User's Guide and Codebook

National Surveys on Energy and Environment (NSEE)

National Surveys on Energy and Environment Public Use Datasets:

Fall 2017

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Summary

The National Surveys on Energy and Environment (NSEE), a core activity in CLOSUP's Energy and Environmental Policy Initiative, reflects a formal partnership between the Muhlenberg Institute of Public Opinion at Muhlenberg College and the Center for Local, State, and Urban Policy at the University of Michigan's Gerald R. Ford School of Public Policy. NSEE surveys include twice per year national opinion surveys on issues directly related to climate change, as well as other surveys conducted on a range of topics such as hydraulic fracturing ("fracking"), the Great Lakes, and wider issues of energy and environment. NSEE is co-directed by professor Barry Rabe at the University of Michigan, and professor Christopher Borick at Muhlenberg College. For more information on the collaboration between the University of Michigan and Muhlenberg College, please see the recent article from Muhlenberg Magazine. For more information about the NSEE, contact CLOSUP staff at 734-647-4091 or closup@umich.edu.

The Fall 2017 NSEE included longitudinal questions about belief in climate change, plus additional content related to support for state and/or federal policies to address climate change.

Methodology

Survey Methodology	
N	929 (140 Land Line & 789 Cell Phone)
Margin of Error	+/- 3.2%
Fielding Dates	October 4, 2017 - November 19, 2017
AAPOR RR3 Response Rate	9%
Weighted by: Gender, Age, Race, Income, and Education	

The results are based on a telephone survey of 929 adult (age 18 or older) residents of the United States between October 4 and November 19, 2017. Respondents were interviewed in English on both landlines (140) and cell phones (789) by the staff of the Muhlenberg College Institute of Public Opinion (MCIPO) in Allentown, Pennsylvania on the Institute's Computer Aided Telephone Interviewing (CATI) system. Both the landline and cell phone samples were provided by the Marketing Systems Group (MSG), Horsham, Pennsylvania. Both landline and cell phones were chosen randomly from sampling frames of United States landline and cell numbers provided by MSG.

With a randomly selected sample of 929 respondents the margin of error for the surveys is ±3.2% at a 95% level of confidence. Margins of error for questions with smaller sample sizes will be larger. In addition to sampling error, one should consider that question wording and other fielding issues can introduce error or bias into survey results. The sample data has been weighted by age, race, educational attainment, income and gender to reflect population parameters for these factors provided by the United States Census Bureau. The calculation of sampling error takes into account design effects due to the weighting identified above. In order to reach a representative sample of adult Americans both landlines and cell phones are called up to 10 times. The response rate for this survey as calculated using the American Association of Public Opinion Research (AAPOR) RR3 formula is 9%. Due to rounding, the totals provided in tables may not equal 100.

The instrument was designed by Christopher Borick of Muhlenberg College; Sarah Mills, Barry Rabe, and Kaitlin Raimi of the University of Michigan; and Erick Lachapelle of the University of Montreal. For more detailed information on the methods employed please contact the MCIPO at 484-664-3444 or email Dr. Borick at cborick@muhlenberg.edu.

Funding and Financial Disclosure

Variable Naming

Rather than using variables names based on question number, the NSEE datasets use a longitudinal variable naming scheme, to facilitate longitudinal analysis. Many questions have been asked in multiple waves of the NSEE, making it a valuable source of longitudinal public-opinion data on climate change and energy policy. Consult the NSEE Crosswalk to see which questions have been asked in prior and subsequent waves of the NSEE.   Variable names include two parts, a subject category for the question, and a description of the contents of the question. When a question has been asked with the same text and response options over multiple waves, the same variable name will be used in each dataset. Where there have been slight changes in question wording, the variable name will include a version number (v1, v2, etc., appended to the variable name). In the single wave NSEE datasets, variables are listed in the order that they were asked.

LIST OF VARIABLES

Variable	Label
RSPDNUM	Respondent Number
Sample	Sample Type
version_weather_v1	Placement of weather questions
version_CDR	Version and placement of CDR battery
demog_age_year	Can you please tell me in which year you were born
AgeRecode	Age Categories
demog_state	State of residence
Region	States Recoded into Regions
weather_pastsummer_v1	How would you describe the overall weather in your area this past summer
gw_belief	Is there solid evidence avg temp on earth has been warming in past 4 decades
believer_confidence	How confident are you that the average temperature on earth is increasing
believer_cause	Is the earth warming because of human activity or natural patterns
believer_cause_followup	Is the earth warming mostly because of human activity or mostly because of natural patterns
believer_problem	Is global warming a serious problem
believer_immediacy	Does global warming require immediate government action
believer_factor_open	Belief factor: primary factor OPEN ENDED
believer_factor_open_coded	Belief factor: primary factor OPEN ENDED coded
believer_factor_glaciers	Belief factor: Declining glaciers & polar ice
believer_factor_warmer	Belief factor: warmer temps in your area
believer_factor_hurricane	Belief factor: Strength of US hurricanes
believer_factor_mildwint	Belief factor: milder winters in your area
believer_factor_droughts	Belief factor: Severe droughts across US
nonbeliever_confidence	How confident are you that the average temperature on earth is NOT increasing
nonbeliever_factor_open	Nonbelief factor: primary factor OPEN ENDED
nonbeliever_factor_open_coded	Nonbelief factor: primary factor OPEN ENDED coded
govt_fed	How much responsibility federal govt has for taking actions to reduce GW
govt_state	How much responsibility state govts have for taking actions to reduce GW
govt_local	How much responsibility local govts have for taking actions to reduce GW
state_cleancoal	There should be increased state government support for clean coal technology
state_vehicles_v1	State governments should require auto makers to increase the fuel efficiency of their vehicles even if it increases the cost of the vehicle
state_fftax	State govts should increase taxes on all fossil fuels
state_nuclear	State governments should support increased use of nuclear power to reduce greenhouse gas emissions
state_captrade	Agreement that state govts should allow cap and trade
state_rps_v2	State govts should require set portion of electricity come from renewables
natgas_mystate	Increasing the use of natural gas-fired electricity generation in your state.
govt_nofedaction	If federal govt fails to address GW, it's my state's responsibility to act
state_impactsfelt	My state has already felt negative effects from global warming
state_rps_neighbr	My state's economy will be damaged if it requires greater use of renewable energy while neighboring states don't have such requirements
cdr_knowledge_info	Before today, had you ever heard about carbon dioxide removal
cdr_knowledge	Have you ever heard about carbon dioxide removal
cdr_support	Support for use of carbon dioxide removal
gw_threat	How much of a threat do you believe climate change to be
coalfpp_support_phaseout_v2	Support for phasing out all coal-fired power plants

carbontax_support_v3	Support for reducing GHG by taxing carbon based fuels
subsidy_support	Support for increasing subsidies for renewable energy
state_gastax_v2	State govts should increase gas tax to reduce consumption
state_ee_v2	State govts should require more energy efficiency for buildings & appliances
gw_geoengr	Humans able to find ways to reduce temps through atmospheric engineering
gw_adapt	Instead of trying to stop GW from occurring we should focus on adapting
fed_moralobligation	Agreement that rich countries have moral obligation to reduce GHG
intl_economicimpact	Overall, the U.S. economy would benefit from leaving the international climate treaty designed to reduce greenhouse gas emissions
worldviews_freetrade	Overall, Americans have benefited from globalization and free trade with other countries
worldviews_immigration	The growing number of newcomers from other countries threatens traditional American customs and values
willing2pay_list	How much would you be willing to pay/year for more renewable energy
demog_race	Race
demog_relig	Religious affiliation
demog_relig_evang	Religious affiliation: evangelical Christian
demog_edu	Highest level of education
demog_polparty	Political party affiliation
demog_polviews	Political beliefs: conservative to liberal
worldview_trump	Agreement with Donald Trump on important issues facing the country today
demog_income	Family income
demog_gender	Gender: not asked; assessed by interviewer
Date	Date and Time of Survey
Weight	Overall Weight

National Surveys on Energy and Environment: Fall 2017 Data

RSPDNUM

Label

Respondent Number

Representation

Numeric

Decimal Positions

2

Role

input

Sample

Label

Sample Type

Representation

C	Cell
L	Land

Role

input

version_weather_v1

Label

Placement of weather questions

Representation

A	Weather questions before gw_belief
B	Weather questions after beliefs battery

Role

input

CODEBOOK NOTE:
In Fall 2017, the placement of weather_pastsummer_v1 differed between two samples. This variable indicates the placement of weather_pastsummer_v1 for a respondent.

version_CDR

Label
Version and placement of CDR battery

Representation

C	With extended information, CDR first
D	D Without extended information, policies first

Role
input

CODEBOOK NOTE:
The Fall 2017 NSEE survey included an experiment, varying the order in which questions were asked, as well as whether extended information was provided.   This variable indicates which sample a respondent belongs to.   Details of this experiment are available in the Fall 2017 questionnaire.

demog_age_year

Label
Can you please tell me in which year you were born

QUESTIONNAIRE TEXT: Thank you. Can you please tell me in which year you were born?

