

# CLIMATE CHANGE IN THE AMERICAN MIND: FOCUS ON CALIFORNIA, COLORADO, OHIO, AND TEXAS



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## Introduction

This report is based on findings from statewide representative surveys of Californians, Coloradans, Ohioans, and Texans conducted by the Yale Project on Climate Change Communication (<http://environment.yale.edu/climate-communication>).

A total of 800 adults (18+) in each state were interviewed by telephone from June to August, 2013. To help ensure representativeness of the final sample, the surveys were administered to respondents reached on traditional landline telephones as well as to those reached on cellphones. The average margin of error for the total sample in each state is +/- 3 percentage points at the 95% confidence level. The surveys were conducted for YPCCC by Abt SRBI using random digit dial sample supplied by Survey Sampling International. Please see Appendix III for more information about the method.

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## Key Findings

Following are selected comparisons between the survey findings in California, Colorado, Ohio, and Texas.

- Majorities in each state say global warming is happening. This belief is most widespread in California (79%), but seven in ten in Colorado, Ohio, and Texas agree as well (70% in each).
- Over half of Californians say that, if global warming is happening, it is caused mostly by human activities (58%). About half of Ohioans (49%) and Coloradans (48%) agree. By contrast, fewer Texans (44%) say global warming is caused mostly by human activities, and 31% say it is caused mostly by natural changes in the environment.
- Californians are the most likely to say they are very or somewhat worried about global warming (63%), followed by Coloradans (59%). Ohioans are the least likely to express worry (52%), and nearly half (47%) say they are not very or not at all worried about global warming.
- Half or more people in each state say that global warming will cause a great deal of harm to plant and animal species—California (66%), Colorado (55%), Ohio (52%), and Texas (54%)—and to future generations of people (65%, 56%, 52%, and 54% respectively). Fewer, however, believe that global warming will cause great harm people in their communities (26%, 20%, 17%, and 20% respectively), or their own families (24%, 20%, 18%, and 19%). In each state, even fewer believe global warming will harm them personally (19%, 15%, 14%, and 16%)
- Over half of Californians (55%) say they have personally experienced the effects of global warming. By contrast, fewer than half (45%) of Ohioans say that they have. Almost as many Texans as Californians (52%) say they have personally experienced the effects of global warming, including 25% who strongly agree (the highest proportion among the states). Almost half (48%) of Coloradans say they have.
- With the exception of California, people in the states surveyed are more likely to say scientists disagree than agree that global warming is happening. In Colorado, 50% say most scientists disagree versus 41% who say most scientists agree; in Ohio, the respective numbers are 49% versus 43%; and in Texas, they are 47% versus 43%. Californians by a substantial margin, however, understand that scientists agree (55%) rather than disagree (37%) that global warming is happening.
- A plurality in each state—California (42%), Colorado (43%), Ohio (35%), and Texas (35%)—believe humans could reduce global warming, but it's unclear at this point whether we will do what's needed. By contrast, only about one in ten or less believes that humans can reduce global warming and we will do so successfully (12%, 7%, 7%, and 8%).
- More people in each state say that corporations and industry, and individuals themselves, relative to the government, should be doing more to address global warming. In California, 53% say corporations and industry should be doing much more, and about four in ten say the same in Colorado (40%), Ohio (42%), and Texas (40%).

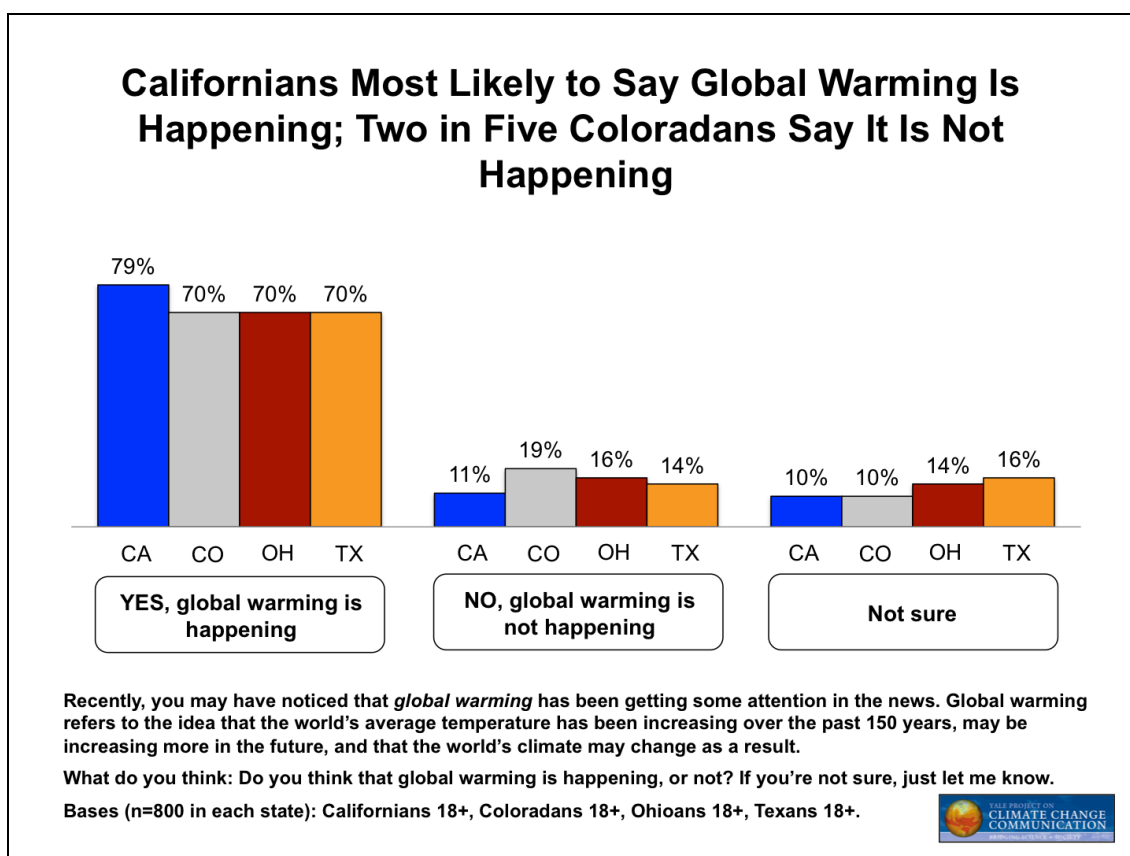
- Majorities in California (73%), Colorado (69%), Ohio (59%), and Texas (55%) say the United States should reduce its own greenhouse gas emissions regardless of what other countries do.
- Large majorities – from 77% in Texas to 81% in California – strongly or somewhat support providing tax rebates for people who purchase energy-efficient vehicles or solar panels.
- Substantially more people in each state say switching from fossil fuels to clean energy sources would increase rather than decrease economic growth in their state. This is particularly true in California, where 51% say switching to clean energy would increase economic growth, versus 19% who say it would decrease growth (a difference of 32 percentage points).
- In each state, at least one in ten people say they have, in the past 12 months, written, emailed, or phoned a government official about global warming. Among them, most contacted the official to ask them to take action to reduce global warming (at least 75% in each state).
- People talk about global warming with friends and family more often in some states than in others. In Colorado and California, majorities talk about the subject at least occasionally (59% and 53% respectively). By contrast, over half of those in Ohio (54%) and Texas (54%) talk about global warming with friends and family only rarely or never.
- President Obama is very or somewhat believable to majorities of Californians (67%), Texans (58%), Ohioans (57%), and Coloradans (56%) regarding energy- and climate-related issues.

### Selected Comparisons Between the States

**Californians are the most likely to say global warming is happening. Two in five Coloradans say it is not happening.**

Majorities in each state say global warming is happening. This belief is most widespread in California (79%), but seven in ten in Colorado, Ohio, and Texas agree as well (70% in each).

About two in five Coloradans (19%) say global warming is *not* happening, and 16% of Texans say they are not sure if it is or not.



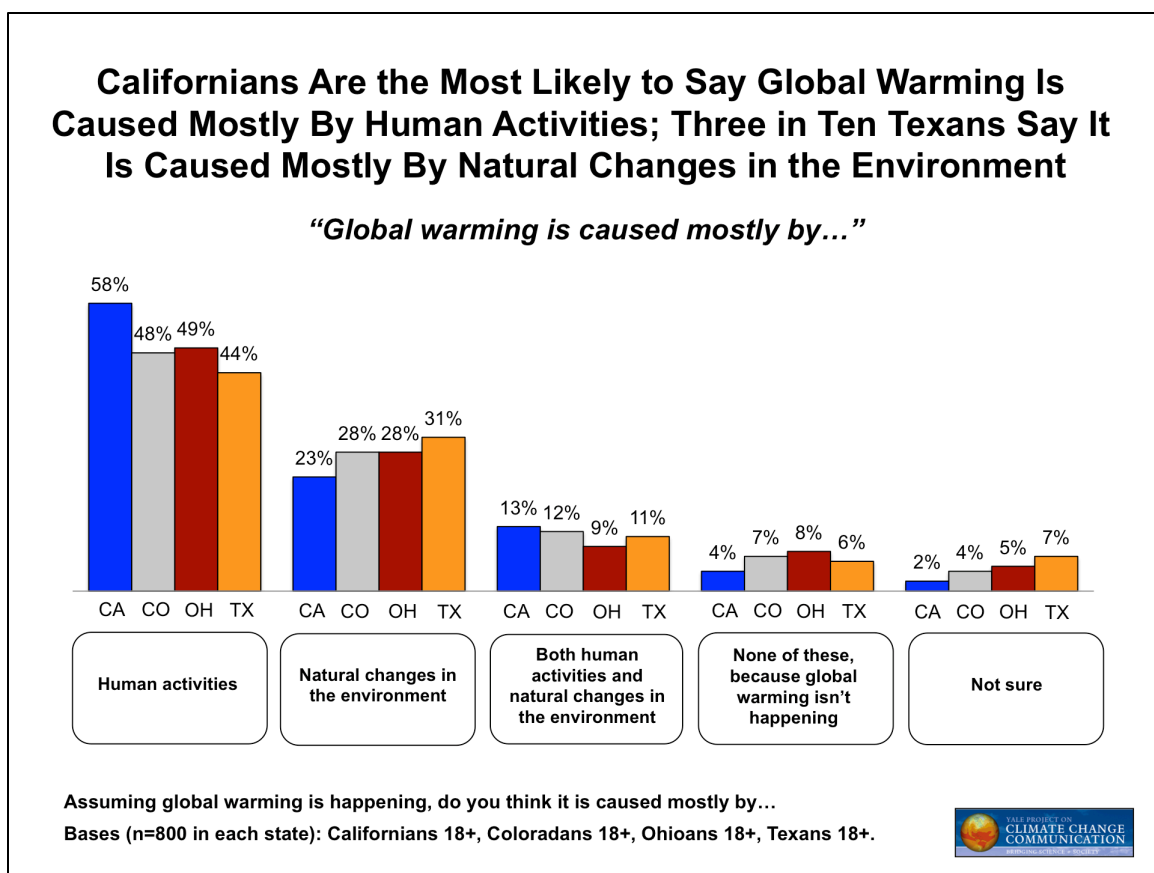


**Californians are the most likely to say global warming is caused mostly by human activities. Three in ten Texans say it is caused mostly by natural changes in the environment.**

