deal	25	81	42	14	1	3	0
	A moderate amount	25	17	40	41	2	11	0
	Only a little	17	3	10	37	4	26	0
	Not at all	16	0	1	6	1	28	99
	Don't Know	17	0	7	2	92	33	1
Wild birds in your area	A great deal	26	81	43	14	1	3	0
	A moderate amount	23	15	38	37	1	8	0
	Only a little	19	3	11	38	7	32	0
	Not at all	16	0	1	8	1	25	99
	Don't Know	17	1	6	2	90	33	1
Wild animals in your area	A great deal	25	79	42	14	1	3	0
	A moderate amount	23	17	38	38	1	9	0
	Only a little	18	4	13	37	5	29	0
	Not at all	16	0	1	8	1	26	99
	Don't Know	17	0	6	3	92	33	1

# TABLE 9 | Local Risk Perceptions, Continued

How much do you think global warmi	ng will harm:	Vational Alerado	410111800 (12.55)	Concerned (2.5%)	Gutious (25%)	Disones of the second second	Doubrul1358	Dismissive (10%)
Outdoor recreational places (e.g.,	A great deal	20	73	32	7	2	3	0
parks, beaches, lakes, rivers,	A moderate amount	24	17	44	35	0	7	1
forests) in your area	Only a little	20	8	16	43	2	25	1
	Not at all	18	0	2	12	0	32	97
	Don't Know	18	2	6	4	96	33	1
Pets in your area	A great deal	20	64	29	14	0	3	0
	A moderate amount	19	19	34	25	2	6	0
	Only a little	22	14	22	42	5	24	0
	Not at all	21	3	7	15	0	33	99
	Don't Know	18	1	8	4	93	35	1
Public property (e.g., roads,	A great deal	13	52	15	7	1	1	0
schools, sewer systems and public	A moderate amount	20	27	41	21	0	4	1
buildings) in your area	Only a little	22	11	24	43	2	24	1
	Not at all	26	4	12	23	0	41	97
	Don't Know	19	6	9	5	97	30	1
People's private property (e.g.,	A great deal	11	47	14	5	0	1	1
homes, cars, boats) in your area	A moderate amount	18	25	35	19	1	4	0
	Only a little	25	17	26	45	2	25	1
	Not at all	27	7	14	25	0	40	97
	Don't Know	19	4	10	5	97	30	1

# TABLE 10 Concern about Health Impacts of Global Warming

		Vational Average	Alormed (128)	Concerned (235)	Cautious (25%)	Disertes Beed (2006)	Doubtful (1358)	Osmissie 108
How concerned are you about	Extremely concerned - 7	10	43	10	3	10	2	0
the impact of global warming	6	8	17	17	2	7	1	0
on your health?	5	14	16	28	13	11	0	0
	4	18	12	21	22	36	10	1
	3	12	7	13	20	11	13	0
	2	13	2	8	26	7	20	1
	Not at all concerned - 1	25	5	3	13	17	54	98
How concerned are you about	Extremely concerned - 7	11	46	14	4	8	0	0
the impact of global warming	6	8	20	15	3	6	1	0
on the health of other	5	16	18	30	14	13	3	0
Americans?	4	17	8	18	27	36	9	0
Americans:	3	12	4	13	18	9	14	0
	2	12	1	6	24	11	20	4
	Not at all concerned - 1	24	3	3	11	17	54	96

## TABLE 11 | Risk Perceptions: Human Health Impacts Expected from Global Warming

In the United States over the next 20 years warming will cause more or less of the follo done to address it <sup>1</sup>		National Average	41917ned (2285)	Concerned (23.5)	Cautious (258)	Dienergester 1205)	Doubriul (25%)	Dismissive (108
Deaths and injuries from floods	Many more	31	81	55	20	9	3	0
	A few more	24	9	31	41	12	18	1
	No difference	24	0	5	23	10	51	80
	A few less	1	0	0	2	3	3	0
	Many less	2	3	1	1	0	0	8
	Don't Know	18	8	7	13	66	25	11
Deaths and injuries from	Many more	30	76	52	19	12	3	0
hurricanes	A few more	25	12	32	43	14	19	0
	No difference	23	0	6	20	6	49	79
	A few less	1	2	1	3	0	1	0
	Many less	2	1	1	2	0	1	8
	Don't Know	19	9	8	13	67	27	13
Deaths and injuries from severe	Many more	29	75	51	16	14	2	0
winter storms	A few more	25	15	31	42	13	17	0
	No difference	25	2	7	24	7	53	79
	A few less	1	0	0	2	0	2	0
	Many less	2	1	1	3	1	1	8
	Don't Know	18	8	9	12	64	25	13

<sup>1</sup>The order of the nine types of impact was randomized in the survey; they are listed here from highest to lowest expected impact.

## TABLE 11| Risk Perceptions: Human Health Impacts Expected from Global Warming, Continued

In the United States over the next 20 years, global warming will cause more or less of th nothing is done to address it <sup>1</sup>	-	National Average	Alstned (228)	Conconcertes (230)	Gutious (25%)	Disenter and the state	Doubrill (25%)	Dismissive (108)
Deaths and injuries from	Many more	26	72	45	16	7	3	1
wildfires	A few more	28	20	36	44	18	16	0
	No difference	26	3	9	23	12	52	79
	A few less	1	0	0	3	1	0	0
	Many less	2	1	1	2	0	0	8
	Don't Know	18	4	9	12	62	28	12
Heat stroke	Many more	26	71	46	13	7	3	0
	A few more	27	15	36	42	20	18	2
	No difference	25	4	6	26	6	50	77
	A few less	1	2	2	2	0	1	0
	Many less	2	2	1	2	0	0	8
	Don't Know	19	6	8	15	66	28	13
Increased malnutrition as a	Many more	27	74	49	17	8	2	0
result of spikes in food prices	A few more	23	13	29	37	15	19	1
	No difference	26	4	8	28	6	48	78
	A few less	2	0	1	5	0	1	0
	Many less	2	1	1	1	1	0	8
	Don't Know	20	9	12	13	69	29	13

<sup>1</sup>The order of the nine types of impact was randomized in the survey; they are listed here from highest to lowest expected impact.