Type
Text

Role
input

CODEBOOK NOTE:
To protect respondent confidentiality, CLOSUP coded demog_age_year into a categorical variable AgeRecode, and masked original values of demog_age_year. Original values of demog_age_year are not available to secondary users.

AgeRecode

Label
Age Categories

Representation

1	18-29
2	30-44
3	45-64

4	Or 65 and older
98	Not Sure
99	Refused

Role
input

demog_state

Label
State of residence

QUESTIONNAIRE TEXT: What state do you currently reside in?

Type
Text

Role
input

Region

Label
States Recoded into Regions

Representation

1	Northeast
2	South
3	Midwest
4	West

Role
input

weather_pastsummer_v1

Label
How would you describe the overall weather in your area this past summer

QUESTIONNAIRE TEXT: In general how would you describe the overall weather in your area this past summer? Would you say it was:

1	A lot warmer than usual
2	A lot cooler than usual
3	About the same as usual

98	Not Sure
99	Refused

Role
input

CODEBOOK NOTE:
In Fall 2017, weather_pastsummer_v1 was asked as a split sample. Half of respondents were asked the question immediately before gw_belief, and the other half got the question immediately after the beliefs battery (gw_belief, believer_[x], and nonbeliever_[x] questions). The variable VersionQ3 shows which placement of weather_pastsummer_v1 applied for each respondent.

gw_belief

Label
Is there solid evidence avg temp on earth has been warming in past 4 decades

QUESTIONNAIRE TEXT: Now I would like to ask you a few questions on the issue of global warming. From what you've read and heard. Is there solid evidence that the average temperature on earth has been getting warmer over the past four decades?

1	Yes
2	No
98	Not sure
99	Refused

Role
input

believer_confidence

Label
How confident are you that the average temperature on earth is increasing

QUESTIONNAIRE TEXT: How confident are you that the average temperature on earth is increasing? Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is increasing?

-9	Not asked - not applicable
1	Very confident
2	Fairly confident
3	Not too confident
4	Not confident at all
98	Not sure
99	Refused

Role
input

believer_cause

Label

Is the earth warming because of human activity or natural patterns

QUESTIONNAIRE TEXT: Is the earth getting warmer because of human activity such as burning fossil fuels, or mostly because of natural patterns in the earth's environment?

-9	Not asked - not applicable
1	Human activity
2	Natural patterns
3	A combination (volunteered)
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
Not asked unless gw_belief=1

believer_cause_followup

Label

Is the earth warming mostly because of human activity or mostly because of natural patterns

QUESTIONNAIRE TEXT: I know you say it's a combination, but if you had to choose, would you say that temperatures on earth are rising mostly because of human activity or mostly because of natural patterns?

-9	Not asked - not applicable
1	Human activity
2	Natural patterns
3	Equal
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
Not asked unless believer_cause=3 "A combination"

believer_problem

Label

Is global warming a serious problem

QUESTIONNAIRE TEXT: In your view is global warming a very serious problem, somewhat serious, not too serious, or not a problem?

-9	Not asked - not applicable
1	Very serious
2	Somewhat serious
3	Not too serious
4	Not a problem
98	Not sure
99	Refused

Role

input

SKIP PATTERN:

Not asked unless gw_belief=1

believer_immediacy

Label

Does global warming require immediate government action

QUESTIONNAIRE TEXT: Do you or do you not think global warming requires immediate government action?

-9	Not asked - not applicable
1	Yes
2	No
98	Not sure
99	Refused

Role

input

SKIP PATTERN:

Not asked unless gw_belief=1

believer_factor_open

Label

Belief factor: primary factor OPEN ENDED

QUESTIONNAIRE TEXT: What is the primary factor that has caused you to believe that temperatures on earth are increasing?

Type
Text

Role
input

SKIP PATTERN:
Not asked unless gw_belief=1

believer_factor_open_coded

Label
Belief factor: primary factor OPEN ENDED coded

Representation

-9	Not asked - not applicable
1	Melting Glaciers
2	Warmer Temps Observed
3	Weather Change
4	Scientific Research
5	Gore Documentary
6	Media Coverage
7	Declining Species
8	Human Activity
9	Natural Patterns
10	Not Sure/Other
11	Ocean/sea-level rise
12	Religious factors
13	Population growth
14	Growing season/plants
99	Refused

Role
input

SKIP PATTERN:
believer_factor_open was not asked unless gw_belief=1

believer_factor_glaciers

Label
Belief factor: Declining glaciers & polar ice

QUESTIONNAIRE TEXT: Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer.   For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer: Declining glaciers and polar ice throughout the globe

-9	Not asked - not applicable
1	Very large
2	Somewhat large
3	Not too large
4	No effect
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
Not asked unless gw_belief=1

believer_factor_warmer

Label
Belief factor: warmer temps in your area

QUESTIONNAIRE TEXT: Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer.   For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer: Warmer temperatures in your area during recent years

-9	Not asked - not applicable
1	Very large
2	Somewhat large
3	Not too large
4	No effect
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
not asked unless gw_belief=1

believer_factor_hurricane

Label
Belief factor: Strength of US hurricanes

QUESTIONNAIRE TEXT: Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer.   For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer: The strength of hurricanes hitting the United States

-9	Not asked - not applicable
1	Very large
2	Somewhat large
3	Not too large
4	No effect
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
Not asked unless gw_belief=1

believer_factor_mildwint

Label
Belief factor: milder winters in your area

QUESTIONNAIRE TEXT: Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer.   For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer: Milder winters in your area

-9	Not asked - not applicable
1	Very large
2	Somewhat large
3	Not too large
4	No effect
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
not asked unless gw_belief=1

believer_factor_droughts

Label
Belief factor: Severe droughts across US

QUESTIONNAIRE TEXT: Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer.   For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer: Sever droughts in areas across the United States

-9	Not asked - not applicable
1	Very large
2	Somewhat large
3	Not too large
4	No effect
98	Not sure
99	Refused

Role
input

SKIP PATTERN:
Not asked unless gw_belief=1

nonbeliever_confidence

Label
How confident are you that the average temperature on earth is NOT increasing

QUESTIONNAIRE TEXT: How confident are you that the average temperatures on earth are NOT increasing?   Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is NOT increasing?

-9	Not asked - not applicable
1	Very confident
2	Fairly confident
3	Not too confident
4	Not confident at all
98	Not sure
99	Refused

Role
input

SKIP PATTERN
not asked unless gw_belief=2

nonbeliever_factor_open

Label
Nonbelief factor: primary factor OPEN ENDED

QUESTIONNAIRE TEXT: What is the primary factor that makes you believe that temperatures on earth are not increasing?

