



OVERCOMING THE COST BARRIER

Findings From Qualitative Research and Message Testing

For the Climate Message Project and U.S. In The World

Authors: Axel Aubrun, Ph.D., Meg Bostrom, Andrew Brown, Ph.D., Joseph Grady, Ph.D.

June 2008

INTRODUCTION

As advocates work to promote public policies to address climate change, they are consistently attacked on the basis of cost – the policies will cost too much, increase taxes, increase costs to consumers, raise energy costs, and so on. These attacks are particularly powerful in the current economic environment when Americans are highly attentive to rising costs, particularly energy costs. The Climate Message Project turned to the Topos Partnership to investigate the dynamics of the cost issue and to develop a message strategy that can overcome this significant obstacle.

As a preface to this discussion, it is important to recognize that “costs” should not be a leading idea or organizing principle for a conversation on climate change policy. A conversation that starts with costs *begins on opposition terrain*. The tools developed in this particular project are essentially *defensive* – responses that can help when someone else brings the topic up, or guidance for how to bring it up later in the conversation, in a way that can forestall or inoculate against attack. That in mind, one important task for future research will be to develop the initial lens, or frame, for the issue that both builds public support for action and that prevents cost from arising as a problematic question.

When a cost conversation is necessary, this research points to a number of clear lessons for communicating effectively:

Helping Americans understand the issue is a key to engaging their support.

As is true on many other public interest issues, a lack of understanding on this issue impedes constructive engagement. While some advocates emphasize “crisis” or “epidemic” themes, or characterize a problem in a shrill or frightening tone, our research clearly demonstrates that an emotional connection is usually not enough, and that the wrong kind of emotional connection can even prove counterproductive. When people lack a useful *conceptual picture* of an issue, their engagement is limited.

Investment vs. Loss – presenting the positive vision and the threat

Global warming is a problem that can easily seem overwhelming, and people can feel helpless to address it even when they accept that it is real and important. Positive messages about a new energy future, however, can sound like platitudes. The most effective approach, according to this research, is to present both sides in the form of a *choice*. The underlying idea is *Prevention*, and the specific options are *Investment* now vs. *Loss* later if we fail to act.

Broadening the definition of “cost” beyond dollars

Climate change advocates can make headway by effectively broadening the definition of “cost” to mean more than dollars spent in the short-term. When people consider the health and environmental consequences (and long-term costs) of our policy decisions, they are less cost sensitive and are inclined to support policies that protect health and the environment for current and future generations.

Empowering people with a sense of control over energy choices

Americans’ approach to energy technology is largely passive; they assume new energy sources will become available when the technology is ready. People need to feel a greater sense of agency and influence over our energy future, and one way to do that is to communicate the proactive role for government and other actors.

Promoting a sense of responsible management

A practical appeal to act responsibly helps engage Americans and move them beyond a partisan stance on the issue. Communicators should use messages and tone that evoke a sense of responsibility rather than guilt or fear, for example.

The following analysis describes some of the underlying patterns in Americans’ thinking that influence how the public will hear the cost conversation and describes in depth the message elements that help overcome the cost barrier.

METHODOLOGY

Research Team

The researchers who conducted the project have engaged in years of collaborative work developing strategies for effective communication on public interest issues. The principals of the team are Axel Aubrun (anthropologist, Cultural Logic), Meg Bostrom (public opinion researcher, Public Knowledge) and Joe Grady (linguist, Cultural Logic). Together, they bring a unique combination of perspectives to the work of exploring and changing the “landscape” of public understanding where issues play out. Their innovative approach and techniques focus on three areas:

- Re-examining an issue “from the ground up” – identifying default patterns of belief and strongly held values that can lead people’s thinking in counterproductive directions as they approach a topic,
- Developing and empirically testing new communications tools, with the capacity to enter the public conversation and reframe the issue in a more constructive way, and
- Helping advocates and other communicators develop new and more effective habits of both speech and thought as they address the issue in their own work.

Research methods for the project included both focus groups and “TalkBack” testing.

Focus Groups

Four focus group sessions were conducted, in two locations – Milwaukee, WI (April 21, 2008) and Raleigh, NC (April 24, 2008). All focus group participants were screened to meet an engaged citizen profile, meaning they are registered to vote, read the newspaper frequently, and are involved in community organizations. In addition, participants were recruited to be open to addressing global warming (those strongly opposed to any action on global warming were not invited to the conversation). Two groups were conducted among college-educated citizens and two among non-college educated citizens. Otherwise, participants represented a mix of gender, race, age, and party identification.

The focus groups were each two hours in length. During the focus groups, respondents reviewed a series of brief texts and discussed meaning, problem and solution definitions, emotional connections and audience. The texts were discussed within the context of either the economy, global warming, or energy. The group dynamic allows the rhetorical strength and weakness of different arguments to emerge. The test materials were slightly revised between the Milwaukee and Raleigh groups. Both focus group guides are included in the Appendix.

TalkBack Testing

In the TalkBack method, subjects (in telephone interviews or internet surveys) are presented with brief texts (roughly 80-150 words) and then asked several open-ended questions, at least one of which focuses on their ability to repeat the core of the message, or pass it along to others.

In this case the messages focused primarily on presenting the fact that global climate change is going to have cost consequences, and presenting this information in a way that implied the possibility of policy responses and solutions.

Measures of the effectiveness of a message include subjects' ability to remember, explain, use and repeat the explanatory idea. The testing is designed to assess whether a given idea has the capacity to become an organizing principle for thinking and communicating about the issue.

Seven distinct messaging directions and several variants were tested in this way.

This combination of focus groups and TalkBack allowed the researchers to evaluate critical aspects of the messages:

- Impact on reasoning about the issue – Does a particular narrative help people reach new conclusions, including views about actions that can/should be taken?
- Clarity – Do people take away the right point, or do they misunderstand the argument?
- Motivation – Is the new narrative engaging and compelling?
- Repeatability – If people can repeat back the core elements of the information being presented, this is a good indication that they grasp it, and that it has the potential to become part of the public conversation on the issue.

Subjects

The pool of research participants included roughly 150 TalkBack subjects, drawn from 3 different regions of the US – California, the Upper Midwest, and Southern New England, and approximately 40 focus group participants in two locations (Milwaukee, WI and Raleigh, NC). Subjects were diverse in terms of age, gender, education and political leaning. They had no special expertise in areas related to energy or climate change. Focus group subjects were recruited by professional focus group facilities from their panels of respondents. TalkBack subjects were recruited from Cultural Logic's existing panel of subjects.

Generating Directions

The initial stages of the project involved an effort to identify a variety of potential avenues for analysis and testing – including both *what* ideas to express and *how* to express them. These ideas were generated partly through review of materials produced by experts and advocates in the field, as well as our earlier experience researching the topic of climate change. As testing proceeded, new materials were created as directions were rejected or refined for empirical reasons.

Testing took place in April and May of 2008.

FINDINGS

The research findings are organized into three main sections. Before providing recommendations for communicating costs and discussing respondents' reactions to specific test materials, the research team felt it important to convey some of the underlying patterns in Americans' thinking that influence how the public will hear the cost conversation. This research reinforces our earlier conclusions that a lack of understanding impedes constructive engagement and that the choice of an initial lens will influence public support for policy solutions.

LACK OF UNDERSTANDING IMPEDES CONSTRUCTIVE ENGAGEMENT.

The research on this topic clearly indicates that *a lack of understanding is a significant obstacle to engaged and constructive conversations*, and that explanation is an important element of effective communications.

Among the variety of key elements in a communication – from facts to overarching narratives to examples to images, clear *explanation* of key points stands out as a key missing piece in current communications on issues related to global warming and the costs of dealing with it.

The public's lack of understanding in several key areas is hurting communications and playing into opposition hands:

- A lack of understanding *of how global warming works* can undermine conversations on the topic even before they begin.

This round of research confirms that most Americans still don't understand the basic heat-trapping mechanism of global warming, and that discussion is better (more engaged, concrete and constructive) when people are offered some explanation of this mechanism beforehand.

