American Public Opinion on Climate Change and Its Impact on Voting in Congressional and Presidential Elections

Jon A. Krosnick, Bo MacInnis, Ana Villar
Stanford University

<u>Funded by</u>

Woods Institute for the Environment at Stanford University
ABC News

Time Magazine

The Washington Post

The Associated Press

Reuters

National Science Foundation

New Scientist Magazine

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U.S. Environmental Protection Agency

National Oceanic and Atmospheric Administration

Ohio State University

Electric Power Research Institute

with Resources for the Future

"The strong scientific consensus on the causes and risks of climate change stands in stark contrast to widespread confusion and complacency among the public."

John D. Sterman, Science (October, 2008)

Headlines: October, 2009

Belief in GW existence

Fewer Americans Believe in Global Warming

Certainty

Americans More Confused About Climate

Concern

Concern About Climate Change Waning

<u>Cute</u>

U.S. Belief in Global Warming is Cooling

December, 2010

"The number of Americans who agree the earth is warming because of manmade activity has been in free fall."

Bloomberg Businessweek

February, 2011

"Why don't Americans believe in global warming?"

The Economist

What Does the Public Believe?

National Surveys

- 1997 thru 2011
- Representative samples of American adults.
- Interviewed by telephone.
- Extensive interviewer training and supervision.
- Unbiased, balanced questions.
- Surveys not described as about global warming.

Today

I: American Public Opinion on Climate Change: 1997-2011

II: Regional Differences?

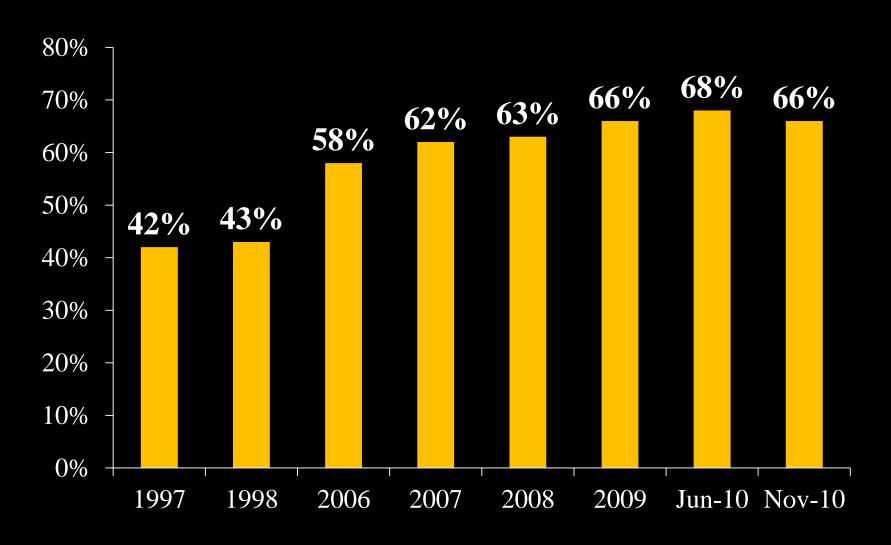
III: The 2008 and 2010 Elections

Part I:

A Portrait of Public Opinion

1997 - 2010

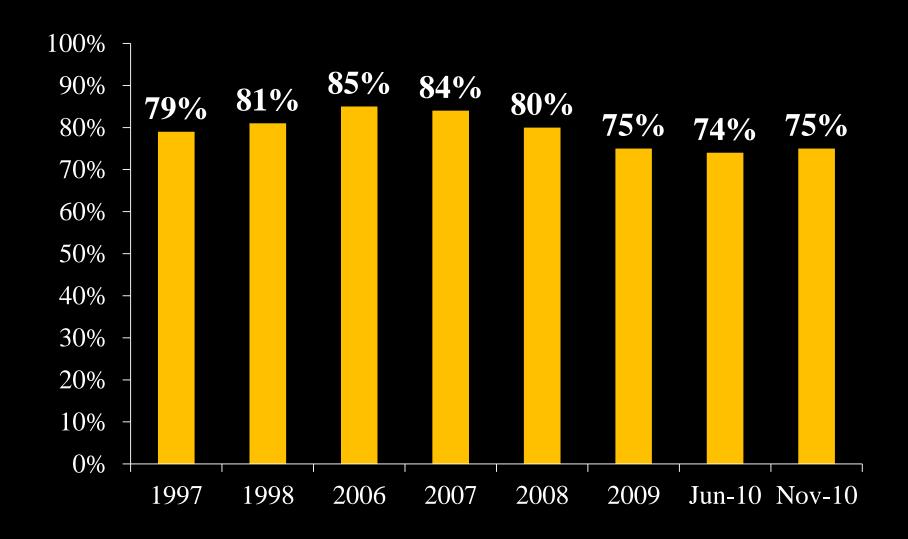
Know a Lot or a Moderate Amount About Global Warming



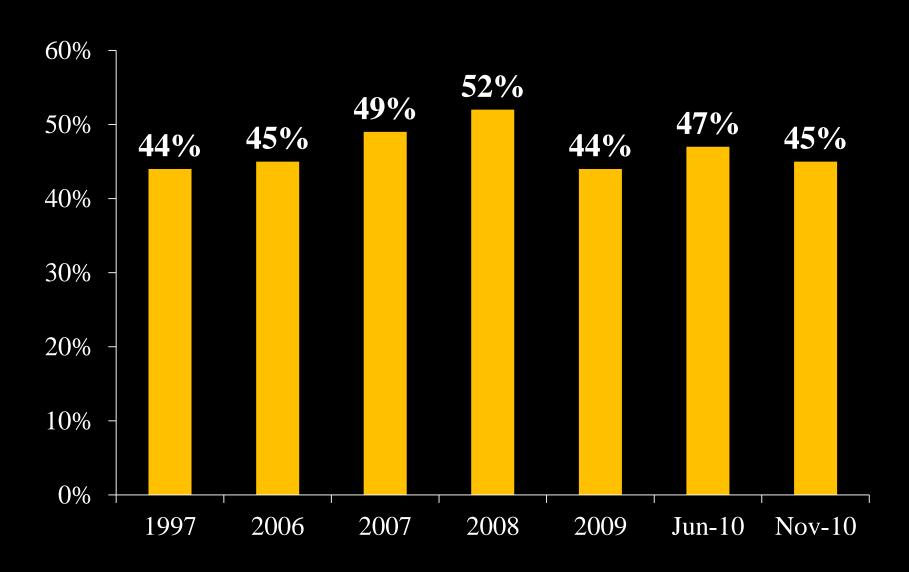
Our Question

 "You may have heard about the idea that the world's temperature may have been going up slowly over the past 100 years. What is your personal opinion on this? Do you think this has probably been happening, or do you think it probably has not been happening?"

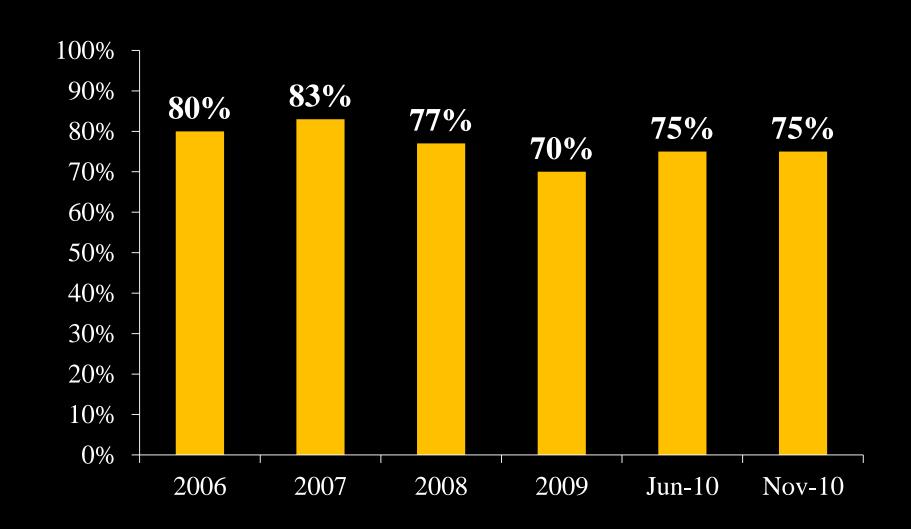
Has Global Warming Been Happening?



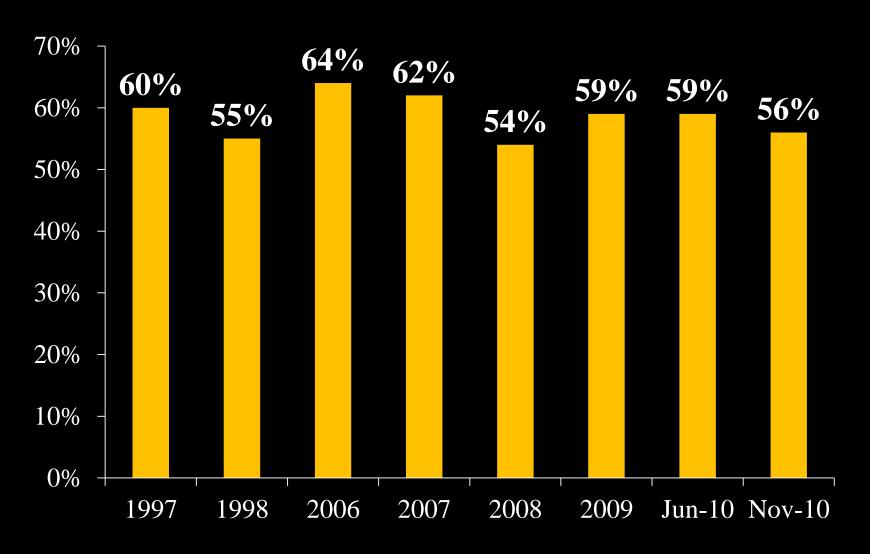
Extremely/Very Sure Global Warming Has Been Happening