Type
Text

Role
input

SKIP PATTERN
not asked unless gw_belief=2

nonbeliever_factor_open_coded

Label
Nonbelief factor: primary factor OPEN ENDED coded

Representation

-9	Not asked - not applicable
1	Personal Observations
2	Natural Patterns
3	Lack of Evidence
4	Media has Misled
5	Evidence Disproves
6	Religious Factors
7	Political Factors
8	No Particular Reason
9	Not Sure/Other
98	Not sure
99	Refused

Role
input

SKIP PATTERN
not asked unless gw_belief=2

govt_fed

Label

How much responsibility federal govt has for taking actions to reduce GW

QUESTIONNAIRE TEXT: For each level of government that I mention please tell me if it has a great deal of responsibility, some responsibility or no responsibility for taking actions to reduce global warming: The Federal Government

1	A great deal of responsibility
2	Some responsibility
3	No responsibility
98	Not sure
99	Refused

Role
input

govt_state

Label

How much responsibility state govts have for taking actions to reduce GW

QUESTIONNAIRE TEXT: For each level of government that I mention please tell me if it has a great deal of responsibility, some responsibility or no responsibility for taking actions to reduce global warming: State Governments

1	A great deal of responsibility
2	Some responsibility
3	No responsibility
98	Not sure
99	Refused

Role
input

govt_local

Label

How much responsibility local govts have for taking actions to reduce GW

QUESTIONNAIRE TEXT: For each level of government that I mention please tell me if it has a great deal of responsibility, some responsibility or no responsibility for taking actions to reduce global warming: Local Governments

1	A great deal of responsibility
2	Some responsibility

3	No responsibility
98	Not sure
99	Refused

Role
input

state_cleancoal

Label
There should be increased state government support for clean coal technology

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases.   For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions: There should be increased state government support for clean coal technology.

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure
99	Refused

Role
input

state_vehicles_v1

Label
State governments should require auto makers to increase the fuel efficiency of their vehicles even if it increases the cost of the vehicle

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases.   For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions: State governments should require auto makers to increase the fuel efficiency of their vehicles even if it increases the cost of the vehicle

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure

99	Refused

Role
input

state_fftax

Label
State govts should increase taxes on all fossil fuels

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases.   For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions: State governments should increase taxes on all fossil fuels in order to reduce consumption.

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure
99	Refused

Role
input

state_nuclear

Label
State governments should support increased use of nuclear power to reduce greenhouse gas emissions

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases.   For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions: State governments should support increased use of nuclear power to reduce greenhouse gas emissions.

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure
99	Refused

Role
input

state_captrade

Label

Agreement that state govts should allow cap and trade

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases.   For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions: State governments should allow businesses to buy and sell permits to release greenhouse gases if it results in an overall decrease in emissions.

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure
99	Refused

Role

input

state_rps_v2

Label

State govts should require set portion of electricity come from renewables

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases.   For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions: State governments should require a set portion of all electricity to come from renewable energy sources such as wind and solar power.

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure
99	Refused

Role

input

natgas_mystate

Label

Increasing the use of natural gas-fired electricity generation in your state.

QUESTIONNAIRE TEXT: There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases. For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions. Increasing the use of natural gas-fired electricity generation in your state.

1	Strongly support
2	Somewhat support
3	Somewhat oppose
4	Strongly oppose
98	Not sure
99	Refused

Role

input

govt_nofedaction

Label

If federal govt fails to address GW, it's my state's responsibility to act

QUESTIONNAIRE TEXT: Please identify your level of agreement with the following statements.   For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree: If the federal government fails to address the issue of global warming it is my state's responsibility to address the problem.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role

input

state_impactsfelt

Label

My state has already felt negative effects from global warming

QUESTIONNAIRE TEXT: Please identify your level of agreement with the following statements.   For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree: My state has already felt negative effects from global warming.

1	Strongly Agree
2	Somewhat Agree
3	Somewhat Disagree
4	Strongly Disagree
98	Not Sure
99	Refused

Role
input

state_rps_neighbr

Label
My state's economy will be damaged if it requires greater use of renewable energy while neighboring states don't have such requirements

QUESTIONNAIRE TEXT: Please identify your level of agreement with the following statements.   For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree: My state's economy will be damaged if it requires greater use of renewable energy while neighboring states don't have such requirements.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

cdr_knowledge_info

Label
Before today, had you ever heard about carbon dioxide removal

QUESTIONNAIRE TEXT: Before today, had you ever heard about carbon dioxide removal?

-9	Not asked - split sample
1	Yes
2	No

98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:
cdr_knowledge_info was asked as a split sample, as part of a larger experiment. Sample C was given a description of CDR, and then asked cdr_knowledge_info and cdr_support. Sample D was asked cdr_knowledge, followed by cdr_support.   Respondents from sample D are coded as -9 "Not asked - split sample" in cdr_knowledge_info. A full description of the larger experiment can be found on the Fall 2017 questionnaire.

CODEBOOK NOTE:
This question was collected as sponsored research, and is under embargo at the time of the dataset release. Researchers interested in these variables can contact CLOSUP directly (closup-nsee@umich.edu) to inquire about future availability of the data.

cdr_knowledge

Label
Have you ever heard about carbon dioxide removal

QUESTIONNAIRE TEXT: Have you ever heard about carbon dioxide removal?

-9	Not asked - split sample
1	Yes
2	No
98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:
cdr_knowledge was asked as a split sample, as part of a larger experiment. Sample D was asked cdr_knowledge, followed by cdr_support.   Sample C was given a description of CDR, and then asked cdr_knowledge_info and cdr_support. Respondents from sample C are coded as -9 "Not asked - split sample" in cdr_knowledge. A full description of the larger experiment can be found on the Fall 2017 questionnaire.

CODEBOOK NOTE:
This question was collected as sponsored research, and is under embargo at the time of the dataset release. Researchers interested in these variables can contact CLOSUP directly (closup-nsee@umich.edu) to inquire about future availability of the data.

cdr_support

Label

Support for use of carbon dioxide removal

QUESTIONNAIRE TEXT: Based on what you know, how much do you support or oppose the use of carbon dioxide removal?

1	Strongly support
2	Somewhat support
3	Neither support nor oppose
4	Somewhat oppose
5	Strongly oppose
98	Not sure
99	Refused

Role

input

CODEBOOK NOTE:

cdr_support was asked as part of a larger experiment. Sample C was given a description of CDR, and then asked cdr_knowledge_info and cdr_support. Sample D was asked cdr_knowledge, followed by cdr_support. The variable version_CDR indicates which sample the respondent belongs to.   A full description of the larger experiment can be found on the Fall 2017 questionnaire.

CODEBOOK NOTE:

This question was collected as sponsored research, and is under embargo at the time of the dataset release. Researchers interested in these variables can contact CLOSUP directly (closup-nsee@umich.edu) to inquire about future availability of the data.

gw_threat

Label

How much of a threat do you believe climate change to be

QUESTIONNAIRE TEXT: How much of a threat do you believe climate change to be?

1	Not at all a threat
2	A small threat
3	A moderate threat
4	A serious threat
5	An extreme threat
98	Not sure
99	Refused

Role

input

CODEBOOK NOTE:

gw_threat was asked as part of an experiment. Details of this experiment are available in the Fall 2017 questionnaire.   The variable version_CDR indicates which sample the respondent belongs to.

CODEBOOK NOTE:

This question was collected as sponsored research, and is under embargo at the time of the dataset release. Researchers interested in these variables can contact CLOSUP directly (closup-nsee@umich.edu) to inquire about future availability of the data.

coalfpp_support_phaseout_v2

Label
Support for phasing out all coal-fired power plants

QUESTIONNAIRE TEXT: I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions. Phasing out all coal-fired power plants.

1	Strongly support
2	Somewhat support
3	Neither support nor oppose
4	Somewhat oppose
5	Strongly oppose
98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:

coalfpp_support_phaseout_v2 was asked as part of an experiment.   Details of this experiment are available in the Fall 2017 questionnaire.   The variable version_CDR indicates which sample the respondent belongs to.

subsidy_support

Label
Support for increasing subsidies for renewable energy

QUESTIONNAIRE TEXT: I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions. Increasing subsidies for renewable energy such as wind and solar power.

1	Strongly support
2	Somewhat support

3	Neither support nor oppose
4	Somewhat oppose
5	Strongly oppose
98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:
subsidy_support was asked as part of an experiment.   Details of this experiment are available in the Fall 2017 questionnaire.   The variable version_CDR indicates which sample the respondent belongs to.

carbontax_support_v3

Label
Support for reducing GHG by taxing carbon based fuels

QUESTIONNAIRE TEXT: I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions. The federal government increasing taxes on carbon based fuels such as coal, oil and natural gas.

