

# AMERICAN OPINIONS ON GLOBAL WARMING

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## Contents

- [Executive Summary](#)
- [Simplified Results](#) (summary % for each policy)
  - [Table 1](#): Awareness
  - [Table 2](#): Concern
  - [Table 3](#): U.S. Reduce Emissions
  - [Table 4](#): Regulate CO<sub>2</sub>
  - [Table 5](#): Subsidize Renewable Energy
  - [Table 6](#): Gas Guzzler Tax
  - [Table 7](#): Business Energy Tax
  - [Table 8](#): Gas Tax
  - [Table 9](#): Kyoto Protocol
  - [Table 10](#): U.S. Act Regardless
  - [Table 11](#): International Emissions Market
- [Summary Chart](#) (% support for all National and International policies)
- [Detailed Results](#) (results broken down by Political Identification, Political Ideology, and Geographic Region – see “[How to Interpret Detailed Results](#)”)
  - [Table 1](#): Awareness
  - [Table 2](#): Concern
  - [Table 3](#): U.S. Reduce Emissions
  - [Table 4](#): Regulate CO<sub>2</sub>
  - [Table 5](#): Subsidize Renewable Energy
  - [Table 6](#): Gas Guzzler Tax
  - [Table 7](#): Business Energy Tax
  - [Table 8](#): Gas Tax
  - [Table 9](#): Kyoto Protocol
  - [Table 10](#): U.S. Act Regardless
  - [Table 11](#): International Emissions Market
- [Methodology](#) (study methods)

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# Executive Summary

Anthony Leiserowitz and the University of Oregon Survey Research Laboratory (OSRL) conducted a national survey entitled "American Opinions on Global Warming" between November 2002 and February 2003 (n=673).

This research found that of those Americans who have heard of global warming (92%):

- Over 90% think the United States should reduce its greenhouse gas emissions.
- A strong majority (77%) support government regulation of carbon dioxide as a pollutant and investment in renewable energy (71%).
- A strong majority (88%) support the Kyoto Protocol and (76%) want the United States to reduce greenhouse gas emissions regardless of what other countries do.
- While a majority favor a tax on "gas guzzlers" (54%), strong majorities oppose a gasoline tax (78%) or a business energy tax (60%) to reduce greenhouse gas emissions.
- They divide evenly (40%) regarding a market-based emissions trading system, while 18% are uncertain.
- Democrats and Liberals express stronger support for climate change policies than Republicans and Conservatives.
- Independents and Moderates show levels of support more similar to Democrats and Liberals than to Republicans and Conservatives.
- Nonetheless, majorities of Republicans and Conservatives support most climate change policies.

# Simplified Results

## PUBLIC AWARENESS AND CONCERN ABOUT GLOBAL WARMING

**Table 1: Awareness**

“Have you ever heard of global warming?”

	%
Yes	92
No	8
Total	100

**Table 2: Concern**

“How concerned are you about global warming?”

	%
Somewhat/Very concerned	75
Not very/Not at all concerned	24
No response	1
Total	100

## NATIONAL POLICIES

**Table 3: U.S. Reduce Emissions**

“Do you think the United States should reduce its emissions of the greenhouse gases (carbon dioxide, methane, etc.) that are said to cause global warming?”

	%
Probably/Definitely Yes	90
Probably/Definitely No	7
No response	3
Total	100

**Table 4: Regulate CO<sub>2</sub>**

“Carbon dioxide is the primary greenhouse gas said to be causing global warming and is produced by electric power plants and motor vehicles (e.g., cars, trucks and sport utility vehicles). Currently, carbon dioxide is not regulated as a pollutant. How much do you support or oppose the regulation of carbon dioxide as a pollutant?”

	%
Somewhat/Strongly Support	77
Somewhat/Strongly Oppose	20
No response	3
Total	100

### Table 5: Subsidize Renewable Energy

“The United States government provides approximately \$5 billion a year in subsidies to the fossil fuel industry (coal, oil, natural gas). Some people have proposed transferring these subsidies to the renewable energy industry (wind, solar, biomass, etc.) to develop cleaner forms of energy. This would make fossil fuels more expensive and renewable energy less expensive. How much do you support or oppose this proposal?”

	%
Somewhat/Strongly Support	71
Somewhat/Strongly Oppose	17
Don't know	9
No response	3
Total	100

### Table 6: Gas Guzzler Tax

“In order to encourage people to use more fuel-efficient vehicles, some people have proposed a 5 percent "gas guzzler" tax on cars, trucks and sport utility vehicles that get less than 25 miles per gallon. This would add approximately \$1,000 to the price of a \$20,000 car. How much do you support or oppose this proposal?”

