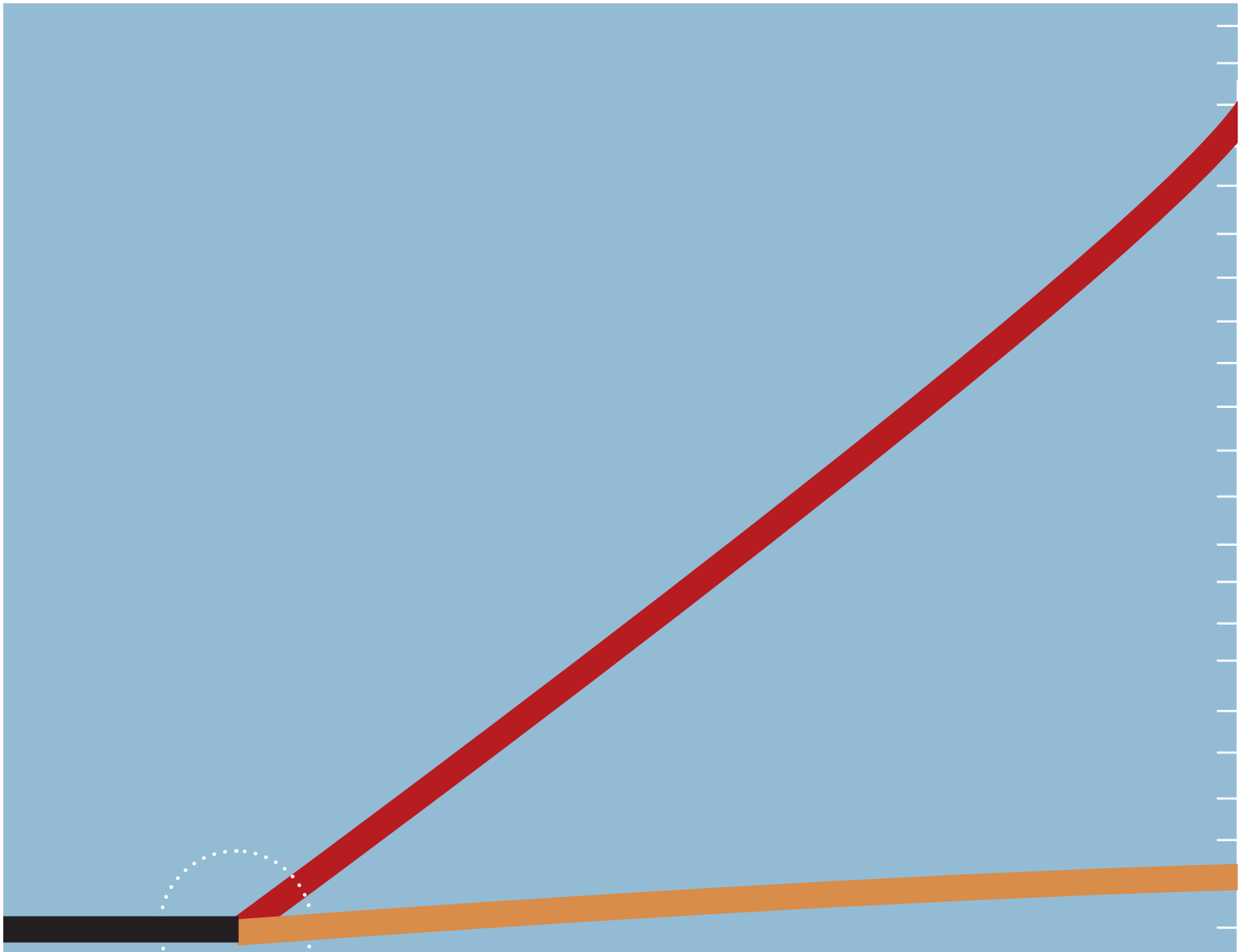


CLIMATE CROSSROADS

A Research-Based Framing Guide

For Global Warming Advocates
From Global Warming Advocates

authors **The Topos Partnership, with Cara Pike and Meredith Herr**

project leader **Cara Pike, Social Capital Project**

principal researchers **The Topos Partnership**

Climate Crossroads was produced thanks to the generous support of the Sea Change Foundation, Florian Fund, and Earthjustice.

CONTRIBUTORS

1 Sky	Gillian Caldwell
350.org	Phil Aroneanu Bill McKibben
American Rivers	Amy Kober Rebecca Wodder
Apollo Alliance	Heidi Pickman Keith Scheider
Audubon	Tony Iallonardo
California League of Conservation Voters	Warner Chabot
Climate Action Network - International	David Turnbull
Climate Leadership Initiative	Bob Doppelt
Climate Solutions	KC Golden Andy Grow
Defenders of Wildlife	Cat Lazaroff
Earthjustice	Meredith Herr Buck Parker Cara Pike
Environment America	Jennifer Mueller
Environmental Defense Fund	Joy Blackwood Keith Gaby
Greenpeace	Karen Schneider
Natural Resources Defense Council	Julia Bovey Francesca Koe
Ocean Conservancy	Dennis Heinemann
Oxfam America	Laura Rusu
Pew Environment Group	Phyllis Cuttino
Resource Media	Hunter Cutting
Sierra Club	Kim Haddow
The Partnership Project	Michael Town
The Regeneration Project	Rev. Canon Sally Bingham
The Wilderness Society	Kathy Westra
Trust for Public Land	Tim Ahern Jay Dean
Union of Concerned Scientists	Aaron Huertas Lisa Nurnberger Suzanne Shaw
US Climate Action Network	Jennifer Kurz
US in the World	Priscilla Lewis Sue Veres Royal

About the Social Capital Project

The Social Capital Project is an initiative aimed at building the base of public support for environmental protection. Started by Earthjustice in 2005, Social Capital Project staff have developed an understanding of the dominant social values that shape the public's understanding of and engagement in environmental issues through the creation of the Ecological Roadmap, a national segmentation study of the American public that organizes people according to their social values and environmental worldviews. Earthjustice has applied that understanding in strategic planning, and in the development of new framing approaches and communications campaigns.