1	Strongly support
2	Somewhat support
3	Neither support nor oppose
4	Somewhat oppose
5	Strongly oppose
98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:
carbontax_support_v3 was asked as part of an experiment.   Details of this experiment are available in the Fall 2017 questionnaire.   The variable version_CDR indicates which sample the respondent belongs to.

state_gastax_v2

Label
State govts should increase gas tax to reduce consumption

QUESTIONNAIRE TEXT: I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions. State governments should increase taxes on gasoline in order to reduce consumption.

	1	Strongly support
	2	Somewhat support
	3	Neither support nor oppose
	4	Somewhat oppose
	5	Strongly oppose
	98	Not sure
	99	Refused

Role
input

CODEBOOK NOTE:
state_gastax_v2 was asked as part of an experiment.   Details of this experiment are available in the Fall 2017 questionnaire.   The variable version_CDR indicates which sample the respondent belongs to.

state_ee_v2

Label
State govts should require more energy efficiency for buildings &   appliances

QUESTIONNAIRE TEXT: I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions. State governments should require an increase in energy efficiency for residential and commercial buildings and appliances.

	1	Strongly support
	2	Somewhat support
	3	Neither support nor oppose
	4	Somewhat oppose
	5	Strongly oppose
	98	Not sure
	99	Refused

Role
input

CODEBOOK NOTE:
state_ee_v2 was asked as part of an experiment. Details of this experiment are available in the Fall 2017 questionnaire.   The variable version_CDR indicates which sample the respondent belongs to.

gw_geoengr

Label
Humans able to find ways to reduce temps through atmospheric engineering

QUESTIONNAIRE TEXT: Please identify your level of agreement with the following statements.   For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. If human activity leads to global warming then humans will also be able to find ways to reduce temperatures on the planet through atmospheric engineering methods.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

gw_adapt

Label
Instead of trying to stop GW from occurring we should focus on adapting

QUESTIONNAIRE TEXT: Please identify your level of agreement with the following statements. For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. Instead of trying to stop global warming from occurring we should focus on adapting to a warmer climate.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

fed_moralobligation

Label
Agreement that rich countries have moral obligation to reduce GHG

QUESTIONNAIRE TEXT: Please identify your level of agreement with the following statements.   For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. Rich countries like the US have a moral obligation to show international leadership by reducing their greenhouse gas emissions.

1	Strongly agree
2	Somewhat agree

3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

intl_economicimpact

Label
Overall, the U.S. economy would benefit from leaving the international climate treaty designed to reduce greenhouse gas emissions

QUESTIONNAIRE TEXT: Overall, the U.S. economy would benefit from leaving the international climate treaty designed to reduce greenhouse gas emissions.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

worldviews_freetrade

Label
Overall, Americans have benefited from globalization and free trade with other countries

QUESTIONNAIRE TEXT: For each of the statements that I read please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the statement. Overall, Americans have benefited from globalization and free trade with other countries.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

worldviews_immigration

Label
The growing number of newcomers from other countries threatens traditional American customs and values

QUESTIONNAIRE TEXT: For each of the statements that I read please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the statement. The growing number of newcomers from other countries threatens traditional American customs and values.

1	Strongly agree
2	Somewhat agree
3	Somewhat disagree
4	Strongly disagree
98	Not sure
99	Refused

Role
input

willing2pay_list

Label
How much would you be willing to pay/year for more renewable energy

QUESTIONNAIRE TEXT: If it required you to pay extra money each year in order for more renewable energy to be produced, how much would you be willing to pay? Would you be willing to pay...

1	Nothing
2	$1-$50 per year
3	$50-$100 per year
4	$100-$250 per year
5	$250-$500 per year
6	Over $500 per year
98	Not sure
99	Refused

Role
input

demog_race

Label
Race

QUESTIONNAIRE TEXT: Finally a few questions about yourself. Which of the following categories best describes your racial identity?   Are you...

1	White/Caucasian
2	African-American
3	Hispanic
4	Latino
5	Asian
6	Native American
7	Mixed race
8	Other
9	Hispanic/Latino
10	Mixed race and other
98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:
In order to protect respondent confidentiality, CLOSUP recoded demog_race as follows:

- 3 "Hispanic" and 4 "Latino" were combined into 9 "Hispanic/Latino"
- 6 "Native American", 7 "Mixed race", and 8 "Other" were combined into 10 "Mixed race and other".

The original values of demog_race are not available to secondary data users.

demog_relig

Label
Religious affiliation

QUESTIONNAIRE TEXT: Which of the following categories best describes your religious affiliation?   Are you...

1	Protestant
2	Catholic
3	Jewish

4	Muslim
5	Hindu
6	Other
7	Atheist
98	Not sure
99	Refused

Role
input

demog_relig_evang

Label
Religious affiliation: evangelical Christian

QUESTIONNAIRE TEXT: Would you describe yourself as an evangelical Christian?

-9	Not asked - not applicable
1	Yes
2	No
98	Not sure
99	Refused

Role
input

CODEBOOK NOTE:
not asked unless demog_relig=1

demog_edu

Label
Highest level of education

QUESTIONNAIRE TEXT: What is your highest level of education?

1	Less than HS graduate
2	HS Graduate
3	Some college or technical school
4	College graduate
5	Grad or professional degree
98	Not sure

99	Refused

Role
input

demog_polparty

Label
Political party affiliation

QUESTIONNAIRE TEXT: Which of the following best describes your political party affiliation?

1	Democrat
2	Republican
3	Other party
4	Independent
5	Not registered (Fall 2009 only)
98	Not sure
99	Refused

Role
input

demog_polviews

Label
Political beliefs: conservative to liberal

Representation

1	Very conservative
2	Somewhat conservative
3	Moderate
4	Somewhat liberal
5	Very liberal
98	Not sure
99	Refused

Role
input

worldviews_trump

Label
Agreement with Donald Trump on important issues facing the country today

QUESTIONNAIRE TEXT: Thinking about important issues facing the country today, overall, would you say you tend to agree with Donald Trump on all or nearly all issues, many but not all issues, a few issues, or no or almost no issues?

1	All or nearly all issues
2	Many, but not all issues
3	A few issues
4	No or almost no issues
98	Not sure
99	Refused

Role
input

demog_income

Label
Family income

QUESTIONNAIRE TEXT: Which of the following categories best describes your family income? Is it...

1	Less than 20,000
2	20,000-40,000
3	40,000-60,000
4	60,000-80,000
5	80,000-100,000
6	Over 100,000
98	Not sure
99	Refused

Role
input

demog_gender

Label
Gender: not asked; assessed by interviewer

Representation

1	Male
2	Female
98	Not sure
99	Refused

Role
input

Date

Label
Date and Time of Survey

Representation

Type
Text

Role
input

Weight

Label
Overall Weight

Representation

Numeric

Decimal Positions
2

Role
input

CODEBOOK NOTE:

The data has been weighted by age, race, educational attainment, income and gender to reflect population parameters for these factors provided by the United States Census Bureau.

Hello. My name is _____ and I'm a student at Muhlenberg College. We are conducting a research project regarding environmental issues in the United States. Would you be able to help us by answering a few questions?

> Yes......................1
> No.......................2   (Thank and terminate)
> Not sure............98   (Thank and terminate)
> Refused............99   (Thank and terminate)

Q1. Thank you. Can you please tell me in which year you were born?
> (OPEN) _____

Q2. What state do you currently reside in?

> (OPEN) _____

Q3A. [SPLIT SAMPLE; HALF GETS Q3 HERE; HALF GETS Q3 BEFORE Q18] In general how would you describe the overall weather in your area this past summer? Would you say it was:

> A LOT warmer than usual 1
> SLIGHTLY warmer than usual 2
> SLIGHTLY cooler than usual............................. 3
> A LOT cooler than usual 4
> Or about the same as usual?............................... 5
> Not sure (Volunteered) 98
> Refused (Volunteered).. 99

Q4. Next, I would like to ask you a few questions on the issue of global warming. From what you've read and heard. Is there solid evidence that the average temperature on earth has been getting warmer over the past four decades?

> Yes …………..………………...1
> No ..………..…………………...2   (SKIP TO Q16)
> Not Sure (Volunteered)…………..98   (SKIP TO Q18)
> Refused (Volunteered)…………...99   (SKIP TO Q18)

Q5. How confident are you that the average temperature on earth is increasing? Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is increasing?