	%
Somewhat/Strongly Support	54
Somewhat/Strongly Oppose	40
Don't know	3
No response	3
Total	100

### Table 7: Business Energy Tax

“To encourage industry to be more fuel efficient, some people have proposed a business energy tax. This tax would raise the average price of most things you buy, including food and clothing, by 3 percent, or approximately \$380 per person per year. How much do you support or oppose this proposal?”

	%
Somewhat/Strongly Support	31
Somewhat/Strongly Oppose	60
Don't know	6
No response	3
Total	100

### Table 8: Gas Tax

“How much do you support or oppose a 60-cent per gallon gasoline tax, over and above existing gas taxes, to encourage people to drive less and thus reduce carbon dioxide emissions?”

	%
Somewhat/Strongly Support	17
Somewhat/Strongly Oppose	78
Don't know	2
No response	3
Total	100

## INTERNATIONAL POLICIES

**Table 9: Kyoto Protocol**

“In 1997, the United States and other developed countries made an agreement called the Kyoto Protocol to collectively reduce their emissions of greenhouse gases. The United States agreed to reduce its emissions by 7% by the year 2010. How much do you favor or oppose this agreement?”

	%
Somewhat/Strongly Favor	88
Somewhat/Strongly Oppose	10
No response	2
Total	100

**Table 10: U.S. Act Regardless**

“The United States currently emits about 20% of the world's total greenhouse gases. People disagree whether the U.S. 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 emissions...

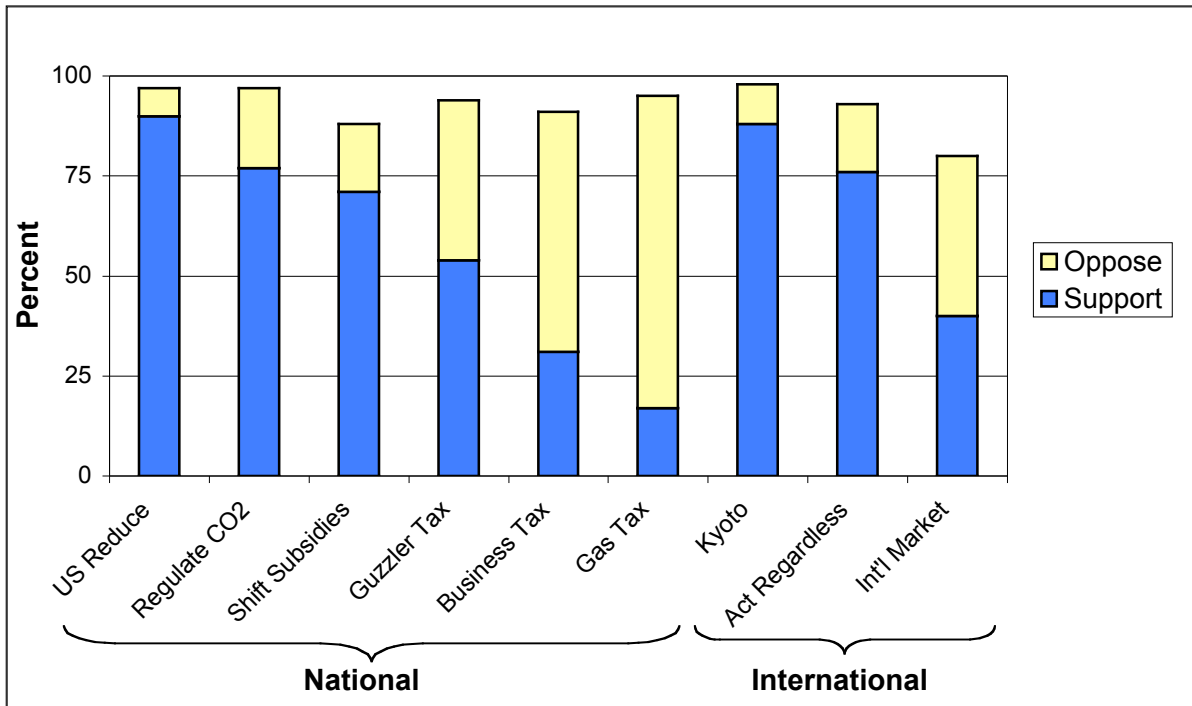
	%
...regardless of what other countries do.	76
...only if all other industrialized countries reduce their emissions.	7
...only if all other industrialized and all less-developed countries reduce their emissions.	8
The United States should not reduce its emissions.	2
Don't know.	5
No response	2
Total	100

**Table 11: International Emissions Market**

“One controversial proposal to solve global warming is to create an international market in greenhouse gases. In this system, all countries agree to a global cap on emissions. Each country then gets the right to emit a portion of this global amount. If a country emits more than its portion, it must buy more emission rights from other countries or else pay stiff fines. In principle, how much do you support or oppose an international market that allows countries to buy and sell greenhouse gases?”