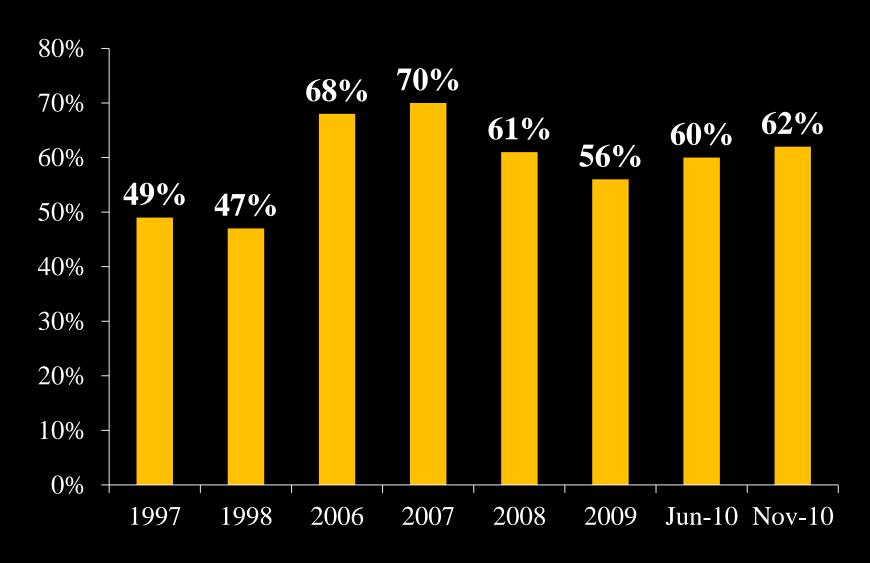
Human Action Has Been Causing Warming



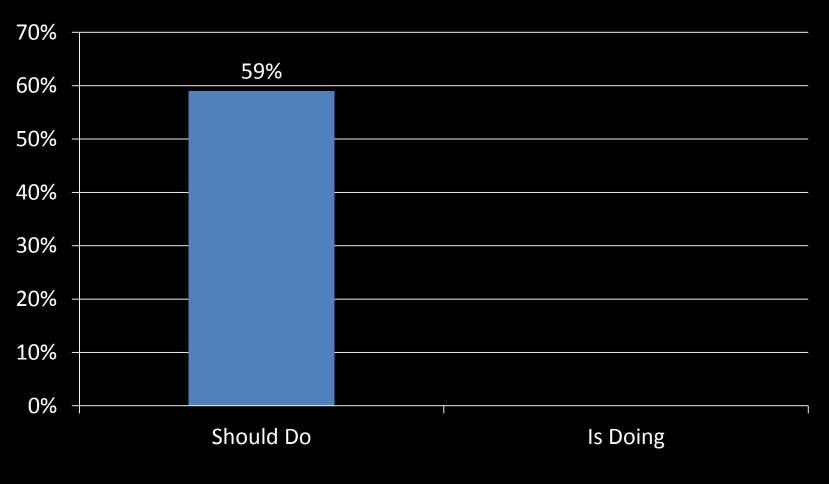
5 degrees in 75 years would be bad



The Federal Government Should Do More to Deal with Global Warming

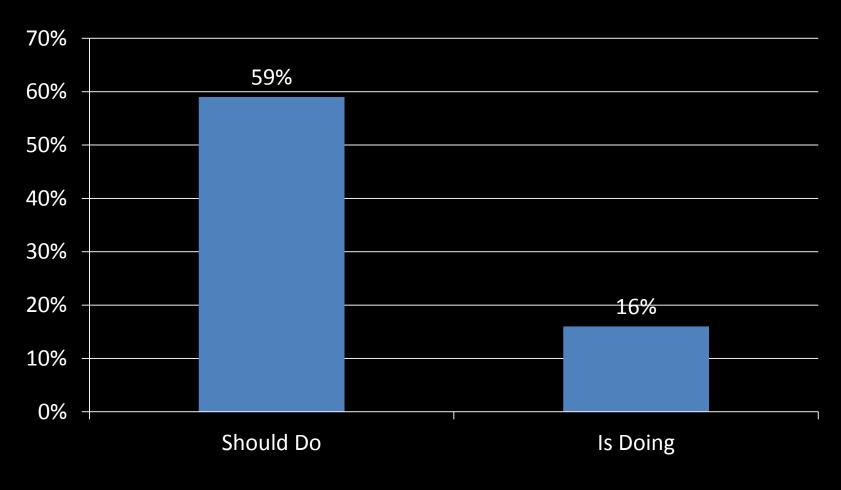


The Federal Government: A Great Deal or Quite a Bit



November, 2010

The Federal Government: A Great Deal or Quite a Bit



November, 2010

Differences Between States?

• GW has been happening: 66% to 99%



GW has been happening

66% to 99%

Human caused

64% to 99%

 GW has been happening 6 	66%	to	99%
--	-----	----	-----

- Human caused
 64% to 99%
- Government should do more 43% to 92%



High Employment in Coal and Oil Industries



•	GW I	nas l	been	happening	66% to 99%

- Human caused 64% to 99%
- Government should do more 43% to 92%
- Limit greenhouse gas emissions 65% to 96%

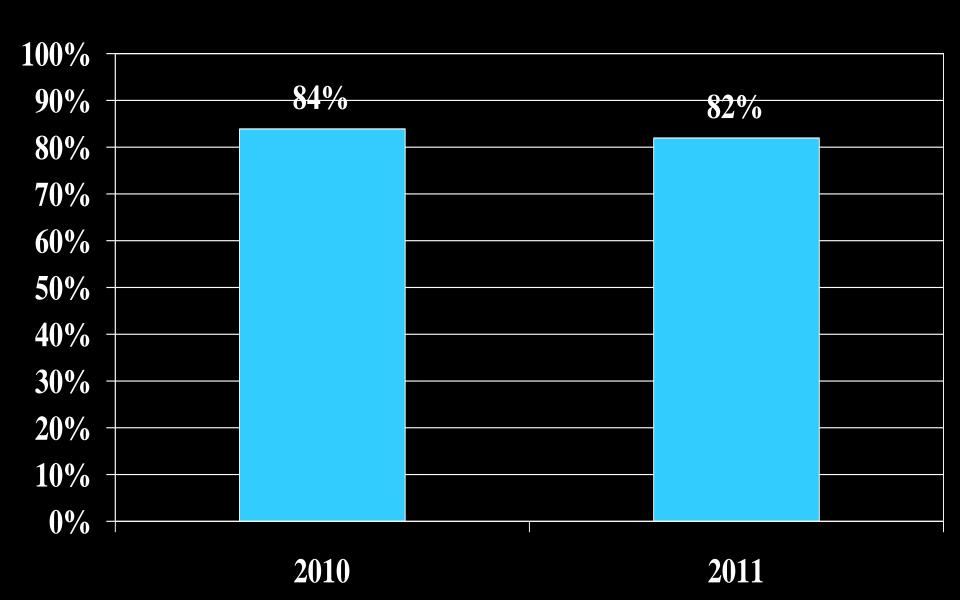


Change: 2010 to 2011?

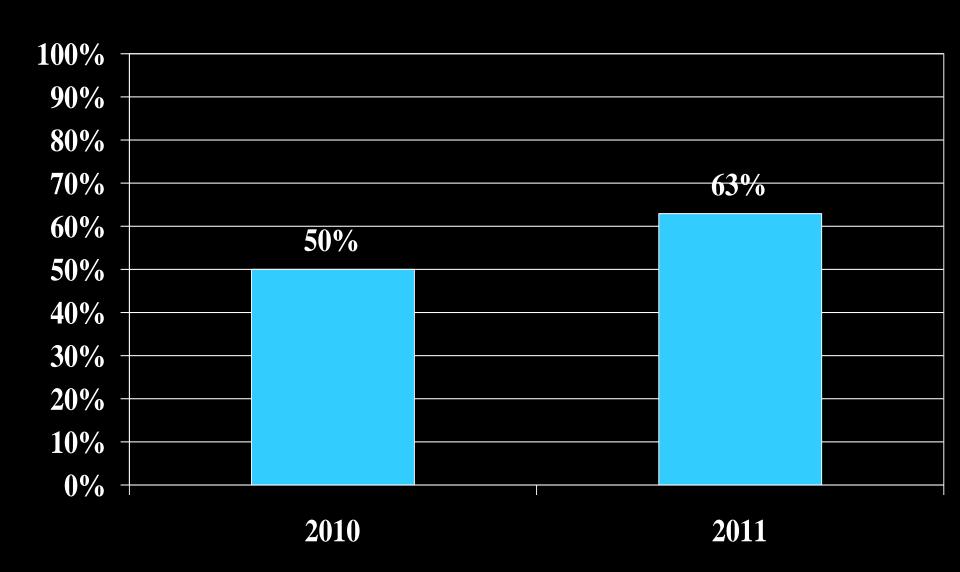
Massachusetts Only

MassINC Polling Group and Stanford

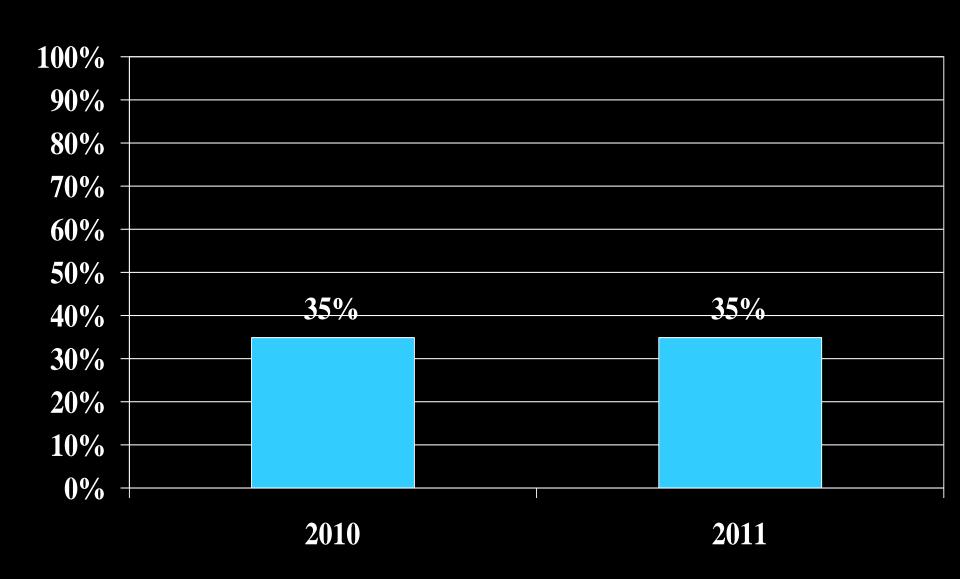
Has GW Been Happening?