What are you going to do now that is going to prevent thunderstorm? Or suddenly we've got a drought that usually comes around the end of June in Wisconsin and lasts until November. That's been going on for 5 years. What can we do to stop that?

College-educated man, Milwaukee

I don't know too much about global warming, but I guess the earth is getting hotter due to the burning of the fuels we use today like coal or gas. And with everything running on that kind of energy, there must be a lot of heat emanating from the earth

27-year old moderate woman, California

- A lack of understanding *of how proposed remedies address the problem* makes them sound like *schemes* rather than *solutions*
 - Average people don't easily how taxes (or higher prices) are a "solution." For experts, there is a simple causal logic to taxes used as disincentives, for instance: When a particular activity costs more, people and businesses will engage in it less. But while average people understand that they drive less when gas costs more, they don't easily see the big-picture logic of taxes as instruments for changing the overall behavior of the economy. The result is that taxes tend to sound like money-raising schemes for government, and/or more "punishment" for them personally.

I don't see where that money is going to go.

Moderator: What do you mean?

If you are going to invest time and money now, what are you going to invest it in?

College-educated man, Milwaukee

It doesn't solve anything to put a tax on it because all people do is trade these or they sell them. Now you can pollute more. What does that solve? Okay, I'm not going to pollute. I'm going to get a credit but I'm going to sell it to you and you're going to be able to pollute more, even though who is to say I was going to pollute at all? That's just a money scheme; it's a money transfer.

Non college-educated man, Milwaukee

- For lack of an understanding of the economic dynamic (how the "game" works), Cap and Trade sounds like allowing pollution to continue. For insiders, the logic of Cap and Trade is clear and convincing. As businesses seek to maximize profit under a Cap and Trade system, overall emissions must inevitably go down, while individual businesses have a great deal of choice about how to manage within the system. For average people, though, who don't have a grasp of how the approach works, it sounds like a pointlessly complicated idea. It would be much simpler to "just tell businesses to stop polluting."

I don't want to control the amount of carbon emissions in the air; I want to stop the carbon emissions in the air and find an alternate source.

Non college-educated man, Milwaukee

There would be a black market for credits. That would really get ugly.

Non college-educated woman, Milwaukee

They're going to continue to pollute as much as they want and just pay the check at the end of the day ... But we have these monies and we still have this incredibly bad pollution. I have to breathe that and my daughter has to breathe that. So the fact that this guy paid all that money doesn't do me any good.

College-educated woman, Raleigh

They're just going to pass the buck. They're not going to absorb all the cost. It's going to ultimately cost everybody else too.

College-educated man, Raleigh

- If people don't understand the role of policy in promoting the change, they easily assume that government should "butt out."

The research shows that average people tend to make counterproductive assumptions about the role of government in moving us to a different energy approach. Either the new technology etc. seems to be coming in gradually "on its own," or people may feel that it is "not ready for prime time" just yet, and that there is therefore nothing constructive for government to do at the moment.

I think the free market will develop whatever they can because they're going to sell it and make a good profit off of it.

Non college-educated man, Milwaukee

- A lack of understanding *of what "cost" means in the global warming context* prevents people from taking a constructive, responsible position.

Average people have heard some references to the costs of addressing global warming, but don't have a clear picture of just what these (quite varied) costs might consist of. The research shows that explaining what the costs are in simple and understandable terms helps people think constructively – maybe in part because this kind of knowledge is empowering and helps them take a "responsible decision-maker" stance.

It costs to make things more energy efficient. Recycling costs more than just making new products from raw material. The technology to run cars on other things than gas costs more. I think in general, it just costs money to change the way people and corporations have gotten used to doing things, which is why many are unwilling to do it.

22-year old moderate woman, Illinois

Each of these areas of understanding – how global warming works, how solutions work, how cost works – is important and it is not clear that one has primacy over the others. Instead they may work together and reinforce each other, either positively or negatively.

THE INITIAL “LENS” MATTERS.

The research confirms a key pattern from thinking in other issue areas: The initial “lens” through which people are prompted to view the topic has important consequences for their subsequent thinking – including how seriously they take the issue, how they assign responsibility, the kinds of actions they support (if any), etc.

This initial lens (or *frame*) can be thought of as the conceptual context in which the topic is introduced – e.g. the topic of smoking bans might be brought up in the context of a public health discussion, or a discussion of individual liberties, with potentially very different consequences for the conclusions people draw, the associations they make, etc.

Several different introductory “lenses” for global warming costs were given preliminary testing in the research, with very different results. Note that this testing was only enough to establish *potential* advantages and drawbacks of different lenses for the cost conversation. This key question regarding which is the most effective overarching narrative on this issue was not within the scope of the current research, but is a question that deserves significant empirical effort. Here we briefly review some effects of the initial lens.

Economy

Depending on how the topic of the economy is introduced – and how the topic of global warming costs is related to it – this focus can have *either positive or negative consequences*.

- Positive: There is potential in the idea that our economy will benefit from the investments in new technologies and industries needed to address global warming. As a causal story, this resonates with people and makes sense.

On the other hand, there are still serious questions about how to tell such a story. For instance, one of the core doubts expressed by research subjects was whether *government* can effectively lead or spark this kind of economic boom.

I don't think that government should get involved in investments themselves. I think it's a private sector thing. I think there are other options

74-year old moderate man, California

Federal government does not build jobs and technologies. That's what industry does. Taxation is destruction and waste because we tend to -- it would go into huge bureaucracies and be earmarked, pork barreled into God knows what.

College-educated man, Milwaukee

- Negative: In the current climate, it is very easy to trigger resistance to anything that might make the economy *worse*. When research subjects were focused on the troubled economy, it was very easy for them to dismiss global warming as a low priority, an issue we can't afford to focus on right now.

[We shouldn't spend a dime on global warming because] there are people that are starving and murders happening every day.

27-year old moderate woman, California

Global warming

As an initial, organizing idea, this one is (still) **very problematic**, unfortunately. While there is a minority of Americans who are very concerned and willing to act on the issue, the topic is also controversial, can fail to engage serious interest, and can be dismissed as less important than other concerns.

I personally think it's a bunch of hogwash on global warming. So I'm looking at this and I'm like, "Why?"

College-educated woman, Milwaukee

I believe something needs to be done but there are also many other important things that need taken care of too.

31-year old conservative woman, Minnesota

I can tell you I basically tuned you out because I don't believe that anthropologic causes are really the cause of global warming . . . it's all political mumbo jumbo for the masses.

46-year old conservative man, California

When average Americans are prompted to think about global warming costs in the context of environmental impacts, they tend to focus on effects on animals, plants, etc. Unfortunately, this means that the issue remains a relatively low priority, despite general American sympathy for environmental perspectives.

Why would we want to destroy some of animal's most unique species to drive our cars and fuel our factories? Surely, there are enough scientists in this world that they can invent an energy that would not destroy our wildlife habitats.

48-year old liberal woman, Wisconsin

All jokes asid, a polar bear has never done anything to me, so why should I see his habitat be diminished by global warming, if that's what is causing it?

College-educated man, Milwaukee

I've been to Alaska. The weather is changing every winter. It doesn't snow as much. We went and watched glaciers calve, which is an amazing life experience. They don't do it nearly as much as they used to. They're not as big as they used to. There is more ocean uncovered. It's like well, okay you're not worried about that, but do you want at any point to have someone go see a puffin? How about anything else that lives on anything or anywhere that we affect. The world isn't just about us.

College-educated woman, Milwaukee

Energy

A focus on the nation's approach to energy has many constructive effects on average Americans' thinking but also has several risks.

Price sensitivity

One risk inherent in this focus is that, given current gas and oil prices – which have risen even higher since the testing – Americans are of course extremely cost sensitive, and ***any implication that energy costs may rise leads to strong objections.***

Q: Try to explain why we shouldn't be mining coal and drilling for oil.

