# CLIMATE CHANGE IN THE SAN FRANCISCAN MIND















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#### Introduction

This report is based on findings from a citywide representative survey of San Franciscans conducted by the Yale Project on Climate Change Communication (<u>http://environment.yale.edu/climate-communication</u>).

A total of 700 adults (18+) were interviewed by telephone July 31 -August 7, 2013. To help ensure representativeness of the final sample, the survey was administered to respondents reached on traditional landline telephones (420) as well as to those reached on cellphones (280). The average margin of error for the total sample +/- 4 percentage points at the 95% confidence level.

For comparison purposes, data from a statewide survey of California are referenced in this report. In this survey, a total of 800 adults (18+) were interviewed by telephone from June 26 to July 3, 2013. The survey was administered to respondents reached on traditional landline telephones (480) as well as to those reached on cellphones (320). The averages margin of error for the total sample +/-3 percentage points at the 95% confidence level.

Both surveys were conducted for YPCCC by Abt SRBI using a random digit dial sample supplied by Survey Sampling International.

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#### **Executive Summary**

- Most San Franciscans (87%) believe global warming is happening. Few (5%) believe it is not.
- Two in three (67%) believe that if global warming is happening, it is caused mostly by human activities.
- San Franciscans think global warming is important and are worried about it. Nine in ten (89%) say the issue of global warming is at least somewhat important to them personally. And three in four (77%) are at least somewhat worried about it.
- Seven in ten San Franciscans (69%) understand that "most scientists think global warming is happening." Fewer (25%) believe "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 having a large or moderate influence on the severity of heat waves (73%), drought (72%), and reduced snowpack in the mountains (71%) in California.
- About two in three San Franciscans (63%) say they have personally experienced the effects of global warming.
- Among San Franciscans who believe global warming is happening, large majorities expect to see a myriad of negative effects from it over the next 50 years. Nine in ten anticipate more droughts and water shortages (91%), heat waves (89%), or declining numbers of fish and native wildlife (89%). At least eight in ten and believe the area will experience increased allergies, asthma, infectious diseases, or other health problems (83%) and more power outages (80%).
- Two in three San Franciscans who believe global warming is happening (66%) expect that parts of San Francisco will have to be abandoned in the next 50 years due to sea level rise.
- More than half of San Franciscans say that more should be done about global warming at all levels of government—from Congress (69%) and President Obama (63%), to California state legislators (66%) and Governor Brown (62%), to local government officials (63%). However, even larger numbers of San Franciscans believe that citizens themselves (77%) or corporations and industry (75%) should be doing more to address climate change.
- Three in four San Franciscans (75%) say the United States should reduce greenhouse gas emissions regardless of whether or not other countries do the same.
- Many San Franciscans believe that individual action, and especially collective action, can be effective in addressing global warming. Among those who believe global warming is happening, most (91%) say their own actions would reduce their personal contribution to global warming at least a little. Virtually all San Franciscans who believe global warming is happening say that if the



same actions were taken by most people in the U.S. (94%) or around the world (96%), it would reduce global warming a little, some, or a lot.

- More than half of San Franciscans (58%) say that switching from fossil fuels to clean energy sources would increase economic growth and the number of jobs in San Francisco.
- Many San Franciscans are unsure that people will rally to do what's necessary to reduce global warming. Half (52%) believe 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 (11%).
- About half of San Franciscans (53%) 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 57% would like to do it more frequently in the next 12 months. Moreover, 45% 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 52% would like to do this more frequently in the coming year.

#### **Key Findings**

#### **Beliefs and Attitudes**

#### Most San Franciscans believe global warming is happening is human caused.

- Nearly nine in ten San Franciscans (87%) believe that global warming is happening. Few (5%) do not.
- Three in four (77%) of those who believe global warming is happening are either extremely or very sure it is. Those who do *not* believe it is happening are equally firm in their beliefs—77% are either extremely or very sure global warming is *not* happening.
- Two in three San Franciscans (67%) believe that, if global warming is happening, it is caused mostly by human activities. Relatively few (16%) believe it is caused mostly by natural changes in the environment, while 12% believe it results from a combination of human activities and natural changes.
- Seven in ten San Franciscans (69%) believe there is agreement about the reality of global warming among scientists. By contrast, one in four (25%) believe that there is a lot of disagreement among scientists. Just 1% believes that most scientists think global warming is not happening.

## Most San Franciscans are concerned about global warming, and nearly two in three believe they have experienced its effects.