	%
Somewhat/Strongly Support	40
Somewhat/Strongly Oppose	40
Don't know	18
No response	2
Total	100

**Americans' Support for National and International Policies  
January, 2003**





# Detailed Results

## PUBLIC AWARENESS AND CONCERN ABOUT GLOBAL WARMING

**Table 1: Awareness**

“Have you ever heard of global warming?”

	%
<b>Yes</b>	<b>92</b>
<b>No</b>	<b>8</b>
Total	100

**Table 2: Concern**

“How concerned are you about global warming?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Concerned (total)</b>	<b>75</b>	<b>86</b>	<b>80</b>	<b>62</b>	<b>90</b>	<b>79</b>	<b>55</b>	<b>80</b>	<b>70</b>	<b>75</b>	<b>76</b>
Very concerned	26	42	28	13	44	21	16	29	24	24	29
Somewhat concerned	49	45	51	49	46	58	39	52	46	51	47
<b>Not concerned (total)</b>	<b>24</b>	<b>12</b>	<b>20</b>	<b>38</b>	<b>9</b>	<b>20</b>	<b>44</b>	<b>20</b>	<b>27</b>	<b>24</b>	<b>24</b>
Not very concerned	18	9	12	29	6	16	31	16	18	17	19
Not at all concerned	7	3	7	9	3	4	13	4	9	7	5

### How to Interpret Detailed Results (for the above table)

*Reading across:* For **Political ID**, 86% of Democrats, 80% of Independents, and 62% of Republicans are concerned (total) about global warming. For **Political Ideology**, 90% of Liberals, 79% of Moderates and 55% of Conservatives are concerned (total). For **Region**, 80% of respondents in the Northeast, 70% in the South, 75% in the Midwest, and 76% in the West are concerned (total) about global warming.

*Reading down:* A **Total** of 75% of all respondents said they were very (26%) to somewhat (49%) concerned, while 24% said they were not very (18%) to not at all (7%) concerned about global warming. Among **Republicans**, a total of 62% said they were very (13%) to somewhat (49%) concerned, while a total of 38% said they were not very (29%) to not at all concerned (9%).

\*Note: Results are rounded to the nearest whole number. Columns do not always total 100% due to a small percentage of respondents who did not answer every question.

## NATIONAL POLICIES

**Table 3: U.S. Reduce Emissions**

“Do you think the United States should reduce its emissions of the greenhouse gases (carbon dioxide, methane, etc.) that are said to cause global warming?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Yes (total)</b>	<b>90</b>	<b>94</b>	<b>91</b>	<b>87</b>	<b>96</b>	<b>91</b>	<b>84</b>	<b>95</b>	<b>88</b>	<b>91</b>	<b>88</b>
Definitely yes	58	71	62	44	75	59	42	66	57	57	54
Probably yes	32	23	29	43	21	33	43	29	31	34	34
<b>No (total)</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>12</b>	<b>3</b>	<b>6</b>	<b>14</b>	<b>5</b>	<b>9</b>	<b>6</b>	<b>9</b>
Probably no	6	3	5	9	2	6	10	3	7	4	8
Definitely no	2	1	1	3	1	1	5	2	3	1	1

**Table 4: Regulate CO<sub>2</sub>**

“Carbon dioxide is the primary greenhouse gas said to be causing global warming and is produced by electric power plants and motor vehicles (e.g., cars, trucks and sport utility vehicles). Currently, carbon dioxide is not regulated as a pollutant. How much do you support or oppose the regulation of carbon dioxide as a pollutant?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Support (total)</b>	<b>77</b>	<b>84</b>	<b>81</b>	<b>69</b>	<b>86</b>	<b>84</b>	<b>62</b>	<b>85</b>	<b>75</b>	<b>79</b>	<b>71</b>
Strongly support	34	43	43	20	48	36	18	46	28	36	29
Somewhat support	43	41	38	49	38	48	44	39	47	43	42
<b>Oppose (total)</b>	<b>20</b>	<b>13</b>	<b>16</b>	<b>30</b>	<b>12</b>	<b>14</b>	<b>36</b>	<b>14</b>	<b>21</b>	<b>19</b>	<b>27</b>
Somewhat oppose	14	10	12	19	10	11	23	10	14	12	21
Strongly oppose	6	3	5	10	2	4	13	5	7	7	5