Over half of Californians say that, if global warming is happening, it is caused mostly by human activities (58%). About half of Ohioans (49%) and Coloradans (48%) agree.

By contrast, fewer Texans (44%) say global warming is caused mostly by human activities, and 31% say it is caused mostly by natural changes in the environment.

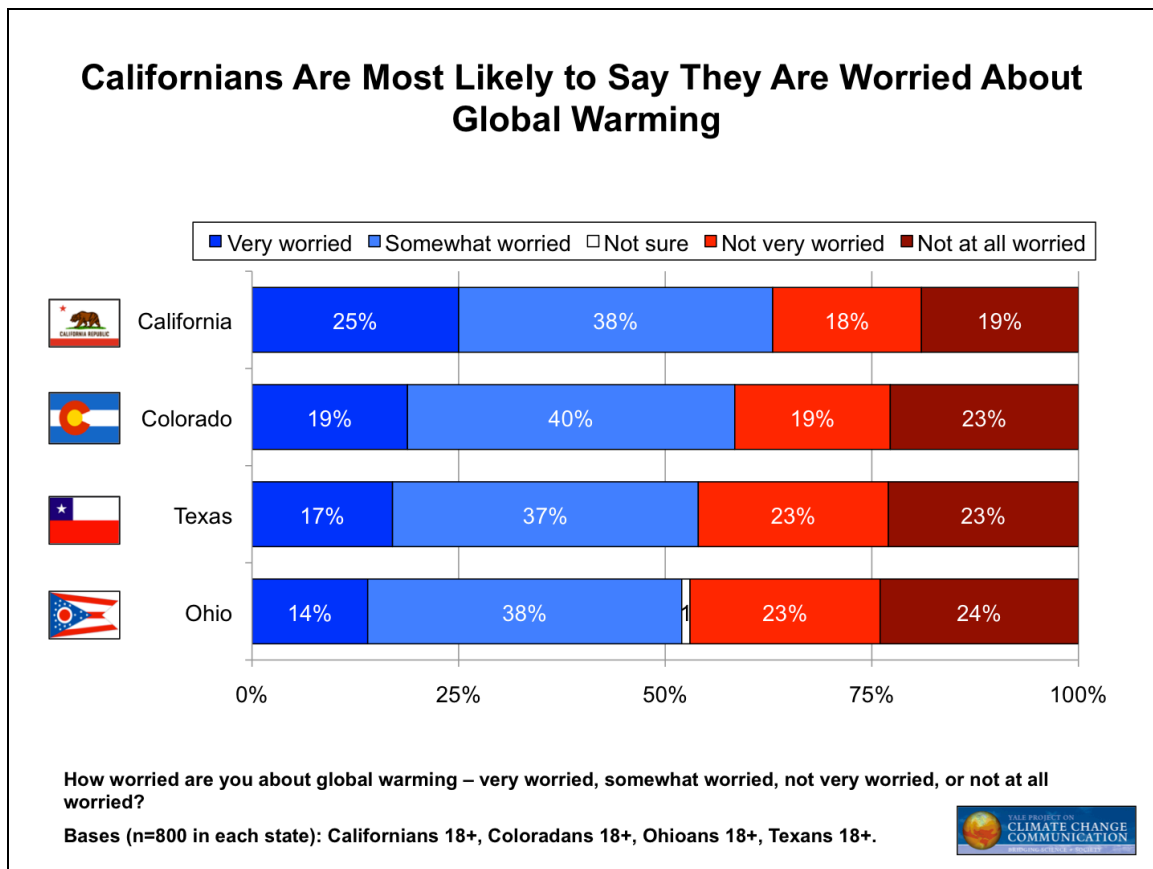
In all four states, those who believe global warming is caused mostly by human activities outnumber those who believe it is caused mostly by natural changes in the environment.



**Californians are the most likely to say they are worried about global warming.**

Californians are the most likely to say they are very or somewhat worried about global warming (63%), followed by Coloradans (59%).

Ohioans are the least likely to express worry (52%), and nearly half (47%) say they are not very or not at all worried about global warming.





## In each state, people believe global warming is a relatively distant threat.

Half or more people in each state say that global warming will cause a great deal of harm to plant and animal species—California (66%), Colorado (55%), Ohio (52%), and Texas (54%)—and to future generations of people (65%, 56%, 52%, and 54% respectively).

Three in ten or more also say global warming will cause great harm to people in developing countries (48%, 40%, 36%, and 37% respectively), in modern industrialized countries (44%, 34%, 32%, and 36%), or in the United States (42%, 31%, 30%, and 32%).

Fewer, however, believe that global warming will cause great harm people in their communities (26%, 20%, 17%, and 20% respectively), or their own families (24%, 20%, 18%, and 19%). In each state, even fewer believe global warming will harm them personally (19%, 15%, 14%, and 16%)

### In Each State, People Believe Global Warming Is a Relatively Distant Threat - % say a “great deal of harm” -



	CA	CO	OH	TX
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Plant and animal species	66	55	52	54
Future generations of people	65	56	52	54
People in developing countries	48	40	36	37
People in modern industrialized countries	44	34	32	36
People in the United States	42	31	30	32
People in your community	26	20	17	20
Your family	24	20	18	19
You personally	19	15	14	16

Please tell me whether you think global warming will harm each of the following not at all, only a little, a moderate amount, or a great deal? If you're not sure about an item, just let me know. First...

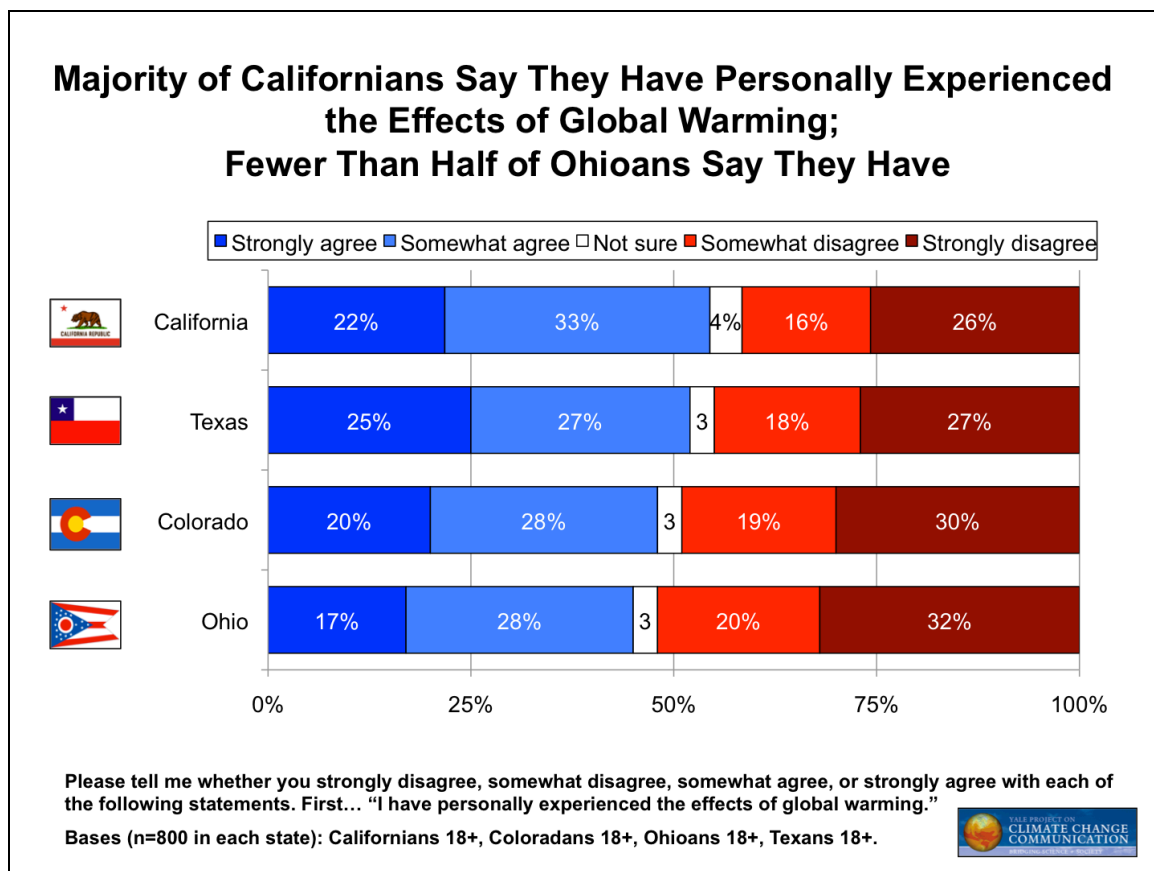
Bases (n=800 in each state): Californians 18+, Coloradans 18+, Ohioans 18+, Texans 18+.



