

HAMILTON COLLEGE  
NATIONAL YOUTH POLLS

CLIMATE CHANGE AND  
ENVIRONMENTAL ISSUES POLL

*January 2007*

Climate Change and Environment Issues Poll

November, 2006

**Developed by**

Philip W. Arscott '07

Patrick C. Hooper '07

Tucker Hutchinson '07

Ghiane C. Jones '07

Jesse D. Koch '07

Amanda E. Merrow '07

Samantha R. Pitter '07

Zarrette J. Rogers '08

Ellim Song '07

Lauren L. Steates '07

Matthew D. Stewart '07

Christian M. Warner '07

Adam J. Weisz '07

Julio Videras, Assistant Professor of Economics

**Conducted in collaboration with**

Zogby International

**Supported by**

The Arthur Levitt Public Affairs Center at Hamilton College

Blue Moon Fund

## 1. Executive Summary

American high-school students do not understand climate change issues well. The average high-school student fails a quiz on the causes and consequences of climate change. Students who learn the most about climate change from TV news and shows know as much as students who have learned the most about climate change in school. However, students who learn the most using the Internet do better than the average. Teaching students about climate change outside typical science courses, for example, in a special class dedicated to the natural environment, increases students' knowledge.

In addition to this limited understanding, most high-school students do not see themselves at risk from climate change. Only 28 percent of the students say it is very likely that climate change will affect them personally in the future. Despite these findings, 70 percent of the respondents think the U.S. should start reducing emissions of pollutants contributing to climate change rather than wait until there is more evidence about the benefits of reducing greenhouse gasses. However, only 20 percent of the students say it is very likely that a candidate's position about climate change will strongly influence their vote.

Hamilton Economics Associate Professor Julio Videras and his students collaborated with the polling firm Zogby International to conduct the poll. Nine hundred high-school sophomores, juniors, and seniors from across the U.S. were contacted by phone in November 2006. Hamilton's Levitt Public Affair Center funded the poll. The poll has a margin of error of plus/minus 3.4 percent.

Other interesting findings include:

- African-American students are 12 percent more likely to believe that climate change is very likely to affect them personally in the future than students from any other ethnic and racial background. However, African-American students answer correctly fewer questions about climate change than students of other races or ethnicities. This difference holds after controlling for additional characteristics such as gender, political preference, and parents' education, among others.
- High-school students who do not affiliate to any religious denomination know more about the causes and consequences of climate change than their counterparts and are 13 percent more likely to claim that the U.S. should start reducing greenhouse gasses now than their counterparts do.
- High-school students who think it is very likely that they will experience the effects of climate change in their lives are 17 percent more likely to state the U.S. should start reducing greenhouse gasses now than their counterparts. However, how students perceive climate change risks is not correlated with their efforts to engage in pro-environment behaviors.

- Although 66 percent of the high-school students in the sample agree that humans have the right to modify the natural environment, more than two-thirds of the respondents think that the earth's resources are limited and mankind is severely abusing the environment.
- Making efforts to conserve water is the most frequent pro-environment behavior for the individuals in this sample (65 percent of the responses). The least common activity is trying to reduce the amount of waste the person generates (35 percent of the responses).
- Discussing environmental issues in school does not influence pro-environment attitudes and behaviors in any significant way. On the other hand, high-school students who discuss issues about the environment at least occasionally with their friends engage in more pro-environment behaviors, know more about the causes and consequences of climate change, and are 16 percent more likely to claim that the U.S. should start reducing greenhouse gasses now than their counterparts do.
- Almost 83 percent of the respondents strongly agree with the statement that we must consider the impact that our actions will have for the welfare of future generations versus 70 percent who strongly agree with the statement that we must consider how our actions influence the well-being of people living in other countries. Although there is no systematic difference in pro-environment efforts based on how much concern for future generations students state, those who claim to care about people in other countries engage in more pro-environment behaviors than their counterparts.