**Table 5: Subsidize Renewable Energy**

“The United States government provides approximately \$5 billion a year in subsidies to the fossil fuel industry (coal, oil, natural gas). Some people have proposed transferring these subsidies to the renewable energy industry (wind, solar, biomass, etc.) to develop cleaner forms of energy. This would make fossil fuels more expensive and renewable energy less expensive. How much do you support or oppose this proposal?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Support (total)</b>	<b>71</b>	<b>82</b>	<b>76</b>	<b>58</b>	<b>82</b>	<b>79</b>	<b>52</b>	<b>72</b>	<b>67</b>	<b>75</b>	<b>73</b>
Strongly support	29	45	31	12	49	27	14	33	29	27	31
Somewhat support	42	37	45	46	33	52	39	39	38	49	42
<b>Oppose (total)</b>	<b>17</b>	<b>12</b>	<b>12</b>	<b>26</b>	<b>12</b>	<b>11</b>	<b>29</b>	<b>11</b>	<b>21</b>	<b>12</b>	<b>22</b>
Somewhat oppose	11	9	7	16	11	7	16	3	15	7	18
Strongly oppose	6	2	5	10	1	4	13	8	6	5	4
Don't know	9	4	9	13	3	8	15	13	8	9	5

**Table 6: Gas Guzzler Tax**

“In order to encourage people to use more fuel-efficient vehicles, some people have proposed a 5 percent "gas guzzler" tax on cars, trucks and sport utility vehicles that get less than 25 miles per gallon. This would add approximately \$1,000 to the price of a \$20,000 car. How much do you support or oppose this proposal?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Support (total)</b>	<b>54</b>	<b>67</b>	<b>56</b>	<b>38</b>	<b>67</b>	<b>60</b>	<b>33</b>	<b>65</b>	<b>50</b>	<b>52</b>	<b>49</b>
Strongly support	23	34	17	15	40	19	15	28	22	18	30
Somewhat support	30	33	39	23	27	42	18	38	28	34	20
<b>Oppose (total)</b>	<b>40</b>	<b>28</b>	<b>36</b>	<b>56</b>	<b>29</b>	<b>33</b>	<b>59</b>	<b>27</b>	<b>42</b>	<b>41</b>	<b>46</b>
Somewhat oppose	14	13	12	17	14	14	16	5	15	19	14
Strongly oppose	26	15	25	39	15	19	43	22	27	23	32
Don't know	3	3	4	3	1	4	5	5	4	4	1

**Table 7: Business Energy Tax**

“To encourage industry to be more fuel efficient, some people have proposed a business energy tax. This tax would raise the average price of most things you buy, including food and clothing, by 3 percent, or approximately \$380 per person per year. How much do you support or oppose this proposal?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	4	%
<b>Support (total)</b>	<b>31</b>	<b>35</b>	<b>36</b>	<b>25</b>	<b>37</b>	<b>35</b>	<b>23</b>	<b>42</b>	<b>22</b>	<b>25</b>	<b>38</b>
Strongly support	7	11	7	2	13	6	2	9	5	4	11
Somewhat support	25	25	29	23	24	30	21	33	18	25	27
<b>Oppose (total)</b>	<b>60</b>	<b>57</b>	<b>54</b>	<b>67</b>	<b>53</b>	<b>58</b>	<b>68</b>	<b>47</b>	<b>69</b>	<b>61</b>	<b>55</b>
Somewhat oppose	23	29	18	20	30	24	16	16	29	21	22
Strongly oppose	37	28	35	46	24	34	52	31	40	40	33
Don't know	6	5	6	5	7	4	6	7	5	7	4

**Table 8: Gas Tax**

“How much do you support or oppose a 60-cent per gallon gasoline tax, over and above existing gas taxes, to encourage people to drive less and thus reduce carbon dioxide emissions?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Support (total)</b>	<b>17</b>	<b>24</b>	<b>16</b>	<b>10</b>	<b>29</b>	<b>14</b>	<b>10</b>	<b>21</b>	<b>12</b>	<b>19</b>	<b>15</b>
Strongly support	8	13	7	4	16	5	5	9	6	8	9
Somewhat support	9	12	9	7	13	10	5	13	6	11	6
<b>Oppose (total)</b>	<b>78</b>	<b>72</b>	<b>76</b>	<b>85</b>	<b>69</b>	<b>80</b>	<b>85</b>	<b>71</b>	<b>84</b>	<b>73</b>	<b>81</b>
Somewhat oppose	25	30	25	21	29	32	13	26	29	20	24
Strongly oppose	53	43	51	64	40	48	72	46	55	53	57
Don't know	2	2	5	1	1	3	2	4	1	4	1