**A majority of Californians say they have personally experienced the effects of global warming. Fewer than half of Ohioans say they have.**

Over half of Californians (55%) say they have personally experienced the effects of global warming. By contrast, fewer than half (45%) of Ohioans say that they have.

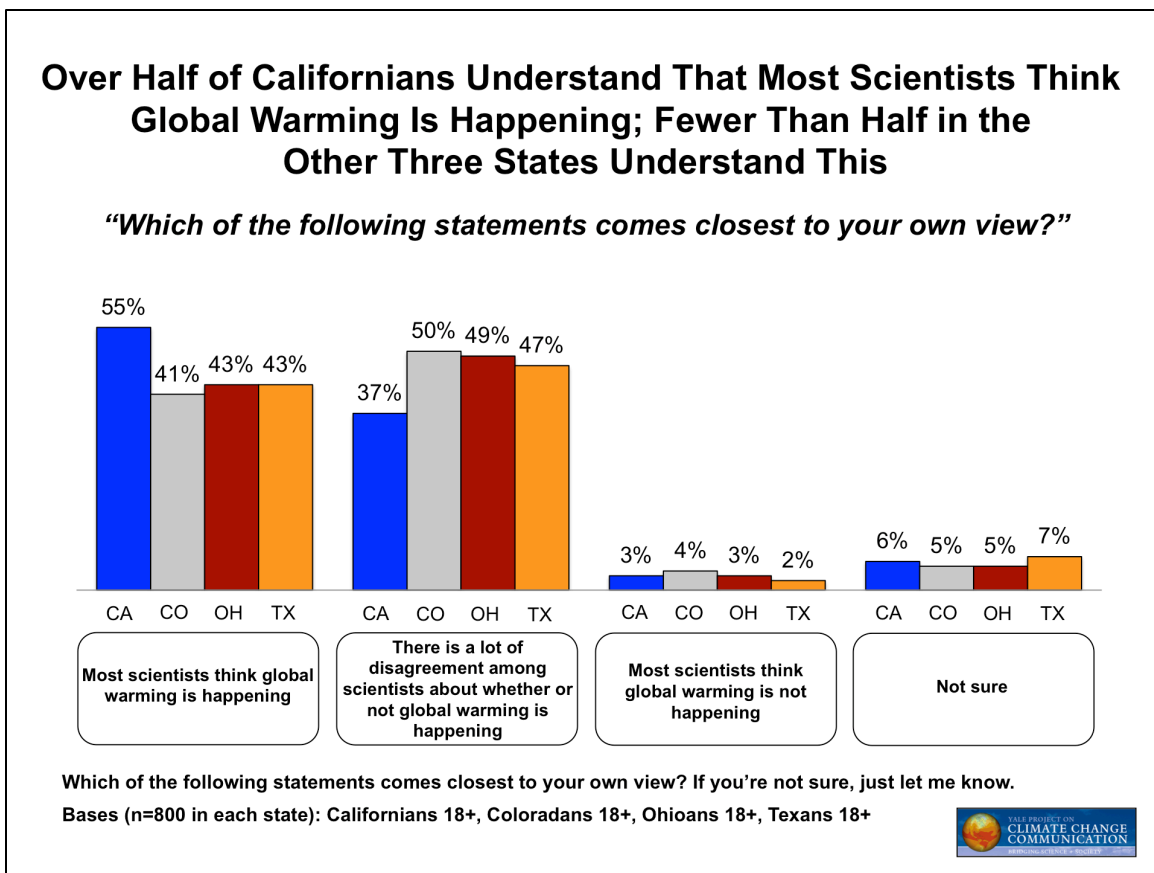
Almost as many Texans as Californians (52%) say they have personally experienced the effects of global warming, including 25% who strongly agree (the highest proportion among the states). Almost half (48%) of Coloradans say they have.



**Over half of Californians understand that most scientists think global warming is happening. Fewer than half in the other three states understand this.**

With the exception of California, people in the states surveyed are more likely to say scientists disagree than agree that global warming is happening. In Colorado, 50% say most scientists disagree versus 41% who say most scientists agree; in Ohio, the respective numbers are 49% versus 43%; and in Texas, they are 47% versus 43%.

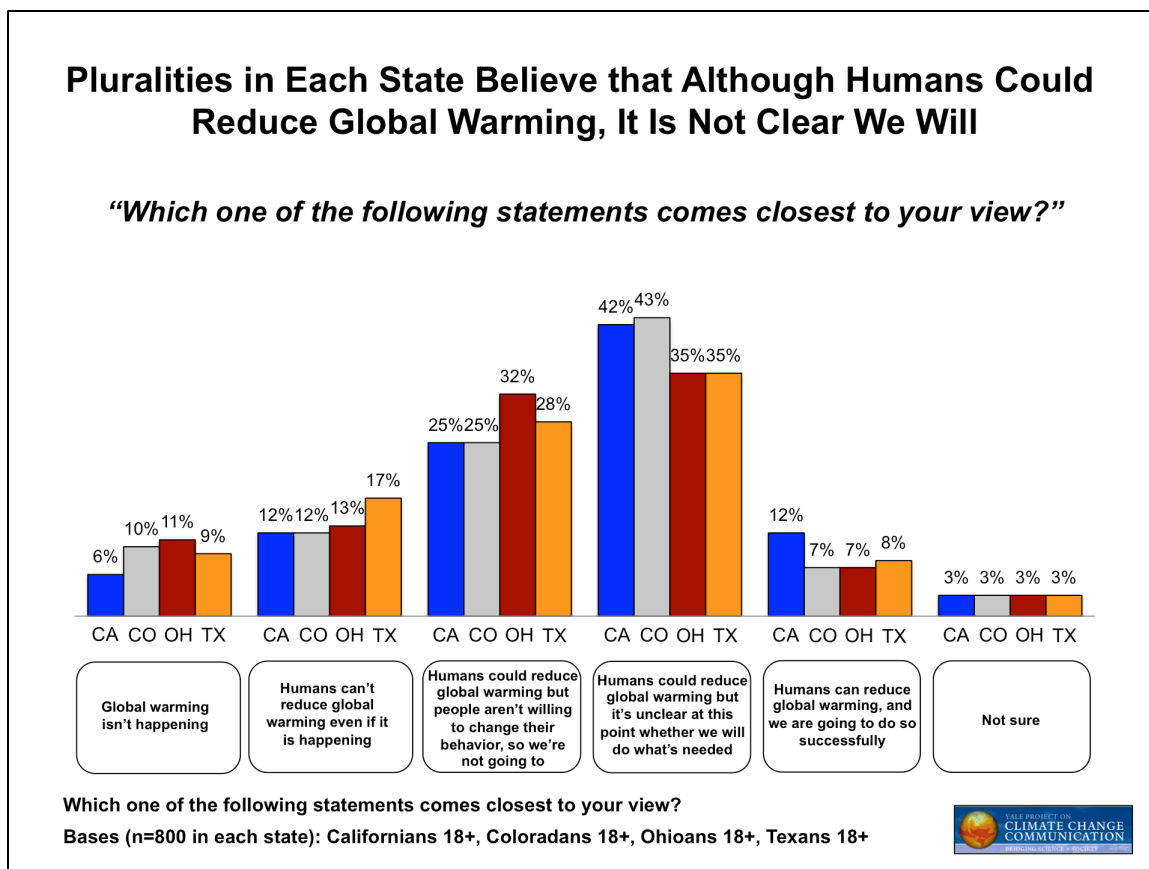
Californians by a substantial margin, however, understand that scientists agree (55%) rather than disagree (37%) that global warming is happening.



**Pluralities in each state believe that although humans could reduce global warming, it is not clear we will.**

People are uncertain about whether humanity will do what’s necessary to reduce global warming. A plurality in each state—California (42%), Colorado (43%), Ohio (35%), and Texas (35%)—believe humans could reduce global warming, but it’s unclear at this point whether we will do what’s needed.

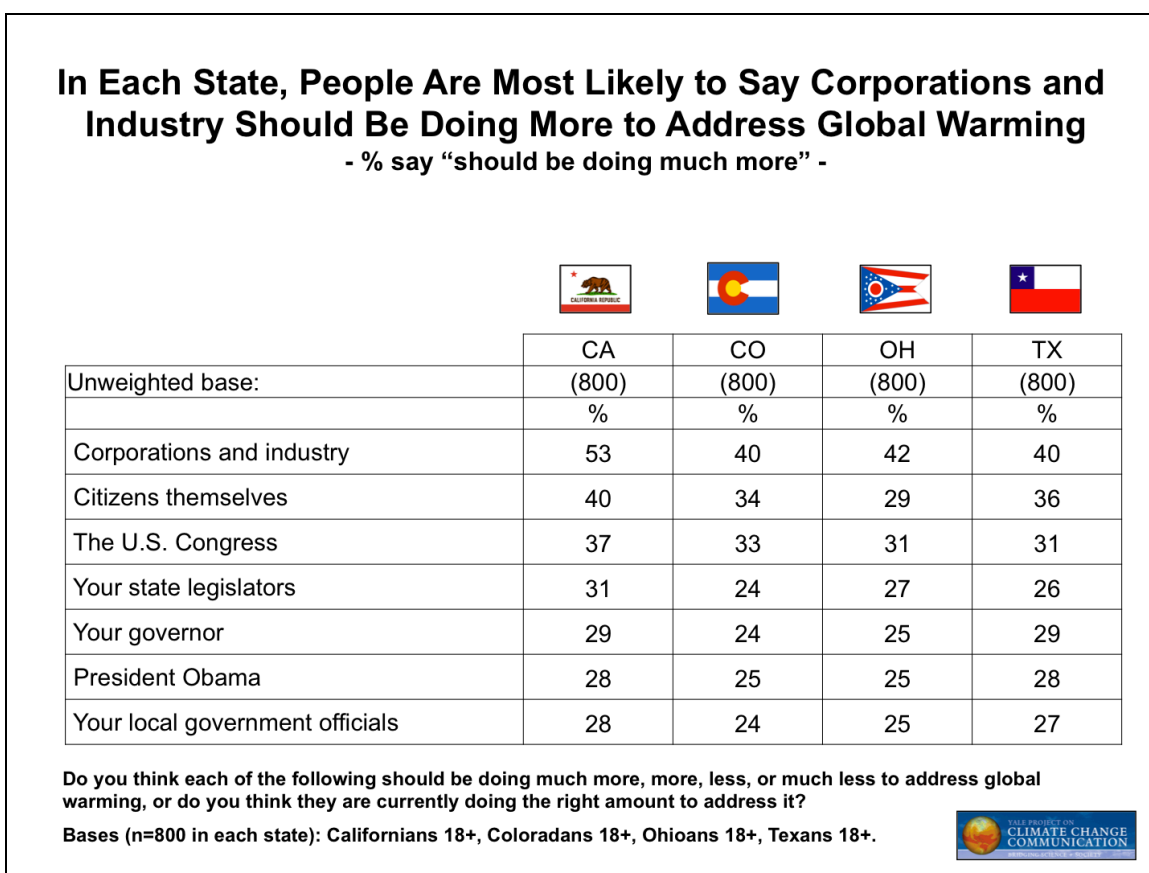
In each state, the pessimists outnumber the optimists. Many believe that although we could reduce global warming, people aren’t willing to change their behavior to do so (25%, 25%, 32%, and 28%, respectively) or that we can’t reduce global warming even if it is happening (12%, 12%, 13%, and 17%). Only about one in ten or less believes that humans can reduce global warming and we will do so successfully (12%, 7%, 7%, and 8%).