About the Partnership Project

The Partnership Project is a coalition of 20 organizations, including the largest national environmental advocacy groups in the country. By uniting their members and contributors on coordinated campaigns, the participating groups are creating a sum of citizen participation and advocacy greater than they could generate acting apart. The Partnership Project helps the environmental community work more collaboratively to strengthen and defend environmental safeguards from efforts to weaken them.

About the Topos Partnership

Founded by veteran communications strategists Axel Aubrun, Ph.D. and Joe Grady, Ph.D. of Cultural Logic and Meg Bostrom of Public Knowledge, Topos has as its mission to explore and ultimately change the landscape of public understanding where public interest issues play out. Our approach is based on the premise that while it is possible to achieve short-term victories on issues through a variety of strategies, real change depends on a fundamental shift in public understanding. Topos was created to bring together the range of expertise needed to understand existing issue dynamics, explore possibilities for creating new issue understanding, develop a proven course of action, and arm advocates with new communications tools to win support.

CONTENTS

PREFACE

For close to four decades, climate advocates have worked to build broad public and policymaker awareness of the issue of global warming and the steps needed to address it. While advocates have made enormous strides over the years, they have also continued to struggle to mobilize Americans on behalf of the issue. Even people who are members of environmental organizations, or who pay attention to environmental issues, do not necessarily prioritize global warming or feel engaged on this topic.

The main objective for this Framing Guide is to provide the communications insights to engage and activate environmental supporters and allies. Advocates cannot realistically build further on this issue until solidifying the foundation—those supporters closest to environmental and climate organizations and issues. The challenges in connecting global warming issues even to this dedicated base reveals a number of communications hurdles global warming advocates need to overcome before the issue will have much salience with the majority of Americans. While the Framing Guide was designed with sympathetic audiences in mind, it will also provide relevant and helpful direction for communications with all audiences.

The authors have developed the recommendations with a long-term vision. While the economic and political context in 2009 presents opportunities to advance a number of climate-friendly energy policies, particularly with allies in national leadership, advocates need to recognize that passing policies on the back of economic or energy worries may not serve the issue well in the long run. When the economy improves or when the price of gas drops, will advocates have positioned the public to address global warming in a serious way? This guide seeks to put global warming back into the conversation, so that advocates can use the short-term opportunities to build lasting support.

This guide is informed by several sources, including the experiences of the environmental and climate communities, the thinking of strategic advisors, and a body of research conducted in recent years, as well as new research conducted specifically for this project. The effort began in Summer 2008 with three meetings among national environmental and global warming organizations. Over the course of 2008, the authors completed a review of existing public opinion research, conducted original research, and worked with US in the World to develop an initial message framework. In early 2009, the authors continued to review research sponsored by the community, and also conducted original research among environmental group supporters and sympathizers to better understand the kinds of communications that will inspire and motivate action. Throughout this process, a committee of key advisors provided critical direction and insight. In total, more than 25 environmental, climate, and social change organizations contributed to this guide.

We view this document as part of an active, ongoing process that will adapt and grow as the context changes and as more evidence accumulates to provide new insights. In that spirit, we welcome any and all advice and evidence to further advocates' practices and collective thinking.

INTRODUCTION

The important thing in science is not so much
to obtain new facts as to
discover new ways of thinking about them.

SIR WILLIAM BRAGG, PHYSICIST (1862 – 1942)

For most of the past several decades, public discourse concerning global warming has been driven by the state of scientific knowledge. As early as the 1800s, scientists recognized that gases in the atmosphere trap heat, and by the turn of the century some were suggesting that man-made CO2 entering the atmosphere would result in global temperature rise. However, it wasn't until the late 1950s that scientists began to warn of a climate problem and not until the 1970s when the public began to learn of the impending crisis. Scientific consensus began to emerge clearly in the 1980s.

For most of the 70's, 80's, and 90's, the overarching global warming narrative was shaped by the state of scientific certainty (and uncertainty) about global warming and its possible impacts. The cycle of news stories dominated by scientists arguing the reality of global warming, warning of the possible pending environmental disasters, and hedging over the likely timeline for the emergence of climate consequences, made headway on policy change difficult.

In recent years, the "scientific proof" narrative has become less relevant as most journalists now recognize the debate has been settled, offering an opportunity to fill the void with a new way of thinking about this scientific fact. But a new, overarching narrative has yet to emerge. A review of communications by global warming advocates finds a number of approaches and guiding assumptions. Some organizations emphasize disastrous environmental impacts in the hopes that fear will lead to action, while others emphasize solutions in the belief that a vision of the possible will motivate the public. Some work to change individual behavior while others work toward systemic change.

Global warming advocates recognize that there is an enormous opportunity to advance the issue through unified language and common ideas. Currently several frames compete for public and policy-

A Frame is a "central organizing idea…for making sense of relevant events, suggesting what is at issue." (Gamson/Modigliani)

maker attention, each with consequences for how people define the problem and solution. As demonstrated in the 2008 presidential election, people (included elected leaders) can easily toggle between conflicting frames, such as an Energy Cost Frame that leads to a "drill, baby drill" mentality, and an Environmental Frame that creates worry about the effects of global warming on nature and our surroundings.

This effort was founded to develop the overarching narrative, or Common Message Platform, that all global warming advocates can embrace. A Common Message Platform is deeper and more extensive than short-term talking points. It identifies the shared ideas, values and explanations that provide the foundation for a national conversation over the long term. These shared concepts underlie specific, shared message elements that naturally support and enhance each other, since they all operate off the same ideas and values. A Common Message Platform allows advocates to create an echo chamber through communications so that engaged Americans hear the same themes echoed from a variety of directions and voices until they become obvious and comfortable ways of thinking about the issue.

The cornerstone of a Common Message Platform is a Common Objective. While different organizations may have different legislative priorities, for example, ultimately, all organizations working to address

global warming have the same objective(s): Reduce heat-trapping gases in the atmosphere on the scale that is needed to avoid dangerous global warming, and begin efforts to adapt for the unavoidable impacts already underway (impacts on communities, ecosystems and wildlife). The foundational ideas that support the Common Message Platform need to lead to public support for this objective(s), or advocates' efforts are likely to fail over the long term even if short term policy efforts succeed. Short term, step-by-step policy change can be undone, but it is far more difficult to undo support for a goal that citizens and leaders have embraced.