## TABLE 11 | Risk Perceptions: Human Health Impacts Expected from Global Warming, Continued

In the United States over the next 20 year global warming will cause more or less of nothing is done to address it <sup>1</sup>	•	National Auerage	Alarmed (2280)	Concerned (2.28)	Gutious (253	Disense de la Constantina de	Doubtiul (25%)	Dismissive (20%)
Asthma and other diseases of	Many more	24	69	40	12	11	3	0
the lungs	A few more	23	11	34	40	11	10	0
	No difference	27	5	10	28	9	55	78
	A few less	2	0	2	4	0	1	0
	Many less	2	3	1	2	1	1	8
	Don't Know	22	13	13	15	68	31	14
Diseases carried by insects, such	Many more	21	68	33	12	10	1	0
as Lyme disease, West Nile virus	A few more	25	17	34	37	13	16	1
and dengue fever	No difference	30	4	16	32	8	53	78
	A few less	1	2	2	3	0	0	0
	Many less	2	1	1	2	0	0	8
	Don't Know	21	8	14	14	68	30	13
Cholera and other diseases	Many more	22	63	36	13	7	1	0
carried by infected water	A few more	22	14	34	34	10	12	0
	No difference	31	8	18	32	5	56	79
	A few less	1	0	1	4	0	0	0
	Many less	2	3	1	1	3	1	8
	Don't Know	21	13	10	15	74	30	13

<sup>1</sup>The order of the nine types of impact was randomized in the survey; they are listed here from highest to lowest expected impact.

## TABLE 12 Beliefs about Current Environmental Impacts of Global Warming in the U.S.

	varming is already impacting the r disagree that global warming is following things worse, or do	National Average	41 <sub>6</sub> med (220)	Concerned (23e)	Gutious (258)	Disensase of 105	Doubriul (258)	Dismissile (108)
Droughts	Strongly agree	19	68	30	9	3	1	0
	Somewhat agree	31	20	50	45	17	16	1
	Somewhat disagree	13	3	6	21	5	26	14
	Strongly disagree	14	5	2	2	2	26	76
	Don't know	22	4	13	23	72	30	9
Hurricanes	Strongly agree	19	66	28	12	4	1	0
	Somewhat agree	30	21	51	42	15	11	1
	Somewhat disagree	14	3	6	20	7	34	13
	Strongly disagree	14	5	2	3	5	23	77
	Don't know	22	4	13	22	69	31	9
Wildfires	Strongly agree	18	63	26	9	4	1	0
	Somewhat agree	28	26	50	34	17	9	0
	Somewhat disagree	16	2	8	28	6	29	13
	Strongly disagree	15	6	3	5	2	23	78
	Don't know	24	3	14	25	71	37	9

## TABLE 12 | Beliefs about Current Environmental Impacts of Global Warming in the U.S., Cont

Some people say that global warming is already impacting the United States. Do you agree or disagree that global warming is already causing or making the following things worse, or do you not know?		National Average	Alarmed (12%)	Concerned (2.26)	Gutious (25%)	Diserver (10%)	Doubtul 1258	Dismissive 10%
Coastline	Strongly agree	17	63	26	8	2	1	0
erosion and	Somewhat agree	35	27	57	49	18	13	1
flooding	Somewhat disagree	12	3	5	16	5	27	13
	Strongly disagree	14	5	1	4	3	24	77
	Don't know	22	3	10	23	71	35	9
Rivers flooding	Strongly agree	17	55	24	12	2	1	0
	Somewhat agree	31	34	52	37	16	14	0
	Somewhat disagree	14	2	10	20	6	27	14
	Strongly disagree	14	5	1	5	2	24	77
	Don't know	24	3	13	26	73	34	9
Damage from	Strongly agree	9	29	14	4	4	1	0
pine-bark	Somewhat agree	17	19	29	22	3	6	0
beetles	Somewhat disagree	15	9	11	22	6	25	13
	Strongly disagree	14	3	2	5	3	24	74
	Don't know	45	40	45	46	84	44	13

## TABLE 13 | Risk Perceptions: When Harm Will Occur

When do you think global warming will start to harm people in the United States?	National Average	Alormed (226)	Concorned (238)	Cautious (258)	Disensaged (20%)	Doubtrul (1358)	Dismissive (2008)
They are being harmed now	32	79	50	18	36	1	0
In 10 years	12	8	16	19	8	5	0
In 25 years	13	7	20	22	9	5	1
In 50 years	12	3	12	18	19	13	0
In 100 years	11	3	2	20	10	25	4
Never	20	0	0	3	17	51	95

#### When do you think global warming will start to harm other

peop	le	around	the	world?
peop	ie.	arounu	uie	wonu:

people around the world?								
	They are being harmed now	35	87	53	21	35	3	0
	In 10 years	12	8	17	19	11	5	0
	In 25 years	11	3	16	19	9	5	0
	In 50 years	12	2	11	21	18	14	1
	In 100 years	10	1	2	18	8	24	4
	Never	20	0	0	3	18	48	95