- Three in four San Franciscans (77%) say they are very or somewhat worried about global warming, and 89% say the issue of global warming is at least somewhat important to them personally. By contrast, only one in ten (11%) say it is not important.
- Nearly two in three San Franciscans (63%) say that they have personally experienced the effects of global warming.

#### Most believe human intervention is needed to reduce global warming.

- Many San Franciscans believe that individual actions can help, and indeed are necessary, to reduce global warming. For example, about two in three (64%) *disagree* that the actions of a single individual won't make any difference in global warming. Similarly, 57% disagree that new technologies can solve global warming without individuals having to make big changes in their lives.
- San Franciscans are uncertain about whether humanity will do what is necessary to reduce global warming. Half (52%) believe humans could reduce global warming, but it's unclear at this point whether we will do what's needed. Aside from those who are uncertain, the pessimists outnumber the optimists. One in four (25%) believes that, although we could reduce global



warming, people aren't willing to change their behavior to do so, while another 5% believes humans simply can't reduce global warming. About one in ten (11%) believes that humans can reduce global warming and will do so successfully.

#### **Climate Impacts and Extreme Weather**

#### San Franciscans have observed increasing heat waves and drought, and reduced snowpack in the mountains.

- Half of San Franciscans (49%) say that, over the past several years, heat waves become more severe in their area. Of those who believe global warming is happening, three in four (73%) believe global warming has had at least a moderate influence on the severity of the heat waves. Few (9%) believe global warming has had *no* influence on heat waves.
- Similarly, nearly half of all San Franciscans (47%) believes drought in the area has become more severe over the past several years. Of those who believe global warming is happening, a solid majority (72%) say that it has had at least a moderate influence on the severity of drought, while only 9% say global warming has had no influence.
- By contrast, relatively few San Franciscans say that the area has experienced an increase in wildfires (32%), coastal flooding and erosion (31%), or flooding of rivers or lakes (19%).

#### San Franciscans expect a myriad of negative global warming effects over the next 50 years.

- Most San Franciscans who believe that global warming is happening say that negative climate impacts are at least somewhat likely to occur over the next 50 years as a result. For example, nine in ten anticipate more droughts and water shortages (91%), heat waves (89%), or declining numbers of fish and native wildlife (89%). At least eight in ten believe the area will experience increased allergies, asthma, infectious diseases, or other health problems (83%) and more power outages (80%).
- At least seven in ten who believe global warming is happening say the area will experience worse storms, hurricanes, or tornadoes (75%) or flooding (70%).
- Two in three San Franciscans who believe global warming is happening (66%) expect that parts of San Francisco will have to be abandoned in the next 50 years due to sea level rise.

#### San Franciscans tend to see global warming less as a threat to themselves than to others.

- More than eight in ten San Franciscans believe that global warming will cause at least a moderate amount of harm to future generations of people (87%) and to plant and animal species (84%).
- Seven in ten believe that global warming will harm people in developing countries (72%), modern industrialized countries (72%), or in the United States (71%).



- More than half of San Franciscans believe that global warming will harm people in their own families (59%) or communities (57%).
- Fewer San Franciscans, however, think they will be personally harmed by global warming, with 46% saying global warming will do at least a moderate amount of harm to them personally, while one in five (18%) say they will not be harmed at all.

#### Support for Climate and Energy Policies

San Franciscans say industry, citizens, and government should do more to address global warming.

- Most San Franciscans (89%) say that global warming should be a very high, high, or medium priority for the president and Congress.
- At least six in ten San Franciscans want their representatives at all levels of government to do more to address global warming, including the U.S. Congress (69%), California state legislators (66%), President Obama (63%), local government officials (63%), and Governor Brown (62%).
- However, more San Franciscans say that citizens themselves (77%) or corporations and industry (75%) should be doing more to address climate change.

#### San Franciscans say the U.S. should act alone on global warming if necessary.

- The majority of San Franciscans (75%) say the United States should reduce greenhouse gas emissions regardless of what other countries do. Very few (4%) say the U.S. should act only if other industrialized countries also reduce their emissions, and only 6% say the U.S. should wait for both other industrialized and developing countries to act. Only 5% say the U.S. should *not* reduce its emissions in any case.
- Further, four in five San Franciscans (81%) say the U.S. should make a medium- or large-scale effort to reduce global warming, even if there are, respectively, medium or large economic costs. Only 4% say the U.S. should make *no* effort to reduce global warming.