> Very confident…..…………………1
> Fairly confident…..……………….....2
> Not too confident…………………..3
> Not confident at all…………………4
> Not Sure (Volunteered)……..……..98
> Refused (Volunteered)……………99

Q6. Is the earth getting warmer mostly because of human activity such as burning fossil fuels, or mostly because of natural patterns in the earth's environment?

> Human activity…………………..…..1 [skip to Q8]
> Natural patterns………………………2 [skip to Q8]
> A combination (Volunteered)………...…...3 [ask Q7]
> Not Sure (Volunteered)………………….98 [skip to Q8]
> Refused (Volunteered)…………………..99 [skip to Q8]

Q7. I know you say it's a combination, but if you had to choose, would you say that temperatures on earth are rising *mostly* because of human activity or *mostly* because of natural patterns?

> Human activity…………………..…..1
> Natural patterns……………………….2
> Equal (Volunteered)……………………….3
> Not Sure (Volunteered)………………….98
> Refused (Volunteered)…………………..99

Q8. In your view is global warming a very serious problem, somewhat serious, not too serious, or not a problem?

> Very serious…………….…………1
> Somewhat serious…………….… 2
> Not too serious………………..……3
> Not a problem………………..….4
> Not Sure (Volunteered)…………..98
> Refused (Volunteered)……..……..99

Q9. Do you or do you not think global warming requires immediate government action?

> Yes, it requires immediate government action…………..…..1
> No, it does not require immediate government action………2
> Not Sure (Volunteered)…………………………………..98
> Refused (Volunteered)………………..………………..99

Q10. What is the primary factor that has caused you to believe that temperatures on earth are increasing?

> (OPEN)_____

Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer. For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer. First, **[ROTATED LIST]**

	Very Large	Somewhat Large	Not Too Large	No Effect	Not Sure (Volunteered)	Refused (Volunteered)
Q11. Declining glaciers and polar ice throughout the globe	1	2	3	4	98	99
Q12. Warmer temperatures in your area during recent years	1	2	3	4	98	99
Q13. The strength of hurricanes hitting the United States	1	2	3	4	98	99
Q14. Milder winters in your area	1	2	3	4	98	99
Q15. Severe droughts in areas across the United States	1	2	3	4	98	99

*****************************SKIP TO Q3B or Q18****************************

ONLY THOSE WHO ANSWERED "NO" IN Q4 (i.e., do not believe temperatures are increasing)

Q16. How confident are you that the average temperatures on earth are NOT increasing? Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is NOT increasing?

Very confident 1
Fairly confident.. 2
Not too confident 3
Not confident at all 4
Not Sure (Volunteered)....................................... 98
Refused (Volunteered)... 99

Q17. What is the primary factor that makes you believe that temperatures on earth are not increasing?

(OPEN) _____

Q3B. [SPLIT SAMPLE; HALF GETS Q3 AFTER Q2; HALF GETS Q3 HERE] In general how would you describe the overall weather in your area this past summer? Would you say it was:

A LOT warmer than usual 1
SLIGHTLY warmer than usual 2
SLIGHTLY cooler than usual.............................. 3
A LOT cooler than usual 4
Or about the same as usual?............................... 5
Not sure (Volunteered) 98
Refused (Volunteered).. 99

For each level of government that I mention please tell me if it has a great deal of responsibility, some responsibility or no responsibility for taking actions to reduce global warming. First:

	A Great Deal of Responsibility	Some Responsibility	No Responsibility	Not Sure (Volunteered)	Refused (Volunteered)
Q18. The Federal Government	1	2	3	98	99
Q19. State Governments	1	2	3	98	99
Q20. Local Governments	1	2	3	98	99

There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases. For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions. **[ROTATED LIST]**

	Strongly Support	Somewhat Support	Somewhat Oppose	Strongly Oppose	Not Sure (Volunteered)	Refused (Volunteered)
Q21. There should be increased state government support for clean coal technology.	1	2	3	4	98	99
Q22. State governments should require auto makers to increase the fuel efficiency of their vehicles even if it increases the cost of the vehicle	1	2	3	4	98	99
Q23. State governments should increase taxes on ALL fossil fuels in order to reduce consumption.	1	2	3	4	98	99
Q24. State governments should support increased use of nuclear power to reduce greenhouse gas emissions.	1	2	3	4	98	99

Q25. State governments should allow businesses to buy and sell permits to release greenhouse gases if it results in an overall decrease in emissions	1	2	3	4	98	99
Q26. State governments should require a set portion of all electricity to come from renewable energy sources such as wind or solar power.	1	2	3	4	98	99
Q27. Increasing the use of natural gas-fired electricity generation in your state.	1	2	3	4	98	99

Please identify your level of agreement with the following statements. For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. First, **[ROTATED LIST]**

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Not Sure (Volunteered)	Refused (Volunteered)
Q28. If the federal government fails to address the issue of global warming it is my state's responsibility to address the problem.	1	2	3	4	98	99
Q29. My state has already felt negative effects from global warming.	1	2	3	4	98	99
Q30. My state's economy will be damaged if it requires greater use of renewable energy while neighboring states don't have such requirements.	1	2	3	4	98	99

CDR Experiment – Half get Track C; Half get track D; note that order of questions changes and Track C gets extended introductory explanation.

Track C [half of the sample]

Next, I will read some information about a new strategy to deal with global warming. Please listen carefully, I will ask you about it afterward.

Scientists have started to discuss a new—but still mostly unproven—strategy for addressing global climate change known as "carbon dioxide removal." The idea is to remove carbon dioxide from the air using various natural and man-made processes. The carbon dioxide is then stored by plants and trees, in soils, or deep underground so that it cannot contribute to global warming. Carbon dioxide removal strategies could decrease the current concentration of greenhouse gases in the atmosphere and potentially reverse some of the temperature and climate changes that have already occurred. Currently, however, the cost of carbon dioxide removal and the need for additional research have limited these strategies.

Q31C. Before today, had you ever heard about carbon dioxide removal?
Yes……………………….…………………1
No……………………………….…………2
Not Sure (Volunteered)……………....98
Refused (Volunteered)…………………...99

Q32C. Based on what you know, how much do you support or oppose the use of carbon dioxide removal?
Strongly support……………………….……1
Somewhat support ………………….………2
Neither support nor oppose ..……….……3
Somewhat oppose ………...…....…………4
Strongly oppose ……………….…….……5
Not Sure (Volunteered)……………....98
Refused (Volunteered)…………………...99

Q33C. How much of a threat do you believe climate change to be?
Not at all a threat……………………….…1
A small threat…………………………….…2
A moderate threat…………....…………3
A serious threat………………………..…4
An extreme threat…………………...…5
Not Sure (Volunteered)……………....98
Refused (Volunteered)…………………...99

I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions.

	Strongly Support	Somewhat Support	Neither Support nor Oppose	Somewhat Oppose	Strongly Oppose	Not Sure (Volunteered)	Refused (Volunteered)
Q34C. Phasing out all coal-fired power plants.	1	2	3	4	5	98	99
Q35C. Increasing subsidies for renewable energy such as wind and solar power.	1	2	3	4	5	98	99
Q36C. The federal government increasing taxes on carbon based fuels such as coal, oil and natural gas.	1	2	3	4	5	98	99
Q37C. State governments should increase taxes on gasoline in order to reduce consumption	1	2	3	4	5	98	99
Q38C. State governments should require an increase in energy efficiency for residential and commercial buildings and appliances.	1	2	3	4	5	98	99

Track D [half of the sample]

Q33D. How much of a threat do you believe climate change to be?

Not at all a threat……………………….…1
A small threat……………………….….…2
A moderate threat……………....…………3
A serious threat…………………………..4
An extreme threat………………….....…..5
Not Sure (Volunteered)………………...…98
Refused (Volunteered)…………………...99

I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions.

