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George Mason University  
Center for Climate Change Communication

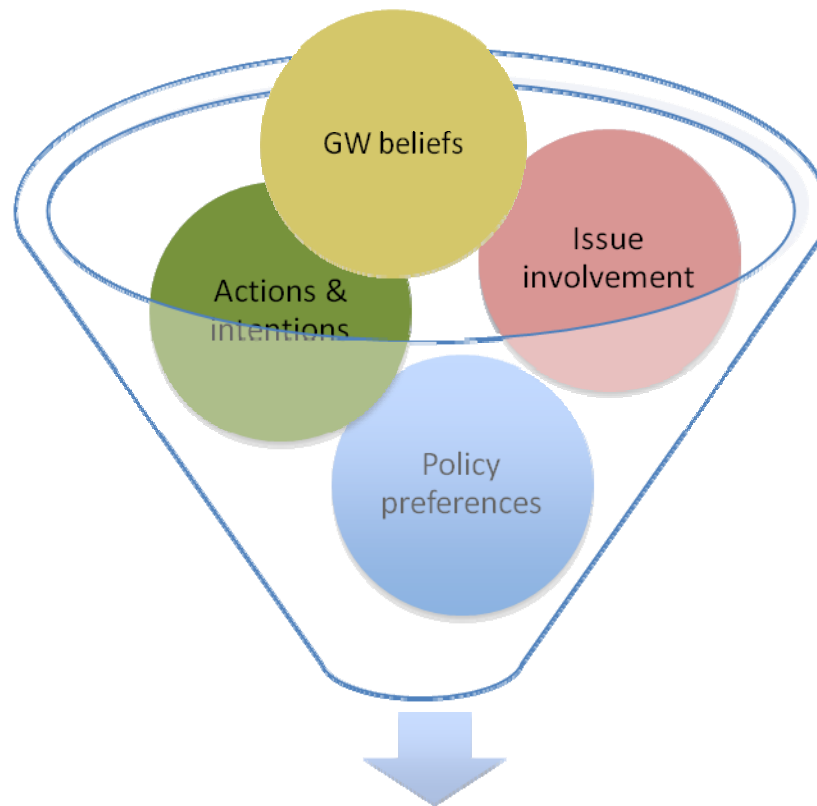
## **On this we all agree – saving energy is good: The case of global warming’s “Six Americas”**

**American Council for an Energy-Efficient Economy**  
**30<sup>th</sup> Anniversary Policy & Analysis Conference**  
**Washington, DC**  
December 8, 2010

Edward Maibach, MPH, PhD

# The premise of audience segmentation

*Effective communication provides people with information targeted to their informational needs.*

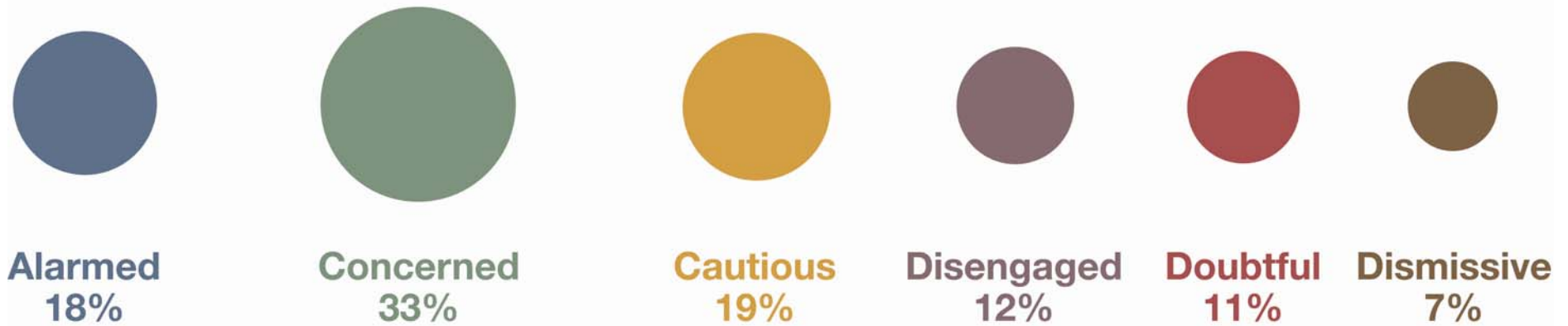


*People differ. An important task for program planners is to identify groups of people whose needs can be met in a similar manner.*

**motivationally coherent audience segments**

# Figure 1: Proportion of the U.S. adult population in the Six Americas

*Proportion represented by area*



← Highest Belief in Global Warming  
Most Concerned  
Most Motivated

Lowest Belief in Global Warming  
Least Concerned  
Least Motivated →

n=2,129



# Alarmed Alice



Alice is completely sure global warming is happening, she believes it is human caused, and she feels personally threatened by it. She also believes that people around the world are already being harmed by it, or will soon be.

# Concerned Claudia

Claudia is very sure global warming is happening, and she believes it is human causes, but she feels less personally threatened by it than Alice. She believes that global warming will begin to harm people around the world 10+ years from now.



# Cautious Carl



Carl is only somewhat sure that global warming is happening, and he is equally likely to see it as human caused or not. He sees global warming as a more distant threat – primarily a threat to other people – that won't begin to hurt people around the world for another 25 - 50 years.

# Disengaged Diane

Diane thinks global warming may be happening, but she's not at all sure. She's given it very little thought, doesn't consider it personally important, and doesn't feel she knows anything about it.



# Doubtful David



David says he doesn't know if real or not, but if it is, he's pretty sure it isn't human-caused. David certainly isn't worried about it; he sees global warming as a very distant threat that won't harm people for at least another 100 years.



# Dismissive Dan

Dan simply does not believe that global warming is happening – or if he does, he believes that it's in God's hands - and he believes that many scientists share his views.



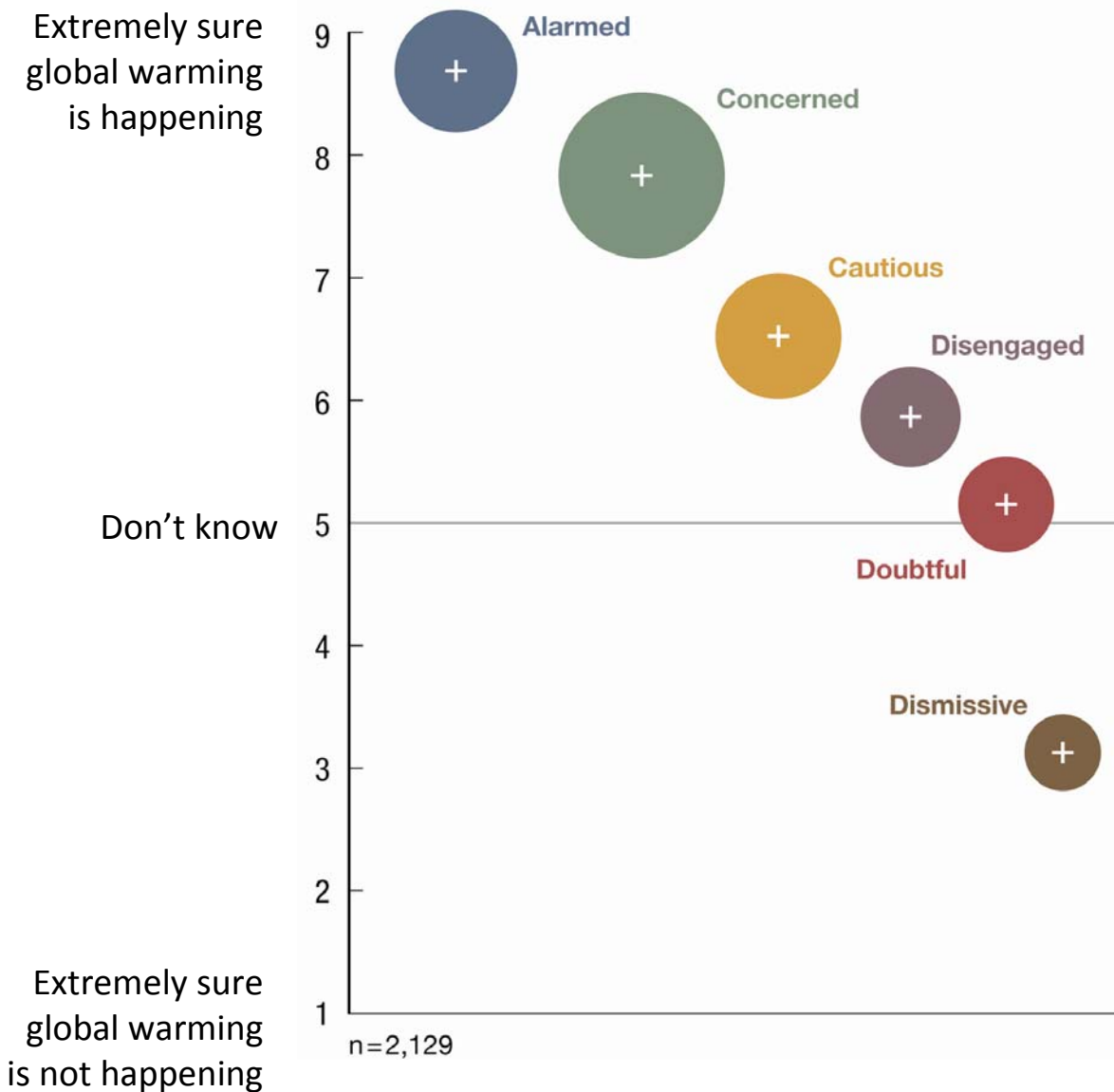
## Five Key Beliefs

differentiate those who ***support*** strong climate change policies from those who ***don't*** in the United States