**In each state, people are most likely to say corporations and industry should be doing more to address global warming.**

More people in each state say that corporations and industry, and individuals themselves, relative to the government, should be doing more to address global warming. In California, 53% say corporations and industry should be doing much more, and about four in ten say the same in Colorado (40%), Ohio (42%), and Texas (40%). In each state, citizens themselves are the second most likely group to be named (40%, 34%, 29%, and 36%, respectively, say citizens should be doing much more).

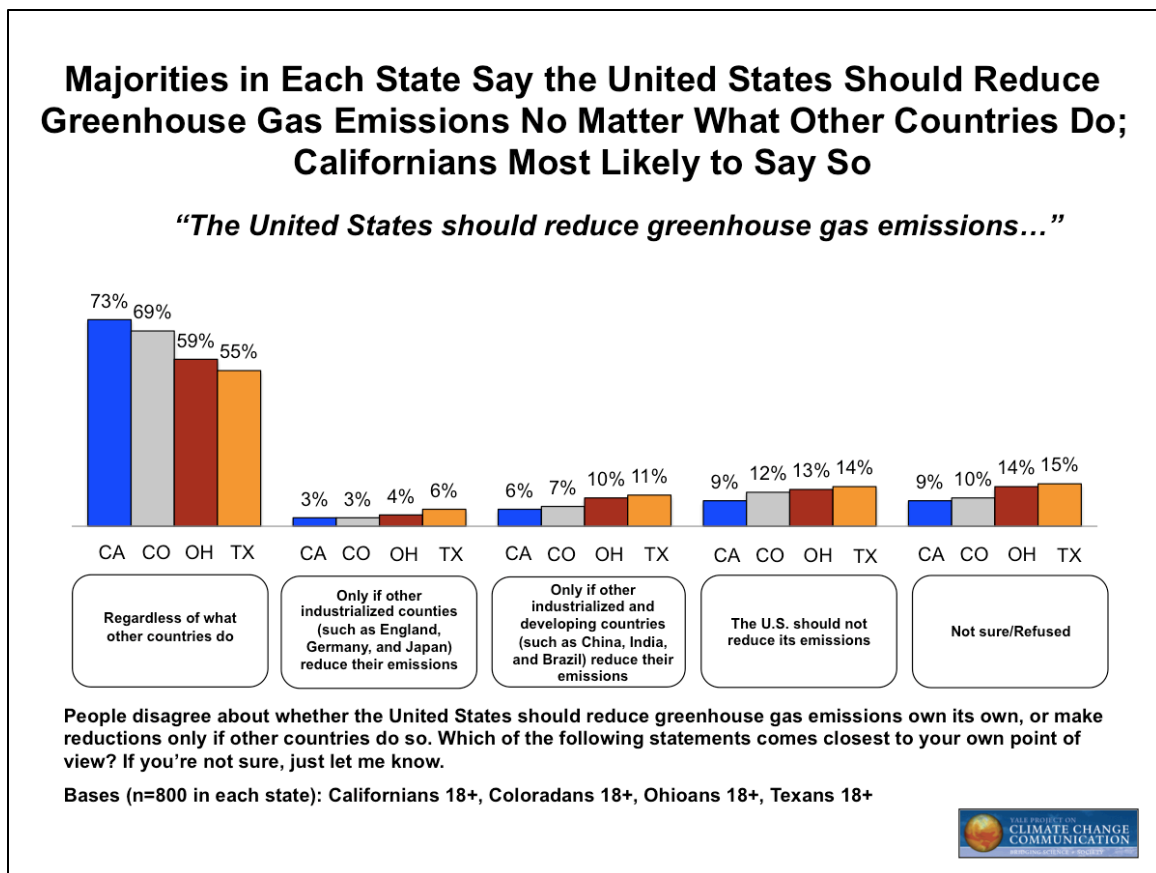
Local government officials and President Obama are least often cited.



**Majorities in each state say the United States should reduce greenhouse gas emissions no matter what other countries do. Californians are the most likely to say so.**

Majorities in California (73%), Colorado (69%), Ohio (59%), and Texas (55%) say the United States should reduce its own greenhouse gas emissions regardless of what other countries do. Few say the U.S. should reduce emissions only if other industrialized, or developing, nations do so as well.

Few also say the U.S. should not reduce its emissions at all (ranging from 14% in Texas to 9% in California).

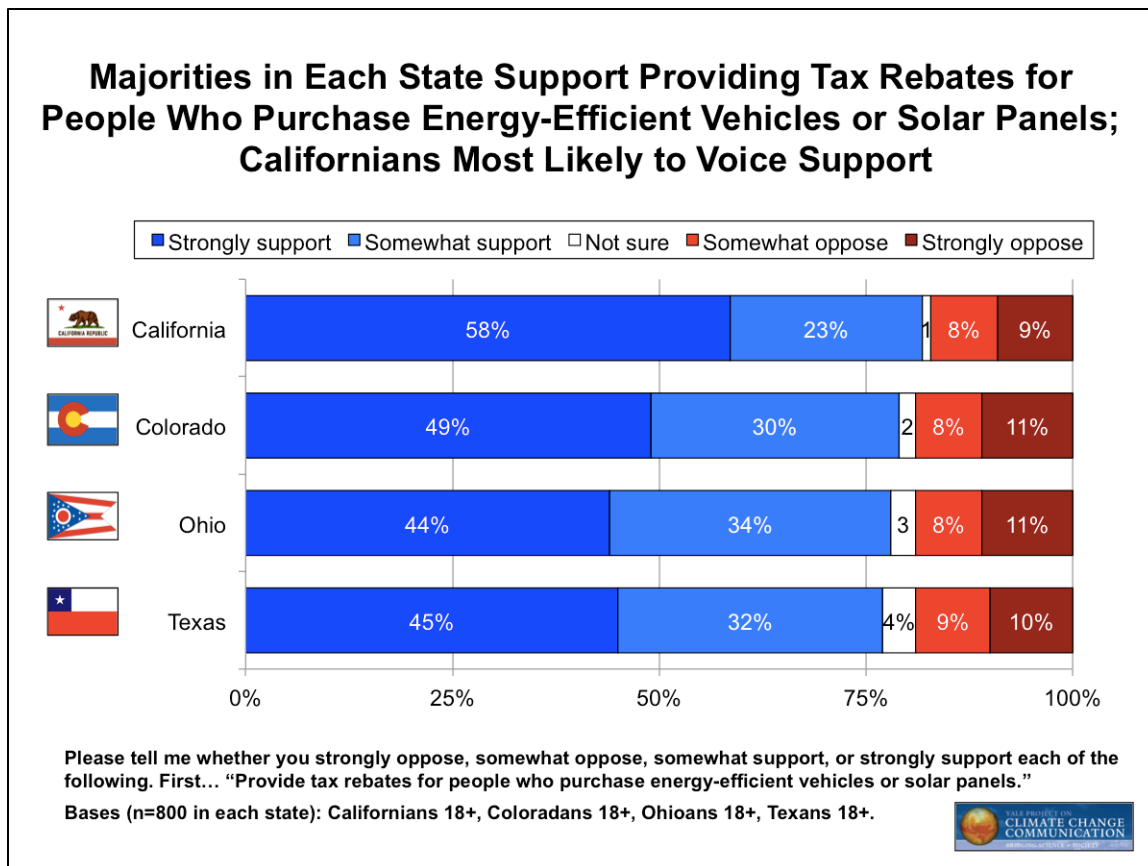




**Majorities in each state support providing tax rebates for people who purchase energy-efficient vehicles or solar panels. Californians are the most likely to support this policy.**

Large majorities – from 77% in Texas to 81% in California – strongly or somewhat support providing tax rebates for people who purchase energy-efficient vehicles or solar panels.