	Strongly	Somewhat	Neither	Somewhat	Strongly	Not Sure	Refused

	Support	Support	Support nor Oppose	Oppose	Oppose	(Volunteered)	(Volunteered)
Q34D. Phasing out all coal-fired power plants.	1	2	3	4	5	98	99
Q35D. Increasing subsidies for renewable energy such as wind and solar power.	1	2	3	4	5	98	99
Q36D. The federal government increasing taxes on carbon based fuels such as coal, oil and natural gas.	1	2	3	4	5	98	99
Q37D. State governments should increase taxes on gasoline in order to reduce consumption	1	2	3	4	5	98	99
Q38D. State governments should require an increase in energy efficiency for residential and commercial buildings and appliances.	1	2	3	4	5	98	99

Q31D. Have you ever heard about carbon dioxide removal?

> Yes……………………………………….…1
> No……………………………………….…2
> Not Sure (Volunteered)………………...…98
> Refused (Volunteered)…………………...99

Q32D. Based on what you know, how much do you support or oppose the use of carbon dioxide removal?

> Strongly support……………………..…1
> Somewhat support ………………….…2
> Neither support nor oppose ..………….…3
> Somewhat oppose ………..…....…………4
> Strongly oppose …………….…….…..5
> Not Sure (Volunteered)………………...…98
> Refused (Volunteered)…………………...99

For each of the statements that I read please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the statement.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Not Sure (Volunteered)	Refused (Volunteered)
Q39. If human activity leads to global warming then humans will also be able to find ways to reduce temperatures on the planet through atmospheric engineering methods.	1	2	3	4	98	99
Q40. Instead of trying to stop global warming from occurring we should focus on adapting to a warmer climate.	1	2	3	4	98	99
Q41. Rich countries like the US have a moral obligation to show international leadership by reducing their greenhouse gas emissions.	1	2	3	4	98	99
Q42. Overall, the U.S. economy would benefit from leaving the international climate treaty designed to reduce greenhouse gas emissions.	1	2	3	4	98	99
Q43. Overall, Americans have benefited from globalization and free trade with other countries.	1	2	3	4	98	99
Q44. The growing number of newcomers from other countries threatens traditional American customs and values.	1	2	3	4	98	99

Q45. If it required you to pay extra money each year in order for more renewable energy to be produced, how much would you be willing to pay? Would you be willing to pay… **[READ LIST]**

Nothing each year………………….…..1
1 to 50 dollars per year……………….…..2
50 to 100 dollars a year……………….…3
100 to 250 dollars a year……………….…4
250 to 500 dollars a year…………….…..5
Over 500 dollars a year…………………6
Not Sure (Volunteered)……………....…98
Refused (Volunteered)……………….…..99

Q46. Finally a few questions about yourself. Which of the following categories best describes your racial identity? Are you… **[READ LIST]**

White/Caucasian…………... 1
African-American……….….2
Hispanic..……………….…...3
Latino …………………...…4
Asian………….…………....5
Native American………...…6
Mixed race..……………..…7
Other …………………….…8
Not Sure (Volunteered)…...98
Refused (Volunteered)….....99

Q47. Which of the following categories best describes your religious affiliation? Are you… **[READ LIST]**

Protestant…………………………………....1
Catholic……………………………………….2 (SKIP Q48)
Jewish..……………………………………...3 (SKIP Q48)
Muslim .……………………………….…4 (SKIP Q48)
Hindu…………….………………….......5 (SKIP Q48)
Other religion (including agnostic)………...…6 (SKIP Q48)
Atheist..………………………………….7 (SKIP Q48)
Not Sure (Volunteered)……………………....98 (SKIP Q48)
Refused (Volunteered)………………….....99 (SKIP Q48)

Q48. Would you describe yourself as an evangelical Christian?

Yes………………….……1
No………………………...2
Not Sure (Volunteered)….98
Refused (Volunteered)…. 99

Q49. What is your highest level of education? **[READ LIST]**

       Less than High School Graduate……………………1
       High School Graduate……………………………….2
       Some college or technical school……………………3
       College graduate…………………………………..4
       Graduate or professional degree…………………......5
       Not Sure (Volunteered)……………………………..98
       Refused (Volunteered)………………………………99

Q50. Which of the following best describes your political party affiliation? **[READ LIST]**

       Democrat…………………… 1
       Republican……………..…….2
       Other party..……………..…….3
       Independent .………………….4
       Not Sure (Volunteered)…...98
       Refused (Volunteered)…....99

Q51. Which of the following best describes your political beliefs? **[READ LIST]**

       Very Conservative 1
       Somewhat Conservative 2
       Moderate 3
       Somewhat Liberal 4
       Very Liberal 5
       Not sure (Volunteered) 98
       Refused (Volunteered) 99

Q52. Thinking about important issues facing the country today, overall, would you say you tend to agree with Donald Trump on all or nearly all issues, many but not all issues, a few issues, or no or almost no issues?

       All or nearly all issues 1
       Many, but not all issues 2
       A few issues 3
       No or almost no issues 4
       Not sure (Volunteered) 98
       Refused (Volunteered) 99

Q53. Which of the following categories best describes your family income? Is it… **[READ LIST]**

       Less than 20,000………………....1
       20,000-40,000……...............……2
       40,000-60,000…………………...3
       60,000-80,000……...............……4
       80,000-100,000…………………5
       Over 100,000……………………6
       Not Sure (Volunteered) ……..…98
       Refused (Volunteered)…………99

Q54.Thank you for your help with the survey. We appreciate your time.

[DO NOT ASK!]
        Male……………………….. 1
        Female………...................….2
        Not Sure …………………....98

The National Surveys on Energy and Environment (NSEE)
Fall 2017 Data Tables

Survey Methodology	
N	929 (140 Land Line & 789 Cell Phone)
Margin of Error	+/-3.2%
Fielding Dates	October 4, 2017 - November 19, 2017
AAPOR RR3 Response Rate	9%
Data tables below are weighted by Gender, Age, Race, Income, and Education	

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Hello. My name is _____ and I'm a student at Muhlenberg College. We are conducting a research project regarding environmental issues in the United States. Would you be able to help us by answering a few questions?

Q1. Thank you. In which category does your current age fall? [READ LIST]

		Total
Thank you. In which category does your current age fall? [READ LIST]	18-29	24%
	30-44	25%
	45-64	27%
	65 and older	20%
	Refused, but stated they are 18 or over	4%
	N	929

Columns may not sum to 100% due to rounding within cells.

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Q2. What state do you currently reside in? [CODED INTO REGIONS]

		Total
What state do you currently reside in? [CODED INTO REGIONS]	Northeast	18%
	South	36%
	Midwest	21%
	West	25%
	N	929

Columns may not sum to 100% due to rounding within cells.

↑ Back to the Table of Contents

Q3. In general how would you describe the overall weather in your area this past summer?

		Total
In general how would you describe the overall weather in your area this past summer?	A lot warmer than usual	20%
	Slightly warmer than usual	27%
	Slightly cooler than usual	12%
	A lot cooler than usual	4%
	About the same as usual	34%

		Total
	Not Sure (Volunteered)	3%
	N	*929*

Columns may not sum to 100% due to rounding within cells.

Q4. Next, I would like to ask you a few questions on the issue of global warming. From what you've read and heard. Is there solid evidence that the average temperature on earth has been getting warmer over the past four decades?

		Total
Next, I would like to ask you a few questions on the issue of global warming. From what you've read and heard. Is there solid evidence that the average temperature on earth has been getting warmer over the past four decades?	Yes	70%
	No	18%
	Not Sure (Volunteered)	12%
	N	*928*

Columns may not sum to 100% due to rounding within cells.

Q5. How confident are you that the average temperature on earth is increasing? Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is increasing?

		Total
How confident are you that the average temperature on earth is increasing? Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is increasing? (Among those who said there is solid evidence of global warming)	Very Confident	66%
	Fairly Confident	30%
	Not Too Confident	4%
	Not Confident At All	<1%
	Not Sure (Volunteered)	<1%
	N	*649*

Columns may not sum to 100% due to rounding within cells.

Q6. Is the earth getting warmer because of human activity such as burning fossil fuels, or mostly because of natural patterns in the earth's environment?

		Total
Is the earth getting warmer because of human activity such as burning fossil fuels, or mostly because of natural patterns in the earth's environment? (Among those who said there is solid evidence of global warming)	Human Activity	50%
	Natural Patterns	16%
	A Combination (Volunteered)	25%
	Not Sure (Volunteered)	8%
	N	*649*

Columns may not sum to 100% due to rounding within cells.