1. Belief in the reality of climate change: *It's real.*
2. Certainty: *I'm certain it's real.*
3. Human implications: *It will be bad for people.*
4. Belief in human causation: *Humans caused it.*
5. Response efficacy: *Humans can fix it.*

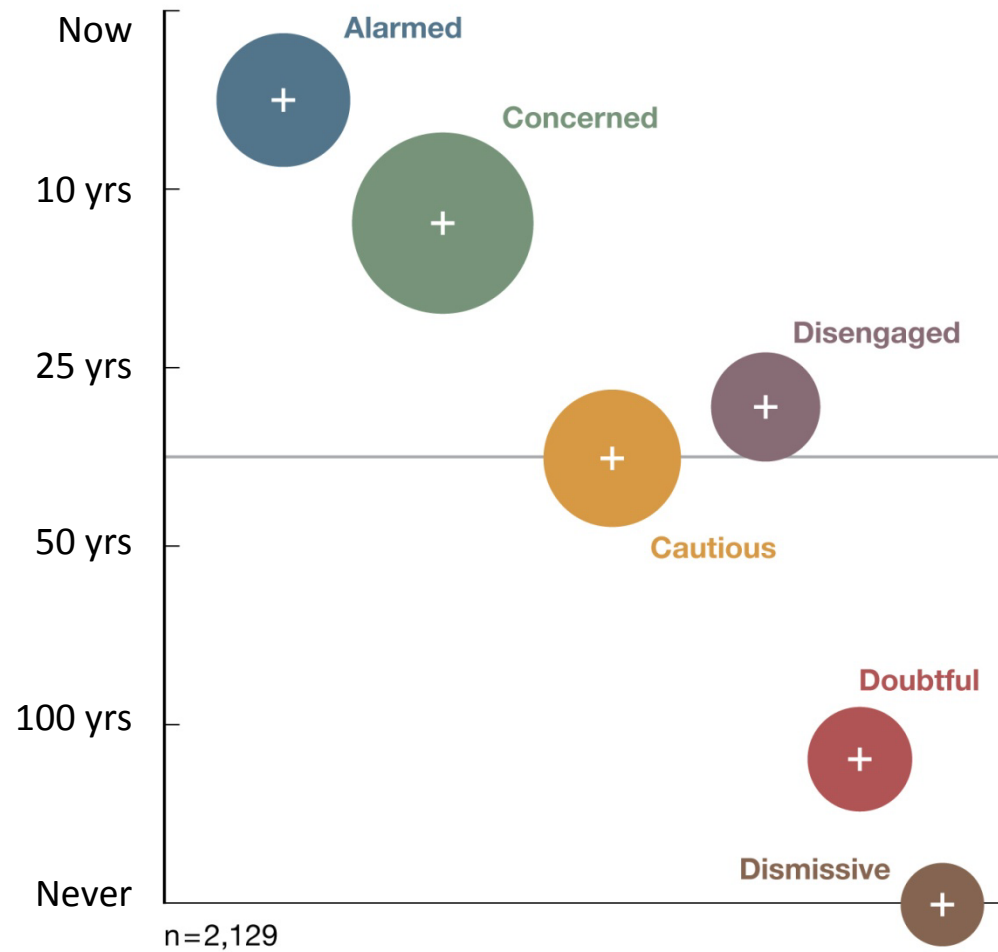
- 1. Reality of climate change: *It's real.***
- 2. Certainty: *I'm certain it's real.***

# Do you think that global warming is happening? How sure are you?



**3. Evaluation: *It will be bad for people.***

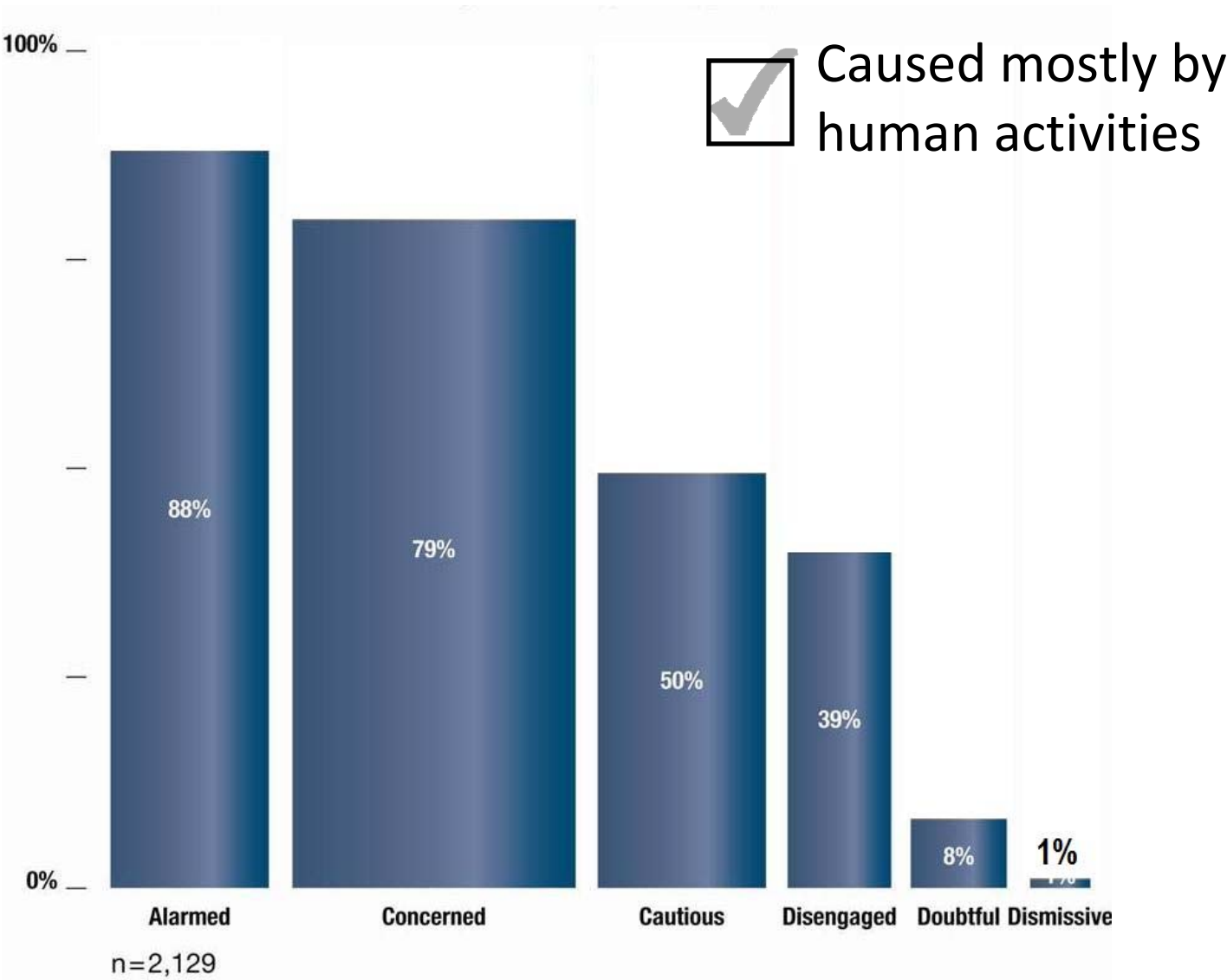
# When do you think global warming will start to harm people in the United States?