Most important, the Common Message Platform has to adapt to changing circumstances. Different opportunities and challenges will arise over time. Rather than treat each in isolation, the Common Message Platform provides a unifying foundation with "bridges" to targeted issues. As a result, advocates working to defeat new coal plants and those working to pass particular legislation will not be having unrelated conversations. Instead, they will each draw on common ideas, shaped to address their particular needs. In this way, each effort contributes to the echo chamber and builds solid, lasting public understanding and support over time.

The following document is a first step towards a unified conversation on global warming. It is a summary of what is known to date about the most effective communications approaches, developed by drawing on more than 25 advocacy organizations' experiences in the field, the body of research they built over the years, and new research conducted specifically for this project. This document identifies the ideas and values that will lead to public support for global warming advocates' shared objectives over the long term, and suggests ways to bridge from specific policy concerns to the broader, shared narrative. It provides vetted text both to provide a common language and to inspire new words and phrases that illustrate shared themes. It is the authors' intention that this document will inform, shape, and enhance the conversation with citizens and leaders and spark new thinking among advocates about how to best advance the shared goal of addressing global warming.

METHODS

In addition to research produced by more than 25 environmental, climate, and social change organizations, the Framing Guide is based on original research conducted solely for this project, including:

- A review of existing public opinion research (including publicly available sources as well as sources confidential to particular organizations)
- An exploration of how to address the costs of global warming, based on:
  - Four focus groups (in Milwaukee, WI and Raleigh, NC, April 2008) and
  - Talkback tests with 150 research subjects nationwide in April and May of 2008.
- And a significant body of original research to inform this guide, including:
  - Eight focus groups (in Tampa, FL, Philadelphia, PA, Chicago, IL and Phoenix, AZ, January 2009) and
  - Talkback tests with more than 600 subjects from November 2008 through February 2009.

While the original research conducted in November 2008—February 2009 included a range of subjects, a particular emphasis was given to environmental group supporters (who prioritize the environment and global warming, and already belong and contribute to environmental organizations) and environmental sympathizers (who care about the environment, but give the issue less priority and are not active on the issue). Throughout this report, environmental group supporters and sympathizers are quoted from the focus groups and Talkback testing.

EXECUTIVE SUMMARY OF COMMON MESSAGE PLATFORM

The purpose of the Common Message Platform is to provide organizations with a shared set of key points and perspectives that will lead to both more effective communications on their own particular issues, and a more engaged and constructive national conversation on the topic with sympathetic groups.

The set of related recommended points add up to a lens that constructively frames global warming as a practical concern that touches everyone, and that we must act on now. They also help communicators avoid the many "traps" that can easily derail constructive thinking and discussion. Together these points present the best chance for a perspective shift that promotes greater engagement and action.

1 COMMUNICATORS SHOULD USE THE CURRENT ECONOMIC AND ENERGY CONTEXT TO DEVELOP LASTING SUPPORT FOR ADDRESSING GLOBAL WARMING.

In the current context, environmental group supporters and sympathizers are motivated by the idea that addressing global warming will create *economic opportunity*. The power of the economic frame goes beyond jobs or wealth; it taps into deep-seated feelings about America's role in the world, our ability to provide a better and more secure future for our children, and the promise of regaining leadership.

In the short term, these interventions might be effectively promoted without any mention of global warming, but that *approach misses an important opportunity to use the current context to build a lasting foundation of support*. We cannot afford to promote policies based on economic concerns alone—for the simple reason that the short term economic argument and the long-term environmental case will not always coincide. For the long term, we need people to have a rationale for addressing global warming, even when the economic situation becomes a less urgent priority, or can be addressed by something other than a "green" economy. Therefore, even though economic and energy concerns alone may be compelling enough in the current context, communicators should bridge to global warming to lay a foundation for the future.

APPLYING THE LEARNING: CONNECTING CLIMATE AND ECONOMY

Shifting away from the fossil fuels that cause global warming will create good new jobs for millions of Americans: Subsidies for solar and wind energy installations will create more jobs in that industry. The U.S. can either lead and take advantage of this shift, or miss the boat as other countries act more swiftly.

2 COMMUNICATORS SHOULD EMPHASIZE THE ROLE OF *"TOO MUCH CARBON"* IN CREATING THE PROBLEM, AND SHOULD FRAME SOLUTIONS IN TERMS OF HOW WE HANDLE/MANAGE CARBON.

The idea that "we are putting too much carbon into the air/atmosphere" is a simple and intuitive causal idea that is well suited to becoming conventional wisdom about global warming. This idea focuses thinking in a number of productive ways that build support for the right solutions:

- Begins the conversation with a non-controversial yet compelling fact. The rise in carbon emissions is undisputed, and is clearly problematic. Even global warming deniers are largely compelled to accept the more basic fact of "too much carbon."
- Sharply focuses the conversation on relevant policy choices: How are we dealing with our carbon problem?
- Clarifies the (currently unclear) role of carbon-based energy in leading to "too much carbon" and, as a consequence, global warming.
- Encourages "big picture" thinking: Where does it come from? How much is being produced? What does it do (e.g., acidifies the oceans; blankets the earth)? How can we keep it out of the atmosphere?
- Can be captured by simple language which has the potential to infuse the existing discourse in a viral way.

APPLYING THE LEARNING: CONVEYING THE ROLE OF "CARBON"

Simply put, we're putting too much carbon into the atmosphere, by burning fossil fuels like coal for energy. The good news is that we can deal with our "carbon problem" with solutions that exist today.

Note that *mentioning* carbon is not enough to change thinking – it is the whole idea that **we are putting too much carbon into the atmosphere** that can play a key role in moving thinking forward when expressed well. And, as in the example, it is even more helpful to explain *how* we are introducing all this carbon—e.g. "by burning fossil fuels like coal for energy."