A: That is wrong! Why keep it in the ground? Just to raise the prices?

50-year old conservative man, Wisconsin

Promising discussions

On the other hand, the focus on energy often leads to engaged and constructive discussions. People are willing to consider that serious change should happen or is happening, they support the development of new energy sources, and are willing to entertain the idea that this will cost money.

Other power resources such as wind, solar, etc need to be used in order to decrease the effects of oil and coal into the environment [that are] causing harmful effects on the earth for global warming.

38-year old conservative man, Michigan

We speculate that there are several factors that may make Energy a constructive general lens for thinking about the issue of global warming costs:

- Energy is a very **concrete** topic, which usually helps people think more constructively.
- It is an area where there are **serious and important problems** that must be addressed.
- It is relatively clear that **government has some role** (even if a very vague one) in addressing the issue.

Not a silver bullet – Traps

On the other hand, it is clear that more work needs to be done in figuring out how best to talk about energy, or how to **combine it with other topics**, in order to promote a proactive policy approach towards global warming.

First, energy is not a silver bullet because average people are far from clear on how government policies can create solutions in this area (even if they are sometimes in favor of little-picture interventions such as price limits).

Furthermore, average Americans tend to fall into two particular “traps” when they think about energy. Even when it seems we are engaging their support – e.g. people agree that we should conserve, develop solar energy, etc. – they can land on conclusions that are very problematic:

1. “Evolution” / “Spectator” Trap: Americans tend to think that a transition to cleaner, more efficient, renewable energy **is happening already, gradually, by itself**. This perspective destroys any sense of *urgency*, any sense that we need to be *proactive*, and any focus on how *government intervention* is necessary.

We have [already] spent a lot. The technologies already exist. It's just a matter of implementing their use.

38-year old moderate man, California

2. Coal/ANWAR Trap: Average Americans easily reach for plentiful coal (sometimes “clean coal”), or tapping into ANWAR as solutions to current energy problems – rather than recognizing the real need to move away from all fossil fuels.

Personally, I think that if we drill for more oil locally in the United States, our dependency on foreign oil will be reduced and our oil prices will decrease. I have no problem drilling for oil or mining coal locally.

39-year old conservative man

The ease with which people fall into these traps can be partly explained by three patterns in their thinking about fossil fuels, discussed next.

Fossil fuel narratives

The testing revealed that average Americans aren't surprised by the idea that there are problems with fossil fuels. Three particular problems tend to dominate thinking currently – each of these is a clear story that is familiar and understandable (as well as true).

1. Depletion Problem: Fossil fuels are finite, and are being depleted.
2. Pollution Problem: Fossil fuels cause pollution.
3. Dependence Problem: Our dependence on foreign oil is risky/harmful.

To some degree or other, these are all justifications for renewable energies and policies that will help with global warming. ***But each of these common arguments also allows people “off the hook”*** in important ways:

- If fossil fuels are being depleted we should: find more oil, shift to coal which is plentiful
- If fossil fuels pollute we should: use cleaner energy including clean coal.
- If we are too dependent on foreign oil we should: increase domestic oil production, shift to (domestic) coal, increase our influence over oil-producing countries.

The missing, i.e. weakest, narrative, but one that is ***ultimately critical to promoting the right approach*** is:

4. CO2 Problem: Using fossil fuels increases carbon dioxide in the atmosphere, therefore causing global warming.

* * * * *

In short, none of the tested initial lenses was sufficient to justify spending public money on approaches that address global warming – but the research revealed a number of patterns that should be the basis for further work on this critical question.

For example, it may be possible to develop a lens that combines the positive elements of the economic and energy lenses with the urgency of global warming. One of the messages tested in this research featured a Post-Fossil Fuel Era frame that had some success in getting participants to re-think the issue. This finding suggests that a *Post-Fossil Fuel Era* frame is a strong contender for a new, overarching lens on this issue – but more research needs to be done to rigorously test and fully develop this approach.

FRAMING COSTS

“Costs” should not be a leading idea or organizing principle for any conversation on climate change policy. Because they believe cost is the greatest obstacle standing in the way of public support for solutions, some advocates are tempted to start the conversation with a defense of costs, or feature costs heavily in the message. However, any conversation that starts with costs *begins on opposition terrain*. An initial focus on cost plays directly into the hands of the groups that oppose serious changes to address global warming.

Therefore, communicators should keep in mind that the tools developed for this particular project are essentially *defensive* – responses that can help when someone else brings the topic up, or guidance for how to bring it up later in the conversation, in a way that can forestall or inoculate against attack. They are not recommendations on how one would ideally start the conversation.

Recommendation: Lessons for Communicating Costs

Recognizing that advocates are likely to need several different approaches that can be adapted for different situations, we have structured our communications recommendation around a series of lessons with a short example associated with each lesson. With these lessons in mind, advocates can develop an array of messages to address a variety of situations.

Make “understanding” the issue as important a priority as “persuading” people to endorse costs.

Average people have no clear grasp of what causes global warming, what the proposed solutions are or how they work, or what the costs will be if we address the problem, or if we fail to address it. The entire topic is vaguely threatening, rather than clear. This means it is difficult for people to take a responsible, constructive stance and to consider how the choices we face stack up against each other in practical terms, or in terms of values like protecting our world for future generations. Clear explanations in any of the areas mentioned above help create more constructive conversations, and promote support for the needed interventions, e.g.:

The quick story on how global warming works has to do with something scientists call the carbon dioxide blanket: We’re putting more and more CO₂ into the atmosphere, every time we use fossil fuels like coal and oil – whether it’s to drive our cars, create electricity, or whatever. This is creating an ever-thickening “blanket” of CO₂ around the earth.

Investment vs. Loss – the positive vision and the threat.

Advocates frequently emphasize the consequences of global warming under the assumption that if people understand the severity of the problem, they will take action to solve it. In fact, though, this is a problem that can easily seem overwhelming, and people can feel helpless to address it even when they accept that it is real and important.

In a similar way, a cost message about global warming can feel overwhelming if it only emphasizes the threat, e.g.:

The costs of inaction are even higher as it becomes more and more expensive to address the problem as it worsens. We can't delay and let the next generation of leaders deal with the problems of food crises, extreme weather, droughts and coastal flooding.

On the other hand, *positive* messages about what we can achieve by moving to new energy approaches can sound almost like platitudes. (“Of course we’ll move to clean solar and wind power *eventually!*”).

The most effective messages present both of these visions, in the form of a *choice*. The underlying idea is *Prevention*, and the specific options are *Investment* now vs. *Loss* later if we fail to act. When the choice is clearly presented in this way, the smart, practical response is clear, e.g.:

We can either invest 1% of our economic activity now in reducing the consequences of climate change or we can expect to lose somewhere between 5 and 20 times that in the coming years. Smart investments now can drastically lower the money we spend later on coping with climate disasters like extreme storms, deadly heat-waves, droughts, crop failures and rising sea levels.

Broaden the definition of “cost” beyond dollars.

The opposition’s cost message takes a variety of forms (policies will cost too much, increase taxes, increase costs to consumers, raise energy costs, are unaffordable at this time, etc.) but its core is always narrowly centered on dollars, the money we will spend or “lose” by making changes. When people are focused on taxes and consumer costs, they are price sensitive (particularly in this economic climate) and are reluctant to support any policy that they fear will take more money from them.

Climate change advocates can make headway by effectively broadening the definition of “cost” to mean more than money. When people consider the health and environmental consequences of our policy decisions, they are far less cost sensitive and are inclined to support the policy that will protect health and the environment for current and future generations.

If you factor in the health and environmental costs, suddenly coal-based electricity isn't so cheap anymore. As we invest money in our energy system we need to be much smarter in thinking about the true costs of our approach to getting energy.

Empower people with a sense of control over energy choices.

As advocates communicate on these issues, it is important to include references to the ways in which collective action can influence energy options so people feel empowered to act.