Q7. I know you say it's a combination, but if you had to choose, would you say that temperatures on earth are rising mostly because of human activity or mostly because of natural patterns?

		Total
I know you say it's a combination, but if you had to choose, would you say that temperatures on earth are rising mostly because of human activity or mostly because of natural patterns? (Among those who said the earth is getting warmer because of a combination of human activity and natural patterns)	Human Activity	61%
	Natural Patterns	15%
	Equal (Volunteered)	18%
	Not Sure (Volunteered)	6%
	N	*164*

Columns may not sum to 100% due to rounding within cells.

Q8. In your view is global warming a very serious problem, somewhat serious, not too serious, or not a problem?

		Total
In your view is global warming a very serious problem, somewhat serious, not too serious, or not a problem? (Among those who said there is solid evidence of global warming)	Very Serious	62%
	Somewhat Serious	27%
	Not Too Serious	6%
	Not a Problem	3%
	Not Sure (Volunteered)	1%
	N	649

Columns may not sum to 100% due to rounding within cells.

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Q9. Do you or do you not think global warming requires immediate government action?

		Total
Do you or do you not think global warming requires immediate government action? (Among those who said there is solid evidence of global warming)	Yes, it requires immediate government action	76%
	No, it does not require immediate government action	18%
	Not Sure (Volunteered)	6%
	N	649

Columns may not sum to 100% due to rounding within cells.

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Q10. What is the primary factor that has caused you to believe that temperatures on earth are increasing? [Coded open-end response]

		Total
What is the primary factor that has caused you to believe that temperatures on earth are increasing? (Among those who said there is solid evidence of global warming) [Coded open-end response]	Declining Glaciers and Polar Ice	10%
	Warmer Temperatures Observed	23%
	Weather Changes	16%
	Scientific Research/Data	14%
	Al Gore's Documentary	<1%
	Media Coverage	7%
	Declining Species	2%
	Human Activity	10%
	Natural Patterns	3%
	Ocean / Sea-level Rise	3%
	Religious Factors	<1%
	Population Growth	1%
	Growing Season / Plants	0%
	Not Sure/Other	11%
	N	649

Columns may not sum to 100% due to rounding within cells.

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Q11-15. Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer. For each factor that I mention please indicate if it has had a very large, somewhat large, not too large, or no effect on your view that the earth is getting warmer. [ROTATED LIST]

		Declining glaciers and polar ice throughout the globe	Warmer temperatures in your area during recent years	The strength of hurricanes hitting the United States	Milder winters in your area	Severe droughts in areas across the United States
Next I would like to read you a list of factors that may or may not have had an effect on your view that the earth is getting warmer. For each factor that I mention please indicate if it has had a very large,	Very Large	64%	45%	56%	31%	47%
	Somewhat Large	23%	33%	24%	36%	34%
	Not Too Large	5%	14%	8%	16%	10%

somewhat large, not too large, or no effect on your view that the earth is getting warmer. (Among those who said there is solid evidence of global warming) [ROTATED LIST]		Declining glaciers and polar ice throughout the globe	Warmer temperatures in your area during recent years	The strength of hurricanes hitting the United States	Milder winters in your area	Severe droughts in areas across the United States
	No Effect	3%	5%	5%	15%	4%
	Not Sure (Volunteered)	5%	3%	7%	2%	5%
	N	649	649	649	649	649

Columns may not sum to 100% due to rounding within cells.

Q16. How confident are you that the average temperatures on earth are not increasing? Are you very confident, fairly confident, not too confident, or not confident at all that the average temperature on earth is not increasing?

		Total
How confident are you that the average temperatures on earth are not increasing? Are you very confident, fairly confident, not too confident or not confident at all that the average temperature on earth is not increasing? (Among those who said there is not solid evidence of global warming)	Very Confident	55%
	Fairly Confident	30%
	Not Too Confident	8%
	Not Confident At All	6%
	Not Sure (Volunteered)	1%
	N	170

Columns may not sum to 100% due to rounding within cells.

Q17. What is the primary factor that makes you believe that temperatures on earth are not increasing? [Coded open-end response]

		Total
What is the primary factor that makes you believe that temperatures on earth are not increasing? (Among those who said there is not solid evidence of global warming) [Coded open-end response]	Personal Observations	31%
	Natural Patterns	25%
	Not Enough Evidence	4%
	Media has Misled	3%
	Evidence Disproves	13%
	Religious Factors	4%
	Political Factors	3%
	No Particular Reason	4%
	Not Sure/Other	14%
	N	170

Columns may not sum to 100% due to rounding within cells.

Q18-20. For each level of government that I mention please tell me if it has a great deal of responsibility, some responsibility or no responsibility for taking actions to reduce global warming.

		The Federal Government	State Governments	Local Governments
For each level of government that I mention please tell me if it has a great deal of responsibility, some responsibility or no responsibility for taking actions to reduce global warming.	A Great Deal of Responsibility	52%	41%	34%
	Some Responsibility	27%	37%	35%
	No Responsibility	17%	19%	28%
	Not Sure (Volunteered)	4%	3%	4%
	N	929	929	929

Columns may not sum to 100% due to rounding within cells.

Q21-27. There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases. For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions. [ROTATED LIST]

		There should be increased state government support for clean coal technology	State governments should require auto makers to increase the fuel efficiency of their vehicles even if it increases the cost of the vehicle.	State governments should increase taxes on ALL fossil fuels in order to reduce consumption.	State governments should support increased use of nuclear power to reduce greenhouse gas emissions.	State governments should allow businesses to buy and sell permits to release greenhouse gases if it results in an overall decrease in emissions.	State governments should require a set portion of all electricity to come from renewable energy sources such as wind or solar power.	Increasing the use of natural gas-fired electricity generation in your state.
There have been a number of ideas proposed for how state governments can reduce the emissions of greenhouse gases. For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed ways states can reduce greenhouse gas emissions.	Strongly Support	36%	36%	17%	20%	20%	62%	26%
	Somewhat Support	31%	33%	25%	23%	29%	21%	30%
	Somewhat Oppose	6%	10%	16%	13%	11%	5%	9%
	Strongly Oppose	14%	15%	35%	28%	17%	8%	12%
	Not Sure (Volunteered)	13%	6%	7%	16%	24%	3%	22%
	N	924	929	926	927	928	929	929

Columns may not sum to 100% due to rounding within cells.

Q28-30. Please identify your level of agreement with the following statements. For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. [ROTATED LIST]

		If the federal government fails to address the issue of global warming it is my state's responsibility to address the problem.	My state has already felt negative effects from global warming.	My state's economy will be damaged if it requires greater use of renewable energy while neighboring states don't have such requirements.
Please identify your level of agreement with the following statements. For each statement please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. [ROTATED LIST])	Strongly Agree	32%	24%	17%
	Somewhat Agree	33%	33%	26%
	Somewhat Disagree	12%	12%	19%
	Strongly Disagree	18%	18%	22%
	Not Sure (Volunteered)	5%	13%	16%
	N	926	926	927

Columns may not sum to 100% due to rounding within cells.

Webtables for Questions 31 - 33 are not available at this time. This was sponsored research and is still under embargo.

I'm going to read off some proposed policies that would help reduce greenhouse gas emissions. For each idea that I mention please tell me if you strongly support, somewhat support, neither support nor oppose, somewhat oppose or strongly oppose the proposed ways to reduce greenhouse gas emissions. (Half of respondents were asked questions Q34-Q38 after the questions about carbon dioxide removal, and half were asked Q34-Q38 before the questions about carbon dioxide removal.)

Q34. Phasing out all coal-fired power plants.

		Total
Phasing out all coal-fired power plants.	Strongly Support	28%
	Somewhat Support	19%
	Neither Support nor Oppose	11%
	Somewhat Oppose	14%
	Strongly Oppose	20%
	Not Sure (Volunteered)	8%
	N	927

Columns may not sum to 100% due to rounding within cells.

Q35. Increasing subsidies for renewable energy such as wind and solar power.