#### **4. Belief in human causation:**

*Humans caused it.*

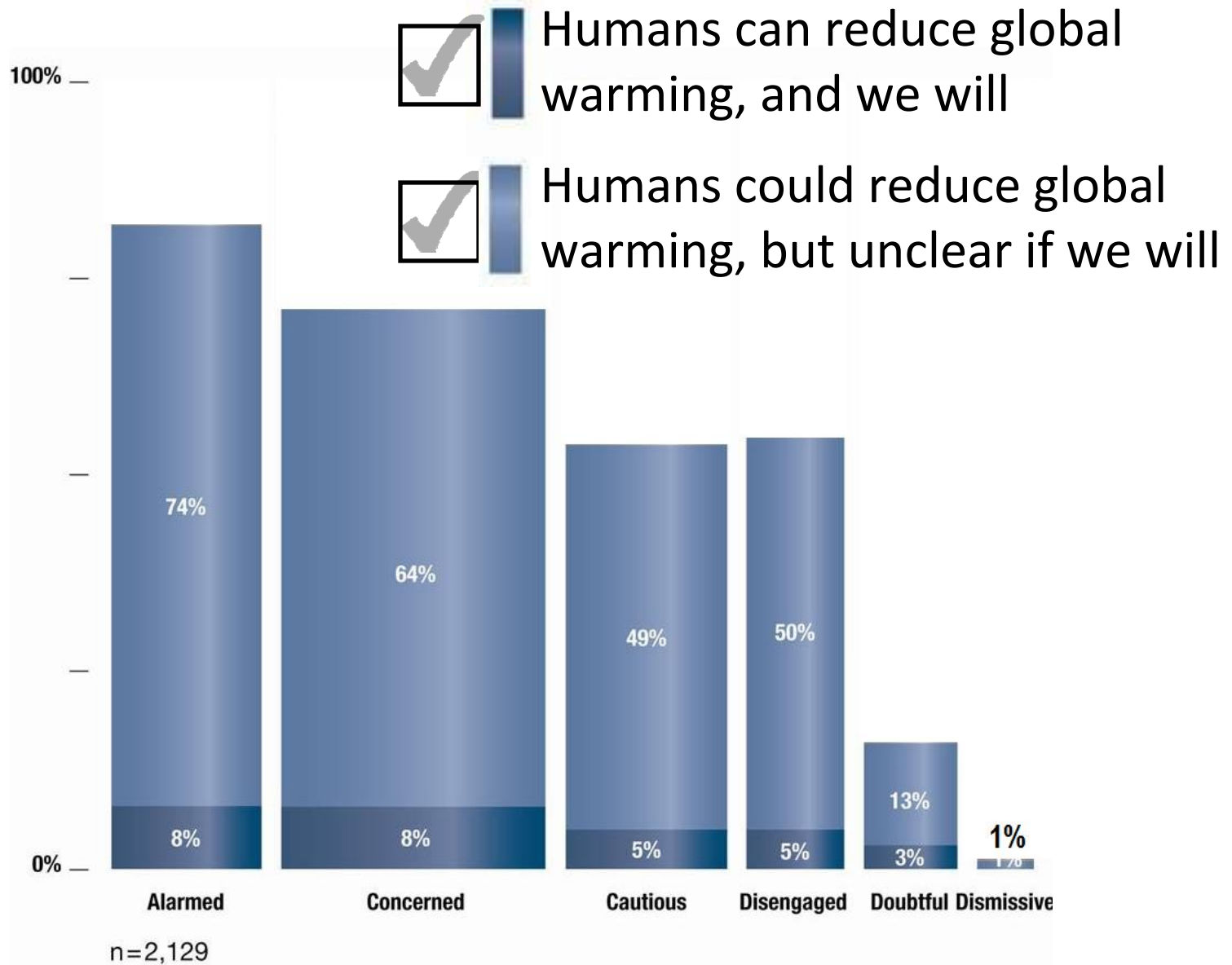
# If global warming is happening, do you think it is ...





**5. Response efficacy: *Humans can fix it.***

# Which of the following statements comes closest to your view?



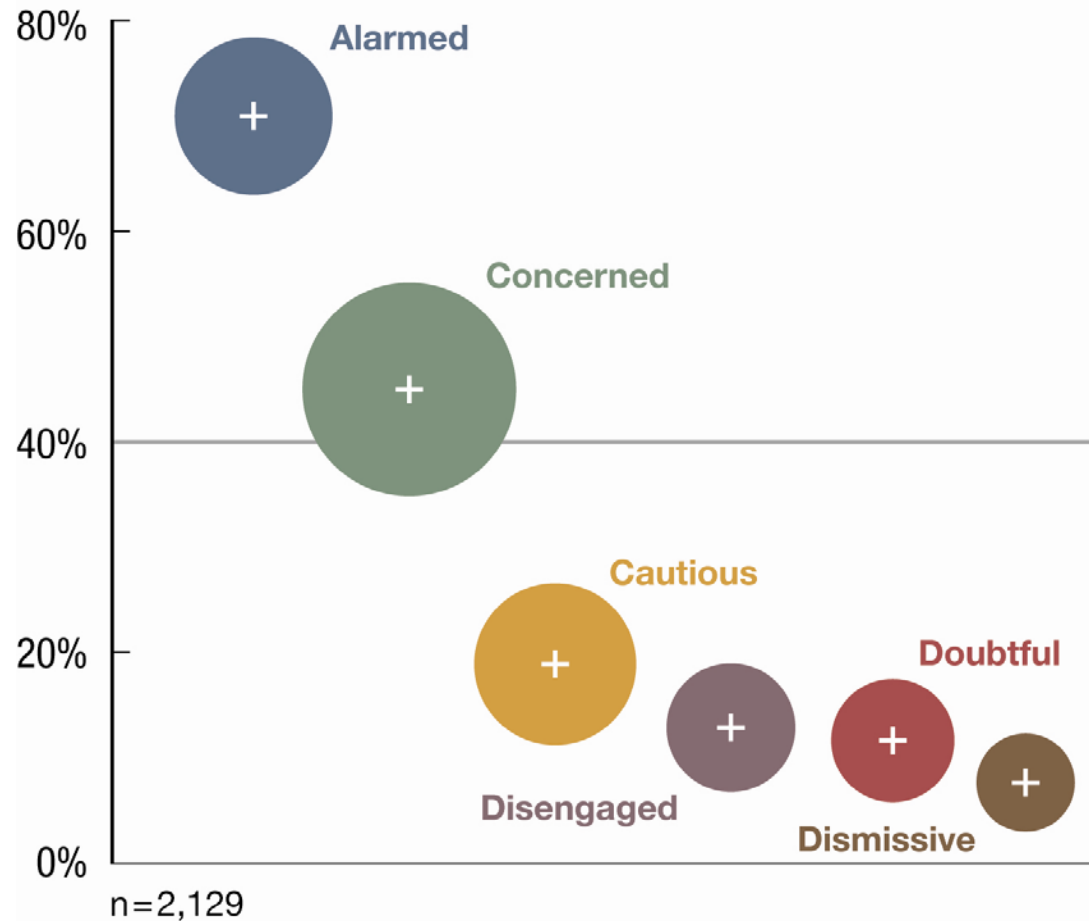
**What **global warming-related** actions are  
the Six Americas taking?**

**And what public policies do they support?**

## Figure 24: Proportion who have rewarded companies that support action to reduce global warming

Over the past 12 months, how many times have you done these things?

- Rewarded companies that are taking steps to reduce global warming by buying their products.

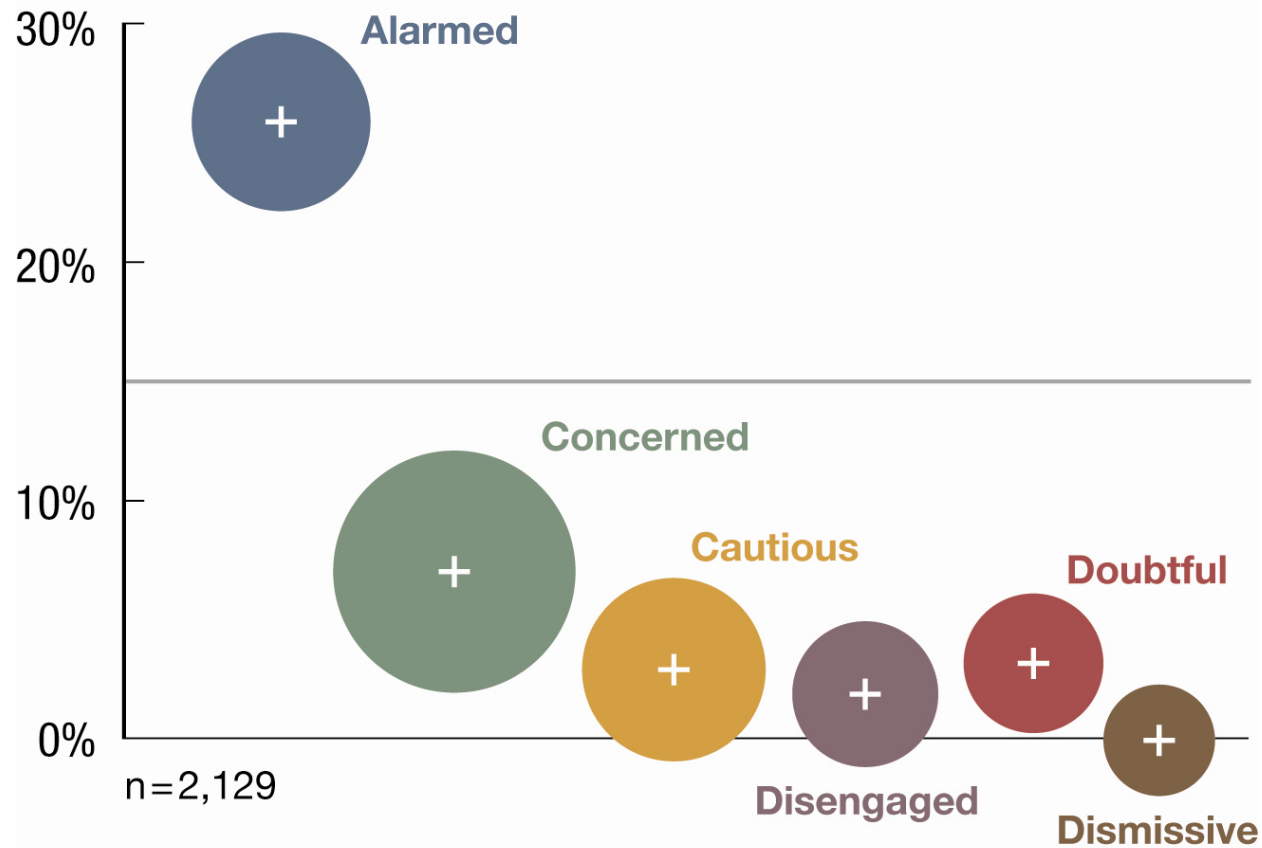


Note: Figure shows the proportion who have rewarded companies one or more times over the past 12 months.

## Figure 23: Proportion who have contacted elected officials to urge action on global warming

Over the past 12 months, how many times have you done each of the following?