By default, Americans assume renewable energy will become more available when the technology is ready, and if it is not widely available, this must be because scientists have

not yet perfected the technology. They assume the profit motive will lead corporations to introduce new products at competitive prices and do not see the ways in which government policy direct our energy options. The end result is that people feel no sense of agency concerning energy options, little ability to influence the industry.

In order to move people past this perspective it is important to be clear about how government and other actors can and must play a proactive role, rather than waiting for the energy situation to “evolve on its own.” E.g.:

Some businesses are already doing small-scale work on new energy and conservation technologies – but they are also waiting for government to set new standards and invest significantly in the new approaches.

Similar messages can explain the role of corporate and other powerful actors.

Promote a sense of responsible management.

The messages that were most understandable and compelling for research participants were often based on practical appeals, as opposed to moral appeals to “do the right thing” with regard to the environment, for instance. More specifically, several of the messages appealed to subjects as *responsible managers* of something important – such as our overall energy system or our environment.

One concrete analogy that was clearly grasped and that helped evoke this responsible stance compared the earth and its climate with a house with a termite problem. In this analogy, *we are the homeowners*, who can either act responsibly by dealing with the problem now, or face much worse and more expensive consequences later. No responsible homeowner can ignore the problem.

Experts compare global warming to an urgent problem like termites in your house foundations. If the problem is ignored, the result will be serious, imminent damage.

Specific Approaches Tested

The researchers tested a number of approaches in individual, group and online formats. In this section we present several of the specific messages that were tested to illustrate the general lessons learned and to provide further insights about approaches that are ineffective. The section begins with some approaches that advocates should avoid and then shifts to examples that show promise in building a more constructive conversation.

Influencing the Market

As noted earlier, people struggle to understand how a tax on fossil fuels is a solution to global warming. However, a straightforward, descriptive response based on using the “power of the market to begin to encourage the shift to renewable energy,” backfires in some important ways.

First, people’s attention is drawn to the idea that certain kinds of energy should be discouraged or taxed. In the current environment of skyrocketing energy prices, people firmly ***reject the suggestion that further increasing prices is wise***. Several cannot even consider whether or not the idea has merit, because they just cannot imagine surviving economically if prices increase further.

Market Forces

Renewable energy is more consistent and not subject to the whims of the market like oil is. So now is the time to begin the transition to renewable energy and start bringing reliable, stable costs back into our energy consumption. We need to use the power of the market to begin to encourage the shift to renewable energy, and that means we should (WI: tax, NC: discourage) the kinds of energy we want to see reduced (like gas, oil and coal), and provide incentives for the kinds of energy we want to encourage (like geothermal, wind and solar) so that we are reinvesting in encouraging this transition.

Well, go ahead and tax me. Take my first born while you're at it because how am I going to afford geo-thermal in my house and a windmill and put up solar panels when I'm paying \$40 more a week in food than I used to 7 weeks ago? Who is this? Who is “we” and who wants to see them reduced? This is very irritating.

College-educated woman, Milwaukee

Furthermore, those who do consider the basic point that higher prices on gas, oil and coal will force a shift to renewable energy, believe that ***shift is already steadily occurring based on existing market dynamics***.

If the price of oil is going to go up, up, up, why do we need the government to take our money? Because the barrel of oil is \$300 a barrel, then wind, geo-thermal and solar will all become cost competitive and natural economics will allow investment and shifts.

College-educated man, Milwaukee

Finally, while participants demonstrated a significant amount of knowledge concerning new energy innovations, most also insisted that renewable technologies are not ready to play a significant role in meeting the nation's energy needs. According to respondents, if we have not yet shifted significantly to renewable energy it must be because these sources are not yet ready for significant, widespread use. Therefore, increasing energy prices on fossil fuels *punishes consumers without offering a viable alternative*.

Could we just have solar cars?

Non college-educated man, Raleigh

There's less energy in a gallon of ethanol than there is in a gallon of gas. So let's say your car gets 20 miles to the gallon, your car is only going to 18 miles on a gallon of ethanol. So until gas is \$5 a gallon, ethanol is not cost effective as an alternative.

College-educated man, Raleigh

Note: Advocates may make headway against this obstacle by illustrating renewables *in action and operating on a large scale*. Rather than emphasize interesting new innovations, they should position renewable energy as mainstream and ready to play a larger role.

Relative Priorities

Since the cost of addressing global warming can seem so daunting, it is reasonable to assume that putting the cost in context will help build public support for dedicating resources to climate change policy. However, when the cost of dealing with global warming was compared with other priorities like the war in Iraq and the space program, most participants *rejected the argument as irrelevant*.

More Expensive than What?

When people argue that addressing global warming is expensive, we should ask, "Compared to What?" Developing a new energy approach would cost less than fighting the war in Iraq, less than our space program, and much less than dealing with the effects of global warming down the road.

I'm having trouble tying global warming with Iraq or a space program...They're separate issues...Whether I'm on the right side or the wrong side on those issues, it's separate.

Non college-educated man, Milwaukee

Shift Existing Resources

One way to communicate the policy change that needs to happen is *redirecting the nation's energy spending away from problematic forms of energy and toward better alternatives*. The benefit of this approach is it causes people to think about energy choices in a proactive way. One downside is that ***these statements sound obvious***; people do not learn anything new or rethink the nation's energy policy based on this information.

Redirecting Spending

Over the next 20 years, the US will spend an estimated \$3 trillion dollars on energy and on our energy infrastructure. The smart move would be to divert more of this money to encouraging energy sources that look to the future, instead of continuing to spend it in ways that will create more problems for us down the road. Sooner or later, we are going to have to invest resources into adapting our energy to rely less on oil and coal, (NC: so we should stop subsidizing oil and use that money to promote smarter energy use.)

We all recognize that it's going to change, because they want to continue to make money and to do that they have to adapt and adopt new sources and methods.

College-educated man, Milwaukee

I think it's pretty obvious. There are things that we can do here to change the way that we're consuming energy.

Non college-educated man, Raleigh

We already do that, don't we? Aren't we already spending billions of dollars on different energies and different fuels?

Non college-educated man, Milwaukee

Finally, respondents interpret both of these approaches as being about redirecting *existing* resources, not as gathering and spending *new* resources. When the policy debate can be honestly described as spending existing resources in wiser ways, this approach is appropriate and powerful. However, this line of thinking will not be constructive in a policy debate that is really focused on new spending or new efforts.

Which is Smarter?

Which is smarter—sending hundreds of billions of dollars overseas to buy oil, and then burning it in ways that intensify global warming, (creating billions, if not trillions of dollars in damage to our country's cities, farmlands and coastal areas)? Or investing some of that money into expanding alternate forms of energy and conservation technology that we can build here at home—and that will help stop global warming rather than making it worse?

I think it's just saying that they should use that money for development or incentives or something to promote better use of other resources instead of the fuels that we're using now.

Non college-educated woman, Raleigh

Economic Benefits of Energy Leadership

In recent years, many advocates have shifted from talking about climate policy as a *cost* to discussing it as an economic *benefit*. This approach reinforces an American can-do spirit and positions climate policy as an opportunity.

Let's use our brain power in this country to help ourselves in this case. And helping ourselves will help everybody else.

College-educated woman, Milwaukee

I think that's true. I think that this country has had a scientific lead in a lot of sectors for a long time they've been ignored.

College-educated man, Raleigh

Taking the Lead

If we act soon, America is in a unique position to lead the worldwide transition to what scientists call the "Post-Fossil Fuel Era." (WI only: As the future price tag of global warming rises into the tens of trillions of dollars,) It has become clear that we are going to need a new toolkit for our energy needs and many new technologies. The US has been dragging its feet, but if we invest money and time now we can still take the lead in creating, building and marketing new alternative energies and conservation technologies, creating jobs and leading the global economy. (NC only: The private sector is slowly beginning to make the transition, but businesses are waiting for government to set standards and create incentives to encourage new technology. To move as quickly as we need to, government policy should harness its resources just like government decisions direct our transportation infrastructure, influence product safety and support university research programs.)