3 COMMUNICATORS SHOULD EXPAND THE RELEVANCE OF THE ISSUE BEYOND AN ENVIRONMENTAL (PLANTS AND ANIMALS) CONCERN BY EMPHASIZING A BROADER AND MORE CONCRETE PICTURE OF WHAT IT MEANS FOR THE CLIMATE TO CHANGE.

People often think of global warming as affecting plants and animals, or as leading to slight warming around the earth. Of course, the problem is not just about *temperature* change, but about significant, rapid changes that are happening now in overall weather patterns—including droughts, floods, and deadly storms. People need to be reminded that global warming directly affects humans, since everything about our lives is ultimately tied to climate: food production, water supplies, health, and so forth.

APPLYING THE LEARNING: CLARIFYING THE IDEA THAT CLIMATE IS CHANGING

Global warming isn't just about temperature – it is about the many weather patterns that make up our climate, including temperature, wind, rainfall and storm patterns.

Weather patterns affect just about everything in our lives – the ability to grow the food we eat, the kinds of infectious diseases and pests that can thrive in our region and affect our health, the amount of water we have for drinking and maintaining our property, and our experiences in keeping our homes and families safe from extreme weather, etc.

4 COMMUNICATORS SHOULD EMPHASIZE THAT WE ARE AT A CROSSROADS, A MOMENT OF CHOICE.

As opposed to simply stating that it is important to act, as we have for some years, communicators should put people in the position of **making a deliberate choice between action and inaction.** This approach answers the implicit question "why now?"—and frames further delay as an active decision not to address the issue.

In the current context it is compelling to cite President Obama and other leaders as believing this is a critical moment.

APPLYING THE LEARNING: CONVEYING THE "MOMENT OF CHOICE" IDEA

As President Obama and other leaders have said, the time for arguing and delaying is past. We are now at a crossroads, with a choice between responsibly addressing the problem now, or dealing with severe consequences later.

5 COMMUNICATORS SHOULD BALANCE DISCUSSIONS OF PROBLEMS AND IMPACTS WITH A VIVID PICTURE OF THE ACTIONS WE CAN AND WILL TAKE.

Supporters want to know that there are meaningful steps available, are engaged by explanations of how they work, and expect the steps to match the scale of the problem.

While it is helpful to remind people what they can do as individuals, it is also effective to highlight the role of government in "jump starting" big changes—through both regulation (setting standards) and investing in technological development.

APPLYING THE LEARNING: CONVEYING THE NEED FOR BIG AND LITTLE CHANGES

We can only address global warming by addressing it together. Driving less helps, but what we really need is high fuel efficiency standards. Turning off the lights helps, but what we really need is more carbon-free energy like solar and wind power.

6 COMMUNICATORS CAN FOSTER A NEW RELATIONSHIP TO THE PROBLEM BY CONNECTING THE ISSUE WITH SUPPORTERS' IDENTITIES.

We can go a long way towards eliminating the sense of "distance" from the problem by bringing a global warming lens to people's lives and work, connecting global warming to a sense of who they are and what they do, and creating a new relationship with global warming by *showing* supporters how global warming is connected to their current actions, priorities and beliefs. In this way, action on global warming becomes a natural extension of supporters' current interests.

APPLYING THE LEARNING: CONNECTING WITH SUPPORTERS' IDENTITIES

If you are a member of a garden or cooking club, ask others to join a CSA with you and support local farmers, cutting down on transportation fuels for food shipped long distances.

If you work at a place of business, suggest opportunities to save energy or ask your employer to create an energy-saving task force to investigate options.

GENERAL BEST PRACTICES

In this section of the Framing Guide we briefly discuss a set of "best practices" for framing—principles that hold true on any issue, but that certainly apply to communications about global warming. These general guidelines for effective messaging emerge from both research and real-world experience in a wide variety of issue areas – including global warming advocates' own experience in communicating on global warming and related issues.

As they go about their work, it will be helpful for communicators to keep this short list of principles in mind.

1 SETTING THE TERMS OF THE DEBATE – ALWAYS BE DELIBERATE ABOUT THE ORGANIZING FRAMES THAT ARE SHAPING YOUR COMMUNICATIONS AND AVOID REPEATING THE OPPOSITION'S MESSAGE.

On every topic, whether it is global warming, nuclear weapons, health disparities, or any other, the choice of what *organizing ideas* are chosen can be critical to changing minds and engaging support. For example, when advocates communicate about the health disparities between different socioeconomic or racial groups, are they focusing on *the role of diet and exercise*, on different levels of *access to health care*, on *parental responsibility*, *broader socio-economic inequities*, or something else? There would naturally be stark differences between these conversations, with different implications for policy outcomes. For example, a conversation focused on the role of diet and exercise places responsibility for health disparities solely on individuals and their choices, with no apparent role for public policy. In contrast, a conversation *about* access to health care shifts responsibility away from the individual and toward public responsibility.

In many contexts, from speeches to fact sheets to editorials, global warming advocates are in a position to determine what the conversation is *about*—endangered polar bears, American jobs, clean coal or something else? The choice can trigger the difference between making a compelling case and being quickly dismissed, misunderstood, or even eliciting a backlash against your position.

Even in cases where communicators are responding to other voices or situations—whether answering interview questions or weighing in on a public debate—the importance of establishing the right organizing idea is just as critical, and there are still important choices to be made. Should advocates enter into a debate about *how quickly offshore drilling can get gas to the pump*? Only if they feel this is a constructive organizing idea for promoting the changes they'd like to see. Otherwise, their challenge is to successfully "bridge" the conversation to favorable ground, rather than allowing the conversation to occur on opposition terrain. Importantly, do not feel the need to repeat (and therefore give more exposure to) the opposition message; simply shift to the organizing idea you want to promote.

2 FOCUSING ON "WINNING THE SERIES," NOT EACH "PLAY" – ASK WHETHER A SPECIFIC COMMUNICATION ON ANY GIVEN TOPIC REALLY SUPPORTS THE ULTIMATE GOALS RELATED TO GLOBAL WARMING.

Global warming advocates are engaged in a prolonged and complex effort that is ultimately about the single, shared goal of significantly cutting carbon emissions (as well as responsibly addressing the consequences of the warming that is already inevitable). Along the way, any number of eventualities will arise that have the potential to shape the public conversation—from new scientific findings to economic developments to legislative proposals, not to mention speeches, ads and other deliberate interventions in the national (and global) dialog.