Which of the following statements comes	closest to your view? <sup>1</sup>	National Average	Alamed (22%)	Concerned (226)	Cautious (25%)	Disensed to a	Doubtrul (1558)	Dismissive (20%)
Humans can reduce global warming, and we are going to do so successfully		5	9	6	6	3	1	1
Humans could reduce global warming, bu whether	t it's unclear at this point we will do what's needed	41	63	55	53	40	9	1
Humans could reduce global warming, bu change their behav	it people aren't willing to ior, so we're not going to	25	28	34	31	29	10	0
Humans can't reduce global warmir	ng, even if it is happening	18	1	3	10	20	60	38
Global	warming isn't happening	11	0	1	1	7	21	60
"The actions of a single individual	Strongly Agree	14	8	7	11	2	25	48
won't make any difference in global	Somewhat Agree	31	18	23	35	47	42	24
warming."	Somewhat Disagree	36	25	44	46	42	25	15
	Strongly Disagree	19	49	26	8	9	9	13
"New technologies can solve global	Strongly Agree	7	15	6	5	1	6	11
warming, without individuals	Somewhat Agree	40	18	38	52	48	44	24
having to make big changes in their	Somewhat Disagree	33	23	38	35	37	33	20
lives."	Strongly Disagree	21	44	17	8	14	17	45

#### TABLE 14 | Mitigation Efficacy: Perceptions about the Effectiveness of Collective and Individual Action

<sup>1</sup>Half the respondents saw the response order shown here; half saw the reverse order, with "global warming isn't happening" at the top.

#### TABLE 14 Mitigation Efficacy: Perceptions about the Effectiveness of Collective and Individual Action

Thinking about the energy-saving actions you taking and those you'd like to take over the n months: <sup>1</sup>	're already ext 12	Notional Average	Alarmed (128)	Concerned (2.5%)	Cautious (25.8%)	Diseres (108)	Doubtrul (258)	Oismissine (20%)
If you did most of these things, how	A lot	6	22	7	4	2	1	0
much do you think it would reduce	Some	26	37	37	21	23	7	14
your personal contribution to global warming?	A little	48	35	51	63	44	36	19
	Not at all	20	6	6	13	30	56	68
If most people in the United States did	A lot	26	61	36	16	17	4	0
these same actions, how much would it reduce global warming?	Some	34	28	44	39	39	8	16
	A little	27	12	16	41	30	43	14
	Not at all	13	0	5	4	14	44	70
If most people in the modern	A lot	40	74	61	30	26	3	3
industrialized countries around the world did these same actions, how much would it reduce global warming?	Some	31	21	31	41	38	19	11
	A little	19	5	7	23	28	40	35
	Not at all	10	0	2	7	7	38	51

<sup>1</sup>Questions were not asked of respondents who said they were very or extremely sure that global warming is not occurring. N=880.

## TABLE 15 | Trust in Information Sources

How much do you trust or distrust the four formation about global warming? <sup>1</sup>	ollowing as a source of	National Average	Alarmed (12%)	Concerned (23%)	Gutious (25%)	Diserver de 1000	Doubtul 1253	Dismissive (20%)
The National Oceanic and	Strongly trust	22	57	35	14	6	4	3
Atmospheric Administration (NOAA)	Somewhat trust	54	38	57	66	73	49	22
	Somewhat distrust	19	3	6	15	20	37	49
	Strongly distrust	6	2	1	5	1	11	26
Scientists	Strongly trust	21	50	29	22	6	2	5
	Somewhat trust	55	45	62	60	75	47	25
	Somewhat distrust	19	4	8	16	16	41	47
	Strongly distrust	5	1	2	3	3	10	22
The U.S. Environmental	Strongly trust	14	37	25	7	4	3	1
Protection Agency (EPA)	Somewhat trust	54	49	58	67	70	44	18
	Somewhat distrust	23	8	15	21	22	41	47
	Strongly distrust	8	6	2	5	4	12	34
The U.S. Centers for Disease	Strongly trust	15	43	23	9	5	3	0
Control & Prevention (CDC)	Somewhat trust	47	39	56	59	65	32	12
	Somewhat distrust	26	13	17	25	28	49	26
	Strongly distrust	13	5	4	7	2	17	62

<sup>1</sup>Order of the 10 sources was randomized in the survey. Sources are listed here from most to least strongly trusted.

## TABLE 15 | Trust in Information Sources, Continued

How much do you trust or distrust the following as a source of information about global warming? <sup>1</sup>		National Average	410111000 (12.55)	Concerned (2).	Gutious (25%)	Diserbaged (20%)	Doubtul 1358	Distriistie 10%)
The National Park Service	Strongly trust	13	34	20	6	2	6	0
	Somewhat trust	62	58	68	73	69	55	24
	Somewhat distrust	20	6	10	18	27	28	51
	Strongly distrust	6	3	2	3	2	11	25
The U.S. Department of Energy	Strongly trust	11	25	17	9	3	3	1
(DOE)	Somewhat trust	48	53	58	54	65	30	10
	Somewhat distrust	28	16	22	27	27	45	36
	Strongly distrust	13	6	3	11	5	21	53
President Obama	Strongly trust	11	34	17	6	4	3	0
	Somewhat trust	35	40	45	37	58	18	3
	Somewhat distrust	24	8	24	36	25	26	13
	Strongly distrust	30	19	14	22	13	53	84
Television weather reporters	Strongly trust	5	16	6	5	2	1	2
	Somewhat trust	47	55	58	48	60	36	8
	Somewhat distrust	34	21	28	37	29	44	46
	Strongly distrust	14	8	8	10	8	18	43

<sup>1</sup>Order of the 10 sources was randomized in the survey. Sources are listed here from most to least strongly trusted.

## TABLE 15 | Trust in Information Sources, Continued

How much do you trust or distrust the finite information about global warming? <sup>1</sup>	following as a source of	National Average	4/4r/160 (12.50)	Concerned (230)	Coutious (258)	Osenseseed (108)	Doubtul (1558)	Dismissive (20%)
The mainstream news media	Strongly trust	4	8	5	3	4	2	0
	Somewhat trust	34	50	47	32	47	14	3
	Somewhat distrust	37	29	31	48	42	44	24
	Strongly distrust	25	13	17	17	7	40	74
Your U.S.	Strongly trust	2	6	3	1	2	0	3
Congressman/Congresswoman	Somewhat trust	34	36	42	38	47	21	11
	Somewhat distrust	39	33	41	41	42	40	35
	Strongly distrust	24	26	14	20	9	39	51

<sup>1</sup>Order of the 10 sources was randomized in the survey. Sources are

listed here from most to least strongly trusted.