## 2. Analysis

### 2.1 Knowledge about the causes and consequences of climate change

American high-school students do not understand climate change issues well. The average high-school student fails a nine-question quiz on the causes and consequences of climate change. As Table 1 shows, 50 percent of the respondents score 5 or fewer correct answers (out of nine). It is more common that students ignore the causes of climate change than the consequences. For example, only 17 percent of the respondents know that nuclear plants do not contribute to climate change and only 25 percent know that toxic chemicals in landfills do not contribute to climate change.

Table 1: Distribution of correct answers

Correct Answers	Responses	Frequency
0	1	0.11%
1	11	1.22%
2	25	2.78%
3	77	8.56%
4	168	18.67%
5	240	26.67%
6	207	23.00%
7	121	13.44%
8	42	4.67%
9	8	0.89%
TOTAL	900	100.00%

There are systematic differences in students' knowledge across socioeconomic groups and attitudes. Although these differences are relatively small (5 to 6 percentage points), statistical tests indicate that the differences are systematic and not driven by sampling errors. For example, children of parents with college education and students who do not affiliate with any religious denomination know more about climate change than their counterparts. African-American students answer correctly fewer questions on climate change than students of other races or ethnicities. The difference holds after controlling for additional characteristics such as parents' education, gender, and political preference, among others. Table 2 shows differences between means that are statistically significant at the 5 percent level or better.

Table 2: Climate Change Knowledge: Difference in means

	Responses	Mean Score
Male	357	55.3
Female	543	49.5
African-American	114	51.9
Other Race/Ethnicity	781	58.3
At least one parent has college education	137	62.2
No parent has college education	686	57.1
Democrat	378	59.8
Republican/Neither	457	56.4
Interested in politics	154	62.7
Not interested in politics	744	56.5
No religious denomination	100	64.0
Some religious denomination	780	56.8
Religion very important or important	385	55.4
Religion somewhat important or not at all	510	59.3
Never talk in school about the environment	91	53.5
Talk in school about the environment at least occasionally	808	58.0
Never talk with friends about the environment	360	54.1
Talk with friends about the environment at least occasionally	540	59.9

High-school students who discuss issues about the environment at least occasionally with their friends and family know more about the causes and consequences of climate change than their counterparts do. However, discussing environmental issues in school does not appear to influence knowledge. Interest in politics and preference for the Democratic Party are also positively related to students' knowledge.

We also use regression analysis to estimate the effects of socioeconomic factors and learning environment on the score, assuming all other explanatory variables are held constant. We present the results in Appendix A, Table 1. Based on these estimates, we can compare the expected score of high-school students with different socio-economic profiles. For example, a male student who learns about climate change in a special class about the natural environment and who has at least one parent with college education scores approximately 13 percentage

points higher than a female student who learns about climate change in a science class and who does not have parents with college education, everything else equal.

## 2.2 Sources of information about the environment and climate change

Almost 50 percent of the respondents say they learn the most about climate change in school. A similar proportion of students have learned the most in the media. Interestingly, there is no evidence that relying on the media rather than on school to learn about climate change affects a student’s knowledge, on average. On the other hand, individuals who learn the most using the Internet do better than the average. Respondents who say they learn the most from the Internet also claim to be paying more attention to this issue than the rest.

Table 3: Learn the most about global climate change

Source	Responses	Frequency	Average Score
Family	57	6.38%	55.8
School	363	47.03%	57.5
TV news	254	28.44%	55.6
TV shows or movies	65	7.28%	60.0
Radio, newspapers, or magazines	63	7.05%	58.4
Internet	91	10.19%	62.0
Total	893	100%	

Although in school the majority of students learn about climate change in science courses, those students who learn about climate change in a special class about the natural environment or in some other class (such as English or Social Studies) do better on the quiz than the rest of students.

Table 4: In school, which course has taught you the most?