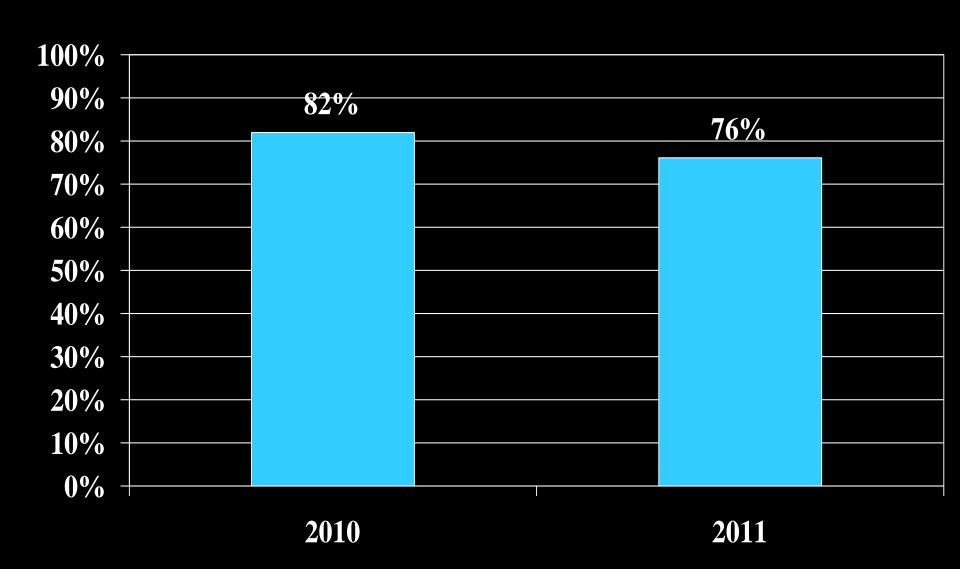
Extremely/Very Sure That GW Has Been Happening



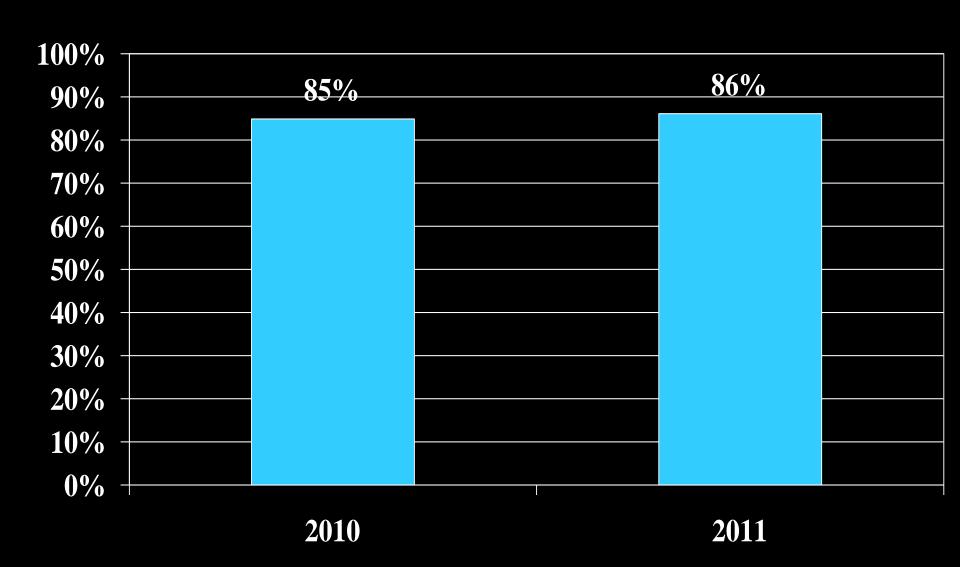
Extremely/Very Sure That GW Has Not Been Happening



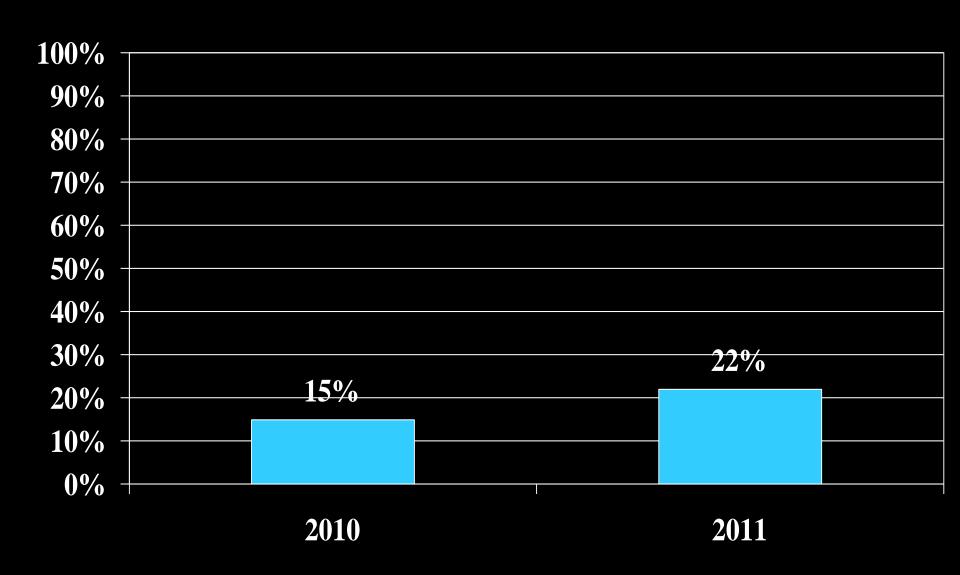
Very or Somewhat Serious Problem for the USA



Very or Somewhat Serious Problem for the World



GW Issue Public Membership

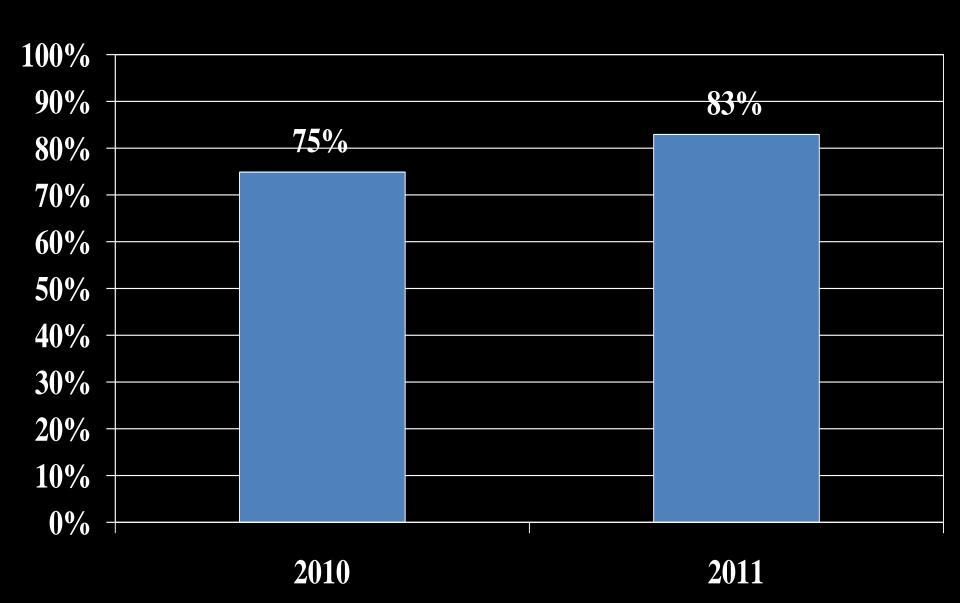


Change: 2010 to 2011?

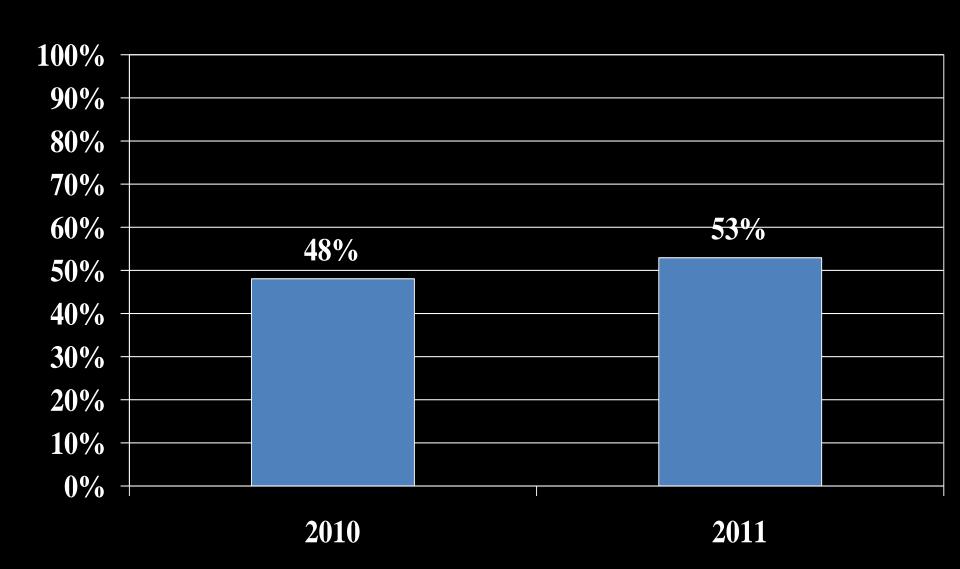
The Entire U.S.