#### TABLE 16 | National Issue Priorities

Do you think global warming should be a low, medium, high, or very high priority for the president and Congress?	National derige	4191. med (228)	Concerned (23e)	Gutious (25%)	Disense and Disens	Doubtur (1358)	Dismissive (20%)
 Very high	13	64	15	3	6	2	0
High	26	32	53	19	26	3	0
Medium	31	4	28	58	49	17	1
Low	30	0	4	19	19	77	99

#### Do you think that developing sources of clean

energy should be a low, medium, high, or very

high priority for the president and Congress?							
Very high	31	79	43	21	15	11	10
High	35	19	47	40	43	28	14
Medium	25	2	9	34	30	49	30
Low	9	0	0	5	11	12	45

## TABLE 17 | Support for a National Response: Conditions for & Magnitude of Action Desired

People disagree whether the United States should reduce greenhouse gas emissions on its own, or make reductions only if other countries do too. Which of the following statements comes closest to your own point of view? The United States should reduce its greenhouse gas emissions	National Average	Alorneo (12.50)	Concerned (2)-	Gutious (35%)	Disense Redeed (10%)	Doubth11258	Dismissive (20%)
Regardless of what other countries do	61	89	90	62	29	38	15
Only if other industrialized countries (such as England, Germany and Japan) reduce their emissions	2	1	1	5	2	3	0
Only if other industrialized countries and developing countries (such as China, India and Brazil) reduce their emissions	8	3	1	11	4	18	11
The US should not reduce its emissions	6	2	0	2	0	5	46
Don't know	23	6	7	20	65	36	27
How big of an effort should the United States make to reduce global warming?							
A large-scale effort, even if it has large economic costs	28	80	45	16	24	1	0
A medium-scale effort, even if it has moderate economic costs	38	19	50	56	44	19	5
A small-scale effort, even if it has small economic costs	19	1	4	26	18	52	17
No effort	14	0	0	2	14	28	78

## TABLE 18 | Support for a National Response: Specific Climate and Energy Policies

		National Average	419171ed (1236)	Concerned (23e)	Cautious (258)	Disenses ed ( 10%)	Doubril 1558)	Dismissive (10%)
How much do you support or oppose the follow	ving policies?	Ver V	4/a	ర్	ne"	D <sup>ig</sup>	00 <sup>1</sup>	D <sup>is</sup>
Require electric utilities to produce at least	Strongly support	23	67	33	16	7	8	1
20% of their electricity from wind, solar, or	Somewhat support	43	23	50	53	49	38	22
other renewable energy sources, even if it	Somewhat oppose	18	3	13	23	27	32	11
cost the average household an extra \$100 a year. Sign an international treaty that requires the	Strongly oppose	16	8	4	8	16	22	66
Sign an international treaty that requires the	Strongly support	23	69	34	12	12	5	0
United States to cut its emissions of carbon dioxide 90% by the year 2050.	Somewhat support	43	24	52	56	57	31	12
	Somewhat oppose	17	3	11	24	23	30	7
	Strongly oppose	17	3	3	8	7	34	81
Expand offshore drilling for oil and natural gas	Strongly support	28	22	20	19	13	44	68
off the U.S. coast.	Somewhat support	38	23	36	48	61	34	18
	Somewhat oppose	20	21	29	23	18	15	3
	Strongly oppose	14	34	15	11	8	7	11
Build more nuclear power plants.	Strongly support	16	12	11	14	2	22	43
	Somewhat support	31	29	22	28	55	39	31
	Somewhat oppose	30	18	37	39	26	26	10
	Strongly oppose	23	41	30	19	17	13	16

## TABLE 18 | Support for a National Response: Specific Climate and Energy Policies, Continued

How much do you support or oppose	the following policies?	National Average	4/4r/160/12.50)	Concerned (236)	Cautious (258)	Disenses sed 10%)	Doubru (1358)	Dismissive (20%)
Fund more research into	Strongly support	47	85	66	41	22	26	20
renewable energy sources, such as solar and wind power.	Somewhat support	37	7	32	45	56	46	36
	Somewhat oppose	11	5	1	11	18	19	21
	Strongly oppose	6	3	1	3	5	9	22
Provide tax rebates for people	Strongly support	41	73	58	35	22	25	13
who purchase energy-efficient vehicles or solar panels.	Somewhat support	41	22	37	51	61	37	34
venicies of solar panels.	Somewhat oppose	10	1	4	10	9	21	18
	Strongly oppose	9	4	1	4	7	16	35
Increase taxes on gasoline by 25	Strongly support	8	19	12	6	4	7	1
cents per gallon and return the revenues to taxpayers by reducing the federal income tax.	Somewhat support	24	32	26	26	34	12	11
	Somewhat oppose	27	25	31	35	31	22	8
	Strongly oppose	40	25	32	33	30	59	80

## TABLE 19 | Support for Local Climate and Energy Policies

How much do you support or oppose the follow <i>your local community?</i> <sup>1</sup>	ving policies for	National Average	4191.1160 (1280)	Concerned (23e)	Gutious (258)	Diseres and the state	Doubhul 1358)	Dismissive (10%)
Constructing bike paths and installing	Strongly support	30	67	35	26	9	18	21
bike lanes on city streets	Somewhat support	47	26	49	54	64	43	39
	Somewhat oppose	14	5	8	17	20	22	18
	Strongly oppose	9	3	8	3	8	17	23
Increasing the availability of public	Strongly support	29	65	34	22	23	17	15
transportation in your county.	Somewhat support	51	31	53	58	56	49	48
	Somewhat oppose	13	2	9	18	16	17	12
	Strongly oppose	8	3	4	3	5	16	24
Regulations requiring any new home to	Strongly support	24	63	34	15	14	9	1
be more energy efficient. This would	Somewhat support	47	26	52	58	59	42	30
increase the initial cost by about \$7,500,	Somewhat oppose	16	4	7	22	18	27	17
but save about \$17,000 in utility bills over	Strongly oppose	13	7	7	5	9	21	52
30 years.								
Changing your county's zoning rules to	Strongly support	17	48	21	14	11	5	5
require that neighborhoods have a mix of housing, offices, industry, schools, and	Somewhat support	40	38	52	38	49	33	20
	Somewhat oppose	24	8	18	34	28	30	19
stores close together, to encourage walking and decrease the need for a car.	Strongly oppose	18	6	9	14	11	32	56

<sup>1</sup>The order of the 12 policies was randomized in the survey. Policies are listed here from most to least supported.