#### San Franciscans support switching to clean energy sources.

- Most San Franciscans (87%) support tax rebates for people who purchase energy-efficient vehicles or solar panels. By contrast, only 7% of San Franciscans oppose this policy.
- Similarly, 80% support requiring electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources—even if it costs the average household an extra \$100 a year. Comparatively few (15%) oppose this policy.
- More than half of San Franciscans (58%) believe that if the city switched from fossil fuels (e.g., coal and oil) to clean energy sources (e.g., solar and wind), it would increase economic growth and the number of jobs in the area. About one in five (18%) say it would have no effect on



economic growth and jobs. Just one in ten (11%) says a switch to clean energy would *decrease* economic growth and the number of jobs.

• More San Franciscans oppose "fracking" (38%) than support it (14%). An additional 38% is currently undecided about fracking.

#### Actions to limit global warming

Many San Franciscans are engaged in actions to limit global warming—and are interested in doing them more frequently.

- Most San Franciscans (88%) have at least a few compact fluorescent lights in their home. Only 3% have none.
- Among San Franciscans who do not yet have all or most bulbs replaced with CFLs, three in ten (31%) say that over the next 12 months they would like to replace them and probably will. Others would like to replace them, but probably won't (30%). About one in four (23%) does not want to replace them, and 16% are not sure.
- More than half of San Franciscans (56%) say they set their thermostats—always, often, or sometimes—to 68 degrees or cooler in the winter. By contrast, 35% do it rarely or never.
- More than half of San Franciscans at least sometimes walk or bike instead of drive (57%) or use public transportation or car pool (56%). Fewer do these things rarely or never (both 41%).

San Franciscans agree individuals can make a difference, but together we can make a bigger difference.

- Of those who believe that global warming is happening, nine in ten (91%) think that the actions they are already taking and those they would like to take over the next 12 months would reduce their personal contribution to global warming at least a little. Only 7% say individual actions will not help reduce global warming at all.
- San Franciscans believe that the same actions would be more effective if done collectively. Virtually all who believe that global warming is happening say that if most people in the United States (94%) or in the modern industrialized countries around the world (96%) did the same things, it would reduce global warming at least a little.

Many San Franciscans reward or punish companies based on their efforts to reduce global warming.

- About half of San Franciscans (53%) say that, over the past 12 months, they have rewarded companies that are taking steps to reduce global warming by buying their products at least once.
- Moreover, more than four in ten (45%) say that, over the past 12 months, they have *punished* companies that are opposing steps to reduce global warming by *not* buying their products.



One in three San Franciscans (35%) says that, over the past 12 months, he or she has volunteered with or donated money to an organization working to reduce global warming. Nearly four in ten (38%) would like to volunteer or donate more often over the next 12 months.

#### Global warming communication

#### Global warming is a topic of conversation for most San Franciscans.

- Six in ten San Franciscans (62%) say they discuss global warming with their family and friends often or occasionally.
- Seven in ten (70%) say that all, most, or some of their friends share their views on global warming. Only 7% say that *none* of their friends do.

#### Some San Franciscans have communicated with government officials about global warming.

- Nearly one in four San Franciscans (23%) has written letters, emailed, or phoned government officials about global warming at least once in the past 12 months. Among them, the large majority (86%) says they urged officials to take action to reduce global warming. Only 2% urged them *not* to take action.
- One in three San Franciscans (35%) says he or she would like to contact government officials more often over the next 12 months. Of those, four in five (81%) would urge officials to take action to reduce global warming, compared to 5% who would urge them *not* to take action.

#### At least two in three San Franciscans say President Obama, Governor Jerry Brown, Senator Dianne Feinstein, and Senator Barbara Boxer are believable when talking about energy- and climate-related issues.

- Three in four San Franciscans (76%) say that President Obama is very or somewhat believable when speaking about energy- and climate-related issues. One in five (20%), however, says he is either not very or not at all believable.
- Seven in ten (71%) say Governor Jerry Brown is very or somewhat believable regarding energy and climate issues. About two in three say Senators Dianne Feinstein (68%) and Barbara Boxer (66%) are believable.