Reuters and Ipsos with Stanford

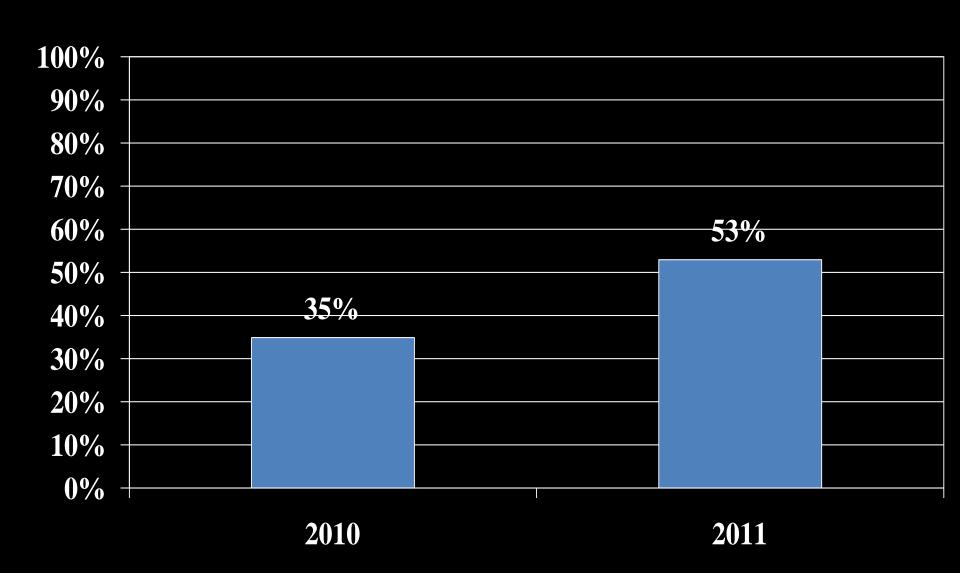
Has GW Been Happening?



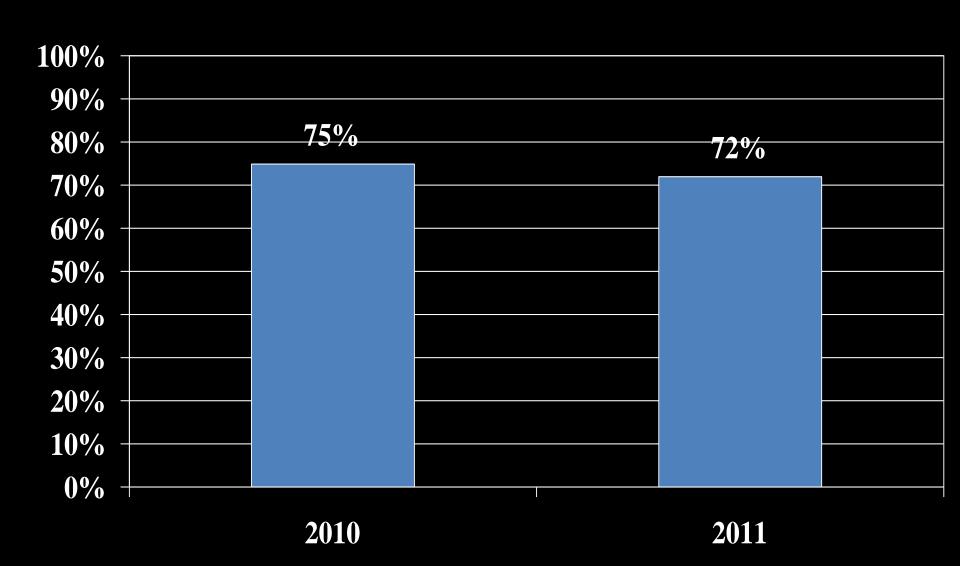
Extremely/Very Sure That GW Has Been Happening



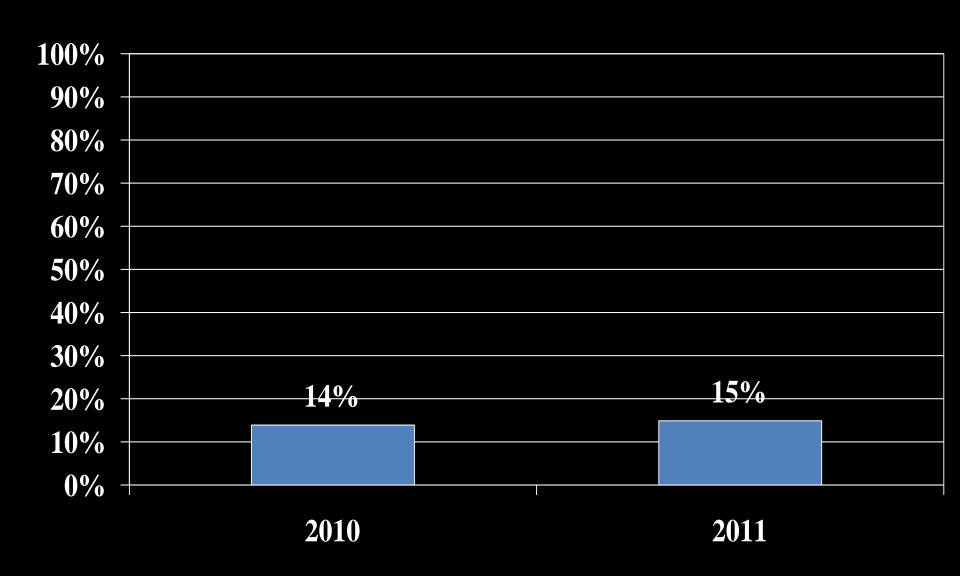
Extremely/Very Sure That GW Has Not Been Happening



Human Activity Has Been Causing Warming



GW Issue Public Membership



Change: 2010 to 2011?

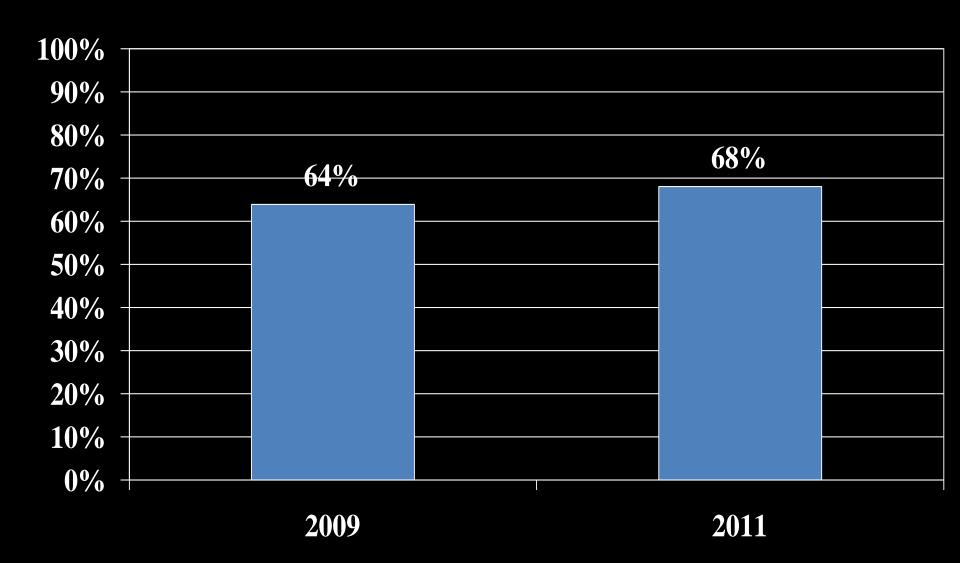
The European Union

Eurobarometer

- August-September, 2009, vs. June, 2011
- 27 Countries
- Probability samples
- Face-to-face interviewing
- The European Commission
- TNS Opinion & Social

How serious a problem do you think climate change is at this moment? Please use a scale from 1 to 10, where 1 would mean that it is not at all a serious problem, and 10 would mean that it is an extremely serious problem.

Seriousness Ratings 7-10



Candidate Choice

- Memory based evaluation vs. online updating
- Thin slice evaluations of appearance
- Evaluation ingredients
 - Party identification
 - Performance of the incumbent
 - Health of the nation
 - Interests of social groups
 - Perceptions of candidates' personalities
 - Emotions evoked by candidates
 - Candidate policy positions

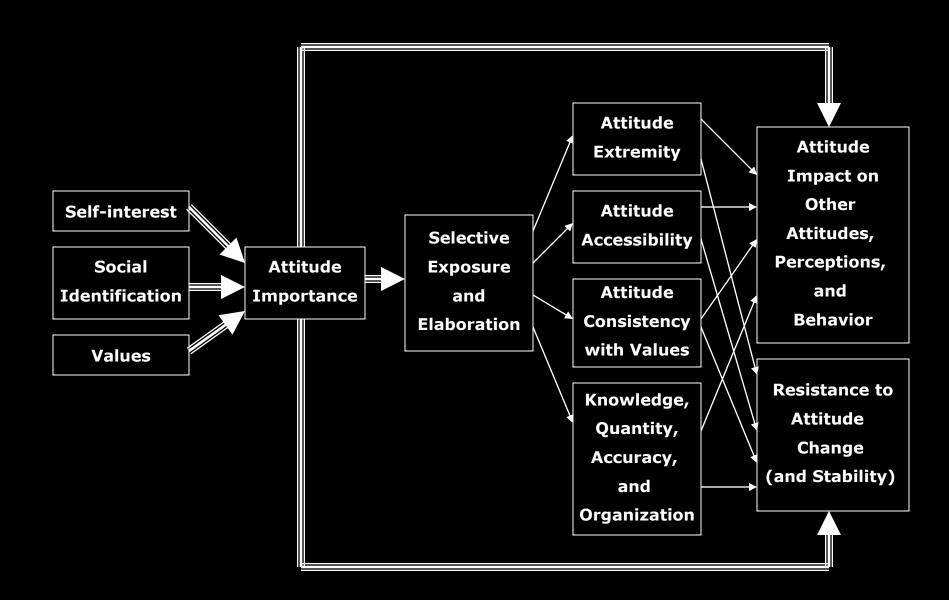
Voting Based on Policy Issues

Rare?