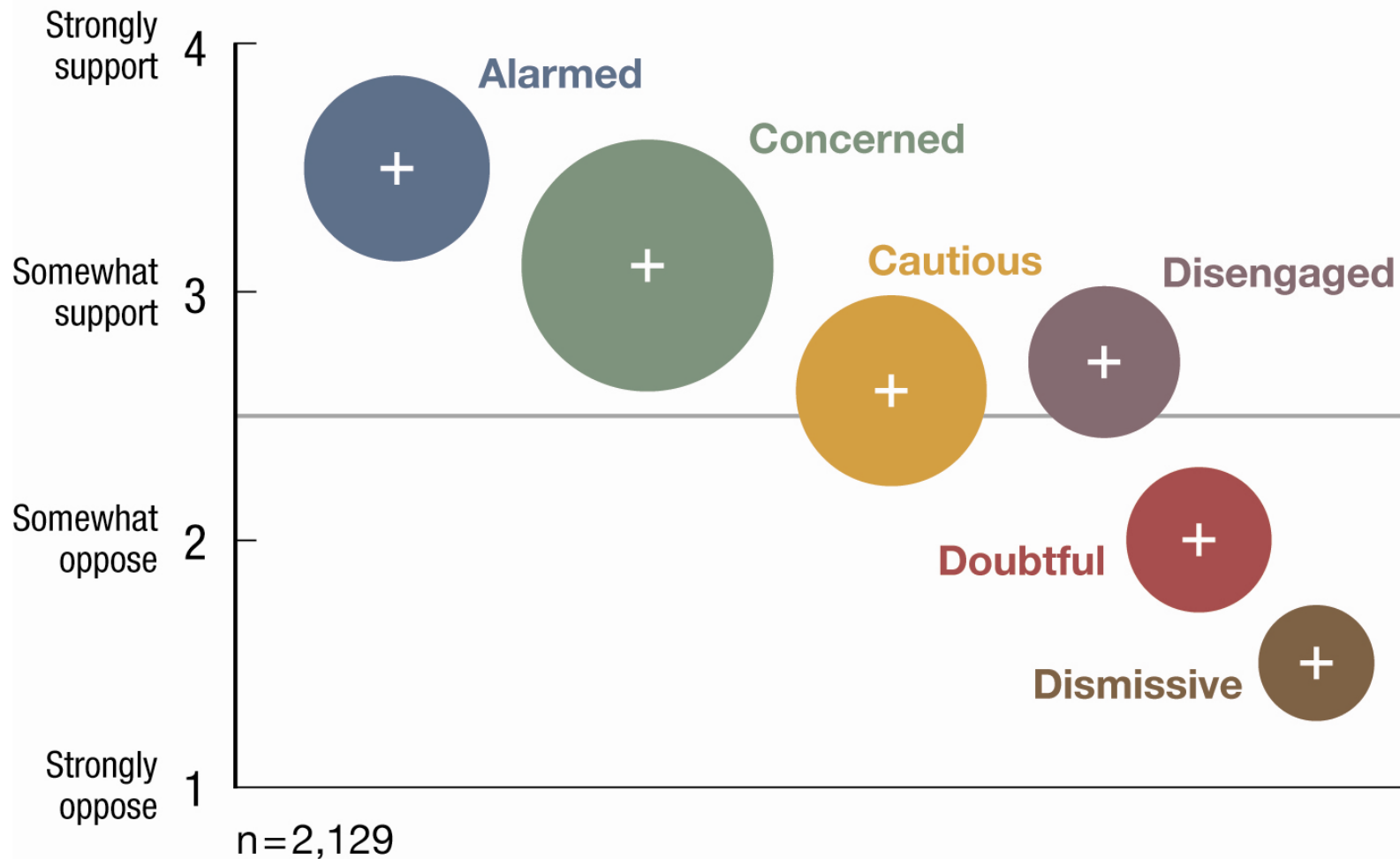
- Written letters, emailed, or phoned government officials to urge them to take action to reduce global warming?



Note: Figure shows the proportion who have contacted officials one or more times over the past 12 months.

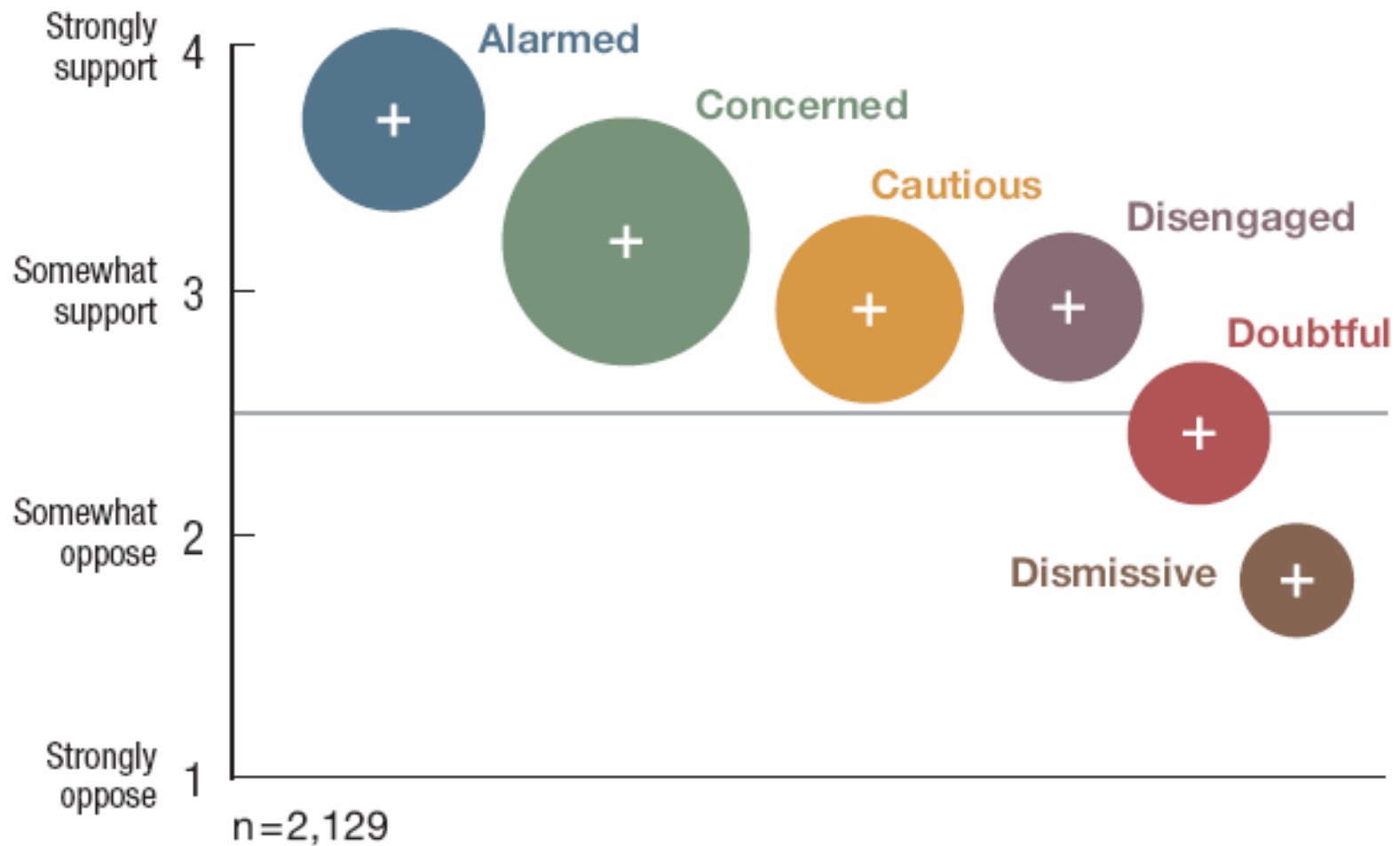
How much do you support or oppose the following policy?

**Sign an international treaty that requires the United States to cut its emissions of carbon dioxide 90% by the year 2050**