## TABLE 19 | Support for Local Climate and Energy Policies, Continued

How much do you support or oppose the follow <i>for your local community</i> ? <sup>1</sup>	ing policies	National Average	419-11-50 (1-50)	Concerned (2.26)	Cautious (258)	Diseres and the second second	Doubrul (258)	Dismissive (10%)
Changing your county's zoning rules to	Strongly support	15	45	18	11	8	5	3
decrease suburban sprawl and	Somewhat support	41	37	51	41	46	35	27
concentrate new development near the	Somewhat oppose	27	12	23	39	37	28	16
center of cities and towns, reducing commuting times Changing your county's zoning rules to	Strongly oppose	17	7	8	10	8	32	54
Changing your county's zoning rules to	Strongly support	14	43	19	8	10	5	0
promote the construction of more energy-	Somewhat support	37	31	40	46	47	30	18
efficient apartment buildings, instead of	Somewhat oppose	28	17	29	32	33	33	21
less efficient single-family homes	Strongly oppose	20	9	11	15	11	32	61
Paying 5% more on your monthly utility bill	Strongly support	14	58	19	5	5	0	0
to get your electricity from renewable	Somewhat support	37	29	44	53	38	21	11
energy sources, like wind or solar	Somewhat oppose	24	7	25	26	31	31	19
	Strongly oppose	25	7	12	15	26	48	70
A \$5-a-month increase in property taxes,	Strongly support	12	45	15	6	7	3	0
to provide funding to help homeowners make energy-efficiency improvements to their homes (such as replacing old, inefficient furnaces, water heaters, air conditioners, and insulation)	Somewhat support	33	34	43	39	37	15	13
	Somewhat oppose	24	9	23	32	34	26	12
	Strongly oppose	31	12	19	23	22	56	74

<sup>1</sup>The order of the 12 policies was randomized in the survey. Policies are listed here from most to least supported.

## TABLE 19 | Support for Local Climate and Energy Policies, Continued

How much do you support or oppose the for your local community? <sup>1</sup>	llowing policies for	National Average	416 12 280	Concerned (23e)	Cautious (258)	Disense de 105	Doubtin 1258)	Dismissive (10%)
A \$5-a-month increase in property taxes,	Strongly support	12	37	18	6	5	3	3
to provide funding to homeowners that	Somewhat support	29	39	35	33	35	15	9
install solar panels	Somewhat oppose	27	10	29	38	33	28	14
	Strongly oppose	31	13	19	23	26	55	73
A \$1.50 fee added to your monthly electric	Strongly support	11	44	13	5	5	2	0
utility bill to fund local programs to save	Somewhat support	37	42	46	49	37	15	13
energy	Somewhat oppose	25	6	27	28	34	34	12
	Strongly oppose	27	8	14	18	24	49	74
Building a nuclear power plant in your	Strongly support	8	7	4	8	5	9	26
local area	Somewhat support	25	21	18	26	31	34	31
	Somewhat oppose	23	17	18	30	28	23	23
	Strongly oppose	43	55	60	36	36	34	21
A 10-cent fee added to each gallon of	Strongly support	7	27	10	2	2	1	0
gasoline you buy, to fund local programs to improve public transportation	Somewhat support	20	31	23	25	21	8	5
	Somewhat oppose	27	14	31	31	42	21	14
	Strongly oppose	46	28	36	42	35	70	81

<sup>1</sup>The order of the 12 policies was randomized in the survey. Policies are listed here from most to least supported.

## TABLE 20 | Perceived Importance of Protecting Local Resources

The federal government is encour the impacts of global warming so protected. How important do you take steps to protect the following	raging communities to prepare for that people and property are think is it for <u>your community</u> to g from global warming?	National Average	Aldrined (1258)	Concerned (23e)	Cautious (258)	Disensaged (1050)	Doubtul 1358)	Dismissive (20%)
The water supply	Extremely important	36	69	54	30	26	11	7
	Very important	26	21	30	36	33	21	4
	Somewhat important	18	3	10	25	21	33	13
	Not too important	6	0	4	3	1	17	14
	Not at all important	9	1	0	3	5	14	54
	Does not apply to my community	5	6	2	4	14	4	8
The public's health	Extremely important	33	66	48	28	27	10	5
	Very important	29	22	38	37	34	20	5
	Somewhat important	19	9	10	26	22	34	14
	Not too important	7	0	3	3	1	19	17
	Not at all important	9	0	0	3	4	15	54
	Does not apply to my community	3	3	0	4	12	2	5
Agriculture	Extremely important	33	66	50	25	28	11	5
	Very important	29	22	37	41	28	17	3
	Somewhat important	17	4	9	23	20	32	14
	Not too important	6	3	1	3	4	21	14
	Not at all important	9	0	0	3	4	13	55
	Does not apply to my community	6	6	3	5	15	6	9

<sup>1</sup>The protective actions are listed from the resources most to least important to protect.