- Converse, 1964
- People lack real preferences on policy issues?
- Candidates rarely stake out clear positions
- Candidates often hug the middle

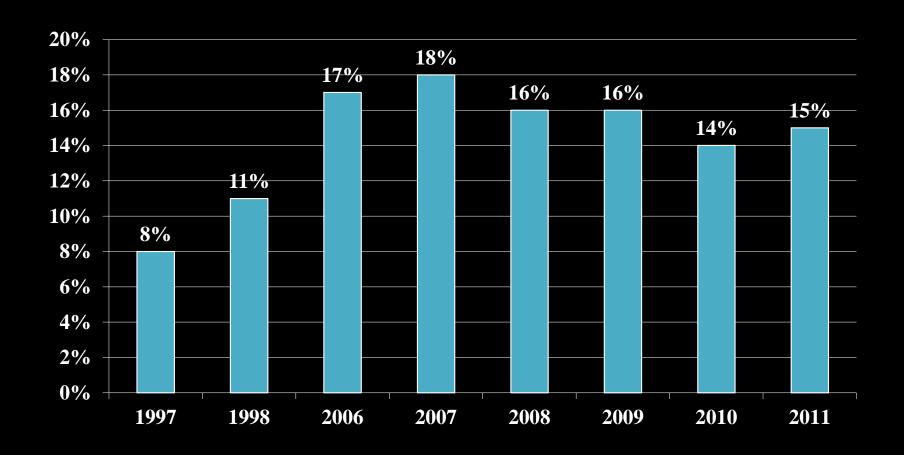
An alternative theory: Issue publics

- Converse, 1964
- A small group of citizens are passionate about each issue
- Issue public members:
 - Pay close attention to candidate statements
 - Infer candidate differences even when not stated explicitly
 - Vote based on the issue



Climate Change?

Doubling of the "Issue Public" Since 1997 (38 million people now)



Issue Publics in the United States

Abortion	31%
Government Social Services Programs	21%
Gun Control	17%
U.S. Military Spending	16%
Global Warming	<u>15%</u>
Capital Punishment	14%
Women's Rights	12%
Race Relations	10%
Unemployment	9%

Other Sources: National Election Studies, General Social Surveys

The Issue Public's Opinions

	<u>2006</u>	2007	2008	2009	<u>2010</u>
Global Warming Has Been Happening	94%	94%	94%	92%	88%
Caused by Human Action	88%	97%	91%	77%	88%
Government Should Do More	90%	93%	91%	86%	84%

Did climate change influence voting in 2010 and 2008?

Headlines After the 2010 Election

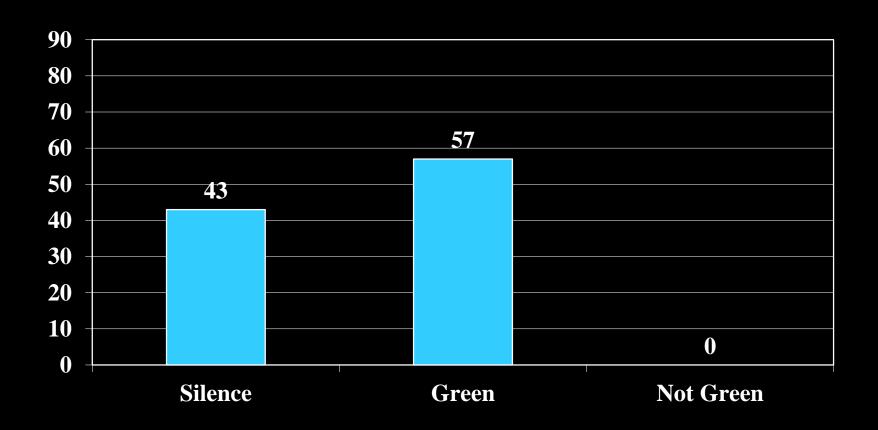
- Democrats Who Took Risk and Voted For Climate Bill Pay Price
- Cap-and Trade Didn't Kill the Dems
- It's Not the Climate Bill, Stupid
- Ignoring Evidence, Politico Spins Climate Vote as Electoral Loser

What Did the Candidates Say During Their Campaigns?

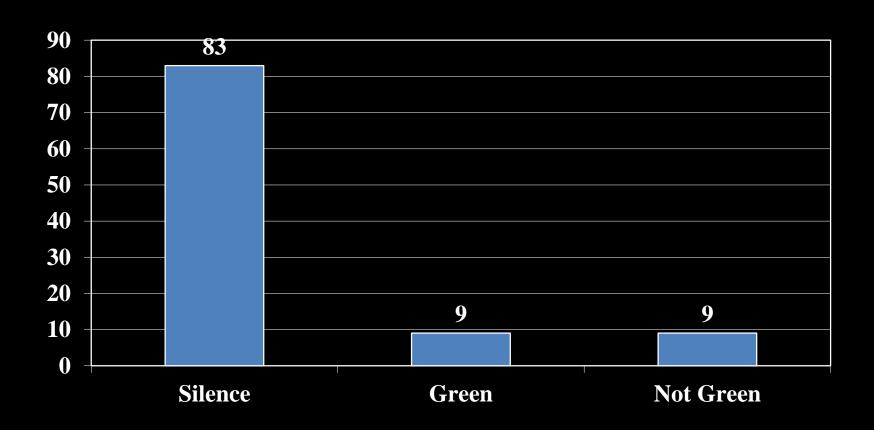
Content analysis of <u>campaign</u> websites.

Green? Not-green? Nothing?

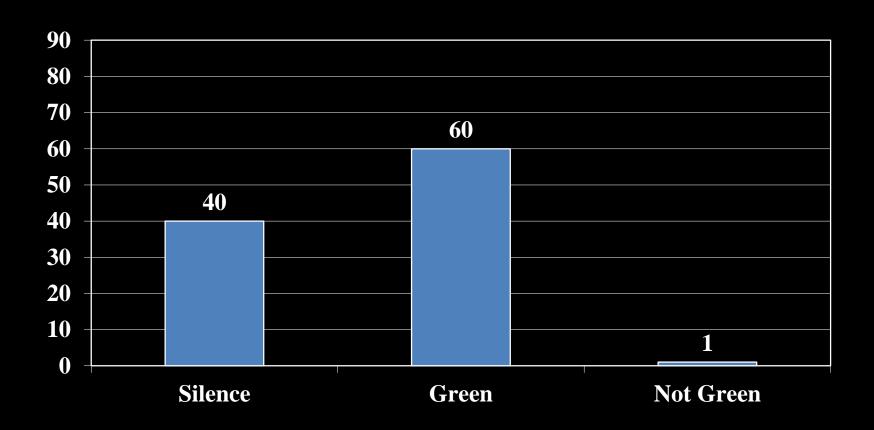
Democrats - Senate



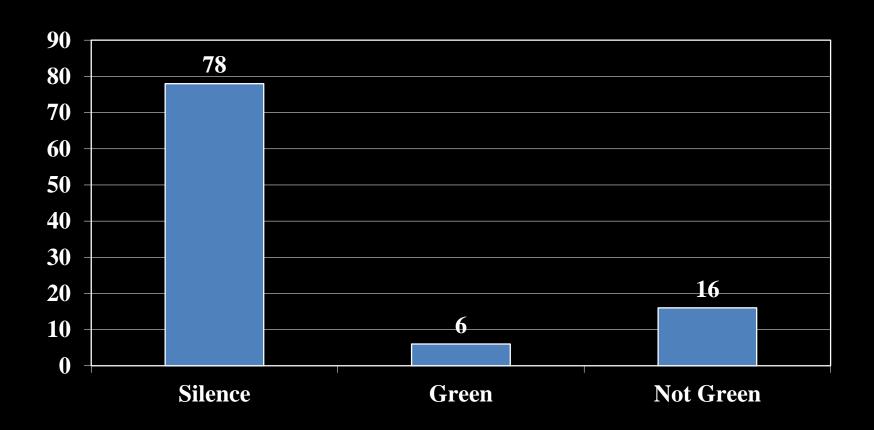
Republicans - Senate



Democrats - House

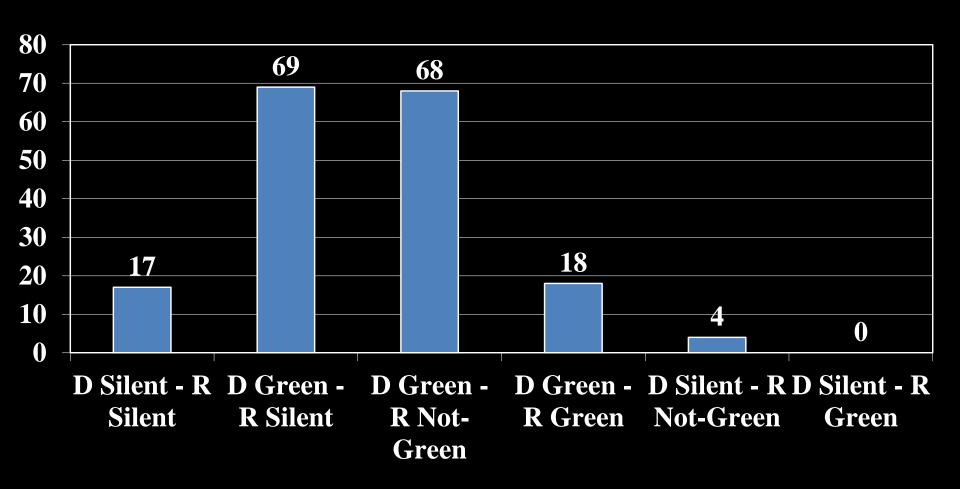


Republicans - House



Did Climate Strategy Correlate with Victory Rates?

Percent of Democrats Who Won



Predictor	Coefficient	Marginal Effect		
Democrat: green	1.03** (.45)	.17** (.08)		
Democrat: not-green	46 (1.45)	07 (.20)		
Democrat: silent/mixed (Base category, omitted)				
Republican: green	29 (1.36)	05 (.21)		
Republican: not-green	-4.27*** (1.58)	34*** (.07)		
Republican: silent/mixed (Base category, omitted)				
Democrat: green x Republican: not-green	4.08** (1.67)	.75*** (.13)		
Democratic: Incumbent	2.60*** (.71)	.42*** (.11)		
Republican: Incumbent	.42 (1.09)	.08 (.21)		
2008 Party Margin	.06*** (.01)	.01*** (.00)		
N	430			
\mathbb{R}^2	.62			
<i>Note:</i> Standard errors appear in parentheses. ***: $p < .01$; **: $p < .05$.				