Communicators should think carefully about whether the arguments they make on particular topics such as "Cap and Trade," "oil dependence," gas prices or green jobs are really promoting ultimate goals such as reducing fossil fuel use and emissions.

For instance:

- Statements that drilling can't produce results fast enough might be taken to mean we need to find faster ways to get at our oil supplies.
- Arguments about the need to reduce America's "oil dependence" might be narrowly construed in terms of dependence on foreign sources—therefore encouraging domestic production of oil and coal.

Even when global warming advocates are inevitably drawn into tough debates on issues such as drilling or fuel-efficiency standards, they need to find ways of addressing the issues that are strongly tied to core messages, and resist messages with the potential to backfire.

For instance, arguments against drilling might be framed in terms of "taking the wrong road" (in the "Crossroads" frame), or missing a critical chance to start developing new industries, and so forth.

And communicators need to be just as thoughtful in situations where we have the advantage on a given issue. For instance, in the current political context, with a friendly President and Congress and genuine public desire for bold action on energy and the economy, the environmental community is poised for significant policy achievements. The challenge is to use this opportunity *to prepare the public for future action on global warming*. The economy and energy are currently central pathways into the policy conversation we want to have. Advocates should use this opportunity to educate the public about global warming so that when an unfriendly administration takes over or when choices become even tougher, the public is poised to continue its support for policies to address global warming.

As much as possible, communicators need to treat each engagement on a specific part of the agenda as an opportunity to make progress in public support for the main objective.

Similarly, communicators should carefully choose which topics to advance the discourse. While it makes sense on one level to use opportunities in the day's headlines to educate about global warming, there are several ways in which the pursuit of news hooks and teachable moments can go wrong, and work against larger objectives. Some of these traps are well known—making connections that come across as callous political hay-making, or as unconvincing "stretches" to make a point, for example.

Climate advocates point to hurricane coverage as one example of a news hook that can easily go wrong. For instance:

- The immediate aftermath of a specific hurricane event is typically a very difficult news hook for advancing public understanding since attention is focused on human pain and loss. Trying to shift attention to the global warming policy debate can come across as insensitive.
- The release of an analysis about the increasing frequency or intensity of hurricanes overall (and not linked to a specific event), is typically a better news hook that offers an opportunity for more thoughtful discourse.

News hooks and teachable moments are only useful if they truly help the public connect to the broader issue. Otherwise, they are a waste of valuable time and resources, and a distraction from reaching the main objective.

3 TEACHING AND PERSUADING – DON'T FORGET THE IMPORTANCE OF CLEARING UP MISCONCEPTIONS, FILLING IN BASIC KNOWLEDGE GAPS.

Whether your audience is legislative staff, the general public, or your own supporter base, they are likely to be (surprisingly) unclear even on some of the most fundamental global warming concepts. For instance, the recent Topos research confirms that environmental supporters—including educated and committed activists—are often unaware that global warming has to do with heat being trapped. Instead they often believe it is caused by the "ozone hole." These sympathetic and educated Americans also tend not to recognize that *carbon (dioxide)* plays a significant role, that our *energy* choices are a key part of the story (as opposed to our treatment of the environment more generally), that human intervention can change the climate, or that global warming can cause *general changes in the climate* (such as changes in rain and wind patterns), as opposed to just temperature increases.

One of the most overlooked aspects of engaging attention and support is helping people grasp certain key ideas such as these. When people hold at least a simple understanding of the basics:

- They are clearer about what solutions might look like, and what they don't look like. Understanding solutions and understanding the problem are sometimes the same thing.
- They are less susceptible to deceptive messages and spin.
- They may feel more empowered to engage on the issue.

- They are better prepared for the long-term national conversation on the issue (as opposed to some immediate choice or concern).

While communicators often feel—and have been told—that ratcheting up the *emotional* content of a communication is the way to make it more effective, research and experience have shown that emotional connections are critically important, but alone are not enough. In fact, clearing up people's misconceptions, or filling in basic gaps in their understanding, can sometimes be even more effective in motivating the right action than the (familiar) moral appeals about why we *should* save the planet.

Importantly, the core ideas can usually be integrated naturally into communications that focus on other points, such as the urgent need for action, the solutions that are available, the choices we face, and so forth.

4 FOREFRONTING "SOLUTIONS" – USE DISCUSSIONS OF ACTION STEPS TO ENGAGE AND INFORM.

Americans like to hear about concrete steps that can lead to positive outcomes. The existence of a practical and effective way forward makes any problem more rewarding to think about—less daunting, less hopeless, and much more satisfying. Discussing solutions early in a communication can go a long way towards attracting and keeping the audience's attention.

But the advantages of talking prominently and concretely about solutions are not just on the emotional level. When people are told how particular steps will make things better, it can also help their *reasoning* about the issue. Discussions of alternative ways of producing electricity, for instance, can highlight the (underappreciated) fact that power plants produce a tremendous amount of carbon emissions. Discussions of solutions are not only motivating in themselves, they can help make audiences smarter about the core ideas.

Finally, solutions discussions (when done well) can often get attention by focusing on *new* ideas that audiences haven't already heard many times before.

5 THE VALUE OF NOVELTY – WHEN POSSIBLE, OFFER A NEW INSIGHT.

Communicators should not underestimate the power of a message that suggests a new perspective—one that audiences don't feel like they are already familiar with before they hear it. Busy people who are flooded with information on a daily basis are quite selective about where they devote their time and attention, and newness is one important way of attracting this precious attention. Many messages related to global warming—whether moral appeals or "new" information about a species in peril—can risk sounding like old news. Communicators will do themselves a favor by offering new insights into how the problem works, why it matters, what the solutions are, who the "players" are, and so forth.

For instance, a number of research subjects were struck by the (relatively novel) information that most American electricity is generated by burning coal.