#### Selected comparisons between San Franciscans and Californians

In a number of ways, San Franciscans show more awareness of and concern about global warming than does the state of California as a whole. For example:

- San Franciscans are more likely than Californians to say global warming is happening (87% versus 79% respectively).
- Two in three San Franciscans (67%) understand that, if global is happening, it is due mostly to human activities, compared to just over half of all Californians (58%).
- A solid majority (69%) of San Franciscans understands that most scientists think global warming is happening, compared to just over half of all Californians (55%).
- San Franciscans are more likely than Californians generally to be "very" or "somewhat worried" about global warming (77% versus 63% respectively).
- San Franciscans are also more likely than Californians in general to say that global warming should be a "very high" or "high" priority for the president and Congress (68% versus 59%).
- By contrast, Californians in general are more likely than San Franciscans to believe climate change is having a large or moderate effect in their local areas on the severity of heat waves (84% versus 73% respectively), drought (77% versus 72%), wildfires (77% versus 59%), or flooding of rivers or lakes (58% versus 53%).

#### **Appendix I: Selected Charts**













#### Many San Franciscans Perceive Global Warming as a Relatively Distant Threat

	Sa	n Francis	со	California			DI DIG
	Am	ount of h	arm	Amount of harm			Pt. Diff. (SF-CA)
	Great deal/ moderate amount	Great deal	Moderate amount	Great deal/ moderate amount	Great deal	Moderate amount	Great deal/ moderate amount
	%	%	%	%	%	%	%
Plant/animal species	87	71	16	80	66	14	7
Future generations of people	84	71	13	81	65	16	3
People in developing countries	72	55	17	69	48	21	3
People in modern industrialized countries	72	44	28	69	44	25	3
People in the U.S	71	42	29	68	42	26	3
Your family	59	26	33	54	24	30	5
People in your community	57	26	31	56	26	30	1
You personally	46	20	26	44	19	25	2

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: San Franciscans 18+ (n=700); Californians 18+ (n=800).



#### Majority of San Franciscans Believe Global Warming Is Having a Large or Moderate Influence on the Severity of Weather Events

	Amount	on Francis of global ence on se	warming	California Amount of global warming influence on severity			Pt. Diff. (SF-CA)
	Large/ moderate amount	Large	Moderate	Large/ moderate amount	Large	Moderate	Large/ moderate amount
	%	%	%	%	%	%	%
Heat waves	73	34	39	84	52	32	-11
Drought	72	31	41	77	44	33	-5
Reduced snowpack in the mountains	71	40	31	74	44	30	-3
Coastal flooding	66	30	36	65	29	36	1
Wildfires	59	21	38	77	39	38	-18
Flooding of rivers or lakes	53	18	35	58	22	36	-5

In your opinion, is global warming having no influence, a small influence, a moderate influence, or a large influence on the severity of...

Base: San Franciscans and Californians 18+ who believe that global warming is happening.











#### San Franciscans Believe Citizens Themselves, Corporations, Industry, and Politicians Should be Doing More to Address Global Warming

	How muc	San Francisco California   How much should be doing to address global warming How much should be doing to address global warming					
	More/ much more	Much more	More	More/ much more	Much more	More	Large/ moderate amount
	%	%	%	%	%	%	%
Citizens themselves	77	38	39	70	40	30	7
Corporations & industry	75	51	24	73	53	20	2
The U.S. Congress	69	39	30	65	37	28	4
Your state legislators	66	30	36	61	31	30	5
President Obama	63	29	34	59	28	31	4
Local government officials	63	27	36	58	28	30	5
Governor Brown	62	26	36	60	29	31	2

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? Bases: San Franciscans 18+ (n=700); Californians 18+ (n=800).



#### Appendix II: Questionnaire

#### [ASK ALL; n=700]

1. How often do you do each the following – never, rarely, sometimes, often, or always? If something I say doesn't apply to you, just let me know. First... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Never	Rarely	Some- times	Often	Always	Not app.	NS [VOL]	REF [VOL]
In the winter, set the thermostat to 68 degrees or cooler	26%	9%	18%	15%	23%	8%	1%	%
Use public transportation or car pool	24	17	22	16	18	3	0	
Walk or bike instead of drive	27	14	27	20	10	2		*

#### [ASK ALL; n=700]

2. Over the next 12 months, would you like to do each of the following more frequently than you do now, less frequently than you do now, or about as frequently as you do now? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Less frequently	About the same	More frequently	NS [VOL]	REF [VOL]
In the winter, set the thermostat to 68 degrees or cooler	14%	61%	18%	6%	1%
Use public transportation or car pool	13	61	24	2	*
Walk or bike instead of drive	8	52	38	1	1

3. How many light bulbs in your home are energy-efficient compact fluorescent lights – All, most, some, a few, none of them, or are you not sure?