Course	Responses	Frequency	Average Score
Regular science class	531	59.26%	56.4
Geography class	107	11.94%	55.5
Special class about the environment	52	5.80%	63.7
Other class such as English or Social Studies	84	9.38%	63.0
Field trip to a park or museum	23	2.57%	56.0
Expert or group talk about climate change	48	5.36%	59.0
None of these	51	5.69%	56.9
Total	896	100%	

### 2.3 Policy preferences

The questionnaire also ask students whether they think the U.S. should start reducing greenhouse gas (GHG) emissions now or they think the U.S. should wait until there is more scientific evidence about the future benefits of reducing GHGs. Almost 71 percent of the respondents believe the U.S. should start reducing greenhouse gasses now. Children of households with at least one parent with college education are 9 percent more likely to believe efforts to reduce GHGs should start now. Students who identify as Democrats are almost 11 percent more likely, while students who are very interested in politics are 14 percent more likely to believe efforts to reduce GHGs should start now. Individuals who talk about environmental issues at least occasionally with friends and family are 19 percent and 10 percent more likely to believe efforts to reduce GHGs should start now, respectively, than their counterparts. Table 5 presents differences in proportions that are statistically significant at the 5 percent level or better.

Table 5: Difference in proportions: Start reducing greenhouse gasses now

	Responses	Start reducing greenhouse gasses now
African-American	114	61.40%
Other Race/Ethnicity	774	72.09%
At least one parent has college education	136	70.00%
No parent has college education	680	79.41%
Democrat	378	76.19%
Republican/Neither	451	65.41%
No religious denomination	99	82.83%
Some religious denomination	775	69.42%
Interested in politics	153	82.35%
Not interested in politics	738	68.42%
Never talk with friends about the environment	356	59.27%
Talk with friends about the environment at least occasionally	537	78.40%
Never talk with family about the environment	254	73.40%
Talk with family about the environment at least occasionally	639	64.17%



In order to explore how politically important the issue of climate change might be in the future, we also ask respondents how likely it is that a candidate’s position about climate change will strongly influence their vote the first time they vote. Only 20 percent of the students say it is very likely that a candidate’s position about climate change will strongly influence their vote.

Table 6: Candidate’s positions will strongly influence vote

Likelihood	Responses	% Frequency
Very likely	183	20.40
Somewhat likely	527	58.75
Somewhat unlikely	110	12.26
Very unlikely	77	8.58
TOTAL	897	100.00

There are also large and statistically significant differences across socioeconomic groups in the likelihood that climate change will be an important political issue for high-school students. Again, we find that there is a positive relationship between discussing environmental issues with friends and family, but not in school, and pro-environment preferences.

Table 7: Difference in proportions: Candidate’s position will strongly influence vote

	Responses	Very Likely a candidate’s position about climate change will strongly influence vote
Democrat	377	27.06%
Republican/Neither	455	14.73%
Interested in politics	153	33.99%
Not interested in politics	743	17.63%
Never talk with friends about the environment	359	14.48%
Talk with friends about the environment at least occasionally	538	24.35%
Never talk with family about the environment	255	14.12%
Talk with family about the environment at least occasionally	642	22.90%

## 2.4 Risk Perceptions

Only 28 percent of the students say it is very likely that climate change will affect them personally in the future. African-American students are 12 percent more likely to believe that climate change will very likely affect them personally in the future than students from any other ethnic and racial background. Individuals who talk about environmental issues at least occasionally with friends are almost 18 percent more likely to believe that climate change will very likely affect them personally in the future than their counterparts. Students who show stronger pro-environment attitudes are more certain that climate change will affect them personally in the future. Consistent with this relatively low concern with the personal effects of climate change, only 11 percent of the respondents believe climate change is the most serious environmental problem, behind air pollution, water pollution and toxic waste.

Interestingly, high-school students who believe it is very likely that climate change will affect them personally in the future do not seem to engage in more pro-environment behaviors than high-school students who think it is somewhat likely or unlikely. However, how students perceive risk is correlated with their knowledge and political preferences. Those who believe they will experience the effects of climate change in their lives are 17 percent more likely to state the U.S. should start reduce GHGs now than their counterparts. In addition, these individuals are 19 percent more likely to say a candidate's position on climate change issues will affect their vote.

Table 8: Very Likely climate change will affect you personally in the future?