6 MAKING COMMON SENSE – TRANSLATE UNFAMILIAR IDEAS INTO TERMS THAT ARE "EASY TO THINK."

Many of the ideas that shape experts' thinking about global warming are relatively unfamiliar, complex and abstract. Advocates are not dealing with an easy-to-understand situation ("The levees are breached!" "The house is on fire!" "The enemy is at the gate!"). Instead, they are challenged with clarifying what kind of crisis/problem this is, in common sense terms, and with making global warming *conceptually* "clear and present."

Many of the ideas global warming advocates are up against already sound like common sense—*drill for more oil, increase American coal production, produce "cleaner" coal, let the new technologies emerge as the market demands them, don't do anything to drive gas prices up, etc.* Ideas from our side must be able to compete. Even sympathetic and educated people have a strong, natural appetite for ideas and solutions that "make sense" in this straightforward way.

If communicators do not present ideas in ways that sound like common sense, the information risks being simplified *in the wrong way*—by the public itself, by the media, or by the opposition—or, may simply be ignored because it doesn't pass the common sense test.

7 CLARITY – CHECK COMMUNICATIONS FOR TERMS, REFERENCES THAT MAY NOT BE UNDERSTOOD.

It is very easy for global warming advocates to resort to terms and references that seem perfectly clear to them, but that don't end up resonating with their audience. This simple point bears mentioning here because it is such a strong trap for knowledgeable communicators in all fields.

Common examples in this area include:

Historical references

- The **Industrial Revolution** (as in "It is time for a new Industrial Revolution") sounds familiar but evokes no clear picture for most Americans.
- The **Manhattan Project** may be a great analogy on paper (for the major technical effort currently needed), but in fact doesn't clearly register with average Americans.

Technical terms

- **"Carbon sequestration"** can make sense once it's explained, but is not a familiar term/idea to most people.
- **"Cap and Trade"** is hard for people to understand—and to distinguish from a simple system of fines—even once it is explained.

Analogies

- Explaining the process of global warming in terms of the **"greenhouse effect"** does not convey the intended information to most people—presumably because trapped heat in a greenhouse is a good thing that helps plants grow, and even more basically, because many people lack a clear mental picture of how greenhouses trap heat.

References that are not understood are not just a missed opportunity; they can contribute to a kind of backlash, reinforcing the view that this is

a technical subject regular people can't really engage with. They can also quickly create a destructive distance between the communicator and the audience.

8 FIRST PRINCIPLES – BEGIN WITH CORE IDEAS AND SHARED VALUES, AND COME BACK TO THEM REPEATEDLY.

Communicators have often concluded—and strategists from Frank Luntz to George Lakoff have recognized—that it is helpful to begin by recognizing the core ideas, goals, and values that motivate both them and their audience, and to come back to those ideas throughout the conversation. While this is a familiar idea, we review it here because it is a simple communications principle that can make the difference between quickly engaging and quickly losing an audience.

A number of "first principles" are relevant to global warming communicators, and will be helpful for orienting a conversation.

Different statements of this kind may be helpful to particular audiences or in a particular context, but all are illustrations of the kind of statement that can help establish **the goals, values and priorities that we share with our audiences,** and with most Americans.

Importantly, communications is most effective when it integrates the meaning of particular values throughout the conversation, and does not simply rely upon one or two mentions of a specific word (such as "stewardship" or "progress") as a quick stand-in for broader meaning. Because global warming is a difficult topic that can seem distant from people's lives, we need to **help people see how the issue relates to core values, beliefs and identities.** This means reinforcing those values, beliefs and identities frequently and in a variety of ways throughout the conversation.

One way to accomplish this is to keep in mind the following principles that reflect a balance of creating *urgency* (an imperative on this issue) with creating a **hopeful vision**—a helpful way to engage support on any issue.

HOW TO CONVEY "FIRST PRINCIPLES"

The following are illustrations informed by qualitative testing. Communicators should come up with their own ways of calling first principles to mind depending on audience and context.

Wisdom/Survival

> **We are wise enough to recognize that we can't afford to ruin the natural "life support" systems our survival depends on.**

Can Do / Greatness/ When the going gets tough …

> **We know that America can solve hard problems and deal with mighty challenges. If we can deal with the challenges of sending an American to the moon, we can deal with the challenges of global warming. Now is the time for bold action.**

Progress

> **Throughout American history, progress has been the norm. We have never been satisfied with accepting things as they are. Green energy is the future, and now is the time for Americans to devote themselves to bringing it about.**

Vision/Leadership

> **The United States has been a global leader in technological development, in scientific discovery and in curing disease. Now we have the chance to take the lead in addressing one of the most important challenges of our time. And that leadership will start at home.**

Long term vs. short term

> **Do we want to make decisions based on what's easiest this year, or based on what's best for our country over the coming years, and as our children grow older?**

Seizing opportunity

> **We can either see the challenges we face as an opportunity to create a new and better future, or we can limp along patching together temporary fixes that leave the world in worse shape for our children.**

Stewardship

> **Americans want to leave their children and grandchildren a world that is as healthy and sound as the one they inherited.**

Responsibility/Practicality

> **It would be irresponsible and foolhardy to let serious problems get worse – to leave them for others to address later, when we are fully aware of them now and know what to do about them.**

Caveat: One core principle not mentioned in this discussion is the idea that "We should protect nature for its own sake." While this is certainly a motivating idea for those Americans who are most engaged in green issues, we also know that it can get knocked down the priority list relatively easily, even with supporters.

It is helpful to think of "nature for its own sake" as a "second principle"—one that may play a helpful secondary role with many audiences, but that should follow the more basic principles like those above.

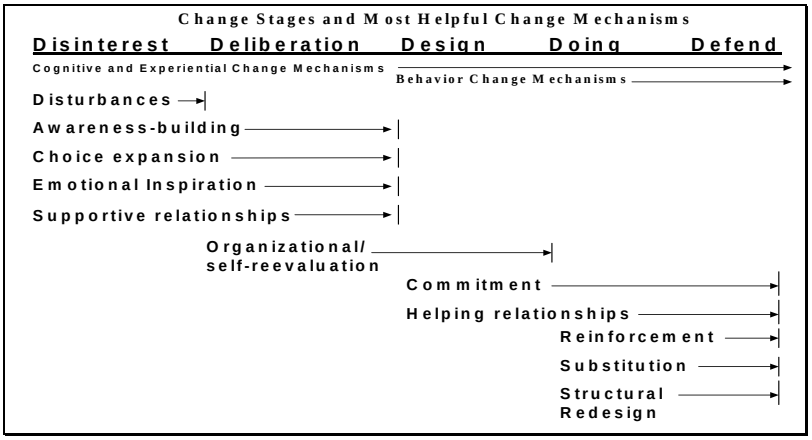
9 STAGE OF CHANGE – PAY ATTENTION TO WHERE YOUR AUDIENCE IS ON THIS ISSUE.