O

What Caused What?

A Survey Experiment

- National RDD Telephone Survey
- All Respondents
 - Hypothetical candidate running for Senate
 - Quotes on two or three issues
 - How likely are you to vote for/against the candidate?

Control Group (one-third of respondents)

- Quotes on two issues
 - E.g., terrorism, the economy
- Do you mostly agree or mostly disagree?
- Now, based on all the things that you have heard the candidate say:
 - Definitely would vote for
 - Probably would vote for
 - Probably would vote against
 - Definitely would vote against

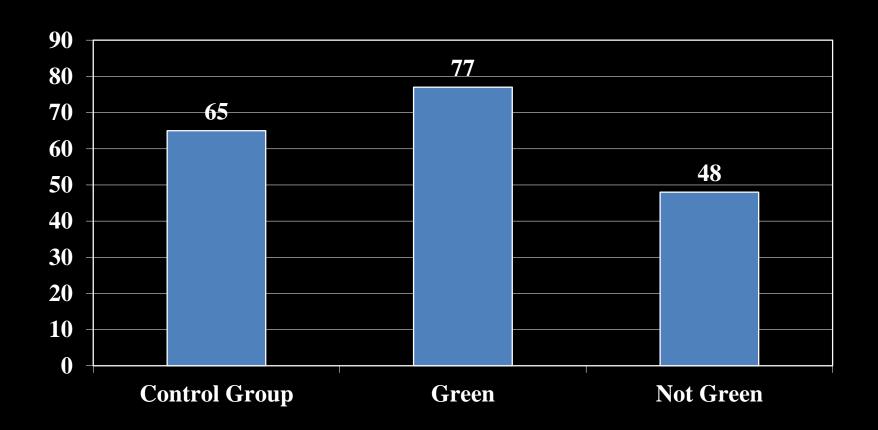
Green Group (one-third of respondents)

Like most Americans and most of the residents of our great State, I believe that global warming has been happening for the last 100 years, mainly because we have been burning fossil fuels and putting out greenhouse gasses. Now is the time for us to stop this by ending our dependence on imported oil and coal to run our cars and heat our houses. We need to begin using new forms of energy that are made in America and will be renewable forever. We can build better cars that use less gasoline. We can build better appliances that use less electricity. And we can make power from the sun and from wind. We don't have to change our lifestyles, but we do need to reshape the way our country does business. We need to end our long-term addiction to polluting the environment and instead let American genius do what it does best – transform our outdated ways of generating energy into new ones that create jobs and entire industries, and stop the damage we've been doing to the environment.

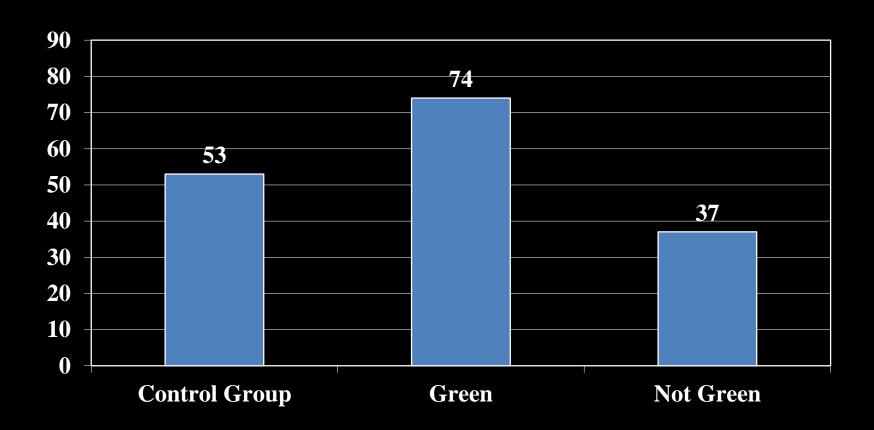
Not Green Group (one-third of respondents)

There isn't any real science to say we are changing the climate of the earth. The science on global warming is a hoax and is an attempt to perpetrate a fraud on the American people. Climate science is junk science, and global warming is a manufactured controversy. I don't buy into the whole man-caused global warming, man-caused climate change mantra, and I believe that there's not sound science to back that up. We must spend NO effort to deal with something that is not a problem at all. Yet that's exactly what's happening with the cap and trade bill that Congress has considered. I oppose the cap and trade bill. Cap and trade is a job killer and damages our economy. We should not invest in windmills and solar panels as alternative energy sources. Instead we should continue to focus on our traditional sources of energy: coal, oil, and natural gas. We should expand energy production in our country, including by continuing to mine our coal and doing more drilling for oil here at home.

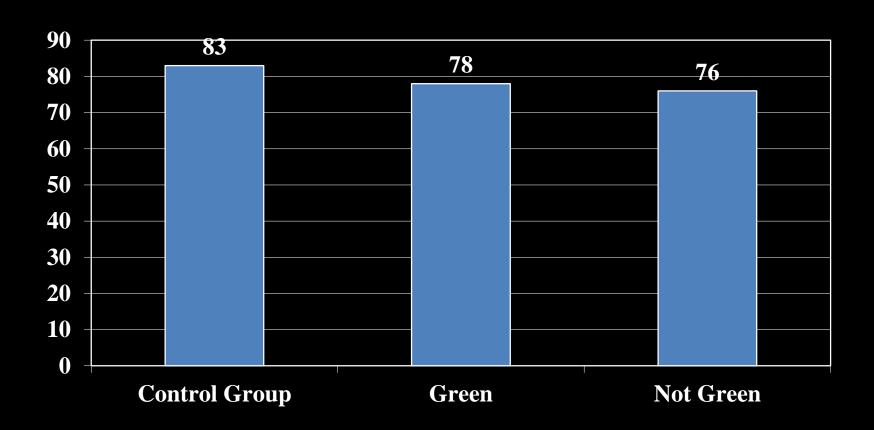
Percent Would Vote For the Candidate



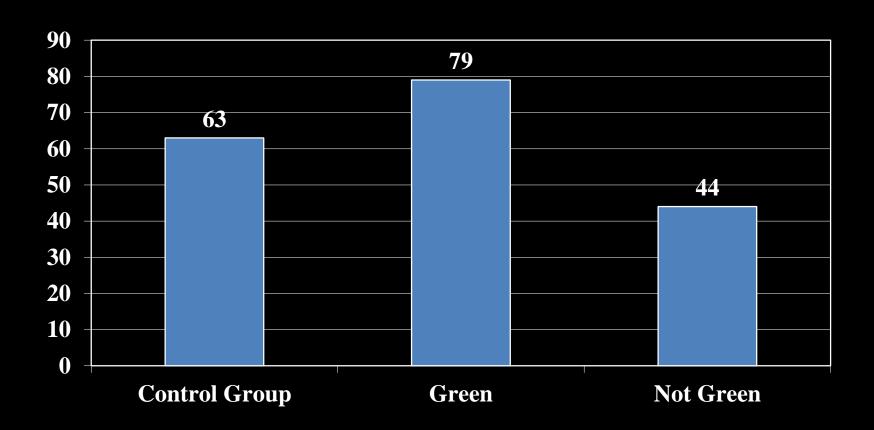
Percent Would Vote For the Candidate: Democratic Voters



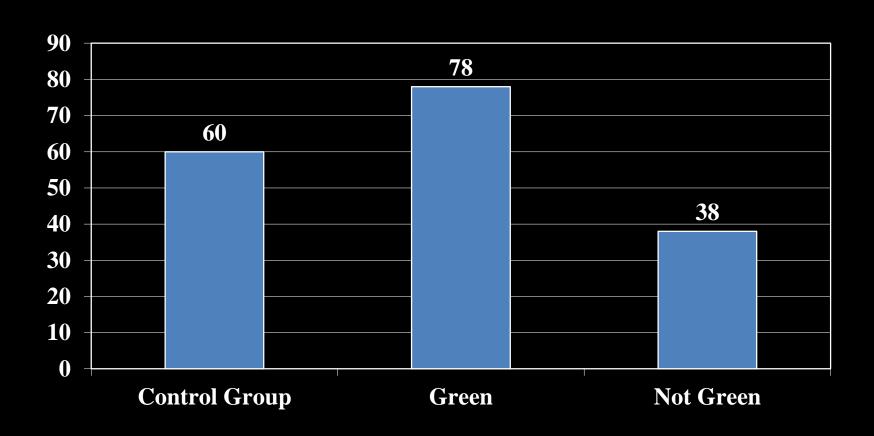
Percent Would Vote For the Candidate: Republican Voters



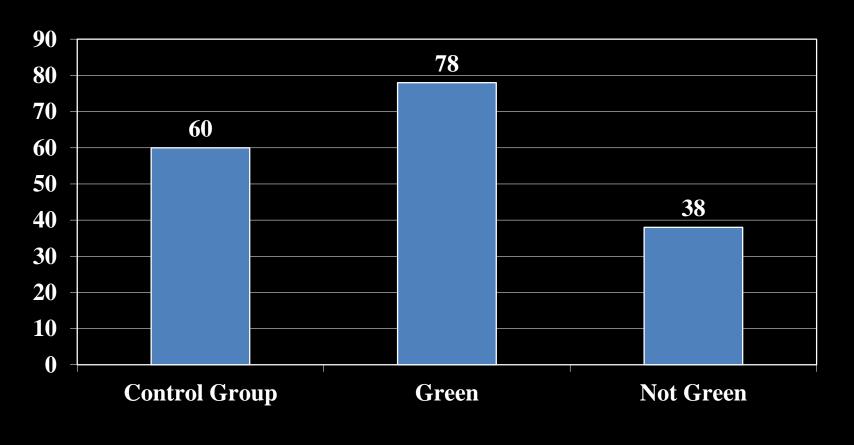
Percent Would Vote For the Candidate: Independent Voters