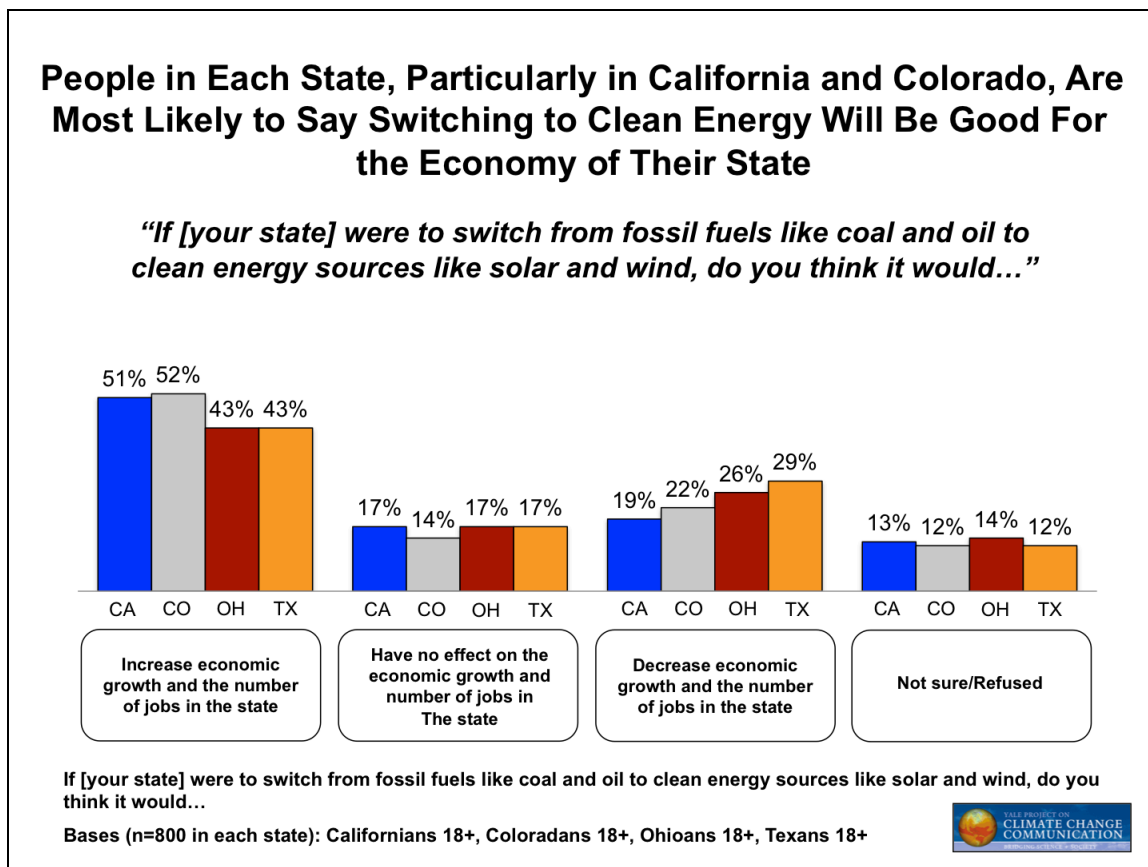
In California, unlike in the other states, a majority (58%) *strongly* supports the policy.



**People in each state, particularly in California and Colorado, are most likely to say switching to clean energy will be good for the economy of their state.**

Substantially more people in each state say switching from fossil fuels to clean energy sources would increase rather than decrease economic growth in their state.

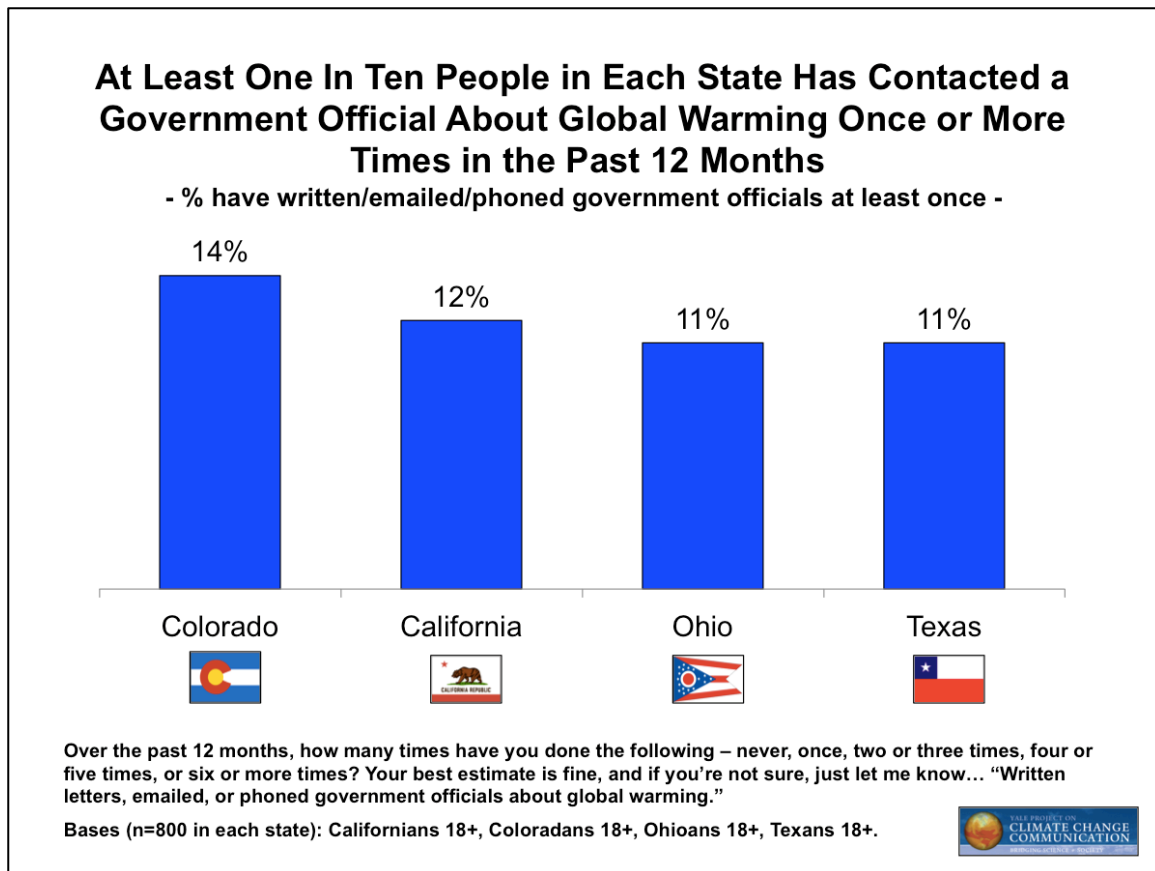
This is particularly true in California, where 51% say switching to clean energy would increase economic growth, versus 19% who say it would decrease growth (a difference of 32 percentage points). The contrast is less strong in Texas, where 43% say it would increase growth versus 29% who say it would decrease growth (a difference of 14 points).



**At least one in ten people in each state has contacted a government official about global warming one or more times in the past 12 months.**

In each state, at least one in ten people say they have, in the past 12 months, written, emailed, or phoned a government official about global warming.

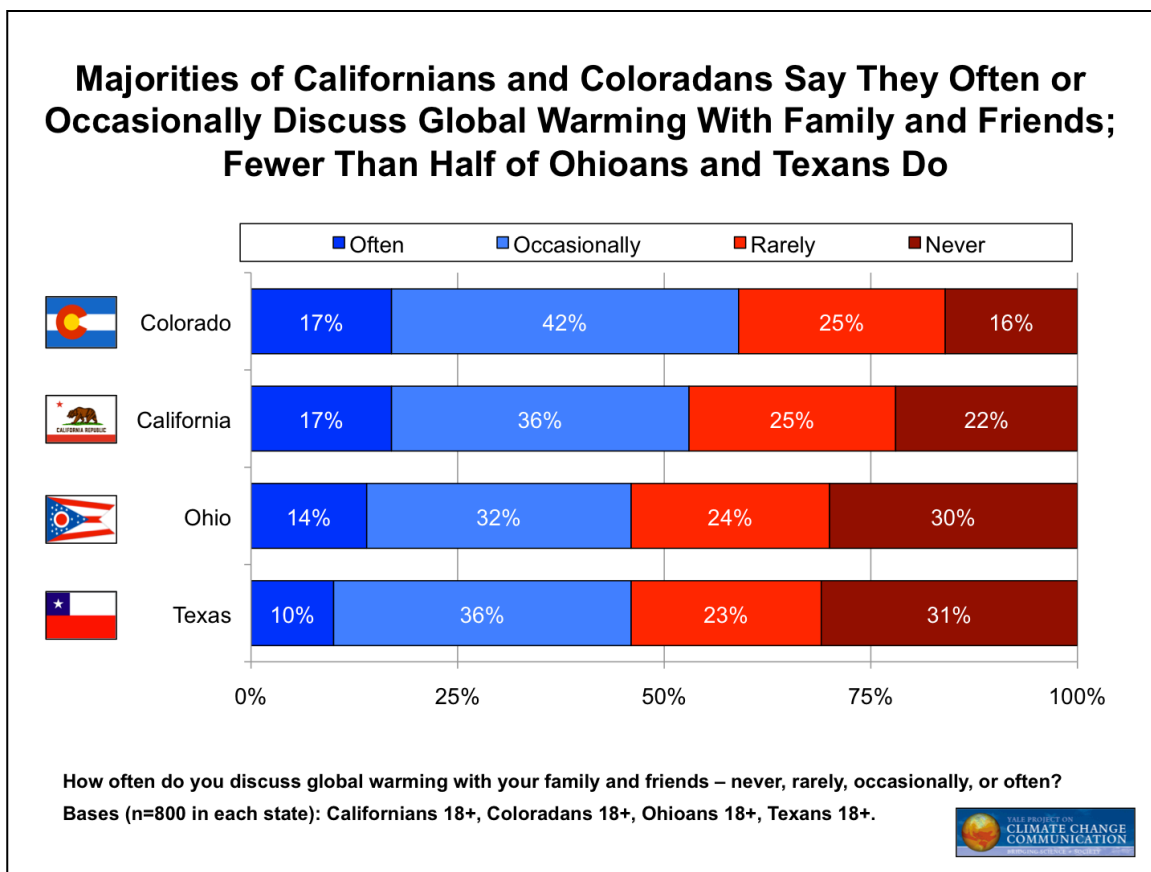
Among them, most contacted the official to ask them to take action to reduce global warming (at least 75% in each state).