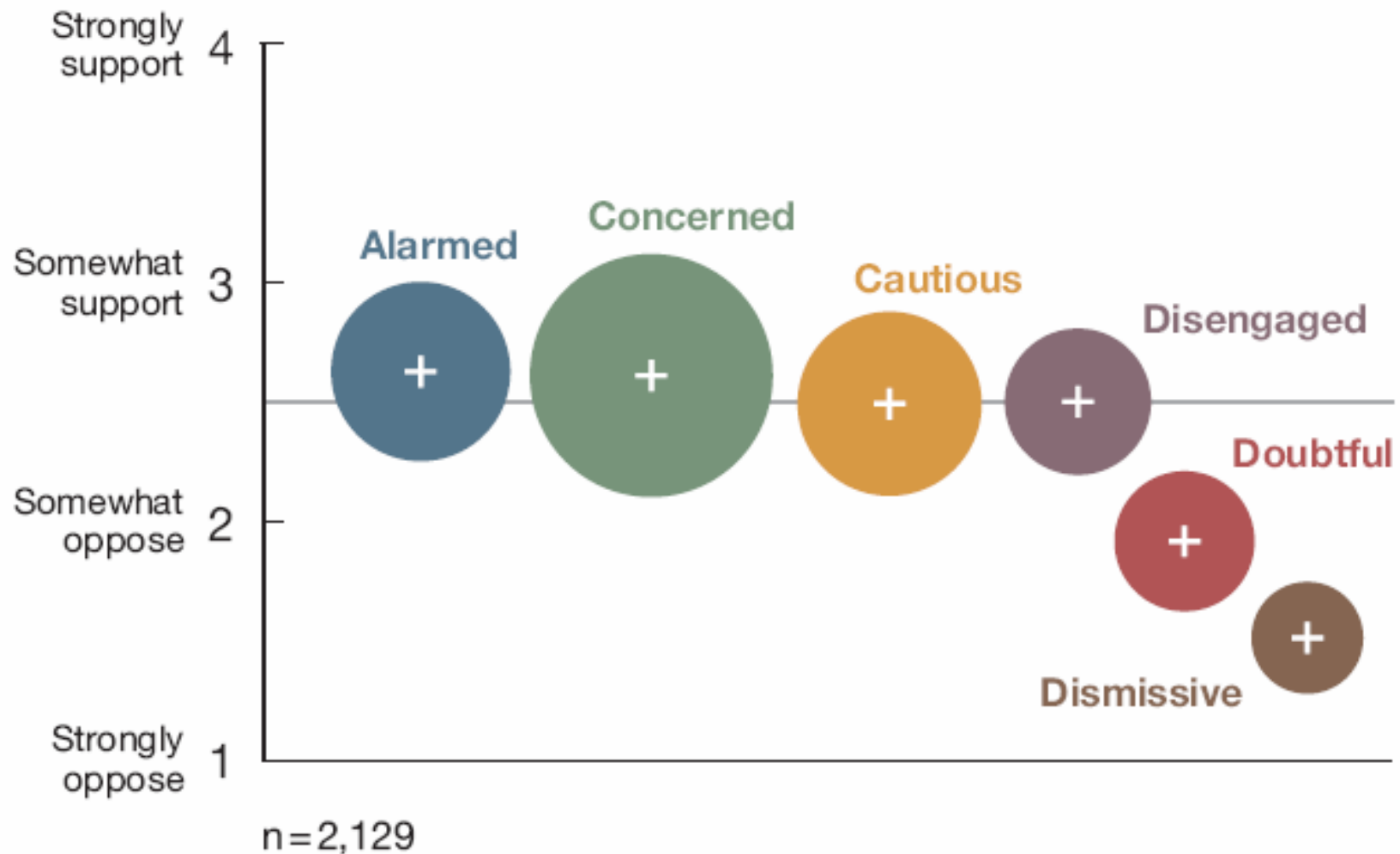
How much do you support or oppose the following policy?

**Regulate carbon dioxide (the primary greenhouse gas) as a pollutant**



How much do you support or oppose the following policy?

**Create a new national market that allows companies to buy and sell the right to emit the greenhouse gases said to cause global warming (cap and trade) ....**



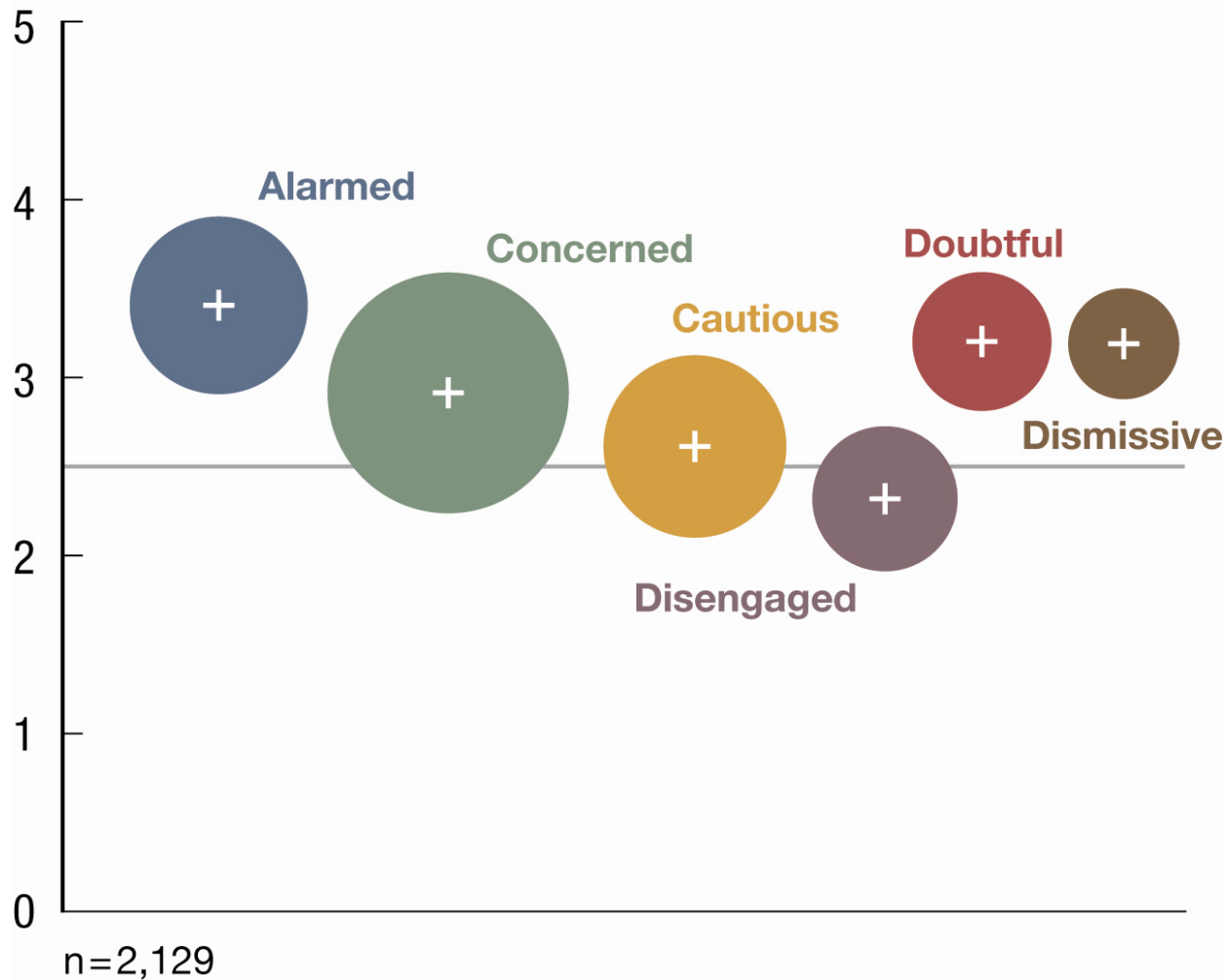


**What **energy-saving** actions are  
the Six Americas taking?**

**And what public policies do they support?**

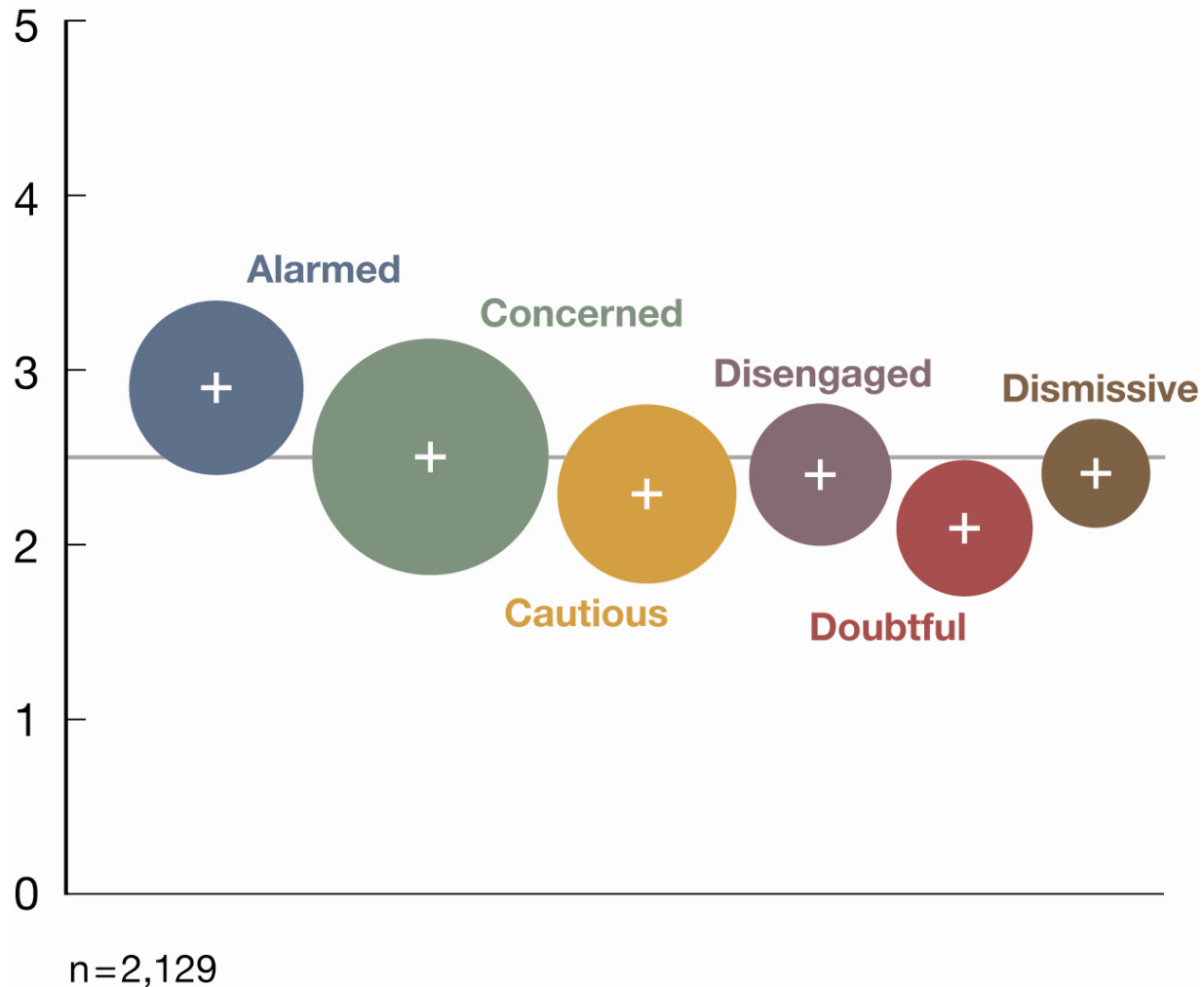
## Figure 26: Number of energy efficiency improvements made to home

Number of improvements made from the following list of five: Insulating the attic; caulking and weather-stripping the home; installation of an energy-efficient water heater; installation of an energy-efficient furnace; installation of an energy-efficient air conditioner.