Issue Public Members



Issue Public Members

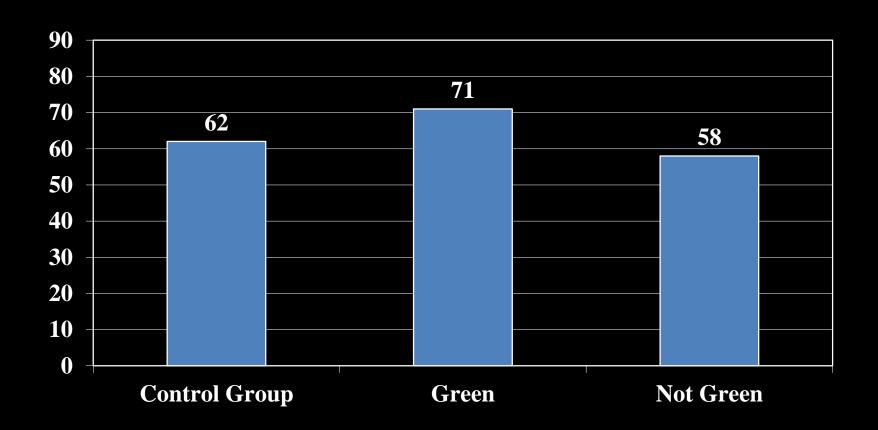


Differences:

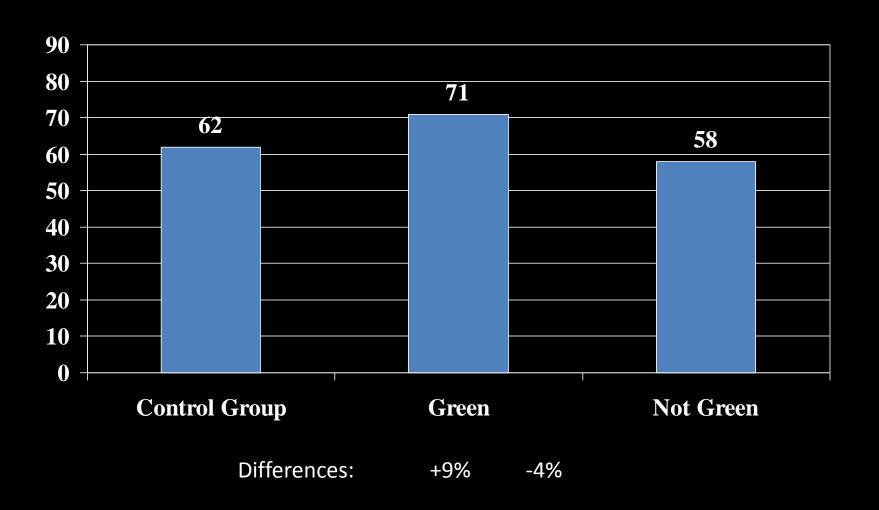
+18%

-22%

Issue Public Non-Members



Issue Public Non-Members



Same Finding on Green Statement:

State Surveys in

Florida, Maine, and Massachusetts

2008 U.S. Presidential Election





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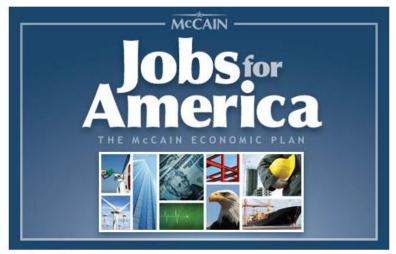




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John McCain's Principles for Climate Policy

- Climate Policy Should Be Built On Scientifically-Sound, Mandatory Emission Reduction Targets And Timetables.
- Climate Policy Should Utilize A Market-Based Cap And Trade System.
- Climate Policy Must Include Mechanisms To Minimize Costs And Work Effectively With Other Markets.
- Climate Policy Must Spur The Development And Deployment Of Advanced Technology.
- Climate Policy Must Facilitate International Efforts To Solve The Problem.

John McCain's Cap and Trade Policy

John McCain Proposes A Cap-And-Trade System That Would Set Limits On Greenhouse Gas Emissions While Encouraging The Development Of Low-Cost Compliance Options. A climate cap-and-trade mechanism would set a limit on greenhouse gas emissions and allow entities to buy and sell rights to emit, similar to the successful acid rain trading program of the early 1990s. The key feature of this mechanism is that it allows the market to decide and encourage the lowest-cost compliance options.

How Does A Cap-And-Trade System Work?

A cap-and-trade system harnesses human ingenuity in the pursuit of alternatives to carbon-based fuels. Market participants are allotted total permits equal to the cap on greenhouse gas emissions. If they can invent, improve, or acquire a way to reduce their emissions, they can sell their extra permits for cash. The profit motive will coordinate the efforts of venture capitalists, corporate planners, entrepreneurs, and environmentalists on the common motive of reducing emissions.

Greenhouse Gas Emission Targets And Timetables

2012: Return Emissions To 2005 Levels (18 Percent Above 1990 Levels)
2020: Return Emissions To 1990 Levels (15 Percent Below 2005 Levels)
2030: 22 Percent Below 1990 Levels (34 Percent Below 2005 Levels)
2050: 60 Percent Below 1990 Levels (66 Percent Below 2005 Levels)

The Cap And Trade System Would Allow For The Gradual Reduction Of Emissions.

The cap and trade system would encompass electric power, transportation fuels, commercial business, and industrial business – sectors responsible for just below 90 percent of all emissions. Small businesses would be exempt. Initially, participants would be allowed to either make their own GHG reductions or purchase "offsets" – financial instruments representing a reduction, avoidance, or sequestration of greenhouse gas emissions practiced by other activities, such as agriculture – to cover 100 percent of their required reductions. Offsets would only be available through a program dedicated to ensure that all offset GHG emission reductions are



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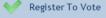
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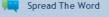
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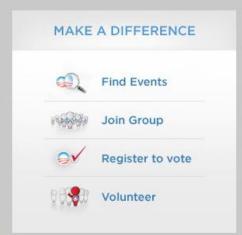
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Not just in my ability to bring about real change in Washington ... I'm asking you to believe in yours."

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January 18

125,000 Before
Nevada

Obama Surges

Caucus for Barack in
Nevada

Obama Wins lowa

Who Can Win in November?

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JANUARY 17, 2008

Reno Gazette-Journal Endorses Obama

Veterans

The Reno Gazette-Journal has endorsed Barack Obama for President...Obama embodies party's vision Nevada Democrats should caucus for Barack Obama, the freshman U.S. senator from Illinois, to represent them as the party's nominee to run for president of the United States. He has the personal characteristics and political instincts expected of the person who leads this nation.The Democratic front-runners seeking the favor of Nevadans make strong presidential...

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Jan 18

PEOPLE

Up for Change

Jan 18 Barack and Michelle Stand for Change in Las Vegas

Jan 17 Feb. 5th News

Jan 17 Barack and Michelle Stand for Change in Las Vegas, Nevada

John Kerry and Michelle Obama Stand

Jan 17 Colorado endorsements: Strickland among 3 to endorse Obama

Jan 17 Where Obama Stands: On Ethics





Barack Obama's Plan

Reduce Carbon Emissions 80 Percent by 2050

- Cap and Trade: Obama supports implementation of a market-based cap-and-trade system to reduce carbon emissions by the amount scientists say is necessary: 80 percent below 1990 levels by 2050. Obama's cap-and-trade system will require all pollution credits to be auctioned. A 100 percent auction ensures that all polluters pay for every ton of emissions they release, rather than giving these emission rights away to coal and oil companies. Some of the revenue generated by auctioning allowances will be used to support the development of clean energy, to invest in energy efficiency improvements, and to address transition costs, including helping American workers affected by this economic transition.
- Confront Deforestation and Promote Carbon Sequestration: Obama will develop domestic incentives that reward
 forest owners, farmers, and ranchers when they plant trees, restore grasslands, or undertake farming practices that
 capture carbon dioxide from the atmosphere.

Invest in a Clean Energy Future

- Invest \$150 Billion over 10 Years in Clean Energy: Obama will invest \$150 billion over 10 years to advance the next generation of biofuels and fuel infrastructure, accelerate the commercialization of plug-in hybrids, promote development of commercial-scale renewable energy, invest in low-emissions coal plants, and begin the transition to a new digital electricity grid. A principal focus of this fund will be devoted to ensuring that technologies that are developed in the U.S. are rapidly commercialized in the U.S. and deployed around the globe.
- Double Energy Research and Development Funding: Obama will double science and research funding for clean
 energy projects including those that make use of our biomass, solar and wind resources.
- Invest in a Skilled Clean Technologies Workforce: Obama will use proceeds from the cap-and-trade auction
 program to invest in job training and transition programs to help workers and industries adapt to clean technology
 development and production. Obama will also create an energy-focused Green Jobs Corps to connect
 disconnected and disadvantaged youth with job skills for a high-growth industry.
- Convert our Manufacturing Centers into Clean Technology Leaders: Obama will establish a federal investment
 program to help manufacturing centers modernize and Americans learn the new skills they need to produce green
 products.
- Clean Technologies Deployment Venture Capital Fund: Obama will create a Clean Technologies Venture
 Capital Fund to fill a critical gap in U.S. technology development. Obama will invest \$10 billion per year into this
 fund for five years. The fund will partner with existing investment funds and our National Laboratories to ensure
 that promising technologies move beyond the lab and are commercialized in the U.S.
- Require 25 Percent of Renewable Electricity by 2025: Obama will establish a 25 percent federal Renewable
 Portfolio Standard (RPS) to require that 25 percent of electricity consumed in the U.S. is derived from clean,
 sustainable energy sources, like solar, wind and geothermal by 2025.
- Develop and Deploy Clean Coal Technology: Obama will significantly increase the resources devoted to the
 commercialization and deployment of low-carbon coal technologies. Obama will consider whatever policy tools
 are necessary, including standards that ban new traditional coal facilities, to ensure that we move quickly to
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Support Next Generation Biofuels

- Deploy Cellulosic Ethanol: Obama will invest federal resources, including tax incentives, cash prizes and
 government contracts into developing the most promising technologies with the goal of getting the first two billion
 gallons of cellulosic ethanol into the system by 2013.
- Expand Locally-Owned Biofuel Refineries: Less than 10 percent of new ethanol production today is from farmerowned refineries. New ethanol refineries help jumpstart rural economies. Obama will create a number of incentives for local communities to invest in their biofuels refineries.
- Establish a National Low Carbon Fuel Standard: Barack Obama will establish a National Low Carbon Fuel











October 7, 2008 Debate

Question:

• I want to know what you would do within the first two years to make sure that Congress moves fast as far as environmental issues, like climate change and green jobs?"