However, there are some weaknesses with this approach that need to be overcome. For example, some people believe we've already lost economic leadership and others **worry about the appropriate role for government in sparking this transition**. Positioning government's role as setting standards and creating incentives begins to address some of the problems, but more work needs to be done for it to become a dominant lens on this issue.

Why does everything we do have to go through the government?

College-educated woman, Raleigh

[Government] needs to be less involved. It might be like the incentives. They could give a bunch of incentives to do that, but once the government gets involved then all of a sudden it's like Big Brother looking over you.

Non college-educated man, Raleigh

As soon as the government gets their hands in it, it's over because they're going to do what is in their best interest not in the best interest of what we need to do for us.

Non college-educated man, Raleigh

Hidden Costs of Current Approach

As noted earlier, it is important for advocates to broaden the definition of “cost” beyond dollars. When people think of energy costs, they tend to be very price sensitive. However, when they consider the health and environmental costs of the nation’s energy choices, they begin to think about the long-term costs rather than just the short-term bill in the mail.

Hidden Costs of Coal

A new coal-burning plant produces electricity a few cents cheaper than a windmill does. But if you factor in the health and environmental costs of burning coal, suddenly coal-based electricity isn’t so cheap anymore. Many aging coal-fired plants are nearing the end of their lives, and rather than replace them with new coal plants as is being planned, we should replace them with clean energy. As we invest money in our energy system we need to be much smarter in thinking about the true costs of our approach to getting energy.

There is always going to be a cost affiliated with it. It's just how do we want to pay it and do we want to pay it in looking in the big picture of health concerns and all these other issues. Or do we want to look just at well this is two cents cheaper so that's just going to be the entire thing we base our decision on?

College-educated woman, Raleigh

I certainly agree that we need to be forward thinking. We need to see the big picture and we need to see what's going to happen 50, 75, 100 years down the road. And we can't just think about today.

Non college-educated woman, Milwaukee

I think we have to consider the environmental costs. Sometimes it's worth it if it costs you more financially. I think it's worth it because there are important things to consider.

College-educated woman, Milwaukee

Some of the old methods aren't necessarily cheaper when you think about the long term effects like on people's health. Harvesting coal, what about all the coal miners who suffered and then the government had to pay out for black lung disease and the cost of their insurance and losing their health and the effect on their families. Then the effect on the environment.

Non college-educated woman, Raleigh

The push to replace aging power plants offers an opportunity to ask people to think about the energy path they want to commit to for the 30+ years of operation of a new plant. Rather than continue down the same path, people believe it makes sense to replace aging coal-fired plants with clean energy.

I would say let's make sure that when they say replacing them with clean energy, something that is actually clean energy, not nuclear plants that produce thousands of tons of nuclear waste a year. Truly clean energy, something that is not kicking out all this crap out of it that we've got to figure out how to dispose of years later.

Non college-educated man, Raleigh

Problematically, the coal industry’s efforts to position coal as “clean” have been at least somewhat successful. Research participants frequently noted that “clean coal” could be a viable solution. Since they do not understand the role of CO2 in causing climate change, people are fooled by this false solution.

They do make coal plants that have more controls on the pollution, so if they're going to have to do a coal plant maybe make them replace the aging ones with ones that are environmentally [sound].

College-educated man, Raleigh

Coal is a clean energy source because of the scrubbing systems that are installed on all these plants. This dates back to the acid rain issues that were real

College-educated man, Milwaukee

They can make alternative fuels from algae and it actually produces 10 times more than corn does. They said those actually can be put onto coal plants to take the carbon dioxide to feed the algae to reduce the alternative fuels. So it would help the emissions on the coal plants on top of what they do initially.

Non college-educated man, Milwaukee

Investments to Ward off Losses

Benjamin Franklin said it best: “an ounce of prevention is worth a pound of cure.” This fundamental notion helps people understand the importance of quickly addressing climate change rather than waiting to act.

However, the research suggests that *how* advocates express the prevention idea will dictate its effectiveness. Topos experimented with three different ways to communicate prevention. One was a straightforward efficiency message stating that greater energy efficiency is worth the extra initial cost because it pays off later. While research participants agree with this statement, it is an obvious perspective and does nothing to shift their view of climate policy.

Efficiencies that Pay Off

We can go a long way toward using our energy more wisely. By increasing efficiency standards for new building construction, or raising fuel efficiency standards for cars, we save 1/3 in energy costs so any extra initial costs in creating more efficiencies pays off quickly.

I think we can always try to use our energy more wisely.

College-educated woman, Milwaukee

Furnaces, water heaters, all the stuff I put in -- how efficient it is. It costs more up front but it saves you quite a bit.

Non college-educated man, Milwaukee

A second approach featured the threats of climate change and the *costs of inaction*. This fear-based concept makes the problem seem even more overwhelming and tends to paralyze people.

I have a problem with these generalized statements because it's great to do something today, but I don't know that anyone has an answer of what to do. I see

that's the problem with the inaction. I don't know that anyone is really sure of how to handle the problem because it's so big. There's all these different aspects to it that I don't even know if anyone knows exactly how to start.

College-educated woman, Raleigh

We have the technology today to know everything almost, so we're panicking. Everybody is panicking. There is too much information out there.

Non college-educated man, Raleigh

What are they going to do by spending extra money -- what can we do?

Non college-educated man, Raleigh

The most effective prevention approach ***combines the threat with a positive vision***. In a practical tone, it suggests that the nation will have to spend to address climate change, and can either do so now, or spend 5-20 times as much later. This pragmatic approach causes research participants to feel some sense of urgency and want to take action rather than wait for things to get worse.

There is more of a sense of urgency in there. Not only the harmful effects that are causing, but if we continue to not do something, it will be even more expensive.

Non college-educated woman,
Raleigh

Absolutely. I don't have any children. I'm probably never going to but you've got to look down the road. You've got to look out for the generations after you. I'd rather spend 1 percent now than 5 to 20 times more. It's a no-brainer.

Non college-educated man, Raleigh

Serious People Concerned

Everyone from scientists to insurance companies to economists to the military says that we need to act immediately to avoid the worst costs of global warming. Solving the problem would mean investing extra resources today—something like 1% of our GDP—in order to avoid much more expensive disasters down the road. The costs of inaction are even higher as it becomes more and more expensive to address the problem as it worsens. We can't delay and let the next generation of leaders deal with the problems of food crises, extreme weather, droughts and coastal flooding.

Investing Now is Cheaper

One way or another, we are going to have to spend some money dealing with global warming. But the sooner we act the lower the costs will be. Experts say that we can either invest 1% of our economic activity / GDP now in reducing the problem or we can expect to lose somewhere between 5 and 20 times that in the coming years. Smart investments now can drastically lower the money we spend later on coping with climate disasters like extreme storms, deadly heat-waves, droughts, crop failures and rising sea levels.

We all have children and grandchildren and that's what we're thinking.

Non college-educated woman, Milwaukee

I'm not even thinking cost. I'm thinking about taking action sooner the better.

Non college-educated woman, Milwaukee

Plus the ounce of prevention argument. It seems prudent.

College-educated man, Raleigh

Explaining Costs

As noted earlier, one of the areas where average Americans have little clarity on this issue concerns exactly what the costs might be of addressing global warming. Based on how thinking works in other issue areas, it is likely that this lack of understanding makes it more difficult for people to come to grips with the problem and think as responsible decision-makers.

While no conversation on this issue should *begin* with an explanation of this kind, the research suggests that this kind of language helps people engage in a concrete and constructive way, and helps them realize the sense and importance of a proactive stance.

3 Types of Cost

What are the “costs” of global warming? There 3 different kinds: There are Investments in things that will reduce carbon dioxide, which will also end up producing other benefits, including profitable new industries. These include energy sources like solar and wind power, and technologies for more efficient cars, appliances, factories and so on. Some businesses are already doing small-scale work on these – but they are also waiting for government to set new standards and invest significantly in the new approaches. Second, there are Losses, if we don’t deal with the problem. Damage to agriculture, infrastructure and other parts of our economy will probably cost 20 times more than Investing now would. Finally there are short-term Energy Price Increases. Economists believe we won’t actually move away from coal and oil until businesses are taxed on how much carbon dioxide they emit. These taxes will probably be passed on as higher energy costs for all of us, until we reach the stage where the new ways of dealing with energy are established.