**Majorities of Californians and Coloradans say they often or occasionally discuss global warming with family and friends. Fewer than half of Ohioans and Texans do.**

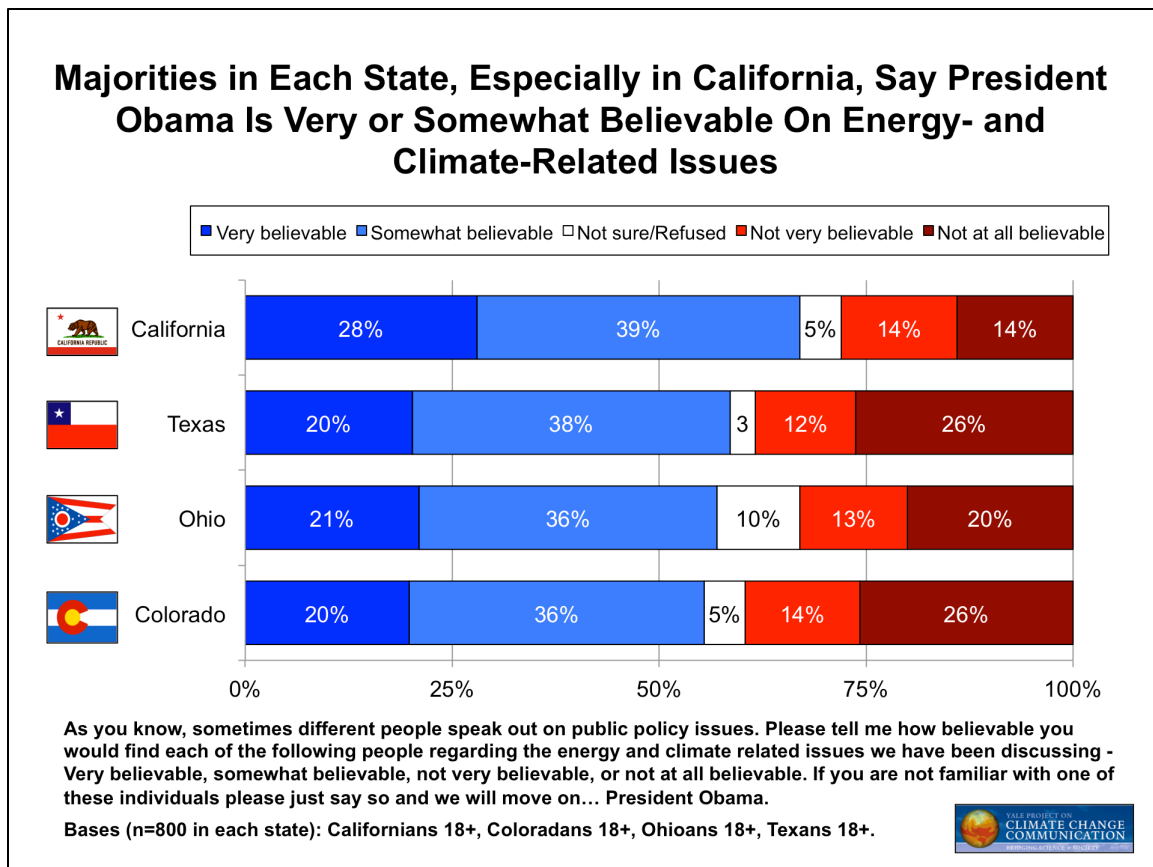
People talk about global warming with friends and family more often in some states than in others. In Colorado and California, majorities talk about the subject at least occasionally (59% and 53% respectively).

By contrast, over half of those in Ohio (54%) and Texas (54%) talk about global warming with friends and family only rarely or never.



**Majorities in each state, especially in California, say President Obama is very or somewhat believable on energy- and climate-related issues.**

President Obama is very or somewhat believable to majorities of Californians (67%), Texans (58%), Ohioans (57%), and Coloradans (56%) regarding energy- and climate-related issues.



## Introduction to California, Colorado, Ohio, and Texas

### California

- Most Californians (79%) believe global warming is happening. Relatively few (11%) believe it is not.
- More than half (58%) believe global warming is caused mostly by human activities.
- Californians think global warming is important and are worried about it. About eight in ten (78%) say the issue of global warming is very or somewhat important to them personally. And about two in three (63%) are very or somewhat worried about it.
- Over half of Californians (55%) say that “most scientists think global warming is happening.” More than one in three (37%), however, say that “there is a lot of disagreement among scientists” about whether or not global warming is happening.
- Among those who believe global warming is happening, solid majorities believe it is currently contributing to intensifying heat waves (84%), exacerbating droughts (77%), and/or increasing the severity of wildfires (77%).
- Over half of Californians (55%) say they have personally experienced global warming’s effects.
- Californians who believe global warming is happening expect to see a myriad of negative effects over the next 50 years. More than nine in ten believe that there will be increased heat waves (93%), increased droughts (92%), and/or declining numbers of fish and native wildlife (91%). More than eight in ten expect increased allergies, asthma, infectious diseases, or other health problems (86%).
- Approximately six in ten Californians say that more should be done about global warming at all levels of government—from Congress (65%) and President Obama (59%), to Governor Brown (60%) and California state legislators (61%), to local government officials (58%). However, even larger numbers of Californians believe that corporations and industry (73%) and citizens themselves (70%) should be doing more to address climate change.
- Three in four Californians (73%) say the U.S. should reduce greenhouse gas emissions regardless of whether or not other countries do the same.
- Many Californians believe that individual action, and especially collective action, can be effective in reducing global warming. Among those who believe global warming is happening, most (89%) say their own actions would reduce their personal contribution to global warming at least a little. Virtually all Californians who believe global warming is happening say that if the same actions were taken by most people in the U.S. and around the world, it would reduce global warming a little, some, or a lot.



- Half of Californians (51%) say that switching from fossil fuels to clean energy sources would increase economic growth and the number of jobs.
- Many Californians are unsure that people will rally to do what's necessary to reduce global warming. A plurality (42%) believes humans could reduce global warming, but that it's unclear at this point whether we will do what is needed. Relatively few are convinced that people can reduce global warming and will do so successfully (12%).
- Nearly half of Californians (48%) say that, in the past 12 months, they have rewarded companies that are taking steps to reduce global warming by buying their products at least once, and 51% would like to do it more often in the next 12 months. Moreover, nearly four in ten (36%) say that, in the past 12 months, they have *punished* companies that are opposing steps to reduce global warming by not buying their products at least once, and 43% would like to do so more often in the coming year.

## Colorado

- Most Coloradans (70%) believe global warming is happening. Relatively few (19%) believe it is not.
- Nearly half (48%) believe global warming is caused mostly by human activities.
- Coloradans think global warming is important and are worried about it. Three in four (73%) say the issue of global warming is very or somewhat important to them personally. And six in ten (59%) are at least somewhat worried about it.
- Though virtually all climate scientists agree human-caused global warming is happening, many Coloradans, like most Americans, are unaware of this fact. Fully half (50%) believe that “there is a lot of disagreement among scientists” about whether or not global warming is happening.
- Among those who believe global warming is happening, about three in four believe it is currently contributing to increased droughts (79%) and heat waves (78%), decreased snowpack in the mountains (78%), and increased wildfires (74%).
- About half of Coloradans (48%) say they have personally experienced global warming's effects.
- Coloradans who believe global warming is happening expect to see a myriad of negative effects due to global warming over the next 50 years. Most believe that heat waves (91%) and droughts and water shortages (90%) will be more likely due to global warming. At least eight in ten believe declining fish and wildlife; (85%); worsening allergies, asthma, and infectious diseases (81%); and worse storms (80%) will be more likely as well. About seven in ten (72%) think power outages will be more likely.
- More than half of Coloradans say that more should be done about global warming at all levels of government—from Congress (58%) and President Obama (53%), to Governor Hickenlooper

(52%) and Colorado state legislators (53%), to local government officials (53%). However, even larger numbers of Coloradans believe that corporations and industry (67%) and citizens themselves (66%) should be doing more to address climate change.

- Coloradans think the United States should take the lead to address global warming. Seven in ten (69%) say the U.S. should reduce greenhouse gas emissions regardless of whether or not other countries do the same.
- Coloradans believe that individual action is effective, and collective action is even more effective in addressing global warming. Among those who believe global warming is happening, 88% say their own actions would reduce their personal contribution to global warming at least a little. And virtually all Coloradans say that if the same actions were taken by most people in the U.S. (95%) and in modern industrialized countries around the world (97%), it would reduce global warming a little, some, or a lot.
- Half of Coloradans (52%) say that switching from fossil fuels to clean energy sources would increase economic growth and the number of jobs.
- Many are unsure that people will rally to do what's necessary to reduce global warming. A plurality (43%) believes humans could reduce global warming, but that it's unclear at this point whether we will do what's needed. Few are convinced that people can reduce global warming and will do so successfully (7%).
- Half of Coloradans (51%) have rewarded companies that are taking steps to reduce global warming by buying their products at least once over the past 12 months, and 39% would like to do this more often than they do now. Four in ten (39%) have *punished* companies that are opposing steps to reduce global warming at least once by not buying their products during the past 12 months, and 46% would like to do this more often in the coming year.

## Ohio

- Most Ohioans (70%) believe global warming is happening. Relatively few (16%) believe it is not.
- About half (49%) believe that if global warming is happening, it is caused mostly by human activities.
- Ohioans think global warming is important and are worried about it. Two-thirds (67%) say the issue of global warming is at least somewhat important to them personally. And about half (52%) are at least somewhat worried about it.
- Though virtually all climate scientists agree human-caused global warming is happening, many Ohioans, like most Americans, are unaware of this fact. Fully half (49%) believe that “there is a lot of disagreement among scientists” about whether or not global warming is happening. Fewer (43%) believe most scientists agree that global warming is happening.