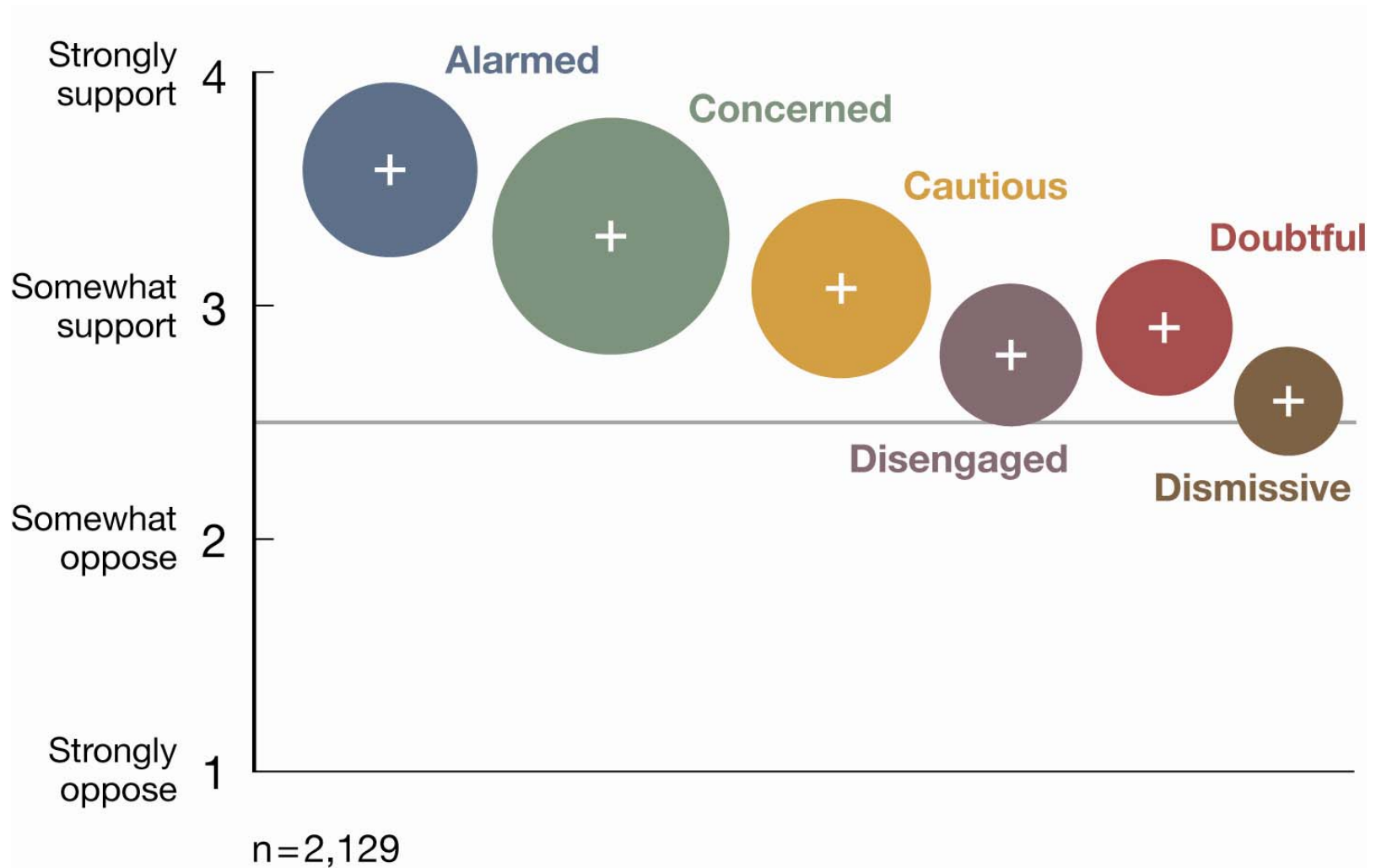
## Figure 27: Number of habitual conservation actions

Number of actions that respondent does “always” or “often” from the following list of five: turning off unneeded lights; raising the thermostat to 76 or higher or using less air conditioning in summer; lowering the thermostat to 68 or cooler in winter; walking or biking instead of driving; using public transportation or car pools.



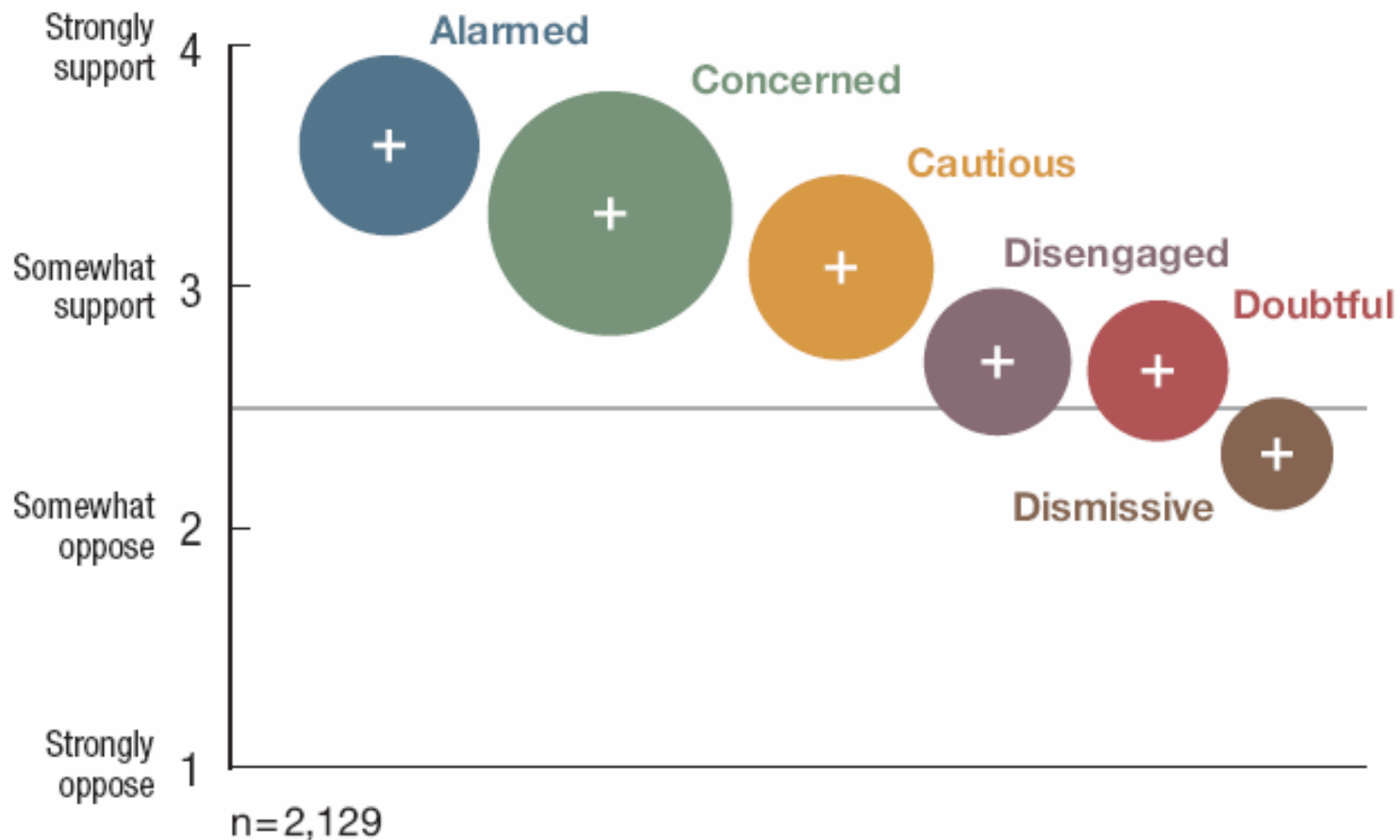
How much do you support or oppose the following policy?

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



How much do you support or oppose the following policy?