All	32%
Most	35
Some	12
A few	9
None	3
Not sure	9
Refused [VOL]	

#### [ASK RESPONDENTS WHO ANSWER Q3=3,4, OR 5; n=194]

4. Over the next 12 months, how likely will you be to change most of the light bulbs in your home to energy-efficient compact fluorescent lights? Would you say you'd like to and probably will, or that you'd like to but probably won't, or that you don't want to and therefore won't, or are you not sure?

Yes, I'd like to and probably will	31%
Yes, I'd like to but probably won't	30
No, I don't want to	23
Not sure	16
Refused [VOL]	



5. In your view, do you think each of the following has become much less severe, somewhat less severe, stayed about the same, become somewhat more severe, or much more severe in San Francisco over the past several years? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Much less severe	Some- what less severe	Same	Some- what more severe	Much more severe	NS [VOL]	REF [VOL]
Wildfires	7%	10%	41%	21%	11%	10%	*%
Flooding of rivers or lakes	14	15	38	11	8	13	*
Drought	8	10	29	31	16	7	
Heat waves	5	9	34	33	16	3	*
Coastal flooding and erosion	5	8	38	22	9	18	*
Reduced snowpack in the mountains	8	13	18	26	19	15	*

#### [ASK ALL; n=700]

6a. Do you think global warming is a bad thing or a good thing? If you've never heard of global warming, just let me know.

Bad thing	83%
Good thing	7
Never heard of global warming	2
Not sure [VOL]	7
Refused [VOL]	2

#### [ASK RESPONDENTS WHO ANSWER Q6a=1; n=593]

### 6b. And do you think global warming is a very bad thing, moderately bad thing, or slightly bad thing?

Very bad	71%
Moderately bad	21
Slightly bad	7
Not sure [VOL]	*
Refused [VOL]	

#### [ASK RESPONDENTS WHO ANSWER Q6a=2; n=39]

6c. And do you think global warming is a very good thing, moderately good thing, or slightly good thing?

Very good	18%
Moderately good	31
Slightly good	49
Not sure [VOL]	
Refused [VOL]	3

7. 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.

Yes	87%
No	5
Not sure	9
Refused [VOL]	

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=614]

8. How sure are you that global warming is happening – not at all sure, somewhat sure, very sure, or extremely sure?

Not at all sure	1%
Somewhat sure	22
Very sure	31
Extremely sure	46
Not sure [VOL]	
Refused [VOL]	

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS NOT HAPPENING (Q7=2); n=40]

9. How sure are you that global warming is not happening – not at all sure, somewhat sure, very sure, or extremely sure?

Not at all sure	1%
Somewhat sure	18
Very sure	44
Extremely sure	33
Not sure [VOL]	4
Refused [VOL]	

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

Caused mostly by human activities, or	
Caused mostly by natural changes in the environment, or	
Something else (Please specify), or	[13]
Both human activities and natural changes in the environment [VOL]	12
Other [VOL]	1
None of these, because global warming isn't happening	2
Not sure [VOL]	3

#### [ASK ALL; n=700]

11. 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.]

Most scientists think global warming is happening, or	
Most scientists think global warming is not happening, or	
There is a lot of disagreement among scientists about whether or not global warming is happening	
Not sure [VOL]	5
Refused [VOL]	

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=614]

12. Thinking about the energy-saving actions you're already taking and those you'd like to take over the next 12 months, If you did most of these things, how much do you think it would reduce your personal contribution to global warming – not at all, a little, some, or a lot?

Not at all	7%
A little	41
Some	33
A lot	17
Not sure [VOL]	2
Refused [VOL]	*

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=534]

13. If most people in the United States did these same actions, how much do you think it would reduce global warming – not at all, a little, some, or a lot?

Not at all	3%
A little	13
Some	30
A lot	51
Not sure	3
Refused [VOL]	

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=534]

14. If most people in the modern industrialized countries around the world did these same actions, how much do you think it would reduce global warming – not at all, a little, some, or a lot?