## TABLE 20 | Perceived Importance of Protecting Local Resources, Continued

the impacts of global warr protected. How important	s encouraging communities to prepare for ming so that people and property are t do you think is it for <u>your community</u> to following from global warming?	National Average	414 med (22%)	Concerned (23e)	Cautious (258)	Disense several (108)	Doubrill (25%)	Dismissive (1085)
Forests	Extremely important	31	66	48	24	21	9	5
	Very important	25	19	34	34	29	16	1
	Somewhat important	19	3	11	27	25	35	10
	Not too important	6	1	0	4	3	16	19
	Not at all important	9	1	0	3	4	15	53
	Does not apply to my community	9	10	6	9	18	9	12
Wildlife	Extremely important	30	63	44	26	26	6	7
	Very important	28	25	37	34	29	21	1
	Somewhat important	19	3	16	29	23	25	11
	Not too important	8	2	2	5	2	26	20
	Not at all important	9	1	0	3	4	14	53
	Does not apply to my community	6	6	2	4	16	7	8
Coastlines	Extremely important	28	55	43	25	23	7	1
	Very important	24	18	32	27	28	19	6
	Somewhat important	16	4	9	22	21	29	10
	Not too important	6	0	1	4	3	19	16
	Not at all important	9	1	1	4	4	15	49
	Does not apply to my community	17	22	14	19	21	11	18

<sup>1</sup>The protective actions are listed from the resources most to least important to protect.

## TABLE 20 | Perceived Importance of Protecting Local Resources, Continued

The federal government is encouraging c the impacts of global warming so that pe protected. How important do you think is take steps to protect the following from	ommunities to prepare for ople and property are s it for <u>your community</u> to global warming?	National Average	Aldrined (22%)	Concerned (236)	Cautious (2558)	Dienesesed (2000)	Doubtful (1358)	Dismissine (20%)
The sewer system	Extremely important	26	59	35	22	21	9	7
	Very important	26	23	36	34	31	12	5
	Somewhat important	22	6	18	30	21	38	12
	Not too important	8	2	3	8	6	21	13
	Not at all important	10	4	1	3	5	15	52
Dou	es not apply to my community	7	6	7	3	15	5	10
Public property	Extremely important	19	51	24	14	18	4	2
	Very important	28	21	39	35	32	14	7
	Somewhat important	27	18	26	35	30	29	13
	Not too important	12	8	7	8	2	31	17
	Not at all important	10	0	1	4	4	18	56
Do	es not apply to my community	4	1	3	4	14	4	5

<sup>1</sup>The protective actions are listed from the resources most to least important to protect.

# TABLE 21 | Energy Conservation Actions

How often do you do the following		National Average	4141med 12281	Concerned (23e)	Gunious (258)	Disense and Los	Doubtin 1358)	Osmissive (10e)
In the winter, set the thermostat	Always	26	35	31	23	15	26	24
to 68 degrees or cooler	Often	19	19	19	16	23	22	22
	Sometimes	18	12	18	21	20	17	16
	Rarely	12	10	13	13	8	11	12
	Never	15	14	9	18	21	14	16
	Not Applicable	10	10	10	9	14	10	9
Use public transportation or car	Always	6	13	6	3	15	4	3
pool	Often	8	13	10	5	8	4	7
	Sometimes	12	15	13	12	9	7	12
	Rarely	20	16	22	27	16	17	15
	Never	40	33	34	40	37	52	46
	Not Applicable	14	11	14	13	16	16	18
Walk or bike instead of driving	Always	5	10	2	2	11	7	3
	Often	10	21	15	8	8	2	5
	Sometimes	18	21	21	19	16	16	13
	Rarely	24	23	24	31	15	21	20
	Never	32	22	27	32	34	41	45
	Not Applicable	10	4	11	8	16	13	14
How many of the light bulbs in your	All	18	30	22	14	16	15	12
home are energy-efficient compact	Most	34	30	42	37	26	26	34
fluorescent lights (CFLs)?	Some	19	17	15	21	29	17	16
	A few	14	13	10	15	9	25	16
	None	10	6	9	11	14	9	17
	I don't know	4	4	2	3	6	9	4

# TABLE 22 | Energy Conservation Intentions

For each of the actions below, over the n would you like to do this more frequently now, less frequently than you are now, o as you are now?	y than you are	National Average	4 <sup>61</sup> med (128	Concerned (225)	Gutious (25g)	Disenses ed tos	Doubthul 158	Osmissie (20%)
In the winter, set the thermostat to	More frequently	17	15	21	18	15	13	14
-	About the same	73	78	70	71	62	80	77
68 degrees or cooler	Less frequently	10	7	9	11	23	8	9
Use public transportation or car pool	More frequently	18	30	21	15	14	11	11
	About the same	63	61	59	65	59	67	71
	Less frequently	19	9	20	20	27	22	17
Walk or bike instead of drive	More frequently	28	40	32	32	19	19	17
	About the same	53	49	50	49	56	61	64
	Less frequently	19	11	18	19	25	20	19
Over the next 12 months, how likely	Yes, I'd like to and							
are you to change most of the light	probably will	34	33	53	30	40	27	14
bulbs in your house to energy-efficiency compact fluorescent lights (CFLs)?*	Yes, I'd like to but probably won't	30	40	28	42	25	27	10
	No, I don't want to	23	9	8	20	15	32	63
	I don't know	13	19	11	8	19	15	12

# TABLE 23 | Consumer Activism

Over the past 12 months, how many tin these things?	nes have you done	National Average	4/4/11/60 (12.8°)	Concorney (23e)	Cautious (253)	Disensaseed (105)	Doubtin 155 %)	Osmissie (108)
Rewarded companies that are	Many times (6+)	6	32	6	2	0	2	0
taking steps to reduce global	Several times(4-5)	7	21	9	6	2	0	0
warming by buying their products.	A few times(2-3)	17	21	28	21	7	6	4
	Once	5	3	5	6	5	5	0
	Never	44	10	29	43	53	68	82
	Don't Know	21	13	23	23	33	20	14
Punished companies that are	Many times (6+)	8	39	8	2	0	1	0
opposing steps to reduce global	Several times(4-5)	5	13	8	2	1	1	0
warming by NOT buying their	A few times(2-3)	11	13	16	15	5	4	0
products.	Once	3	5	3	5	2	2	0
	Never	53	18	38	56	58	76	86
	Don't Know	21	11	26	20	34	16	14
Over the next 12 months, would you	More frequently	35	78	57	28	15	10	1
like to punish companies that are	About the same	55	14	39	59	77	81	75
opposing steps to reduce global warming by NOT buying their products	Less frequently	10	8	5	13	8	9	24
Over the next 12 months do you	More frequently	39	89	58	35	26	4	2
intend to buy the products of	About the same	54	11	38	55	69	86	79
companies that are taking steps to reduce global warming	Less frequently	8	0	4	10	5	10	19