There’s costs that we can use for investments into building up alternative energy sources. But there’s also the cost of the changeover . . . It would be cheaper to invest, rather than try to fix it all up [later].

28-year old liberal man, Illinois

There are three separate aspects, one of which was investments – that’s what it would take now to invest in cleaner technologies to help stem global warming. The other cost would be the cost that eventually will be incurred if we don’t actually put in any investment . . . The third aspect ... was increased energy costs in the short term. So you know, paying more for electricity and other forms of energy now.

24-year old liberal man, Massachusetts

“Termite Problem” and Responsible Management

This analogy, which compares Americans to homeowners facing a serious termite problem, proved to be a concrete, clear and memorable way to describe the current situation. Responses to the text showed focused thinking and support for proactive policies.

Sometimes you need to make a costly investment to address a problem before it gets a foothold and becomes impossible to fix. The only problem . . . is that you can eventually build another home, but we only get one planet.

Termite problem

Experts compare global warming to an urgent problem like termites in your house foundations. If the problem is ignored, the result will be serious, imminent damage.

Everyone from economists to military leaders to insurance companies has recognized that we can either invest now in things that will reduce carbon dioxide (like solar and wind power, and technologies for more efficient cars, appliances, factories and so on) OR we'll have to pay for losses later, like damage to agriculture, infrastructure and other parts of our economy. Experts estimate that the losses will probably cost 20 times more than Investing now would. In other words, the quicker we act like responsible homeowners, the less difficult and expensive it will be.

34-year old moderate man, New Hampshire

Experts compare the problem to termites eating away at your foundation - easy to ignore now, but with drastic consequences for the future. A wide range of industries recognize the problem, and are pursuing various methods of reducing our CO2 emissions.

37-year old conservative woman, Illinois

QUESTIONS FOR FURTHER RESEARCH

The first two limited research investigations conducted by Topos for the Climate Message Project (the meta-analysis and this investigation concerning the cost of global warming) suggest a number of obstacles (mentioned earlier in the paper) of which communicators need to be aware. A solid, continuing research program should seek to investigate each of the following obstacles and develop communications recommendations to overcome them.

- **Clean coal will be our salvation.** Research respondents frequently noted that clean coal will solve many of the problems with the current approach to energy. While developing a response to the “clean coal” message is outside the scope of this work, environmentalists need to take this threat seriously and investigate the strongest frame for negating the industry’s gains. Possible responses include: 1) clean coal isn’t “clean” if it continues to emit the carbon that causes global warming; 2) scientists are working on ways to make coal environmentally friendly, but the technology isn’t

ready yet; 3) when the technology is ready we can build environmentally friendly coal-fired plants, but until then we shouldn't build any more old-fashioned plants because it just commits to continuing the problem for another 30+ years, etc.

- **Americans have little faith in government as problem-solver.** As noted earlier in this analysis, it is important to empower people with the efficacy of collective action. In addition, advocates must find good ways to talk specifically about the need for a government role. This research provides some effective approaches for communicating government's role, but as advocates work to develop an overarching lens for the issue, a compelling role for government should be an important indicator of success.
- **Cap and Trade is widely misunderstood.** If Cap and Trade is going to be the core of advocates' policy solution for climate change, then specific attention needs to be given to explaining what Cap and Trade is and why it matters. As of now, most research respondents do not understand the policy and many believe it is a scheme that just allows companies to continue to pollute.
- **Understanding of global warming is shallow and inconsistent.** Issue understanding continues to be a significant problem in this area. However, when people have a better understanding of the causal mechanism of global warming, and of the costs associated with addressing the problem, they are better able to consider appropriate action. Research should consider and investigate other aspects of global warming that are important to communicate, such as the nature of climate disruption or the locked-in temperature increase.
- **While people are aware of global warming, few believe the consequences will be catastrophic.** Advocates have tended to address this obstacle by highlighting the severity of environmental impacts. However, research has indicated that an Environmental Impacts Frame is not very effective at promoting action. Research should determine the appropriate role for a discussion of impacts: local impacts, impacts on areas and activities, human impacts, a moral call, or a call for preparedness. This research should determine the ramifications of each approach.
- **The initial lens on the issue influences public support for solutions.** Perhaps the most important task for communicators is to develop the right introductory lens or overarching narrative for this issue. Though outside the scope of this research, there are hints at possible narratives that will be more successful than the current Environmental Impacts, Energy and Good Jobs frames. Are there ways to build on the strongest elements of the economic and energy frames to create a New Economy Frame or a Post Fossil Fuel Era Frame that rises above energy and economics and incorporates the urgency of global warming?

APPENDIX I

Sample TalkBack text

Our conversation today is about energy, and how the U.S. produces the energy it needs, a topic all three presidential contenders are saying we need to take seriously. Basically, experts say that the world needs to move to a Post Fossil Fuel Era, where we don't rely on oil and coal. They also say that if we act soon, the U.S. is in a unique position to lead the way in this change, and profit from it too. It's now clear that we are going to need a new toolkit for our energy needs, and many new technologies. The US has been dragging its feet, but if we invest money and effort now we can still take the lead in creating, building and marketing new alternative energies and conservation technologies, creating jobs and leading in new global industries.

Sample "TalkBack" questions

- Please give 3 reasons why you think the US isn't doing more to stop global warming?
- What SHOULD we be doing?
- Please repeat back everything that you can remember from the information you heard about the **costs** of dealing with Global Warming.
- Have you heard the presidential candidates or other leaders talk about this before? Can you sum up what they have to say?
- Please complete one of the following statements:
 - We should throw all of our resources at dealing with Global Warming, because ...
 - We need to invest serious resources into dealing with Global Warming, because ...
 - We should at least do something, because ...
 - We shouldn't spend a dime on Global Warming, because ...
- Let me give you some different policy choices and ask you to pick one and talk about why it's a good idea:
 - Require auto makers to build more fuel efficient cars.
 - Tax companies based on how much carbon they produce.
 - Invest tax dollars into rapid production of renewable energy technology.
 - Or maybe some other policy?
- What ideas stand out for you now from the texts I read – what would you mention to a friend?
- Scientists say that one major challenge is going to be keeping coal and oil in the ground rather than using it. Please try to explain why we shouldn't be mining coal and drilling for oil. (If you don't know, take a guess.)

APPENDIX 2: FOCUS GROUP GUIDES

Focus Group Guide (North Carolina)

GG - Costs

Introduction (15 minutes)

Standard intro – audio taping, talk one at a time, not vested, etc.

Let's go around and introduce ourselves: say your name, a bit about yourself, what you like to do for fun.

Policies without Context (15 minutes)

We have several really interesting topics for tonight. First, we're going to review some ideas that people have mentioned and talk about how you feel about those ideas.

Go through each of the following policy ideas. For each ask:

What is your overall reaction – good idea or bad idea?

How come?

What is the reason to do it? What problem does it solve?

What is the reason against it?

Policies:

- Funding a much more serious federal research and development effort to develop new energy technologies
- Establishing a carbon tax on electricity, gasoline, and other products
- Provide government incentives to builders that are pushing the envelope in innovative, energy-efficient building design
- Making businesses and industries that emit carbon into the atmosphere pay for a permit to pollute
- Requiring automakers to increase the average fuel efficiency of cars, trucks, and SUVs to 35 miles per gallon, even if it meant a new car would cost up to \$500 more to buy

Economic Context (30 minutes)

So let's switch topics and talk about the economy. When you think about the economy, what kinds of things first come to mind?

What's going on with the economy these days?

What are you worried about?

What would you like to see happen?