	Responses	Yes	No
Average Quiz Score	894	5.40	5.09
Proportion who believe the U.S. should start reducing its production of greenhouse gasses	889	83%	66%
Proportion who claim a candidate's position about climate change will strongly influence vote	891	34%	15%

Table 9: Difference in proportions: Climate change will affect you personally

	Responses	Very Likely climate change will affect you personally in the future
African-American	113	38.94%
Other Race/Ethnicity	776	26.67%
Democrat	375	32.27%
Republican/Neither	455	24.39%
Interested in politics	151	37.75%
Not interested in politics	741	26.18%
Never talk with friends about the environment	358	17.60%
Talk with friends about the environment at least occasionally	536	35.26%
Strongly agree or mildly agree humans has a right to modify the natural environment	591	25.89%
Strongly disagree or mildly disagree humans has a right to modify the natural environment	298	32.89%
Strongly agree or mildly agree humans are severely abusing the environment	743	30.01%
Strongly disagree or mildly disagree humans are severely abusing the environment	150	18.67%

## 2.5 Environmental attitudes

Although 66 percent of the respondents agree that humans have the right to modify the natural environment, a clear majority of respondents think that the earth's resources are limited and mankind is abusing the environment. Attitudes about the role of technology in solving these problems are evenly distributed. These responses suggest that the individuals in this sample of American youth are not hard-core environmentalists but share the belief that humans are depleting scarce natural resources.

Table 10: Distribution of Environmental Attitudes (responses in parentheses)

	Strongly Agree	Mildly Agree	Mildly Disagree	Strongly Disagree
Humans have the right to modify the natural environment	24.94% (223)	41.61% (372)	23.04% (206)	10.40% (93)
The earth is like a spaceship with only limited room and resources	46.59% (417)	30.84% (276)	12.96% (116)	9.61% (86)
Technology will ensure that we do not make the earth unlivable	14.46% (127)	36.45% (320)	31.66% (17.43)	17.43% (153)
Mankind is severely abusing the environment.	50.17% (451)	33.15% (298)	11.23% (101)	5.45% (49)

## 2.6 Pro-environment behaviors

Making efforts to conserve water is the most frequent behavior for the individuals in this sample. The least common frequent activity is to try to reduce the amount of waste the person generates. On average, men engage more frequently than women in these pro-environment behaviors. African-American students engage in fewer pro-environment behaviors in general than their counterparts. Students who are very interested in politics make more frequent efforts than students who are not that interested in politics. Talking at least occasionally about the environment with friends and family is positively related to frequent pro-environment behaviors, but talking in the classroom is not.

Table 11: Distribution of Pro-environment Behaviors (responses in parentheses)

	Frequently	Occasionally	Never	Total
Return bottles or cans to a store or recycling center	45.44% (409)	31.67% (285)	22.89% (206)	900
Sort trash to recycle	47.05% (423)	31.70% (285)	21.25% (191)	899
Don't waste water	65.00% (585)	23.22% (209)	11.78% (106)	900
Cut down on the amount of trash you make	34.56% (309)	45.53% (407)	19.91% (178)	894

There is no observable difference in pro-environment efforts between high-school students who strongly agree with the statement that we must consider the impact that our actions will have for the welfare of future generations (almost 83 percent of the responses) and those who mildly agree with the statement or disagree. On the other hand, students who strongly agree with the statement that we must consider the impact that our actions will have for the well-being of people living in other countries (almost 70 percent of the responses) engage in more efforts than those who mildly agree with the statement or disagree with the statement.

### **3. Conclusions**

American high-school students do not understand climate change issues well. Despite the conventional assumption that the media might misrepresent the scientific consensus on climate change, the results of this survey suggest that whether students learn the most about climate change from the media or in school does not influence a student's understanding of the issues. Teaching students about climate change outside typical science courses, for example, in a special class dedicated to the natural environment, appears to increase the students' knowledge. Discussion of environmental issues in the schools is unrelated to pro-environment attitudes and behaviors. On the other hand, the responses to this survey consistently show that a student's social environment is correlated with his or her knowledge of climate change issues as well as with his or her environmental values and behaviors. High-school students who discuss issues about the environment at least occasionally with their friends and family engage in more pro-environment behaviors, know more about the causes and consequences of climate change, and are more likely to claim that the U.S. should start reducing greenhouse gasses now than their counterparts do.