#### TABLE 24 | Political Activism

TABLE 24   Political Activism         Over the past 12 months, how many times         these things?	have you done	National Average	Marmed 1226	Concerned (225)	Gautious (258)	Disenter Berger (10%)	Doubrul 1258	Oismissive (108)
Volunteered with or donated money	Many times (6+)	1	4	1	0	0	0	0
to an organization working to reduce	Several times(4-5)	2	4	3	2	1	1	0
global warming	A few times(2-3)	7	19	10	4	5	2	0
	Once	7	27	8	6	1	2	0
	Never	77	42	73	84	70	93	98
	Don't Know	6	3	7	3	23	3	2
Posted a comment online in	Many times (6+)	1	3	1	0	0	2	2
response to a news stories or blog	Several times(4-5)	2	4	2	1	0	1	3
about global warming	A few times(2-3)	5	10	4	5	2	5	5
	Once	4	6	2	6	1	3	1
	Never	85	75	87	86	80	88	87
	Don't Know	4	2	5	2	17	1	2
Written letters, emailed, or phoned	Many times (6+)	1	3	1	0	0	1	0
government officials about global	Several times(4-5)	1	4	0	2	0	1	1
warming	A few times(2-3)	4	8	5	2	3	2	4
	Once	4	13	4	4	0	1	2
	Never	86	71	86	89	80	93	91
	Don't Know	4	1	3	2	17	1	2
When you contacted a government official,	, did you*							
Urge them to take action to reduce glob	al warming	76	97	93	70	100	0	0
Urge them to not take action to reduce	global warming?	21	3	0	25	0	100	100
Other		3	0	7	5	0	0	0
	n**	96	32	27	20	3	8	6

\*Asked if respondent had contacted a government official one or more times.

\*\*N is for this item only; all other items on the page were asked of the full sample. Please note small cell sizes.

#### TABLE 25 | Political Activism Intentions

						-		
Over the next 12 months, would you like to do the following		National Average	Alormed (220)	Concorned (23e)	Cautious (25%)	Dieolessed 10%)	Doubthul 158	Osmissie (10%)
Volunteer with or donate money	More often	17	43	22	15	12	3	0
to an organization working to	About the same	64	52	64	69	73	66	53
reduce global warming	Less often	20	6	14	16	15	30	47
Post a comment online in	More often	10	27	13	5	9	2	1
response to a news stories or	About the same	68	64	65	75	74	68	63
blog about global warming	Less often	22	9	22	20	17	30	36
Write letters, email, or phone	More often	12	38	16	3	9	2	4
government officials about	About the same	66	53	63	75	74	67	57
global warming	Less often	23	8	21	21	17	31	39
If you were to contact government of global warming, would you*	officials about							
Urge them to take action to reduce	e global warming?	72	98	97	80	73	17	0
Urge them to not take action to reduce global		15	1	1	7	4	49	71
Other		13	1	2	13	23	34	29
	n**	725	110	201	182	74	100	58

\*Asked if respondent intends to contact officials more frequently or about the same.

\*\*N if for contact intentions question only; all other questions on this page were asked of all respondents.

## TABLE 26 | Household Income and Perceived Impact of the Economic Downturn

How much has the economic downturn in this country since 2008 personally hurt you and your family?	National Average	4 Armed 1228	Concerned (230)	Gutious (258)	Disentration of the states of	Doubrul (25%)	Dismissive (108)
A lot	30	51	33	22	31	22	26
Some	33	26	32	37	29	36	35
A little	27	18	28	29	28	27	25
Not at all	10	4	6	12	12	15	14
Household income \$100K+	23	22	24	26	7	25	27
\$60K-\$99.9K	23	12	24	28	24	25	22
\$30K-\$59.9K	29	33	26	27	38	27	34
less than \$30K	24	34	26	20	31	23	17
"With the economy in such bad shape, the US can't afford to reduce global warming."							
Strongly Agree	15	7	6	8	2	31	51
Somewhat Agree	37	14	32	45	57	44	27
Somewhat Disagree	33	22	48	42	29	19	9
Strongly Disagree	16	58	15	5	12	5	14

# TABLE 27 | Social Networking

How often do you use each of the following?		National Average	41917ned (2285)	Concerned (23-50)	Cautious (25%)	Diseres est and a last	Doubritul (258)	Dismissile (1080)
Email	Very Often	43	58	47	43	28	32	42
	Often	24	19	29	26	17	23	26
	Sometimes	17	13	10	21	24	25	9
	Hardly ever	6	3	6	6	3	4	12
	Never	11	8	8	4	27	17	10
Text messaging	Very Often	25	27	28	28	25	21	13
	Often	15	20	17	21	8	10	8
	Sometimes	15	15	12	14	16	17	18
	Hardly ever	10	5	12	13	5	9	12
	Never	35	33	31	24	45	44	49
Social networking sites	Very Often	23	30	27	23	31	17	11
(Facebook, MySpace,	Often	15	12	17	17	10	12	13
Tumblr, etc.)	Sometimes	15	15	11	17	15	21	11
	Hardly ever	10	7	13	11	2	12	13
	Never	37	36	32	33	42	39	52
Blogs	Very Often	3	6	3	3	0	3	2
	Often	3	5	3	3	0	3	5
	Sometimes	9	8	11	8	11	8	6
	Hardly ever	13	9	14	21	3	10	9
	Never	72	72	69	65	86	75	78
Twitter	Very Often	3	4	2	3	0	5	1
	Often	2	1	2	3	2	0	0
	Sometimes	5	3	2	8	7	5	5
	Hardly ever	6	8	8	7	3	5	3
	Never	84	83	87	79	88	85	91