Let me read you some things people have said about the economy and get your reaction. For each ask:

What is your overall reaction?

What kind of actions does this call for?

Messages:

Taking the Lead

If we act soon, America is in a unique position to lead the worldwide transition to what scientists call the "Post-Fossil Fuel Era." It has become clear that we are going to need a new toolkit for our energy needs and many new technologies. The US has been dragging its feet, but if we invest money and time now we can still take the lead in creating, building and marketing new alternative energies and conservation technologies, creating jobs and leading the global economy. The private sector is slowly beginning to make the transition, but businesses are waiting for government to set standards and create incentives to encourage new technology. To move as quickly as we need to, government policy should harness its resources just like government decisions direct our transportation infrastructure, influence product safety and support university research programs.

Market Forces

Renewable energy is more consistent and not subject to the whims of the market like oil is. So now is the time to begin the transition to renewable energy and start bringing reliable, stable costs back into our energy consumption. We need to use the power of the market to begin to encourage the shift to renewable energy, and that means we should discourage the kinds of energy we want to see reduced (like gas, oil and coal), and provide incentives for the kinds of energy we want to encourage (like geothermal, wind and solar) so that we are reinvesting in encouraging this transition.

Serious people concerned

Everyone from scientists to insurance companies to economists to the military says that we need to act immediately to avoid the worst costs of global warming. Solving the problem would mean investing extra resources today—something like 1% of our GDP—in order to avoid much more expensive disasters down the road. The costs of inaction are even higher as it becomes more and more expensive to address the problem as it worsens. We can't delay and let the next generation of leaders deal with the problems of food crises, extreme weather, droughts and coastal flooding.

If recessionary concerns do not come up: Let me push back for a moment. Earlier you were all talking about how worried you are about the economy and the looming recession. Do we really have the luxury of investing in this kind of stuff now?

Let's go through some specific ideas that people have mentioned to address these economic concerns. Go through each of the following policy ideas. For each ask:
What is your overall reaction – good idea or bad idea?
How come?
What is the reason to do it? (See which of the earlier rationales they use, if any)
What is the reason against it?

Policies:

- Requiring American consumers to reduce their carbon emissions
- Provide government grants for job training and retraining for green jobs, jobs that are incorporating the newest energy technologies, such as heating and air conditioning, plumbing, lighting, architecture, engineering, and so on
- Agreeing to an international treaty that requires the United States to cut its emissions of carbon dioxide 90% by the year 2050
- Making energy sources that lead to global warming, such as gasoline, home heating oil, and coal-burning power plants cost more to discourage use
- Changing the way that Americans pay their taxes so that they would pay through a tax on carbon emissions instead of the current payroll tax

(On the revenue generating ideas – follow-up “what if the revenue was used to reinvest in encouraging and accelerating the transition, like providing incentives for energy efficient and clean energy technologies?)

Energy Context (30 minutes)

So let's switch topics and talk about energy. When you think about the topic of energy, what kinds of things first come to mind?

What's going on with energy these days?

What are you worried about?

What would you like to see happen?

Let me read you some things people have said about the energy issue and get your reaction. For each ask:

What is your overall reaction?

What kind of actions does this call for?

Messages:

Redirecting Spending

Over the next 20 years, the US will spend an estimated \$3 trillion dollars on energy and on our energy infrastructure. The smart move would be to divert more of this money to encouraging energy sources that look to the future, instead of continuing to spend it in ways that will create more problems for us down the road. Sooner or later, we are going to have to invest resources into adapting our energy to rely less on oil and coal, so we should stop subsidizing oil and use that money to promote smarter energy use.

Efficiencies that Pay Off

We can go a long way toward using our energy more wisely. By increasing efficiency standards for new building construction, or raising fuel efficiency standards for cars, we

save 1/3 in energy costs so any extra initial costs in creating more efficiencies pays off quickly.

Hidden Costs of Coal

A new coal-burning plant produces electricity a few cents cheaper than a windmill does. But if you factor in the health and environmental costs of burning coal, suddenly coal-based electricity isn't so cheap anymore. Many aging coal-fired plants are nearing the end of their lives, and rather than replace them with new coal plants as is being planned, we should replace them with clean energy. As we invest money in our energy system we need to be much smarter in thinking about the true costs of our approach to getting energy.

Let's go through some specific ideas that people have mentioned to address the energy issue. Go through each of the following policy ideas. For each ask:

What is your overall reaction – good idea or bad idea?

How come?

What is the reason to do it? (See which of the earlier rationales they use, if any)

What is the reason against it?

Policies:

- Providing federal subsidies to expand clean energy infrastructure by, for example, supporting adding solar panels at no or little cost to homeowners
- Requiring American industries to reduce their carbon emissions
- Increasing taxes on gasoline so people either drive less or buy cars that use less gas
- Creating a cap and trade approach, which sets an overall cap on CO2 emissions and companies then buy and sell credits for the emissions they produce
- Requiring that any newly constructed home, residential, or commercial building meet higher energy efficiency standards even if it increased construction costs by 10%.

(On the revenue generating ideas – follow-up “what if the revenue was used to reinvest in encouraging and accelerating the transition, like providing incentives for energy efficient and clean energy technologies?)

Global Warming Context (30 minutes)

So let's switch topics and talk about global warming. When you think about the topic of global warming, what kinds of things first come to mind?

What's global warming about?

What are you worried about?

What would you like to see happen?

Let me read you some things people have said about the global warming issue and get your reaction. For each ask:

What is your overall reaction?

What kind of actions does this call for?

Messages:

Let me read a brief explanation of global warming, for those who are less familiar: Scientists agree on two things about global warming: First, humans are putting far too much carbon dioxide into the atmosphere every time we burn fossil fuels like gas and coal, and second, that all this carbon dioxide is accumulating into a thickening blanket of gas in the atmosphere that is trapping in heat and warming up the planet.

Investing Now Is Cheaper

One way or another, we are going to have to spend some money dealing with global warming. But the sooner we act the lower the costs will be. Experts say that we can either invest 1% of our economic activity / GDP now in reducing the problem or we can expect to lose somewhere between 5 and 20 times that in the coming years. Smart investments now can drastically lower the money we spend later on coping with climate disasters like extreme storms, deadly heat-waves, droughts, crop failures and rising sea levels.

Which is smarter?

Which is smarter—sending hundreds of billions of dollars overseas to buy oil, and then burning it in ways that intensify global warming, (creating billions, if not trillions of dollars in damage to our country’s cities, farmlands and coastal areas)? Or investing some of that money into expanding alternate forms of energy and conservation technology that we can build here at home—and that will help stop global warming rather than making it worse?

Let’s go through some specific ideas that people have mentioned to address global warming. Go through each of the following policy ideas. For each ask:
What is your overall reaction – good idea or bad idea?
How come?
What is the reason to do it? (See which of the earlier rationales they use, if any)
What is the reason against it?

Policies:

- Requiring electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources
- Set a clear, enforceable limit on emissions
- Auctioning off permits to emit carbon into the atmosphere like we auction off licenses to use the airwaves for radio and television broadcasting
- Increasing taxes on electricity so people use less of it
- Abolishing the payroll tax for all Americans and replacing it with a tax on carbon emissions
- Require manufacturers, like television manufacturers, to incorporate new energy-saving features

(On the revenue generating ideas – follow-up “what if the revenue was used to reinvest in encouraging and accelerating the transition, like providing incentives for energy efficient and clean energy technologies?)

Wrap Up (5 minutes)

Honestly, how important is this issue to you really? Why?

What do you think needs to be done?

Of all the things we talked about tonight, what do you most remember? What stands out?

Focus Group Guide (Wisconsin) GG – Costs

Introduction (15 minutes)

Standard intro – audio taping, talk one at a time, not vested, etc.

Let's go around and introduce ourselves: say your name, a bit about yourself, what you like to do for fun.

Policies without Context (15 minutes)

We have several really interesting topics for tonight. First, we're going to review some ideas that people have mentioned and talk about how you feel about those ideas.