Not at all	2%
A little	10
Some	22
A lot	64
Not sure [VOL]	2
Refused [VOL]	





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

Very worried	31%
Somewhat worried	46
Not very worried	12
Not at all worried	11
Not sure [VOL]	1
Refused [VOL]	

#### [ASK ALL; n=700]

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... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Not at all	Only a little	A moder- ate amount	A great deal	Not sure	REF [VOL]
You personally	18%	29%	26%	20%	7%	%
Your family	12	23	33	26	6	1
People in your community	11	24	31	26	8	
People in the United States	6	16	29	42	7	
People in modern industrialized countries	6	14	28	44	8	*
People in developing countries	7	13	17	55	9	
Future generations of people	3	5	16	71	5	
Plant and animal species	4	7	13	71	5	

17. When do you think global warming will start to harm people in the United States? Would you say... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

They are being harmed right now, or	49%
In 10 years, or	13
In 25 years, or	14
In 50 years, or	9
In 100 years, or	7
Never	5
Not sure [VOL]	4
Refused [VOL]	*

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=614]

18. Do you think it is very likely, somewhat likely, somewhat unlikely, or very unlikely that each of the following will occur in San Francisco over the next 50 years due to global warming?

[RANDOMIZE]	Very unlikely	Some- what unlikely	Some- what likely	Very likely	NS [VOL]	REF [VOL]
Increased allergies, asthma, infectious diseases or other health problems	5%	5%	31%	52%	7%	*%
Power outages	5	12	35	45	3	*
More heat waves	3	5	30	59	3	
Droughts and water shortages	4	6	32	59	1	
Worse storms, hurricanes, or tornadoes	11	11	31	44	3	
Flooding of major cities	10	17	29	41	4	*
Declining numbers of fish and native wildlife	3	5	29	60	3	
Abandoning parts of San Francisco due to sea level rise	12	18	34	32	4	

#### [ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=614]

19. In your opinion, is global warming having no influence, a small influence, a moderate influence, or a large influence on the severity of [ITEM] in San Francisco? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	No influence	Small influence	Moder- ate influence	Large influence	NS [VOL]	REF [VOL]
Wildfires	16%	17%	38%	21%	8%	1%
Flooding of rivers or lakes	18	23	35	18	4	2
Drought	9	17	41	31	2	*
Heat waves	9	15	39	34	3	
Coastal flooding and erosion	10	17	36	30	6	
Reduced snowpack in the mountains	9	14	31	40	6	

#### [ASK ALL; n=700]

20. How much had you thought about global warming before today – not at all, a little, some, or a lot?

Not at all	4%
A little	21
Some	35
A lot	40
Not sure [VOL]	
Refused [VOL]	

21. How important is the issue of global warming to you personally – would say it is not at all important, not too important, somewhat important, very important, or extremely important?

Not at all important	5%
Not too important	6
Somewhat important	34
Very important	38
Extremely important	17
Not sure [VOL]	*
Refused [VOL]	

#### [ASK ALL; n=700]

22. On some issues, people feel that they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind. For global warming, would you say you... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Do not need any more information, or you	31%
Need a little more information, or you	20
Need some more information, or you	25
Need a lot more information	23
Not sure [VOL]	1
Refused [VOL]	

23. 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.]

	Strongly disagree	Some- what disagree	Some- what agree	Strongly agree	NS [VOL]	REF [VOL]
I could easily change my mind about global warming	50%	19%	18%	11%	2%	%
The actions of a single individual won't make any difference in global warming	37	27	15	18	3	*
New technologies can solve global warming without individuals having to make big changes in their lives	33	24	27	12	4	
I have personally experienced the effects of global warming	15	18	37	26	4	*

#### [ASK ALL; n=700]

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

Never	16%
Rarely	23
Occasionally	43
Often	19
Not sure [VOL]	*
Refused [VOL]	

25. How many of your friends share your views on global warming – none, a few, some, most, or all?

None	7%
A few	16
Some	21
Most	37
All	12
Not sure [VOL]	7
Refused [VOL]	

#### [ASK ALL; n=700]

26. 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]

Global warming isn't happening, or	4%	
Humans can't reduce global warming, even if it is happening, or		
Humans could reduce global warming, but people aren't willing to change their behavior, so we're not going to, or		
Humans could reduce global warming, but it's unclear at this point whether we will do what's needed, or		
Humans can reduce global warming, and we are going to do so successfully	11	
Not sure [VOL]	3	
Refused [VOL]	*	

27. Do you think global warming should be a low, medium, high, or very high priority for the president and Congress? [READ EACH ITEM.]

Low priority	9%
Medium priority	21
High priority	36
Very high priority	32
Not sure [VOL]	1
Refused [VOL]	*

#### [ASK ALL; n=700]

28. 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.]