# TABLE 28 | Organizational Memberships

e you a member of any of the following types of groups?	National Average	dermed (15e)	Concerned (238)	Cautious (25%)	Disertasseed ( 10%)	Doubtrul (25%)	Dismissive C
AARP	23	28	23	22	22	27	11
Labor union	13	16	13	15	8	9	10
Parent-Teacher association (PTA)	9	13	10	13	3	5	5
Veteran's association	9	3	10	7	12	12	0
Religious study group/Church group/Church board	8	9	3	10	7	12	12
Service club or fraternal organization, such as Rotary, Optimists, Elks, etc.	7	8	6	6	4	11	7
Animal rights organization	6	14	6	5	2	4	6
YMCA	6	7	6	8	4	5	4
Environmental organization	5	14	7	4	2	1	1
Chamber of Commerce	3	4	1	3	4	3	6

# TABLE 29 | Military Service

				-		
National Average	41 <sup>91</sup> med 1285	Concerned (238)	Gunious (25%)	Diserbased (10%)	Doubrul (15%)	Dismissive (20%)
5	6	2	6	4	5	8
2	3	1	2	3	5	2
3	0	2	2	5	7	4
1	2	1	2	0	3	0
0	0	0	0	0	0	1
88	90	94	87	88	81	85
76	69	87	67	75	85	71
-						29
3		, 7	0	0	, 7	0
2	0	0	0	17	0	0
1	0	0	3	0	0	0
14	14	15	9	14	17	12
	2 3 1 0 88 76 19 3 2 1	<ul> <li>5</li> <li>6</li> <li>2</li> <li>3</li> <li>0</li> <li>1</li> <li>2</li> <li>0</li> <li>0</li> <li>88</li> <li>90</li> </ul> 76 <ul> <li>69</li> <li>19</li> <li>31</li> <li>3</li> <li>0</li> <li>2</li> <li>0</li> <li>1</li> <li>0</li> </ul>	5       6       2         2       3       1         3       0       2         1       2       1         0       0       0         88       90       94         76       69       87         19       31       7         3       0       7         2       0       0         1       0       0	5       6       2       6         2       3       1       2         3       0       2       2         1       2       1       2         0       0       0       0         88       90       94       87         76       69       87       67         19       31       7       30         3       0       7       0         1       0       0       3	5       6       2       6       4         2       3       1       2       3         3       0       2       2       5         1       2       1       2       0         0       0       0       0       0         88       90       94       87       88         76       69       87       67       75         19       31       7       30       8         3       0       7       0       0         2       0       0       3       0       17         1       0       0       3       0       17	5       6       2       6       4       5         2       3       1       2       3       5         3       0       2       2       5       7         1       2       1       2       0       3         0       0       0       0       0       0         88       90       94       87       88       81

## TABLE 30 | Party Identification, Political Ideology, and Voter Registration

		National Average	Adrimed (2280)	Concerned (235)	Cautious (258)	Olienseseed (2005)	Doubtul 1258)	Osmissie (208)
Generally speaking, do	Republican	25	12	14	27	15	36	61
you think of yourself	Democrat	32	54	39	33	31	19	2
as a	Independent	23	23	28	22	11	26	22
	Other	3	3	1	3	3	3	9
	No party/not interested in politics	17	8	17	17	40	16	6
In general, do you	Very conservative	11	8	5	5	4	16	46
think of yourself as	Somewhat conservative	23	8	16	27	18	33	38
	Moderate, middle of the road	44	38	48	50	63	42	12
	Somewhat liberal	15	24	24	14	11	7	1
	Very liberal	7	24	7	4	3	2	2
Do you consider	Yes	10	6	2	7	1	17	42
yourself part of the	No	68	79	73	76	64	60	42
Tea Party movement or not?	Don't know	22	15	25	17	35	23	16
Are you registered to	Yes	81	88	77	84	61	80	95
vote?	No	17	11	21	14	34	18	5
	Not sure	2	1	3	2	5	1	0

#### Methodology

These results come from nationally representative surveys of American adults, aged 18 and older. The samples were weighted to correspond with US Census Bureau parameters for the United States.

The surveys were designed by Anthony Leiserowitz and Nicholas Smith of Yale University and Edward Maibach and Connie Roser-Renouf of George Mason University, and were conducted by Knowledge Networks, using an online research panel of American adults.

- May 2011: Fielded April 23rd through May 12th with 981 American adults. The margin of sampling error is plus or minus
   3 percent, with 95 percent confidence.
- June 2010: Fielded May 14 through June 1 with 1,024 American adults. The margin of sampling error is plus or minus 3
- percent, with 95 percent confidence.
- January 2010: Fielded December 24, 2009 through January 3, 2010 with 1,001 American adults. The margin of sampling error is plus or minus 3 percent, with 95 percent confidence.
  - November 2008: Fielded October 7 through November 12 with 2,164 American adults. Data were collected in two
- waves: wave 1 from October 7 through October 20, and wave 2 from October 24 through November 12. The margin of sampling error is plus or minus 2 percent, with 95 percent confidence.

The six audience segments were first identified in analyses of the 2008 data set. Latent Class Analysis was used to segment respondents, based on 36 variables representing four distinct constructs: global warming beliefs, issue involvement, policy preferences and behaviors. Discriminant functions derived from the latent class analysis were used with the 2011 and 2010 data sets to replicate the earlier analysis and identify changes in the groups.

The prior reports on Global Warming's Six Americas are available at our websites: http://climatechange.gmu.edu and http://environment.yale.edu/climate