#### 4. Appendix A: Results Ordinary Least Squares Regression Model

Appendix Table 1: Dependent variable is percentage points in climate change quiz

	Coefficient	p-value
Senior	2.32	(0.119)
<b>Junior</b>	<b>3.19</b>	<b>(0.022)</b>
<b>Male</b>	<b>5.15</b>	<b>(0.000)</b>
<b>African-American</b>	<b>-5.79</b>	<b>(0.002)</b>
<b>Democrat</b>	<b>3.50</b>	<b>(0.005)</b>
Interested in politics	3.09	(0.051)
<b>No religious denomination</b>	<b>5.53</b>	<b>(0.005)</b>
<b>At least one parent has college education</b>	<b>3.43</b>	<b>(0.033)</b>
Two-parent household	-0.65	(0.633)
<b>Never talk with Friends about environmental issues</b>	<b>-3.87</b>	<b>(0.003)</b>
Never talk with Family about environmental issues	1.78	(0.200)
Never talk in School about environmental issues	-2.38	(0.257)
In School, learn about climate change in geography class	-1.05	(0.574)
<b>In School, learn about climate change in special natural environment</b>	<b>5.81</b>	<b>(0.024)</b>
<b>In School, learn about climate change in other class (e.g. English, Social Studies)</b>	<b>5.32</b>	<b>(0.009)</b>
In School, learn about climate change in Field trip to park or museum	2.35	(0.533)
In School, learn about climate change listening to an expert or group	-2.24	(0.394)
Learn the most about climate change in your family	0.66	(0.799)
Learn the most about climate change in TV news	-0.25	(0.860)
Learn the most about climate change in TV shows	-0.36	(0.879)
Learn the most about climate change in the radio	0.87	(0.722)
<b>Learn the most about climate change in the Internet</b>	<b>4.35</b>	<b>(0.034)</b>
School size: 500 -1,000	0.87	(0.608)
School size: 1,000-2,000	1.23	(0.481)
School size: Over 2,000	0.03	(0.987)
Public school	-1.23	(0.573)
South	1.55	(0.391)
Great Lakes/Central	2.01	(0.252)
West	1.26	(0.541)
Constant	51.35	(0.000)

Observations: 736; R-squared =.15.

We can interpret the value of the estimate of each variable as the number of percentage points the score increases (positive sign) or decreases (negative sign) compared to the average score of the default category. The results are qualitatively and statistically robust to changes in the model's specification.

Default class is science class; Default source is "Learn the most about climate change in school;" Default school size is fewer than 500 students; Default region is Northeast.

In bold, estimates that are statistically significant at the 5 percent level or better.

**5. Appendix B: Responses to all questions**

1. What year are you in school?

Grade	Count	% Frequency
Sophomore	343	38.11
Junior	302	33.56
Senior	255	28.33
TOTAL	900	100.00

2. Is your high-school public, private, or a religious school?

Type of School	Count	% Frequency
Public	820	91.21
Private	40	4.45
Religious	28	3.11
Other	11	1.22
TOTAL	899	100.00

3. Approximately, how big is your high-school?

Size of School (in # of students)	Count	% Frequency
Under 500	189	21.43
500 -1,000	271	30.73
1,000 - 2,000	248	28.12
Over 2,000	174	19.73
TOTAL	882	100.00

4. These are some environmental issues and problems people talk about. Which of these problems do you think is the most serious?