[RANDOMIZE]	Much less	Less	Curren- tly doing the right amount	More	Much more	NS [VOL]	REF [VOL]
The U.S. Congress	7%	6%	9%	30%	39%	9%	%
President Obama	5	6	16	34	29	10	*
Corporations and industry	8	5	5	24	51	6	*
Citizens themselves	5	6	9	39	38	4	1
Your local government officials	5	6	15	36	27	12	
Your state legislators	4	7	9	36	30	14	
Your governor	5	5	17	36	26	11	

#### [SPLIT SAMPLE A; n=328]

29a. Do you think your state government should be doing much more, more, less, much less, or about the same amount as it is doing now to prepare for the potential impacts of global warming?

Much more	39%
More	37
Same amount	11
Less	2
Much less	5
Not sure [VOL]	6
Prefer not to answer [VOL]	

#### [SPLIT SAMPLE B; n=372]

29b. Do you think your local government should be doing much more, more, less, much less, or about the same amount as it is doing now to prepare for the potential impacts of global warming?

Much more	35%
More	41
Same amount	14
Less	2
Much less	4
Not sure [VOL]	4
Prefer not to answer [VOL]	

30. 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.]

Regardless of what other countries do, or	75%
Only if other industrialized countries (such as England, Germany, and Japan) reduce their emissions, or	4
Only if other industrialized countries and developing countries (such as China, India, and Brazil) reduce their emissions, or	6
The U.S. should not reduce its emissions	5
Don't know	10
Refused [VOL]	

#### [ASK ALL; n=700]

31. How big of an effort should the United States make to reduce global warming? Would you say... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

No effort, or	4%
A small-scale effort, even if it has small economic costs, or	11
A medium-scale effort, even if it has moderate economic costs, or	32
A large-scale effort, even if it has large economic costs	49
Not sure [VOL]	5
Refused [VOL]	*

32. Over the past 12 months, how many times have you done each of 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.]

	Never	Once	2-3 times	4-5 times	6 or more times	Not sure	REF [VOL]
Rewarded companies that are taking steps to reduce global warming by buying their products	31%	5%	18%	11%	19%	16%	*%
Punished companies that are opposing steps to reduce global warming by NOT buying their products	40	6	14	5	20	15	

#### [ASK ALL; n=700]

33. Over the next 12 months, would you like to punish companies that are opposing steps to reduce global warming by NOT buying their products... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

More frequently than you do now, or	52%
Less frequently than you do now, or	9
About the same as you do now	36
Not sure [VOL]	3
Refused [VOL]	

#### [ASK ALL; n=700]

34. Over the next 12 months, do you intend to buy the products of companies that are taking steps to reduce global warming... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

More frequently than you do now, or	57%
Less frequently than you do now, or	3
About the same as you do now	37
Not sure [VOL]	2
Refused [VOL]	





35. 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.]

	Never	Once	2-3 times	4-5 times	6 or more times	Not sure	REF [VOL]
[A] Volunteered with or donated money to an organization working to reduce global warming	61%	10%	15%	4%	6%	3%	*%
[B] Written letters, emailed, or phoned government officials about global warming	78	6	10	2	5	1	*

### [ASK RESPONDENTS WHO HAVE CONTACTED A GOVERNMENT OFFICIAL AT LEAST ONCE (Q35B=2,3,4 OR 5); n=177]

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

Urge them to take action to reduce global warming, or	86%
Urge them <u>NOT</u> to take action to reduce global warming, or	2
Something else? (Please specify)	7
Not sure [VOL]	4
Refused [VOL]	

37. Over the next 12 months, would you like to do each of the following less often, more often, or about as often as you do now? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Less often	About the same	More often	NS [VOL]	REF [VOL]
[A] Volunteer with or donate money to an organization working to reduce global warming	8%	51%	38%	3%	*%
[B] Write letters, email, or phone government officials about global warming	10	53	35	2	*

### [ASK RESPONDENTS WHO WOULD LIKE TO CONTACT GOVERNMENT OFFICIALS OVER THE NEXT YEAR WITH AT LEAST THE SAME FREQUENCY AS IN THE PAST (Q37B=2 OR 3); n=614] 38. If you were to contact government officials about global warming, would you... [READ EACH

ITEM - DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Urge them to take action to reduce global warming, or	81%
Urge them NOT to take action to reduce global warming, or	5
Something else? (Please specify)	8
Not sure [VOL]	6
Refused [VOL]	1

39. 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.]