Mr. McCain

- Look, we are in tough economic times; we all know that.
 And let's keep -- never forget the struggle that Americans are in today.
- But when we can -- when we have an issue that we may hand our children and our grandchildren a damaged planet,
- I have disagreed strongly with the Bush administration on this issue. I traveled all over the world looking at the effects of greenhouse gas emissions, Joe Lieberman and I.
- And I introduced the first legislation, and we forced votes on it. That's the good news, my friends. The bad news is we lost. But we kept the debate going, and we kept this issue to -- to posing to Americans the danger that climate change opposes.

Mr. Obama

- And it is absolutely critical that we understand this is not just a challenge, it's an opportunity, because if we create a new energy economy, we can create five million new jobs, easily, here in the United States.
- And we can do it, but we're going to have to make an investment. The same way the computer was originally invented by a bunch of government scientists who were trying to figure out, for defense purposes, how to communicate, we've got to understand that this is a national security issue, as well.
- And that's why we've got to make some investments and I've called for investments in solar, wind, geothermal.
- It's easy to talk about this stuff during a campaign, but it's important for us to understand that it requires a sustained effort from the next president.

ethanol by 2030.

Set America on Path to Oil Independence

Obama's plan will reduce oil consumption by at least 35 percent, or 10 million barrels per day, by 2030. This will more than offset the equivalent of the oil we would import from OPEC nations in 2030.

Increase Fuel Economy Standards: Obama will double fuel economy standards within 18 years. His plan will
provide retooling tax credits and loan guarantees for domestic auto plants and parts manufacturers, so that they
can build new fuel-efficient cars rather than overseas companies. Obama will also invest in advanced vehicle
technology such as advanced lightweight materials and new engines.

Improve Energy Efficiency 50 Percent by 2030

- Set National Building Efficiency Goals: Barack Obama will establish a goal of making all new buildings carbon
 neutral, or produce zero emissions, by 2030. He'll also establish a national goal of improving new building
 efficiency by 50 percent and existing building efficiency by 25 percent over the next decade to help us meet the
 2030 goal.
- Establish a Grant Program for Early Adopters: Obama will create a competitive grant program to award those states and localities that take the first steps to implement new building codes that prioritize energy efficiency.
- Invest in a Digital Smart Grid: Obama will pursue a major investment in our utility grid to enable a tremendous
 increase in renewable generation and accommodate modern energy requirements, such as reliability, smart
 metering, and distributed storage

Restore U.S. Leadership on Climate Change

- Create New Forum of Largest Greenhouse Gas Emitters: Obama will create a Global Energy Forum that
 includes all G-8 members plus Brazil, China, India, Mexico and South Africa —the largest energy consuming
 nations from both the developed and developing world. The forum would focus exclusively on global energy and
 environmental issues.
- Re-Engage with the U.N. Framework Convention on Climate Change: The UNFCCC process is the main international forum dedicated to addressing the climate problem and an Obama administration will work constructively within it.

Barack Obama's Record

- Renewable Fuels: Obama has worked on numerous efforts in the Senate to increase access to and use of
 renewable fuels. Obama passed legislation with Senator Jim Talent (R-MO) to give gas stations a tax credit for
 installing E85 ethanol refueling pumps. The tax credit covers 30 percent of the costs of switching one or more
 traditional petroleum pumps to E85, which is an 85 percent ethanol/15 percent gasoline blend. Obama also
 sponsored an amendment that became law providing \$40 million for commercialization of a combined flexible
 fuel vehicle/hybrid car within five years.
- CAFE: Obama introduced a bold new plan that brought Republicans and Democrats, CAFE supporters and longtime opponents together in support of legislation that will gradually increase fuel economy standards and offer what the New York Times editorial page called "real as opposed to hypothetical results."

For More Information about Barack's Plan



Read the Speech

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2008-2009 Face-to-Face Recruited Internet Survey Platform (FFRISP)

"Next, we'd like to ask whether you favor, oppose, or neither favor nor oppose a series of ways that the federal government might try to reduce future global warming. Power plants put gases into the air that could cause global warming. Do you favor, oppose, or neither favor nor oppose the federal government lowering the amount of these gases that power plants are allowed to put into the air?"

"Do you favor (oppose) that a great deal, moderately, or a little?"

<u>Outcomes</u>

Vote for Mr. Obama

Vote for Mr. McCain

Vote for someone else

Not vote

Predictors

- Proximity on power plant emissions regulation
- Ideological proximity
- Party ID
- Approval of George W. Bush
- Health of the economy
- Interest in Politics
- Demographics

Estimation Methods

Multinomial Logistic Regression

Multinomial Probit Regression

- Euclidian distance
- City Block Distance
- Directional Correspondence

Table 14: Impact of Climate Change Issue Congruence on Voting Behavior

_	City Block Measures			Euclidian Measures		Directional Measures			
Predictor	Voting for McCain (1)	Voting for Other (2)	Not Voting	Voting for McCain (4)	Voting for Other (5)	Not Voting (6)	Voting for McCain (7)	Voting for Other (8)	Not Voting (9)
			(3)						
(0.064)	(0.079)	(0.061)	(0.012)	(0.012)	(0.012)	(0.024)	(0.023)	(0.023)	
Ideology	-0.392***	-0.191***	-0.161***	-0.070***	-0.042***	-0.024**	-0.144***	-0.086***	-0.045*
	(0.061)	(0.069)	(0.056)	(0.012)	(0.014)	(0.011)	(0.028)	(0.032)	(0.024)
Democrat	-0.959***	-1.150**	-0.700**	-0.987***	-1.096**	-0.719**	-0.998***	-1.090**	-0.719**
	(0.360)	(0.515)	(0.289)	(0.359)	(0.507)	(0.286)	(0.350)	(0.514)	(0.283)
Republican	1.599***	-0.863	0.224	1.592***	-0.905	0.310	1.590***	-0.884	0.312
	(0.422)	(0.781)	(0.430)	(0.420)	(0.789)	(0.423)	(0.438)	(0.802)	(0.431)
Bush Approval	2.385***	0.463	1.795***	2.469***	0.370	1.866***	2.632***	0.515	1.968***
	(0.576)	(0.735)	(0.468)	(0.565)	(0.751)	(0.457)	(0.557)	(0.715)	(0.459)
Perc. of Economy	0.029	2.636***	-0.313	0.044	2.686***	-0.265	0.195	2.757***	-0.243
	(0.793)	(0.939)	(0.638)	(0.798)	(0.939)	(0.629)	(0.772)	(0.944)	(0.629)
Interest in Politics	0.825	0.946	-2.076***	0.762	0.953	-2.079***	0.889	1.018	-2.037***
	(0.639)	(0.866)	(0.496)	(0.623)	(0.863)	(0.493)	(0.620)	(0.854)	(0.491)
Female	0.149	-0.618	0.832***	0.169	-0.650	0.859***	0.164	-0.631	0.863***
Temate	(0.308)	(0.480)	(0.258)	(0.306)	(0.480)	(0.256)	(0.307)	(0.479)	(0.256)
Hispanic	-0.661	-0.469	0.114	-0.729	-0.459	0.110	-0.781	-0.480	0.069
Tiispanic	(0.562)	(0.810)	(0.359)	(0.588)	(0.806)	(0.358)	(0.584)	(0.796)	(0.356)
Black	-2.862***	-1.713**	-1.990***	-2.877***	-1.691**	-2.004***	-2.797***	-1.641**	-1.982***
Diack	(0.716)	(0.766)	(0.527)	(0.724)	(0.799)	(0.531)	(0.698)	(0.755)	(0.528)
Age	0.008	-0.010	-0.023**	0.008	-0.011	-0.023**	0.007	-0.012	-0.023**
rige	(0.010)	(0.014)	(0.009)	(0.010)	(0.014)	(0.009)	(0.010)	(0.012)	(0.009)
Region - Midwest	0.769*	0.395	0.458	0.737	0.396	0.432	0.684	0.343	0.386
	(0.463)	(0.587)	(0.392)	(0.455)	(0.593)	(0.391)	(0.456)	(0.594)	(0.392)
Region - South	1.095***	0.518	1.306***	1.093***	0.515	1.300***	1.064***	0.471	1.270***
	(0.397)	(0.580)	(0.343)	(0.395)	(0.585)	(0.344)	(0.406)	(0.585)	(0.346)
Region - West	0.458	-0.670	0.418	0.461	-0.639	0.417	0.427	-0.686	0.382
Region - West	(0.397)	(0.753)	(0.344)	(0.390)	(0.761)	(0.342)	(0.393)	(0.763)	(0.344)
Education	1.617	3.821**	-1.216	1.335	3.713**	-1.302	1.592	3.834**	-1.332
	(1.294)	(1.591)	(0.960)	(1.262)	(1.595)	(0.962)	(1.330)	(1.607)	(0.981)
Income	-0.325	-0.957	-1.206***	-0.267	-0.975	-1.187***	-0.161	-0.935	-1.169***
	(0.563)	(0.960)	(0.453)	(0.571)	(0.971)	(0.452)	(0.573)	(0.962)	(0.452)
Constant	-3.483***	-4.167***	2.359***	-3.329***	-4.104**	2.346***	-3.549***	-4.188***	2.385***
	(1.017)	(1.607)	(0.775)	(0.968)	(1.609)	(0.778)	(1.045)	(1.619)	(0.790)
	. ,	, ,	(0.773)	(0.700)	(1.00)	(0.770)	(1.043)	(1.017)	(0.750)

Notes: N = 912. *** p<0.01, ** p<0.05, * p<0.1

<u>Issue Public</u>

Members

$$-b = -.34$$
, p=.005

Non-members

$$-b = -.01$$
, p=.89

Conclusions

America remains largely green

Taking green positions helps candidates

Taking not green positions hurts candidates

Impact is concentrated among issue public members