Environmental Problem	Count	% Frequency
Air Pollution	296	33.45
Pollution of lakes, rivers, and streams	167	18.87
Climate Change	94	10.62
Pollution from toxic or hazardous dump sites	130	14.69
Not enough energy, oil, electricity, etc.	198	22.37
TOTAL	885	100.00

5. How often do you discuss environmental issues and problems with your friends?

How Often?	Count	% Frequency
Frequently	75	8.33
Occasionally	465	51.67
Never	360	40.00
TOTAL	900	100.00

6. How often do you discuss environmental issues and problems with your family?

How Often?	Count	% Frequency
Frequently	130	14.44
Occasionally	515	57.22
Never	255	28.33
TOTAL	900	100.00

7. How often do you discuss environmental issues and problems in school?

How Often?	Count	% Frequency
Frequently	297	33.04
Occasionally	511	56.84
Never	91	10.12
TOTAL	899	100.00

8. Humans have the right to modify the natural environment

Opinion	Count	% Frequency
Strongly Agree	223	24.94
Mildly Agree	372	41.61
Mildly Disagree	206	23.04
Strongly Disagree	93	10.40
TOTAL	894	100.00

9. The earth is like a spaceship with only limited room and resources

Opinion	Count	% Frequency
Strongly Agree	417	46.59
Mildly Agree	276	30.84
Mildly Disagree	116	12.96
Strongly Disagree	86	9.61
TOTAL	895	100.00

10. Technology will ensure that we do NOT make the earth unlivable

Opinion	Count	% Frequency
Strongly Agree	127	14.46
Mildly Agree	320	36.45
Mildly Disagree	278	31.66
Strongly Disagree	153	17.43
TOTAL	878	100.00

11. Mankind is severely abusing the environment.

Opinion	Count	% Frequency
Strongly Agree	451	50.17
Mildly Agree	298	33.15
Mildly Disagree	101	11.23
Strongly Disagree	49	5.45
TOTAL	899	100.00



12. We must consider the impact that our actions will have for the welfare of future generations

Opinion	Count	% Frequency
Strongly Agree	743	82.74
Mildly Agree	129	14.37
Mildly Disagree	17	1.89
Strongly Disagree	9	1.00
TOTAL	898	100.00

13. We must consider the impact that our actions will have for the well-being of people living in other countries

Opinion	Count	% Frequency
Strongly Agree	623	69.69
Mildly Agree	230	25.73
Mildly Disagree	31	3.47
Strongly Disagree	10	1.12
TOTAL	894	100.00

14. As you may know, the issue of global climate change has been the subject of public discussion over the last few years. On a scale of 1 to 10, where 1 means “no attention” and 10 means “close and constant attention,” how much attention have you paid to the issue of global climate change?

How much attention?	Count	% Frequency
1	62	6.90
2	43	4.79
3	99	11.02
4	114	12.69
5	179	19.93
6	155	17.26
7	150	16.70
8	74	8.24
9	11	1.22
10	11	1.22
TOTAL	898	100.00

15. How much do you feel you know about the issue of climate change? Would you say you know...

How much knowledge?	Count	% Frequency
A lot	35	3.89
A fair amount	465	51.67
A little	308	34.22
Practically nothing	92	10.22
TOTAL	900	100.00

16. From which of these sources have you learned the most about global climate change?

Source	Count	% Frequency
Family	57	6.38
School	363	40.65
TV news	254	28.44
Other TV shows, movies	65	7.28
Radio, newspapers, or magazines	63	7.05
The Internet	91	10.19
TOTAL	893	100.00

17. Among the ways that you have learned about global climate change in school, which one way taught you the most?

School Source	Count	% Frequency
Regular science class	531	59.26
Geography class	107	11.94
Special natural environment class	52	5.80
Other class (e.g. English, Social Studies)	84	9.38
Field trip to park or museum	23	2.57
Listened to an expert or group	48	5.36
None of these	51	5.69
TOTAL	896	100.00

18. Do most scientists expect the number of floods to...

Consensus	Count	% Frequency
Stay the same	90	10.99
Increase	665	81.20
Decrease	64	7.81
TOTAL	819	100.00

19. Do most scientists expect temperatures to...

Consensus	Count	% Frequency
Stay the same	43	4.97
Increase	739	85.43
Decrease	83	9.60
TOTAL	865	100.00