- Among those who believe global warming is happening, solid majorities believe it is currently having a large or moderate influence on the severity of heat waves (73%), flooding of rivers or lakes (62%), and droughts (58%).
- Nearly half of Ohioans (45%) say they have personally experienced the effects of global warming.
- Among Ohioans who believe global warming is happening, large majorities expect to see a myriad of negative effects over the next 50 years. Nine in ten (89%) anticipate more heat waves due to global warming. At least eight in ten believe Ohio will experience worse storms, hurricanes, or tornadoes (84%), increased allergies, asthma, infectious diseases, or other health problems (83%), declining numbers of fish and native wildlife (82%), and increased droughts and water shortages (82%).
- More than half of Ohioans say that more should be done about global warming at all levels of government—from Congress (59%) and President Obama (54%), to Ohio’s state legislature (56%) and Governor Kasich (54%), to local government officials (53%). However, even larger numbers of Ohioans believe that corporations and industry (69%) and citizens themselves (65%) should be doing more to address climate change.
- Six in ten Ohioans (59%) say the United States should reduce greenhouse gas emissions regardless of whether or not other countries do the same.
- Many Ohioans believe that individual action, and especially collective action, can be effective in addressing global warming. Among those who believe global warming is happening, most (80%) say their own actions would reduce their personal contribution to global warming at least a little. Virtually all Ohioans who believe global warming is happening say that if the same actions were taken by most people in the U.S. (89%) or around the world (91%), it would reduce global warming a little, some, or a lot.
- A plurality of Ohioans (43%) say that switching from fossil fuels to clean energy sources would increase economic growth and the number of jobs.
- Many Ohioans are unsure that people will rally to do what’s necessary to reduce global warming. A plurality (35%) believes humans could reduce global warming, but that it’s unclear at this point whether we will do what is needed. Relatively few are convinced that people can reduce global warming and will do so successfully (7%).
- Four in ten Ohioans (41%) say that, in the past 12 months, they have rewarded companies that are taking steps to reduce global warming by buying their products at least once, and 38% would like to do it more often in the next 12 months. Moreover, three in ten (31%) have *punished* companies that are opposing steps to reduce global warming at least once by not buying their products during the past 12 months, and 30% would like to do this more often in the coming year.

## Texas

- Most Texans (70%) believe global warming is happening. Relatively few (14%) believe it is not.
- Fewer than half of Texans (44%) believes that if global warming is happening, it is caused mostly by human activities. By contrast, 31% believe it is caused mostly by natural changes in the environment, while 11% believe it is a combination of the two causes.
- Texans think global warming is important and are worried about it. About three in four (73%) say the issue of global warming is at least somewhat important to them personally. About half (54%) are at least somewhat worried about it.
- Though virtually all climate scientists agree human-caused global warming is happening, many Texans, like most Americans, are unaware of this fact. Nearly half (47%) believe that “there is a lot of disagreement among scientists” about whether or not global warming is happening. Fewer (43%) believe most scientists think that global warming is happening.
- Among those who believe global warming is happening, solid majorities believe it is currently having a large or moderate influence on the severity of heat waves (84%), drought (80%), and wildfires (72%) in Texas.
- About half of Texans (52%) say they have personally experienced the effects of global warming.
- Among Texans who believe global warming is happening, large majorities expect to see a myriad of negative effects over the next 50 years. Nearly all anticipate more heat waves (95%) and increased drought and water shortages (92%) in Texas due to global warming. More than eight in ten believe Texas will experience worse storms, hurricanes, or tornadoes (87%), declining numbers of fish and native wildlife (86%), and increased allergies, asthma, infectious diseases, or other health problems (85%) due to global warming.
- More than half of Texans say that more should be done about global warming at all levels of government—from Congress (62%) and President Obama (57%), to Governor Perry (59%) and Texas’s state legislature (56%), to local government officials (60%). However, even larger numbers of Texans believe that citizens themselves (69%) and corporations and industry (68%) should be doing more to address climate change.
- Over half of Texans (55%) say the United States should reduce greenhouse gas emissions regardless of whether or not other countries do the same.
- Many Texans believe that individual action, and especially collective action, can be effective in addressing global warming. Among those who believe global warming is happening, most (89%) say their own actions would reduce their personal contribution to global warming at least a little. Virtually all Texans who believe global warming is happening say that if the same actions were taken by most people in the U.S. (96%) or around the world (96%), it would reduce global warming a little, some, or a lot.

- About four in ten Texans (43%), a plurality, say that switching from fossil fuels to clean energy sources would increase economic growth and the number of jobs. By contrast, only three in ten (29%) say a switch to clean energy would *decrease* economic growth and the number of jobs.
- Many Texans are unsure that people will rally to do what's necessary to reduce global warming. One in three (35%), a plurality, believes humans could reduce global warming but that it's unclear at this point whether we will do what is needed. Relatively few are convinced that people can reduce global warming and will do so successfully (8%).
- More than four in ten Texans (44%) say that, in the past 12 months, they have rewarded companies that are taking steps to reduce global warming by buying their products at least once, and 40% would like to do it more often in the next 12 months. Moreover, one in three (32%) have *punished* companies that are opposing steps to reduce global warming at least once by not buying their products during the past 12 months, and 32% would like to do this more often in the coming year.
- A majority of Texans (58%) say that President Obama is very or somewhat believable when speaking about energy- and climate-related issues. Half (50%) say Governor Rick Perry is very or somewhat believable regarding the same issues and four in ten (43%) say he is not very or not at all believable. Fewer than half of Texans say that either Senator Ted Cruz (46%) or Senator John Cornyn (44%) is believable regarding energy and climate issues.

## Appendix I: Data Tables

### Questions cited in the report

[ASK ALL]

Recently, you may have noticed that *global warming* has been getting some attention in the news. Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate may change as a result.

What do you think: Do you think that global warming is happening, or not? If you're not sure, just let me know.

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Yes	79	70	70	70
No	11	19	16	14
Not sure	10	10	14	16
Refused (volunteered)	--	--	--	--

[ASK ALL]

Assuming global warming is happening, do you think it is... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Caused mostly by human activities	58	48	49	44
Caused mostly by natural changes in the environment	23	28	28	31
Something else (Please specify)	<u>13</u>	<u>13</u>	<u>10</u>	<u>12</u>
Both human activities and natural changes in the environment	13	12	9	11
Other	--	1	1	1
None of these, because global warming isn't happening	4	7	8	6
Not sure (volunteered)	2	4	5	7



**[ASK ALL]**

**How worried are you about global warming – very worried, somewhat worried, not very worried, or not at all worried?**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Very worried	25	19	14	17
Somewhat worried	38	40	38	37
Not very worried	18	19	23	23
Not at all worried	19	23	24	23
Not sure (volunteered)	--	--	1	--
Refused (volunteered)	--	--	--	--

**[ASK ALL]**

**Please tell me whether you think global warming will harm each of the following not at all, only a little, a moderate amount, or a great deal? If you're not sure about an item, just let me know. First... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

**% who say "great deal" of harm**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Plant and animal species	66	55	52	54
Future generations of people	65	56	52	54
People in developing countries	48	40	36	37
People in modern industrialized countries	44	34	32	36
People in the United States	42	31	30	32
People in your community	26	20	17	20
Your family	24	20	18	19
You personally	19	15	14	16

**% who say "great deal" or "moderate amount" of harm**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
You personally	44	40	35	40
Your family	54	45	44	46
People in your community	56	49	44	47
People in the United States	68	59	57	61
People in modern industrialized countries	69	62	59	63
People in developing countries	69	62	57	62
Future generations of people	81	72	70	71
Plant and animal species	80	73	70	72

**[ASK ALL]**

Please tell me whether you strongly disagree, somewhat disagree, somewhat agree, or strongly agree with each of the following statements. First... **[READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

**“I have personally experienced the effects of global warming”**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Strongly agree	22	20	17	25
Somewhat agree	33	28	28	27
Somewhat disagree	16	19	20	18
Strongly disagree	26	30	32	27
Not sure (volunteered)	4	3	3	3
Prefer not to answer (volunteered)	--	--	--	--

**[ASK ALL]**

Which of the following statements comes closest to your own view? If you're not sure, just let me know.

**[READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Most scientists think global warming is happening, or	55	41	43	43
Most scientists think global warming is not happening, or	3	4	3	2
There is a lot of disagreement among scientists about whether or not global warming is happening	37	50	49	47
Not sure (volunteered)	6	5	5	7
Refused (volunteered)	--	--	--	--

**[ASK ALL]**

Which one of the following statements comes closest to your view? [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.] [PROGRAMMER: HALF OF RESPONDENTS SHOULD BE READ ITEMS 1-5; OTHER HALF SHOULD BE READ ITEMS 5-1]

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Global warming isn't happening	6	10	11	9
Humans can't reduce global warming, even if it is happening	12	12	13	17
Humans could reduce global warming, but people aren't willing to change their behavior, so we're not going to	25	25	32	28
Humans could reduce global warming, but it's unclear at this point whether we will do what's needed	42	43	35	35
Humans can reduce global warming, and we are going to do so successfully	12	7	7	8
Not sure (volunteered)	3	3	3	3
Refused (volunteered)	--	--	--	--

**[ASK ALL]**

Do you think each of the following should be doing much more, more, less, or much less to address global warming, or do you think they are currently doing the right amount to address it? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

% who say should be doing "much more" to address global warming

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Corporations and industry	53	40	42	40
Citizens themselves	40	34	29	36
The U.S. Congress	37	33	31	31
Your state legislators	31	24	27	26
Your governor	29	24	25	29
President Obama	28	25	25	28
Your local government officials	28	24	25	27

**[ASK ALL]**

Do you think each of the following should be doing much more, more, less, or much less to address global warming, or do you think they are currently doing the right amount to address it? **[READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

% who say should be doing “much more” or “more” to address global warming

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Corporations and industry	65	58	59	62
Citizens themselves	59	53	54	57
The U.S. Congress	73	67	69	68
Your state legislators	70	66	65	69
Your governor	58	53	53	60
President Obama	61	53	56	56
Your local government officials	60	52	54	59

**[ASK ALL]**

People disagree about whether the United States should reduce greenhouse gas emissions on its own, or make reductions only if other countries do so. Which of the following statements comes closest to your own point of view? If you're not sure, just let me know.