While the frame elements in the Common Message Platform are useful across a wide range of audiences, different audiences can be expected to respond more strongly to some elements than others. In particular, it is helpful to consider an audience's "stage of change"—i.e. where they stand in a spectrum from uninterested to firmly committed and mobilized.

Understanding how people change their thinking and behavior is a critical tool for advocates seeking to communicate effectively about climate change. In *The Power of Sustainable Thinking*, Bob Doppelt, director of The Climate Leadership Initiative, outlines a five-staged model of change that can be applied to climate advocacy.

The "5-D staged approach" is a useful diagnostic tool for understanding where people and organizations are in the process of shifting toward a more sustainable mindset.

1. **Disinterest — deny or fail to recognize the possibility of change**
2. **Deliberation — begin to gather information**
3. **Design — conclude that benefits of change outweigh costs**
4. **Doing — make overt changes that are apparent to others**
5. **Defending — ward off setbacks and opposition**



Doppelt argues that change occurs when the gap is closed between one's current state and a desired goal. This shift often occurs in response to tension. When people remain stagnant in their thinking and behavior, it may be because they do not feel any pressure to change their current state. Self-efficacy is another important factor in determining whether change will occur. An individual is more likely to attempt to change if they believe that their actions will be successful. If a person feels that a solution is necessary and possible, then they are more likely to take steps toward change. On the other hand, if a solution seems impossible or personally out of reach, then an individual will most likely not make an effort to change. Therefore, people must feel that a desired result is both critical and attainable.

People often minimize or outright deny a problem if the impact is not personally felt or if they feel doomed to either failure or the status quo. This attitude creates an important challenge when we face an immense and complex issue such as global warming. Even if people recognize the effects of global warming they will be discouraged from changing their behavior if the situation appears hopeless. Doppelt describes how people go through a series of stages when changing their thinking and behavior.

Accompanying the five stages of change are mechanisms that climate advocates can use to help people transition to the next stage (recognizing that not every individual will pass through all stages and that people often remain in one stage for significant periods of time). For the first two stages, it is important to help people see the benefits of new ways of operating. For the later stages, people need help overcoming the resistance they may face as they make different choices and exhibit new patterns of behavior.

WHAT WE'RE UP AGAINST

Though awareness and concern about global warming have made significant advances in recent years, the problem continues to be a low public priority. As on many other issues, engagement on global warming is limited by a set of default understandings that guide thinking in unproductive directions. These deeply entrenched and widely shared ("common sense") ideas are sometimes articulated explicitly, but typically operate "under the surface" of conscious awareness. Together, they have the effect of derailing productive conversations or thinking about global warming.

In this section we catalog some of the most prominent obstacles on the issue of global warming, in the hopes of marking off ideas that communicators should be particularly wary of triggering—especially since a number of them may seem at first glance like tempting rhetorical "wins."

We begin with obstacles related to **"the stakes"**—the reasons we should be concerned about global warming—then turn to obstacles related to solutions, what we should do about the problem.

STAKES

THE "TERRARIUM" PROBLEM

> **"It's important to me to take care of the earth. There is something special about life, even if it's a plant. Just seeing how wasteful people are and how irresponsible people are, so I do a lot of service projects like clean the beach up, pick up garbage along the trails.**—ENVIRONMENTAL GROUP SUPPORTER, WOMAN, CHICAGO

While people *care* about the environment, it is common for many to subconsciously view the environment as consisting of plants and animals that need protecting, not a broader system of which we are part and that is foundational to our existence. This is a challenge that affects all environmental issues and needs to be tackled in a serious way.

There is an enormous opportunity to shift opinion by putting humans back into the environment (a recommendation discussed in more length later in this guide). More generally, all environmental issues are likely to benefit by getting the Terrarium Trap scrubbed out of public discourse. While advocates can review their own communications to make sure the Terrarium problem does not inadvertently appear, eliminating it from public discourse will take a concerted effort to change the way the public, leaders, and the media approach the issue.

The global warming issue is a good place to begin to change people's relationship to the environment, because of all the issues that environmentalists address, global warming should be easiest to connect with a number of concerns (including energy, the economy, health, national security and so on) that remind people that humans are part of and reliant upon natural systems.

However, even on this issue the public, leaders and the media often place global warming in the "environmental box." It is telling that when pollsters assess the priority of the issue, they frequently word the topic as "environmental issues like global warming" or "global warming and other environmental issues." Over time, people come to see it as an "environmental issue." When asked to choose, most people think of global warming as an environmental issue, with far fewer saying they think of it as an economic, energy, or national security issue.

An obvious problem with characterizing global warming as an environmental issue is that plants and animals are a less urgent priority than the news of the day. Even if people care about the environment, it is less pressing than rising gas prices or the spiraling economy. In fact, for the first time in at least 25 years, more people would prioritize the economy over the environment if forced to choose. Energy security also competes for attention: in a three-way match up, nearly half choose "making America more secure by reducing dependence on oil" as a higher priority than "creating clean energy jobs" or "reducing carbon pollution."

While some environmental advocates may feel uncomfortable as messengers on issues from the economy to national security, they can work to extend their credibility to all topics relating to natural systems, including ones that bear on humans' ability to live on Earth.

STAKES

"LONG LIST OF IMPACTS"

> **If something is going to happen by 2080, I won't even be here.**—ENVIRONMENTAL GROUP SUPPORTER, MAN, PHOENIX

The environmental community has recognized for quite some time that relatively low issue priority and urgency have limited progress on global warming. The most common tactic designed to increase priority has been to highlight lots of examples of frightening impacts. However, an emphasis on impacts does not necessarily increase issue priority. Though majorities of people believe a number of impacts are likely, few are seriously worried about them. In addition, some research has demonstrated that an emphasis on impacts does nothing to increase support for action.