20. Do most scientists expect the number of droughts to...

Consensus	Count	% Frequency
Stay the same	135	16.15
Increase	528	63.16

Decrease	173	20.69
TOTAL	836	100.00

21. Do most scientists expect ocean levels to...

Consensus	Count	% Frequency
Stay the same	66	7.49
Increase	599	67.99
Decrease	216	24.52
TOTAL	881	100.00

Many scientists have argued that global average temperatures have risen slightly and will continue to increase for many years as a result of human activities. To the best of your knowledge, which of the following causes do these scientists believe raise global temperatures?

22. Do scientists believe disposal of toxic chemicals in landfills cause global temperatures to rise?

Consensus	Count	% Frequency
Yes	647	74.45
No	222	25.55
TOTAL	869	100.00

23. Do scientists believe exhaust from cars and trucks cause global temperatures to rise?

Consensus	Count	% Frequency
Yes	818	91.81
No	73	8.19
TOTAL	891	100.00

24. Do scientists believe radiation from nuclear power plants cause global temperatures to rise?

Consensus	Count	% Frequency
Yes	712	81.93
No	157	18.07
TOTAL	869	100.00

25. Do scientists believe coal-powered electricity plants cause global temperatures to rise?

Consensus	Count	% Frequency
Yes	565	66.00
No	291	34.00
TOTAL	856	100.00

26. To the best of your knowledge, how much do scientists think the average global temperature will increase over the next 50 to 70 years? Is it...

Range (in degrees Fahrenheit)	Count	% Frequency
0-1	60	6.90
2-5	368	42.35
6-9	273	31.42
10 or more	168	19.33
TOTAL	869	100.00

Some climate scientists think that average global temperatures are rising because greenhouse gasses from burning coal and oil are released into the atmosphere. **Supporters** of reducing greenhouse gasses say that slowing the rise in global temperatures now is an important step to stop or adapt to rising sea levels and more extreme weather. **Opponents** say it will impose excessive costs on consumers in return for uncertain benefits.

27. In your opinion, how likely is it that climate change will affect you personally in the future?

Likelihood	Count	% Frequency
Very likely	252	28.19
Somewhat likely	447	50.00
Somewhat unlikely	129	14.43
Very unlikely	66	7.38
TOTAL	894	100.00

28. Do you think the US should start reducing its production of greenhouse gasses now or do you think the US should wait until there is more scientific evidence about the future benefits of reducing greenhouse gasses?

When?	Count	% Frequency
The US should start now	632	70.77
The US should wait	261	29.23
TOTAL	893	100.00

29. Using a scale from one to ten, where 1 means “not at all important” and 10 means “extremely important,” how important is it that the United States reduces its production of greenhouse gasses even if this results in higher prices for energy and gasoline?

Scale	Count	% Frequency
1	12	1.35
2	13	1.46
3	37	4.15
4	48	5.38
5	143	16.03
6	126	14.13
7	181	20.29
8	153	17.15
9	62	6.95
10	117	13.12
TOTAL	892	100.00

30. How likely is it that a candidate’s position about climate change will strongly influence your vote the first time you vote?

Likelihood	Count	% Frequency
Very likely	183	20.40
Somewhat likely	527	58.75
Somewhat unlikely	110	12.26
Very unlikely	77	8.58
TOTAL	897	100.00

31. In the last year, have you participated in community affairs or voluntary activities?

Participation	Count	% Frequency
Yes	666	74.33
No	230	25.67
TOTAL	896	100.00

32. By any chance, have you yourself joined a group or club at school where people can work with each other to help do things for the environment?

Membership	Count	% Frequency
Yes	328	36.53
No	570	63.47
TOTAL	898	100.00

I will read you now a list of things some people do to help the environment. How often do you, on your own, do the following?