The United States should reduce its greenhouse gas emissions... **[READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Regardless of what other countries do, or	73	69	59	55
Only if other industrialized countries (such as England, Germany, and Japan) reduce their emissions, or	3	3	4	6
Only if other industrialized countries and developing countries (such as China, India, and Brazil) reduce their emissions, or	6	7	10	11
The U.S. should not reduce its emissions	9	12	13	14
Don't know	9	9	14	14
Refused (volunteered)		1	--	1
Your local government officials	60	52	54	59

**[ASK ALL]**

Please tell me whether you strongly oppose, somewhat oppose, somewhat support, or strongly support each of the following. First... **[READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

**“Provide tax rebates for people who purchase energy-efficient vehicles or solar panels”**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Strongly support	58	49	44	45
Support support	23	30	34	32
Somewhat oppose	8	8	8	9
Strongly oppose	9	11	11	10
Not sure (volunteered)	1	2	3	4
Refused (volunteered)	--	--	--	--

**[ASK ALL]**

If [STATE] were to switch from fossil fuels like coal and oil to clean energy sources like solar and wind, do you think it would... **[READ EACH ITEM. DO NOT ACCEPT AN ANSWER UNTIL BOTH ITEMS ARE READ.]**

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Increase economic growth and the number of jobs in STATE	51	52	43	43
Have no effect on the economic growth and number of jobs in STATE	17	14	17	17
Decrease economic growth and the number of jobs in STATE	19	22	26	29
Not sure (volunteered)	13	12	14	11
Refused (volunteered)	--	--	--	1

**[ASK ALL]**

How often do you discuss global warming with your family and friends – never, rarely, occasionally, or often?

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Never	16	22	30	31
Rarely	25	25	24	23
Occasionally	42	36	32	36
Often	17	17	14	10

**[ASK ALL]**

Over the past 12 months, how many times have you done the following – never, once, two or three times, four or five times, or six or more times? Your best estimate is fine, and if you’re not sure, just let me know. **[READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

“Written letters, emailed, or phoned government officials about global warming”

	California	Colorado	Ohio	Texas
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
6 or more times	2	2	3	2
4-5 times	2	2	1	1
2-3 times	4	6	4	5
Once	4	4	3	3
Never	88	86	89	88
Not sure (volunteered)	1	--	1	1
Refused (volunteered)	--	--	--	--

**[RESPONDENTS WHO HAVE CONTACTED A GOVERNMENT OFFICIAL AT LEAST ONCE IN THE PAST 12 MONTHS ABOUT GLOBAL WARMING]**

When you contacted a government official did you... **[READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

	California	Colorado	Ohio	Texas
Unweighted base:	(114)	(127)	(100)	(86)
	%	%	%	%
Urge them to take action to reduce global warming, or	75	82	82	78
Urge them <u>NOT</u> to take action to reduce global warming, or	7	8	9	8
Something else? (Please specify)	14	10	9	11
Not sure (volunteered)	1	--	--	3
Refused (volunteered)	3	--	--	--

**[ASK ALL]**

As you know, sometimes different people speak out on public policy issues. Please tell me how believable you would find each of the following people regarding the energy and climate related issues we have been discussing - Very believable, somewhat believable, not very believable, or not at all believable. If you are not familiar with one of these individuals please just say so and we will move on. [READ EACH ITEM.]

**“President Obama”**

	<b>California</b>	<b>Colorado</b>	<b>Ohio</b>	<b>Texas</b>
Unweighted base:	(800)	(800)	(800)	(800)
	%	%	%	%
Very believable	28	20	21	20
Somewhat believable	39	36	36	38
Not very believable	14	14	13	12
Not at all believable	14	26	20	26
Not sure (volunteered)	5	4	10	3
Refused (volunteered)	--	1	--	--



## Appendix II: Survey Methods

The data in this report are based on a statewide representative surveys of 800 people (18+) in each of the four states between June and August, 2013.

All interviews were administered by telephone in English or Spanish, depending on the respondents' preference. To help ensure representativeness of the final sample, the survey was administered to respondents reached on traditional landline telephones as well as to those reached on cell phones. Respondents within each household were selected using the next/last birthday selection method. If the selected person was not at home during the initial contact, he or she was called back and interviewed at a convenient time. The survey was conducted for YPCCC by Abt SRBI using random digit dial sample supplied by Survey Sampling International.

Details for each of the state are as follows:

- California: All interviews were conducted June 26-July 3, 2013; Landline interviews (480), Cell phone interviews (320)
- Colorado: All interviews were conducted June 19-26, 2013; Landline interviews (480), Cell phone interviews (320)
- Ohio: All interviews were conducted July 3-10, 2013; Landline interviews (560), Cell phone interviews (240)
- Texas: All interviews were conducted July 17-August 7, 2013; Landline interviews (560), Cell phone interviews (240)

The average margin of error for the total sample in each state is +/- 3 percentage points at the 95% confidence level.

### Rounding error

For tabulation purposes, percentage points are rounded off to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%.

## Appendix III: Sample Demographics

### California

	N (unweighted)	% (weighted)
<b>Total</b>	<b>800</b>	<b>100%</b>
<b>Sex</b>		
Men	389	49
Women	411	51
<b>Age</b>		
18-24	79	14
25-34	102	19
35-44	89	18
45-54	126	18
55-64	187	15
65 or older	200	15
Refused	17	2
<b>Education</b>		
Less than high school	36	8
High school graduate	158	30
Technical/Trade school	9	2
Some college	195	30
College graduate	204	15
Some graduate school	25	2
Graduate degree	158	11
Not sure	4	1
Refused	11	2
<b>Household Income</b>		
Under \$10,000	49	9
\$10,000 to under \$20,000	79	10
\$20,000 to under \$30,000	71	11
\$30,000 to under \$40,000	68	10
\$40,000 to under \$50,000	49	7
\$50,000 to under \$75,000	105	13
\$75,000 to under \$100,000	82	10
\$100,000 to under \$150,000	97	10
\$150,000 or more	87	8
(VOL) Not sure	33	5
(VOL) Refused	80	8
<b>Hispanic</b>		
Yes	157	33
<b>Race/Ethnicity</b>		
White, Caucasian (non-Hispanic)	459	43
Black, African-American (non-Hispanic)	59	6
Asian, Asian-American (non-Hispanic)	49	8
Other/Not sure/Refused	76	10

**Colorado**

<b>Total</b>	N (unweighted) <b>800</b>	% (weighted) <b>100%</b>
<b>Sex</b>		
Men	352	51
Women	448	49
<b>Age</b>		
18-24	61	12
25-34	85	19
35-44	106	18
45-54	152	19
55-64	184	17
65 or older	208	15
Refused	4	*
<b>Education</b>		
Less than high school	37	6
High school graduate	172	26
Technical/Trade school	17	3
Some college	174	29
College graduate	200	19
Some graduate school	32	2
Graduate degree	166	14
Not sure	1	*
Refused	1	*
<b>Household Income</b>		
Under \$10,000	54	7
\$10,000 to under \$20,000	63	6
\$20,000 to under \$30,000	68	10
\$30,000 to under \$40,000	57	8
\$40,000 to under \$50,000	82	12
\$50,000 to under \$75,000	138	18
\$75,000 to under \$100,000	98	12
\$100,000 to under \$150,000	80	10
\$150,000 or more	66	7
(VOL) Not sure	28	3
(VOL) Refused	66	6
<b>Hispanic</b>		
Yes	70	16
<b>Race/Ethnicity</b>		
White, Caucasian (non-Hispanic)	645	75
Black, African-American (non-Hispanic)	28	4
Other/Not sure/Refused	57	5

**Ohio**

	N	%
Total	800	100
	(unweighted)	(weighted)
<b>Sex</b>		
Men	380	49
Women	420	51
<b>Age</b>		
18-24	42	11
25-34	64	16
35-44	88	17
45-54	114	19
55-64	225	18
65 or older	255	19
Refused	12	1
<b>Education</b>		
Less than high school	59	8
High school graduate	248	37
Technical/Trade school	19	3
Some college	157	26
College graduate	157	13
Some graduate school	19	2
Graduate degree	136	9
Refused	5	1
<b>Income</b>		
Under \$10,000	63	10
\$10,000 to under \$20,000	83	10
\$20,000 to under \$30,000	100	11
\$30,000 to under \$40,000	80	11
\$40,000 to under \$50,000	54	8
\$50,000 to under \$75,000	110	14
\$75,000 to under \$100,000	86	11
\$100,000 to under \$150,000	69	7
\$150,000 or more	44	5
(VOL) Don't know	33	6
(VOL) Refused	78	8
<b>Response</b>		
Yes	16	3
<b>Race</b>		
White, Caucasian (non-Hispanic)	652	80
Black, African-American (non-Hispanic)	74	11
Other/Not sure/Refused	58	6

**Texas**

	N 800 (unweighted)	% 100 (weighted)
<b>Total</b>		
<b>Sex</b>		
Men	385	49
Women	415	51
<b>Age</b>		
18-24	60	14
25-34	97	19
35-44	81	18
45-54	163	19
55-64	164	15
65 or older	229	15
Refused	6	1
<b>Education</b>		
Less than high school	55	10
High school graduate	198	33
Technical/Trade school	19	2
Some college	184	29
College graduate	173	14
Some graduate school	35	3
Graduate degree	130	8
Refused	6	1
<b>Household Income</b>		
Under \$10,000	68	10
\$10,000 to under \$20,000	84	10
\$20,000 to under \$30,000	89	13
\$30,000 to under \$40,000	59	8
\$40,000 to under \$50,000	58	7
\$50,000 to under \$75,000	102	13
\$75,000 to under \$100,000	71	10
\$100,000 to under \$150,000	93	11
\$150,000 or more	73	7
(VOL) Not sure	33	6
(VOL) Refused	70	6
<b>Hispanic/Latino</b>		
Yes	124	33
<b>Race/Ethnicity</b>		
White, Caucasian (non-Hispanic)	499	49
Black, African-American (non-Hispanic)	98	12
Other/Not sure/Refused	79	6