## INTERNATIONAL POLICIES

**Table 9: Kyoto Protocol**

“In 1997, the United States and other developed countries made an agreement called the Kyoto Protocol to collectively reduce their emissions of greenhouse gases. The United States agreed to reduce its emissions by 7% by the year 2010. How much do you favor or oppose this agreement?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Favor (total)</b>	<b>88</b>	<b>94</b>	<b>88</b>	<b>83</b>	<b>97</b>	<b>92</b>	<b>76</b>	<b>96</b>	<b>83</b>	<b>90</b>	<b>86</b>
Strongly favor	53	62	57	43	71	56	37	62	52	61	33
Somewhat favor	35	32	30	40	26	37	39	34	30	29	53
<b>Oppose (total)</b>	<b>10</b>	<b>4</b>	<b>10</b>	<b>15</b>	<b>2</b>	<b>6</b>	<b>21</b>	<b>4</b>	<b>15</b>	<b>7</b>	<b>11</b>
Somewhat oppose	5	3	6	7	2	4	10	1	9	3	5
Strongly oppose	5	1	4	9	0	1	12	3	6	4	5

**Table 10: U.S. Act Regardless**

“The United States currently emits about 20% of the world's total greenhouse gases. People disagree whether the U.S. 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 emissions...

- ...regardless of what other countries do.
- ...only if all other industrialized countries reduce their emissions.
- ...only if all other industrialized and all less-developed countries reduce their emissions.
- ...The United States should not reduce its emissions.
- ...Don't know.”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
Regardless of other countries	76	83	84	65	93	80	55	80	72	80	71
Only if all industrialized	7	5	3	11	1	6	12	7	7	4	11
Only if all other countries	8	4	4	13	1	5	17	6	11	5	7
US should not reduce	2	1	1	4	1	1	5	1	2	3	1
Don't know	5	4	5	5	2	5	9	5	6	5	5

**Table 11: International Emissions Market**

“One controversial proposal to solve global warming is to create an international market in greenhouse gases. In this system, all countries agree to a global cap on emissions. Each country then gets the right to emit a portion of this global amount. If a country emits more than its portion, it must buy more emission rights from other countries or else pay stiff fines. In principle, how much do you support or oppose an international market that allows countries to buy and sell greenhouse gases?”

	Total	Political ID			Political Ideology			Region			
		Dem	Ind	Rep	Lib	Mod	Con	NE	S	MW	W
	%	%	%	%	%	%	%	%	%	%	%
<b>Support (total)</b>	<b>40</b>	<b>49</b>	<b>33</b>	<b>39</b>	<b>51</b>	<b>41</b>	<b>30</b>	<b>41</b>	<b>46</b>	<b>34</b>	<b>39</b>
Strongly support	13	12	16	11	15	15	9	14	9	17	12
Somewhat support	27	37	17	27	36	26	21	27	37	17	27
<b>Oppose (total)</b>	<b>40</b>	<b>34</b>	<b>44</b>	<b>41</b>	<b>38</b>	<b>37</b>	<b>47</b>	<b>37</b>	<b>36</b>	<b>43</b>	<b>43</b>
Somewhat oppose	16	20	20	11	22	17	12	16	17	18	13
Strongly oppose	23	14	25	30	16	21	35	21	19	25	31
Don't know	18	15	21	19	10	20	23	22	16	19	16

## Methodology

These results come from a national survey entitled “American Opinions on Global Warming,” which examined American risk perceptions, knowledge, policy preferences and behaviors regarding global climate change. From November 2002 to February 2003, 673 adults (18 and older) completed a mail-out, mail-back questionnaire, for a response rate of 55%. The results represent a random sample of residential addresses from all 50 states and are weighted to bring them in line with actual population proportions. All policy results derive from the subset of Americans who have heard of global warming (92%). For results based on the total sample of national adults, one can say with 95% confidence that the maximum margin of sampling error is +/- 4%. The study was conducted by the University of Oregon Survey Research Laboratory and funded by the National Science Foundation.