33. Return bottles or cans to a store or recycling center

How Often?	Count	% Frequency
Frequently	409	45.44
Occasionally	285	31.67
Never	206	22.89
TOTAL	900	100.00

34. Sort trash to recycle things like newspapers, cans, glass bottles, etc.

How Often?	Count	% Frequency
Frequently	423	47.05
Occasionally	285	31.70
Never	191	21.25
TOTAL	899	100.00

35. Don't waste water, for example, turn off the water when you are brushing your teeth

How Often?	Count	% Frequency
Frequently	585	65.00
Occasionally	209	23.22
Never	106	11.78
TOTAL	900	100.00

36. Cut down on the amount of trash and garbage you make

How Often?	Count	% Frequency
Frequently	309	34.56
Occasionally	407	45.53
Never	178	19.91
TOTAL	894	100.00

38. Which category best describes your ethnic or racial background?

Race	Count	% Frequency
White	605	67.60
Black or African American	114	12.74
Hispanic	88	9.83
Asian	32	3.58
Other	56	6.26
TOTAL	895	100.00

39. Is English the language you and your family usually speak at home?

English?	Count	% Frequency
Yes	824	91.76
No	74	8.24
TOTAL	898	100.00

40. How many people live in your household, including yourself?

Household Size	Count	% Frequency
2	44	4.89
3	185	20.56
4	311	34.56
5	210	23.33
6 or more	150	16.67
TOTAL	900	100.00

41. Do you live with...

Household Composition	Count	% Frequency
Both parents	625	70.07
Your mother only	129	14.46
Your mother and stepfather	60	6.73
Your father only	36	4.04
Your father and stepmother	28	3.14
Neither parent	14	1.57
TOTAL	892	100.00

42. To the best of your knowledge, how much education did your father complete?

Education level	Count	% Frequency
Did not complete high-school	63	7.13
High-school	195	22.06
Some college	114	12.90
College graduate	211	23.87
Post graduate education	90	10.18
Don't live with father	211	23.87
TOTAL	884	100.00

43. To the best of your knowledge, how much education did your mother complete?

Education Level	Count	% Frequency
Did not complete high-school	47	5.33
High-school	187	21.23
Some college	169	19.18
College graduate	302	34.28
Post graduate education	90	10.22
Don't live with mother	86	9.76
TOTAL	881	100.00

44. How important is religion in your life. Would you say it is...

Importance	Count	% Frequency
Very important	385	43.02
Rather important	298	33.30
Not very important	131	14.64
Not at all important	81	9.05
TOTAL	895	100.00

45. Do you consider yourself...

Religion	Count	% Frequency
Protestant	233	26.48
Catholic	247	28.07
Jewish	11	1.25
Muslim	8	0.91
Some other religion	281	31.93
No religion	100	11.36
TOTAL	880	100.00

46. How interested would you say you are in politics?

Interest Level	Count	% Frequency
Very interested	154	17.15
Somewhat interested	446	49.67
Not very interested	182	20.27
Not at all interested	116	12.92
TOTAL	898	100.00

47. Which political party do you most prefer: the Democrats or the Republicans?

Political Party	Count	% Frequency
Democrats	378	45.27
Republicans	315	37.72
Neither	142	17.01
TOTAL	835	100.00



48. How much time do you usually spend watching television on an average weekday?

Time Range (in hours per day)	Count	% Frequency
1-2	448	49.89
2-3	179	19.93
3-4	119	13.25
4-5	44	4.90
More than 5	44	4.90
Do not watch TV or do not have access to TV	64	7.13
TOTAL	898	100.00

49. How much time do you usually spend using the Internet on an average weekday?

Time Range (in hours per day)	Count	% Frequency
1-2	446	49.94
2-3	175	19.60
3-4	94	10.53
4-5	43	4.82
More than 5	67	7.50
Do not use the Internet or do not have access to the Internet	68	7.61
TOTAL	893	100.00

50. Gender

Gender	Count	% Frequency
Female	543	60.33
Male	357	39.67
TOTAL	900	100.00

51. Geographical Region

Region	Count	% Frequency
Northeast	160	17.78
South	285	31.67
Great Lakes/Central	311	34.56
West	144	16.00
TOTAL	900	100.00