	Strongly oppose	Some- what oppose	Some- what support	Strongly support	NS [VOL]	REF [VOL]
Provide tax rebates for people who purchase energy-efficient vehicles or solar panels	4%	3%	27%	60%	6%	%
Require electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources, even if it costs the average household an extra \$100 a year	9	6	32	48	5	*

#### [ASK ALL; n=700]

### 40. "Fracking" is a way to extract natural gas from shale rock deep underground. Based on anything you may have heard or read about fracking, do you... [READ EACH ITEM]

Strongly oppose fracking	27%
Somewhat oppose it	11
I'm undecided	38
Somewhat support it	7
Strongly support it	7
Not sure [VOL]	10
Refused [VOL]	*

# 41. If San Francisco 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.]

Increase economic growth and the number of jobs in San Francisco	27%
Have no effect on the economic growth and number of jobs in San Francisco	11
Decrease economic growth and the number of jobs in San Francisco	38
Not sure [VOL]	10
Refused [VOL]	*

#### [IF 41=1,2, OR 3, ASK; n=611]

42. How strongly do you agree with the statement that switching from fossil fuels to clean energy sources would ...[INSERT STATEMENT FROM Q41]? Do you strongly agree, moderately agree, slightly agree, or do you not agree with the statement at all?

Strongly agree	27%
Moderately agree	11
Slightly agree	38
Agree not at all	38
Not sure [VOL]	10
Refused [VOL]	*

43. 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.]

	Not at all believable	Not very believable	Some- what believable	Very believable	NS [VOL]	REF [VOL]
President Obama	11%	9%	46%	30%	4%	*%
Governor Jerry Brown	10	9	43	28	11	1
U.S. Senator Barbara Boxer	12	6	39	27	16	1
U.S. Senator Dianne Feinstein	10	6	42	26	17	*

#### [ASK ALL; n=700]

44. How often do you watch or listen to the following shows or visit their websites – Often, sometimes, hardly ever, or never. [READ EACH ITEM]

[RANDOMIZE]	Never	Hardly ever	Some- times	Often	NS [VOL]	REF [VOL]
The Daily Show with Jon Stewart	44%	14%	24%	17%	1%	*%
The Colbert Report with Stephen Colbert	47	13	24	14	2	*
National Public Radio, or NPR	39	13	22	26	1	*
Public Broadcasting Service, or PBS	22	14	32	31	1	*
The Fox News Cable Channel	52	12	22	14	0	*
The New York Times	45	16	23	15	0	1
Rush Limbaugh	84	9	5	1	0	*
CNN	27	18	33	21	0	*
The national nightly network news on CBS, ABC, or NBC	37	15	25	23	0	*
MSNBC	37	14	31	18	1	*



#### Appendix III: Survey Method

The data in this report are based on a representative, citywide survey of persons reached within the San Francisco metropolitan statistical area (MSA).

A total of 700 adults (18+) were interviewed by telephone July 31 - August 7, 2013. To help ensure representativeness of the final sample, the survey was administered to respondents reached on traditional landline telephones (420) as well as to those reached on cellphones (280). The average margin of error for the total sample +/- 4 percentage points at the 95% confidence level.

For comparison purposes, data from a statewide survey of California are referenced in this report. In this survey, a total of 800 adults (18+) were interviewed by telephone from June 26 to July 3, 2013. The survey was administered to respondents reached on traditional landline telephones (480) as well as to those reached on cellphones (320). The averages margin of error for the total sample +/-3 percentage points at the 95% confidence level.

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.

#### **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 IV: Sample Demographics

	Ν	0/0
	700	100
Total	(unweighted)	(weighted)
Sex	, O /	
Men	337	49
Women	363	51
18-24	52	11
25-34	60	19
35-44	77	19
45-54	151	19
55-64	161	16
65 or older	186	16
Refused	13	1
Less than high school	15	5
High school graduate	120	25
Technical/Trade school	6	2
Some college	118	26
College graduate	196	21
Some graduate school	30	3
Graduate degree	206	18
Not sure/Refused	9	1
Under \$10,000	18	3
\$10,000 to under \$20,000	39	8
\$20,000 to under \$30,000	45	7
\$30,000 to under \$40,000	48	7
\$40,000 to under \$50,000	42	7
\$50,000 to under \$75,000	78	12
\$75,000 to under \$100,000	79	10
\$100,000 to under \$150,000	102	13
\$150,000 or more	144	19
(VOL) Don't know	38	7
(VOL) Refused	67	7
Yes	83	19
White, Caucasian (non-Hispanic)	418	45
Black, African-American (non-Hispanic)	70	8
Asian/Asian-American/Pacific Islander	70	18
Other/Mixed/Not sure/Refused	59	11