**Require automakers to increase the fuel efficiency of cars, trucks and SUVs to 45 mpg, even if it means that a new vehicle will cost up to \$1,000 more to buy**



**Table 12 | Energy-Efficiency  
Actions and Intentions <sup>1</sup>**

*National Average*  
*Alarmed (18%)*  
*Concerned (33%)*  
*Cautious (19%)*  
*Disengaged (12%)*  
*Doubtful (11%)*  
*Dismissive (7%)*

The next questions ask about energy-related actions you might like to do. Which of the following best describes what you are likely to do over the next 12 months?

|   |  |           |    |    |    |    |    |    |
|---|--|-----------|----|----|----|----|----|----|
| Install new insulation in the attic               | <i>Already have done this</i>              | <b>55</b> | 60 | 53 | 49 | 45 | 71 | 65 |
|   | <i>Like to/probably will <sup>2</sup></i>  | <b>5</b>  | 8  | 5  | 5  | 3  | 3  | 4  |
|   | <i>Like to/probably won't <sup>3</sup></i> | <b>9</b>  | 5  | 11 | 12 | 8  | 9  | 5  |
|   | <i>No intention to do this</i>             | <b>2</b>  | 0  | 2  | 4  | 2  | 3  | 5  |
|   | <i>Not applicable</i>                      | <b>28</b> | 27 | 29 | 29 | 43 | 15 | 21 |
| Caulk and weather-strip the home to reduce drafts | <i>Already have done this</i>              | <b>64</b> | 68 | 62 | 58 | 57 | 75 | 75 |
|   | <i>Like to/probably will <sup>2</sup></i>  | <b>13</b> | 15 | 16 | 13 | 10 | 5  | 5  |
|   | <i>Like to/probably won't <sup>3</sup></i> | <b>11</b> | 6  | 12 | 15 | 12 | 13 | 7  |
|   | <i>No intention to do this</i>             | <b>4</b>  | 1  | 4  | 6  | 3  | 5  | 6  |
|   | <i>Not applicable</i>                      | <b>8</b>  | 9  | 6  | 8  | 18 | 2  | 7  |
| Purchase an energy-efficient home furnace         | <i>Already have done this</i>              | <b>51</b> | 56 | 50 | 50 | 40 | 56 | 50 |
|   | <i>Like to/probably will <sup>2</sup></i>  | <b>5</b>  | 7  | 5  | 5  | 7  | 3  | 1  |
|   | <i>Like to/probably won't <sup>3</sup></i> | <b>21</b> | 20 | 24 | 24 | 17 | 19 | 11 |
|   | <i>No intention to do this</i>             | <b>8</b>  | 2  | 6  | 7  | 12 | 12 | 18 |
|   | <i>Not applicable</i>                      | <b>16</b> | 15 | 15 | 14 | 25 | 10 | 20 |

**Table 13 | Barriers to Home Energy-Efficiency Improvements <sup>1</sup>**

|   |   | <i>National Average</i> | <i>Alarmed (18%)</i> | <i>Concerned (33%)</i> | <i>Cautious (19%)</i> | <i>Disengaged (12%)</i> | <i>Doubtful (11%)</i> | <i>Dismissive (7%)</i> |
|---|---|-------------------------|----------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------|
| There are many reasons why people don't [insert item below]. Please check all of the reasons below that apply to you. |   |                         |                      |                        |                       |                         |                       |                        |
| Install new insulation in their attics  | <i>I can't afford it</i>                      | 44                      | 58                   | 45                     | 42                    | 44                      | 37                    | 38                     |
|   | <i>I don't know how</i>                       | 19                      | 3                    | 36                     | 11                    | 12                      | 10                    | 19                     |
|   | <i>It's too much effort</i>                   | 10                      | 3                    | 10                     | 13                    | 0                       | 15                    | 23                     |
|   | <i>I'm too busy</i>                           | 10                      | 0                    | 11                     | 11                    | 2                       | 13                    | 27                     |
|   | <i>I don't want to pay for it<sup>2</sup></i> | 4                       | 0                    | 5                      | 2                     | 4                       | 5                     | 14                     |
|   | <i>Someone would object<sup>3</sup></i>       | 2                       | 3                    | 2                      | 1                     | 0                       | 0                     | 9                      |
|   | <i>Number of respondents</i>                  | <b>341</b>              | 31                   | 113                    | 85                    | 51                      | 39                    | 22                     |
| Caulk and weather-strip their homes to reduce drafts  | <i>I can't afford it</i>                      | 28                      | 21                   | 30                     | 22                    | 33                      | 38                    | 33                     |
|   | <i>I don't know how</i>                       | 21                      | 19                   | 20                     | 25                    | 18                      | 21                    | 13                     |
|   | <i>It's too much effort</i>                   | 14                      | 15                   | 12                     | 14                    | 7                       | 19                    | 29                     |
|   | <i>I'm too busy</i>                           | 12                      | 2                    | 12                     | 16                    | 7                       | 17                    | 25                     |
|   | <i>I don't want to pay for it<sup>2</sup></i> | 4                       | 7                    | 1                      | 5                     | 0                       | 9                     | 8                      |
|   | <i>Someone would object<sup>3</sup></i>       | 3                       | 0                    | 3                      | 1                     | 8                       | 0                     | 0                      |
|   | <i>Number of respondents</i>                  | <b>478</b>              | 58                   | 152                    | 108                   | 83                      | 53                    | 24                     |
| Purchase an energy-efficient home furnace   | <i>I can't afford it</i>                      | 42                      | 41                   | 46                     | 43                    | 29                      | 44                    | 41                     |
|   | <i>I don't need a new one yet</i>             | 29                      | 25                   | 28                     | 34                    | 18                      | 33                    | 48                     |
|   | <i>I don't want to pay for it<sup>2</sup></i> | 5                       | 2                    | 3                      | 7                     | 3                       | 9                     | 9                      |
|   | <i>It's too much effort</i>                   | 2                       | 1                    | 2                      | 1                     | 2                       | 3                     | 4                      |
|   | <i>I'm too busy</i>                           | 2                       | 0                    | 3                      | 2                     | 1                       | 3                     | 6                      |
|   | <i>Someone would object<sup>3</sup></i>       | 2                       | 4                    | 1                      | 2                     | 5                       | 0                     | 4                      |
|   | <i>Number of respondents</i>                  | <b>788</b>              | 109                  | 260                    | 164                   | 122                     | 80                    | 53                     |

**Table 15 | Barriers to Energy Conservation**  
**Actions: Home Cooling and Heating**

There are many reasons why people don't set the thermostat to 76 degrees or warmer or use less air conditioning in the summer. Please check all of the reasons below that apply to you. <sup>1</sup>

|  |              |            |            |            |            |            |            |
|--|--------------|------------|------------|------------|------------|------------|------------|
| <i>I'm already doing this as much as I can</i>                 | 51           | 52         | 53         | 49         | 53         | 49         | 53         |
| <i>I prefer my home to be cooler than 76 degrees in summer</i> | 23           | 17         | 20         | 26         | 27         | 26         | 24         |
| <i>I don't have air conditioning</i>                           | 15           | 21         | 16         | 15         | 7          | 18         | 11         |
| <i>Someone else in my home would object</i>                    | 8            | 8          | 9          | 8          | 9          | 7          | 8          |
| <i>I can't set an exact temperature on my AC unit</i>          | 5            | 5          | 5          | 4          | 7          | 4          | 2          |
| <i>It's too inconvenient</i>                                   | 1            | 1          | 1          | 1          | 0          | 1          | 1          |
| <i>I don't think it's important</i>                            | 1            | 0          | 1          | 2          | 1          | 2          | 3          |
| <i>I don't know how to set my thermostat</i>                   | 1            | 0          | 1          | 2          | 3          | 1          | 3          |
| <i>I'm too busy</i>  | 1            | 0          | 0          | 0          | 3          | 1          | 0          |
| <i>Number of respondents</i>                                   | <b>1,618</b> | <b>262</b> | <b>530</b> | <b>302</b> | <b>194</b> | <b>198</b> | <b>132</b> |

There are many reasons why people don't set the thermostat to 68 degrees or cooler in the winter. Please check all of the reasons below that apply to you. <sup>1</sup>

|  |    |    |    |    |    |    |    |
|--|----|----|----|----|----|----|----|
| <i>I'm already doing this as much as I can</i>                 | 57 | 63 | 57 | 51 | 57 | 61 | 57 |
| <i>I prefer my home to be warmer than 68 degrees in winter</i> | 26 | 20 | 26 | 31 | 24 | 31 | 24 |
| <i>Someone else in my home would object</i>                    | 9  | 9  | 11 | 10 | 3  | 8  | 16 |
| <i>I don't have a thermostat</i>                               | 6  | 11 | 7  | 7  | 3  | 4  | 1  |
| <i>I can't control my thermostat</i>                           | 4  | 4  | 4  | 3  | 12 | 1  | 0  |
| <i>It's too hard to remember</i>                               | 2  | 1  | 1  | 5  | 4  | 1  | 2  |
| <i>I don't think it's important</i>                            | 2  | 0  | 1  | 4  | 3  | 2  | 4  |
| <i>It's too inconvenient</i>                                   | 1  | 1  | 2  | 2  | 0  | 1  | 1  |
| <i>I'm too busy</i>  | 1  | 0  | 1  | 0  | 3  | 0  | 1  |
| <i>I don't know how to set my thermostat</i>                   | 0  | 0  | 0  | 0  | 3  | 0  | 0  |



**Table 16 | Benefits of Energy Conservation: Home Cooling and Heating**

There are many reasons why people set the thermostat to 76 degrees or warmer or use less air conditioning in the summer.