		Total
Increasing subsidies for renewable energy such as wind and solar power.	Strongly Support	62%
	Somewhat Support	22%
	Neither Support nor Oppose	2%
	Somewhat Oppose	4%
	Strongly Oppose	7%
	Not Sure (Volunteered)	3%
	N	925

Columns may not sum to 100% due to rounding within cells.

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Q36. The federal government increasing taxes on carbon based fuels such as coal, oil and natural gas.

		Total
The federal government increasing taxes on carbon based fuels such as coal, oil and natural gas.	Strongly Support	18%
	Somewhat Support	26%
	Neither Support nor Oppose	5%
	Somewhat Oppose	15%
	Strongly Oppose	32%
	Not Sure (Volunteered)	4%
	N	928

Columns may not sum to 100% due to rounding within cells.

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Q37. State governments should increase taxes on gasoline in order to reduce consumption.

		Total
State governments should increase taxes on gasoline in order to reduce consumption.	Strongly Support	9%
	Somewhat Support	18%
	Neither Support nor Oppose	6%
	Somewhat Oppose	16%
	Strongly Oppose	48%
	Not Sure (Volunteered)	3%
	N	928

Columns may not sum to 100% due to rounding within cells.

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Q38. State governments should require an increase in energy efficiency for residential and commercial buildings and appliances.

		Total
State governments should require an increase in energy efficiency for residential and commercial buildings and appliances.	Strongly Support	40%
	Somewhat Support	31%
	Neither Support nor Oppose	7%
	Somewhat Oppose	8%
	Strongly Oppose	10%
	Not Sure (Volunteered)	4%
	N	927

Columns may not sum to 100% due to rounding within cells.

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For each of the statements that I read please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the statement.

Q39. If human activity leads to global warming then humans will also be able to find ways to reduce temperatures on the planet through atmospheric engineering methods.

		Total
If human activity leads to global warming then humans will also be able to find ways to reduce temperatures on the planet through atmospheric engineering methods.	Strongly Agree	20%
	Somewhat Agree	31%
	Somewhat Disagree	8%
	Strongly Disagree	19%
	Not Sure (Volunteered)	22%
	N	924

Columns may not sum to 100% due to rounding within cells.

Q40. Instead of trying to stop global warming from occurring we should focus on adapting to a warmer climate.

		Total
Instead of trying to stop global warming from occurring we should focus on adapting to a warmer climate.	Strongly Agree	6%
	Somewhat Agree	16%
	Somewhat Disagree	18%
	Strongly Disagree	55%
	Not Sure (Volunteered)	5%
	N	926

Columns may not sum to 100% due to rounding within cells.

Q41. Rich countries like the US have a moral obligation to show international leadership by reducing their greenhouse gas emissions.

		Total
Rich countries like the US have a moral obligation to show international leadership by reducing their greenhouse gas emissions.	Strongly Agree	42%
	Somewhat Agree	28%
	Somewhat Disagree	10%
	Strongly Disagree	13%
	Not Sure (Volunteered)	7%
	N	926

Columns may not sum to 100% due to rounding within cells.

Q42. Overall, the U.S. economy would benefit from leaving the international climate treaty designed to reduce greenhouse gas emissions.

		Total
Overall, the U.S. economy would benefit from leaving the international climate treaty designed to reduce greenhouse gas emissions.	Strongly Agree	16%
	Somewhat Agree	17%
	Somewhat Disagree	14%
	Strongly Disagree	34%
	Not Sure (Volunteered)	18%
	N	924

Columns may not sum to 100% due to rounding within cells.

Q43. Overall, Americans have benefited from globalization and free trade with other countries.

		Total
Overall, Americans have benefited from globalization and free trade with other countries.	Strongly Agree	32%
	Somewhat Agree	36%

	Total
Somewhat Disagree	8%
Strongly Disagree	14%
Not Sure (Volunteered)	10%
N	925

Columns may not sum to 100% due to rounding within cells.

Q44. The growing number of newcomers from other countries threatens traditional American customs and values.

		Total
The growing number of newcomers from other countries threatens traditional American customs and values.	Strongly Agree	15%
	Somewhat Agree	15%
	Somewhat Disagree	15%
	Strongly Disagree	44%
	Not Sure (Volunteered)	10%
	N	909

Columns may not sum to 100% due to rounding within cells.

Q45. If it required you to pay extra money each year in order for more renewable energy to be produced, how much would you be willing to pay? Would you be willing to pay… [READ LIST]

		Total
If it required you to pay extra money each year in order for more renewable energy to be produced, how much would you be willing to pay? Would you be willing to pay… [READ LIST]	Nothing each year	36%
	1 to 50 dollars per year	21%
	50 to 100 dollars a year	13%
	100 to 250 dollars a year	11%
	250 to 500 dollars a year	7%
	Over 500 dollars a year	6%
	Not Sure (Volunteered)	6%
	N	922

Columns may not sum to 100% due to rounding within cells.

Finally a few questions about yourself.

Q46. Which of the following categories best describes your racial identity? Are you [READ LIST]

		Total
Finally a few questions about yourself. Which of the following categories best describes your racial identity? Are you [READ LIST]	White/Caucasian	60%
	African-American	12%
	Hispanic	11%
	Latino	5%
	Asian	4%
	Native American	1%
	Mixed Race	3%
	Other	4%
	N	915

Columns may not sum to 100% due to rounding within cells.

Q47. Which of the following categories best describes your religious affiliation? Are you [READ LIST]

		Total
Which of the following categories best describes your religious affiliation? Are you [READ LIST]	Protestant	38%
	Catholic	24%
	Jewish	3%
	Muslim	1%
	Hindu	2%
	Other Religion (Including Agnostic)	22%
	Atheist	6%
	Not Sure (Volunteered)	4%
	N	852

Columns may not sum to 100% due to rounding within cells.

Q48. Would you describe yourself as an evangelical Christian?

		Total
Would you describe yourself as an evangelical Christian? (Among those who identified as Protestant)	Yes	39%
	No	60%
	Not Sure (Volunteered)	2%
	N	324

Columns may not sum to 100% due to rounding within cells.

Q49. What is your highest level of education? [READ LIST]

		Total
What is your highest level of education? [READ LIST]	Less Than High School Graduate	5%
	High School Graduate	27%
	Some College or Technical School	30%
	College Graduate	24%
	Graduate or Professional Degree	14%
	Not Sure (Volunteered)	<1%
	N	918

Columns may not sum to 100% due to rounding within cells.

Q50. Which of the following best describes your political party affiliation? [READ LIST]

		Total
Which of the following best describes your political party affiliation? [READ LIST]	Democrat	32%
	Republican	26%
	Other Party	8%
	Independent	31%
	Not Sure (Volunteered)	4%
	N	848

Columns may not sum to 100% due to rounding within cells.

Q51. Which of the following best describes your political beliefs? [READ LIST]

		Total
Which of the following best describes your political beliefs? [READ LIST]	Very Conservative	12%
	Somewhat Conservative	20%

		Total
	Moderate	35%
	Somewhat Liberal	19%
	Very Liberal	9%
	Not Sure (Volunteered)	4%
	N	857

Columns may not sum to 100% due to rounding within cells.

Q52. Thinking about important issues facing the country today, overall, would you say you tend to agree with Donald Trump on all or nearly all issues, many but not all issues, a few issues, or no or almost no issues?

		Total
Thinking about important issues facing the country today, overall, would you say you tend to agree with Donald Trump on all or nearly all issues, many but not all issues, a few issues, or no or almost no issues?	All or nearly all issues	10%
	Many, but not all issues	18%
	A few issues	26%
	No or almost no issues	43%
	Not Sure (Volunteered)	3%
	N	915

Columns may not sum to 100% due to rounding within cells.

Q53. Which of the following categories best describes your family income? Is it [READ LIST]

		Total
Which of the following categories best describes your family income? Is it [READ LIST]	Less than 20,000	12%
	20,000 - 40,000	20%
	40,000 - 60,000	19%
	60,000 - 80,000	15%
	80,000 - 100,000	9%
	Over 100,000	18%
	Not Sure (Volunteered)	6%
	N	677

Columns may not sum to 100% due to rounding within cells.

Respondent Gender

		Total
Respondent Gender	Male	49%
	Female	51%
	N	929

Columns may not sum to 100% due to rounding within cells.

Thank you for your help with the survey. We appreciate your time.