Go through each of the following policy ideas. For each ask:

What is your overall reaction – good idea or bad idea?

How come?

What is the reason to do it? What problem does it solve?

What is the reason against it?

Policies:

- Requiring automakers to increase the fuel efficiency of cars, trucks, and SUVs to 35 miles per gallon, even if it meant a new car would cost up to \$500 more to buy
- Funding a massive federal research and development effort to develop new energy technologies
- Establishing a carbon tax on electricity, gasoline, and other products
- Making businesses and industries that emit carbon into the atmosphere pay for a permit to pollute

Energy Context (30 minutes)

So let's switch topics and talk about energy. When you think about the topic of energy, what kinds of things first come to mind?

What's going on with energy these days?

What are you worried about?

What would you like to see happen?

Let me read you some things people have said about the energy issue and get your reaction. For each ask:

What is your overall reaction?

What kind of actions does this call for?

Messages:

Redirecting Spending

Over the next 20 years, the US will spend an estimated \$3 trillion dollars on energy and on our energy infrastructure. The smart move would be to divert more of this money to encouraging energy sources that look to the future, instead of continuing to spend it in ways that will create more problems for us down the road. Sooner or later, we are going

to have to invest resources into adapting our energy to rely less on oil and coal.

Efficiencies that Pay Off

We can go a long way toward using our energy more wisely. By increasing efficiency standards for new building construction, or raising fuel efficiency standards for cars, we save 1/3 in energy costs so any extra initial costs in creating more efficiencies pays off quickly.

Hidden Costs of Coal

A new coal-burning plant produces electricity a few cents cheaper than a windmill does. But if you factor in the health and environmental costs of burning coal, suddenly coal-based electricity isn't so cheap anymore. Many aging coal-fired plants are nearing the end of their lives, and rather than replace them with new coal plants as is being planned, we should replace them with clean energy. As we invest money in our energy system we need to be much smarter in thinking about the true costs of our approach to getting energy.

Let's go through some specific ideas that people have mentioned to address the energy issue. Go through each of the following policy ideas. For each ask:
What is your overall reaction – good idea or bad idea?
How come?
What is the reason to do it? (See which of the earlier rationales they use, if any)
What is the reason against it?

Policies:

- Providing federal subsidies to clean energy producers
- Requiring American industries to reduce their carbon emissions
- Increasing taxes on gasoline so people either drive less or buy cars that use less gas
- Creating a cap and trade approach, which sets an overall cap on CO2 emissions and companies then buy and sell credits for the emissions they produce
- Requiring that any newly constructed home, residential, or commercial building meet higher energy efficiency standards even if it increased construction costs by 10%.

(On the revenue generating ideas – follow-up “what if the revenue was used to reinvest in encouraging and accelerating the transition, like providing incentives for energy efficient and clean energy technologies?)

Global Warming Context (30 minutes)

So let's switch topics and talk about global warming. When you think about the topic of global warming, what kinds of things first come to mind?
What's global warming about?
What are you worried about?
What would you like to see happen?

Let me read you some things people have said about the global warming issue and get your reaction. For each ask:

What is your overall reaction?

What kind of actions does this call for?

Messages:

Let me read a brief explanation of global warming, for those who are less familiar: Scientists agree on two things about global warming: First, humans are putting far too much carbon dioxide into the atmosphere every time we burn fossil fuels like gas and coal, and second, that all this carbon dioxide is accumulating into a thickening blanket of gas in the atmosphere that is trapping in heat and warming up the planet.

Investing Now Is Cheaper

One way or another, we are going to have to spend some money dealing with global warming. But the sooner we act the lower the costs will be. Experts say that we can either invest 1% of our economic activity / GDP now in reducing the problem or we can expect to lose somewhere between 5 and 20 times that in the coming years. Smart investments now can drastically lower the money we spend later on coping with climate disasters like extreme storms, deadly heat-waves, droughts, crop failures and rising sea levels.

More Expensive Than What?

When people argue that addressing global warming is expensive, we should ask, “Compared to What?” Developing a new energy approach would cost less than fighting the war in Iraq, less than our space program, and much less than dealing with the effects of global warming down the road.

Which is smarter?

Which is smarter—sending hundreds of billions of dollars overseas to buy oil, and then burning it in ways that intensify global warming, (creating billions, if not trillions of dollars in damage to our country’s cities, farmlands and coastal areas)? Or investing some of that money into alternate forms of energy and conservation technology that we can build here at home—and that will help stop global warming rather than making it worse?

Let’s go through some specific ideas that people have mentioned to address global warming. Go through each of the following policy ideas. For each ask:

What is your overall reaction – good idea or bad idea?

How come?

What is the reason to do it? (See which of the earlier rationales they use, if any)

What is the reason against it?

Policies:

- Requiring electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources
- Auctioning off permits to emit carbon into the atmosphere like we auction off licenses to use the airwaves for radio and television broadcasting
- Increasing taxes on electricity so people use less of it
- Abolishing the payroll tax for all Americans and replacing it with a tax on carbon emissions

(On the revenue generating ideas – follow-up “what if the revenue was used to

reinvest in encouraging and accelerating the transition, like providing incentives for energy efficient and clean energy technologies?)

Economic Context (30 minutes)

So let's switch topics and talk about the economy. When you think about the economy, what kinds of things first come to mind?

What's going on with the economy these days?

What are you worried about?

What would you like to see happen?

Let me read you some things people have said about the economy and get your reaction. For each ask:

What is your overall reaction?

What kind of actions does this call for?

Messages:

Taking the Lead

If we act soon, America is in a unique position to lead the worldwide transition to what scientists call the "Post-Fossil Fuel Era." As the future price tag of global warming rises into the tens of trillions of dollars, it has become clear that we are going to need a new toolkit for our energy needs and many new technologies. The US has been dragging its feet, but if we invest money and time now we can still take the lead in creating, building and marketing new alternative energies and conservation technologies, creating jobs and leading the global economy.

Market Forces

Renewable energy is more consistent and not subject to the whims of the market like oil is. So now is the time to begin the transition to renewable energy and start bringing reliable, stable costs back into our energy consumption. We need to use the power of the market to begin to encourage the shift to renewable energy, and that means we should tax the kinds of energy we want to see reduced (like gas, oil and coal), and provide incentives for the kinds of energy we want to encourage (like geothermal, wind and solar) so that we are reinvesting in encouraging this transition.

Serious people concerned

Everyone from scientists to insurance companies to economists to the military says that we need to act immediately to avoid the worst costs of global warming. Solving the problem would mean investing extra resources today—something like 1% of our GDP—in order to avoid much more expensive disasters down the road. The costs of inaction are even higher as it becomes more and more expensive to address the problem as it worsens. We can't delay and let the next generation of leaders deal with the problems of food crises, extreme weather, droughts and coastal flooding.

If recessionary concerns do not come up: Let me push back for a moment. Earlier you were all talking about how worried you are about the economy and the looming recession. Do we really have the luxury of investing in this kind of stuff now?

Let's go through some specific ideas that people have mentioned to address global warming. Go through each of the following policy ideas. For each ask:

What is your overall reaction – good idea or bad idea?

How come?

What is the reason to do it? (See which of the earlier rationales they use, if any)

What is the reason against it?

Policies:

- Requiring American consumers to reduce their carbon emissions
- Agreeing to an international treaty that requires the United States to cut its emissions of carbon dioxide 90% by the year 2050
- Making energy sources that lead to global warming, such as gasoline, home heating oil, and coal-burning power plants cost more to discourage use
- Changing the way that Americans pay their taxes so that they would pay through a tax on carbon emissions instead of the current payroll tax

(On the revenue generating ideas – follow-up “what if the revenue was used to reinvest in encouraging and accelerating the transition, like providing incentives for energy efficient and clean energy technologies?)

Wrap Up (5 minutes)

Honestly, how important is this issue to you really? Why?

What do you think needs to be done?

Of all the things we talked about tonight, what do you most remember? What stands out?