Please check all the reasons below that make you want to do this. <sup>1</sup>

|   |            |            |            |           |           |           |           |
|---|------------|------------|------------|-----------|-----------|-----------|-----------|
| <i>It saves me money</i>                  | 87         | 88         | 93         | 81        | 74        | 93        | 95        |
| <i>It saves energy</i>                    | 82         | 97         | 81         | 79        | 65        | 81        | 58        |
| <i>It helps reduce global warming</i>     | 38         | 68         | 43         | 29        | 12        | 7         | 0         |
| <i>It's the moral thing to do</i>         | 24         | 42         | 18         | 22        | 16        | 26        | 0         |
| <i>It makes me feel good about myself</i> | 23         | 37         | 21         | 25        | 7         | 7         | 11        |
| <i>Someone asked me to</i>                | 12         | 15         | 5          | 15        | 11        | 22        | 21        |
| <i>People I care about are doing it</i>   | 10         | 14         | 8          | 12        | 7         | 7         | 5         |
| <i>Other people approve when I do it</i>  | 6          | 12         | 2          | 11        | 5         | 4         | 0         |
| <i>Number of respondents</i>              | <b>477</b> | <b>110</b> | <b>172</b> | <b>92</b> | <b>57</b> | <b>27</b> | <b>19</b> |

There are many reasons why people set the thermostat to 68 degrees or cooler in the winter. Please check all the reasons below that make you want to do this. <sup>1</sup>

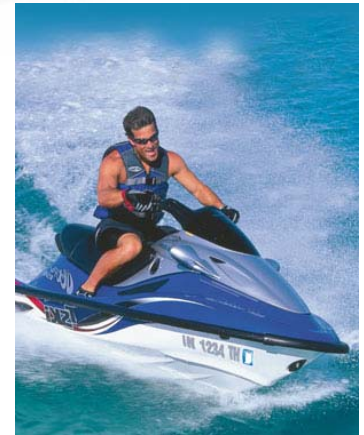
|   |            |            |            |            |           |           |           |
|---|------------|------------|------------|------------|-----------|-----------|-----------|
| <i>It saves me money</i>                  | 89         | 95         | 91         | 86         | 79        | 88        | 94        |
| <i>It saves energy</i>                    | 81         | 98         | 84         | 79         | 55        | 69        | 65        |
| <i>It helps reduce global warming</i>     | 34         | 68         | 35         | 25         | 12        | 0         | 0         |
| <i>It's the moral thing to do</i>         | 24         | 47         | 17         | 25         | 9         | 19        | 0         |
| <i>It makes me feel good about myself</i> | 22         | 36         | 22         | 23         | 3         | 9         | 12        |
| <i>People I care about are doing it</i>   | 7          | 13         | 7          | 8          | 1         | 0         | 6         |
| <i>Someone asked me to</i>                | 6          | 6          | 4          | 8          | 7         | 3         | 0         |
| <i>Other people approve when I do it</i>  | 5          | 6          | 5          | 7          | 6         | 0         | 0         |
| <i>Number of respondents</i>              | <b>558</b> | <b>124</b> | <b>217</b> | <b>101</b> | <b>67</b> | <b>32</b> | <b>17</b> |

The essence of social marketing: Offering people products, services and ideas that....

- Make their lives **easy**



- Make their lives **fun**



- Make them feel **popular**



Easy

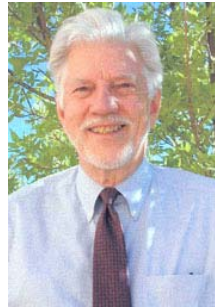


Albert Bandura

Easy products/services/ideas:

- increase our self-efficacy
- reduce external barriers to action

Fun



Everett  
Rogers

Fun products/services/ideas offer:

- positive consequences
- desired benefits

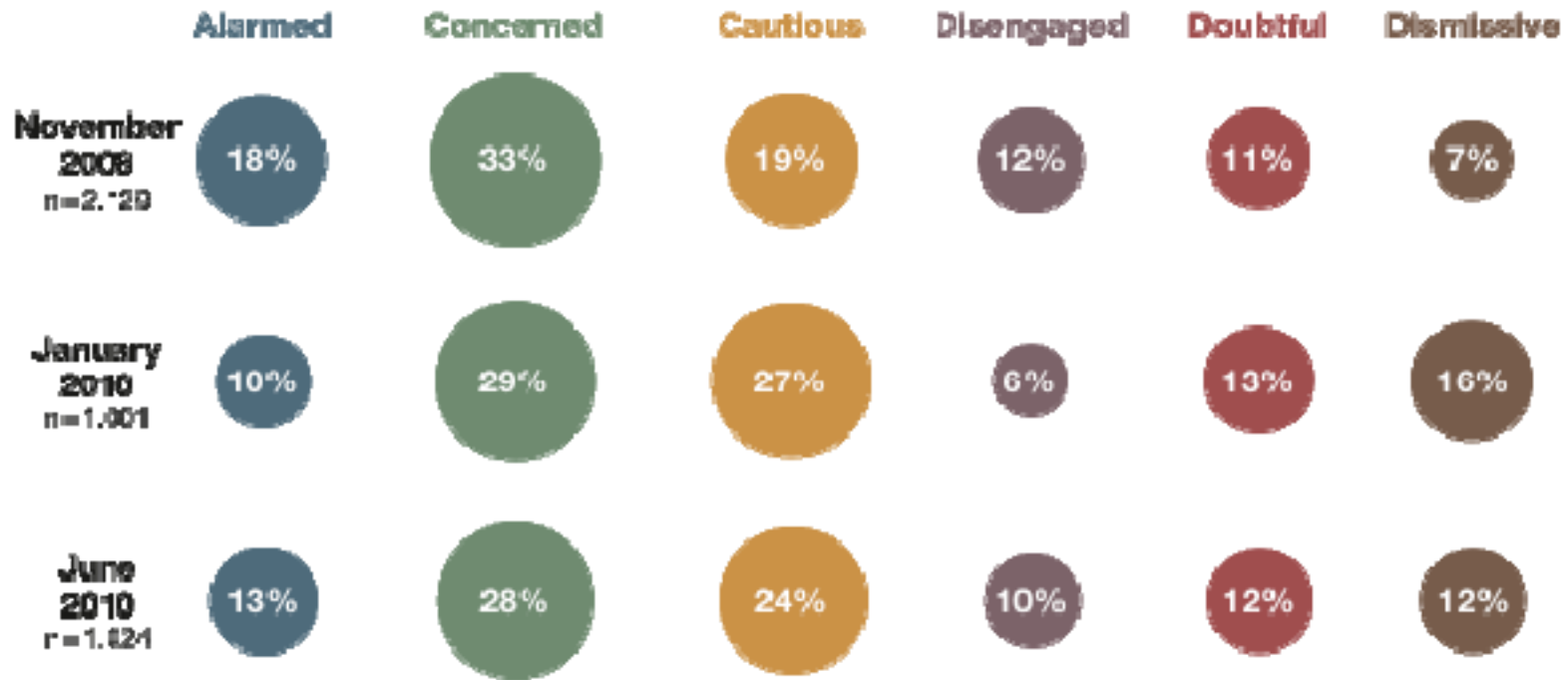
Popular



Robert Cialdini

Popular products & services:

- exert a positive social norm
- elicit positive social reinforcement



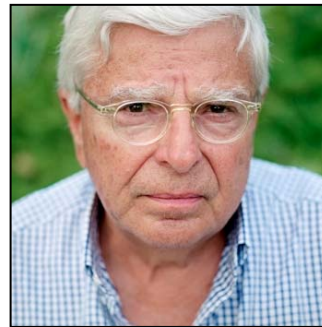
← Highest Belief in Global Warming  
Most Concerned  
Most Motivated

Highest Belief in Global Warming  
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Lowest Belief in Global Warming  
Least Concerned  
Least Motivated

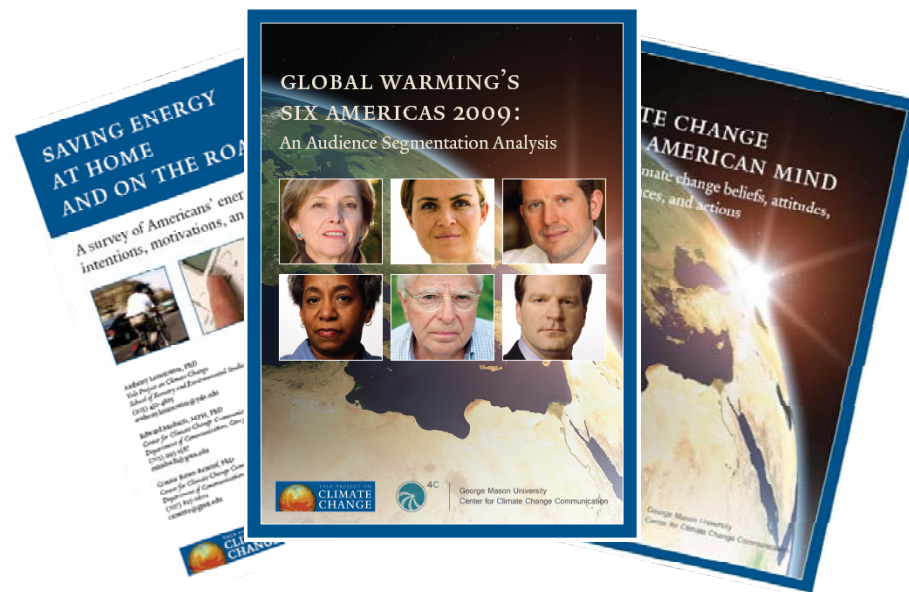
Lowest Belief in Global Warming  
Least Concerned  
Least Motivated

Proportion represented by year



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[Climatechangecommunication.org](http://Climatechangecommunication.org)



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