There are a number of reasons this approach is ineffective:

- People can become overwhelmed and paralyzed.
- For lack of any realistic alternative, they may even become "defensive" of our current way of life.
- To avoid fear, they are more likely to dismiss the reality of the problem.
- Focusing on the problem can inadvertently reinforce an assumption that solutions don't exist or that nothing can be done.
- Impacts can seem disconnected from each other and from human influence.
- Impacts may be seen as unfortunate, but irrelevant to an individual's life.

While impacts are an important part of the case, making impacts the *center of public attention* can be counterproductive.

To avoid this trap, communicators must discuss impacts in ways that are clearly tied to both causes and solutions—a coherent and hopeful big picture.

STAKES

THE WEATHER PROBLEM

We've all heard the phrase, "you can't do anything about the weather." Absent an understanding of the mechanism of global warming, many cannot understand how any action they could take would influence the weather. In addition, most people do not immediately see how a change in climate patterns can fundamentally disrupt human life and existence.

On the other hand, when offered an explanation, Americans are often struck by the fundamental changes we are bringing about.

> **Because it's like it says in here the climate is like the ground under our feet. I mean it's how our quality of living is going to be. I don't really think that people, in general, understand how important it is. I really don't.**—ENVIRONMENTAL SYMPATHIZER, WOMAN, TAMPA

STAKES

THE WARMING PROBLEM

> **If there is global warming, then why do we have so much snow and cold weather this year that's happening in the northeast?**—ENVIRONMENTAL SYMPATHIZER, MAN, TAMPA

Over the years, communicators have largely defined the problem as "warming" and referred to temperature change as "proof" that global warming is occurring. The result is that many people, including environmental group supporters, have a very narrow interpretation of what is meant by global warming. It is easily thought of as simply a (slight) rise in average temperatures.

If people imagine the issue as nothing more than slow, uniform warming around the globe, it is easy to dismiss the importance of the problem, and even the reality of the problem.

- Warming is easy to caricature: "I'm glad it will get warmer here in Minnesota." "This is the upside of not having waterfront property."
- If the problem is more hot days, then the solution is staying inside with air conditioning.

> **How would you like it if we had to use the air conditioner all year round? You couldn't go out in the wintertime and do all this stuff.**—ENVIRONMENTAL GROUP SUPPORTER, MAN, PHOENIX

> **I know 90 degrees is hot but we all have air conditioning, so it would change our lifestyle but it doesn't affect us like if you said the average person would go from 1 gallon of water to a cup of water a day, then I can see that's a dramatic change.**—ENVIRONMENTAL SYMPATHIZER, WOMAN, CHICAGO

- Warming can also be dismissed. Note the comments from two Chicago women who are environmental group supporters:

> **There are still people today…they'll look at the temperature today and say, "Oh, it's obviously not global warming."**

> **"People are talking about global warming. It's freezing outside."**

- Even if "warming" is accepted and recognized as a serious problem, the problem tends to be reduced to one dimension, rather than to reflect a number of challenges to different parts of Earth's ecosystem.

Communicators should be sure to emphasize aspects of the problem other than the heat itself – e.g. the ways in which basic climate patterns are changing, the increases in droughts and floods, etc.

STAKES

CHARISMATIC CRITTERS AND PRIORITY PLACES

> **You watch those commercials [about polar bears], and I cry when I see them. I just can't stand to see them sitting on their little ice floe that used to be Greenland and now it's two ice cubes in the middle of the ocean.**—ENVIRONMENTAL GROUP SUPPORTER, WOMAN, CHICAGO

Messages that point to the impacts of global warming on special places and species often have an immediately compelling quality. The challenge for communicators is to convey impacts in ways that reinforce the big picture, that help people better understand what global warming is and how it works. That means widening the view beyond isolated compelling impacts to include the causes and solutions as well as connecting the dots to the broad systems that affect human life. Research shows that thinking about particular places/species does not automatically lead to thinking about the big picture approaches that are needed. So the challenge for communicators who are featuring a narrow impact (such as a particular animal or place) or a focus on local impacts (such as flooding or drought close to home) need to develop those conversations in ways that also include a broader sense of causes and effects (which is discussed in more detail later in the guide).

The next obstacles relate to how and when (and whether) we should address the problem.

SOLUTIONS

THE "SOMEDAY" PROBLEM

> **It's a tough problem. We need those green jobs that they're talking about to invent technologies that haven't been invented yet…**
> —ENVIRONMENTAL GROUP SUPPORTER, MAN, CHICAGO

Americans are future-oriented and optimistic, and it is relatively easy for them to picture a time when we have clean energy, electric cars, smart houses, and clear skies. Associating green solutions with the future is tempting for a number of reasons: it represents a positive vision of progress; it positions the United States as a world leader, and it counters the

image of environmentalists as Luddites who want society to go back in time to a more ascetic lifestyle.

Problematically, the "Someday" picture decreases active engagement because it does not offer a way of thinking about *how* we reach this visionary future, nor does it imply that we must achieve this future *quickly*. The fact that people *like* messages about the future does not mean people are motivated to act proactively to reach that future. The future can feel like an imaginary place, disconnected from the present. Or it can be felt as a destination that is reached more or less automatically, in its own time and at its own pace.

To avoid this trap, communicators must find ways of conveying that addressing the problem requires an urgent, proactive stance.

SOLUTIONS

"LEADERS ARE TAKING CARE OF IT"

> **You really can't put a face on it and when you say global it's like oh my gosh, it's all over the world. Little old me is not going to have any big effect on that.**—ENVIRONMENTAL GROUP SUPPORTER, WOMAN, TAMPA

Once people have accepted the enormity of the problem of global warming, it strikes them at some level as incongruous that they're being asked to deal with it.

A common response is that "Surely lots of scientists and technical types, who can actually make a difference, are working on this issue."

At its worst, the common sense logic suggests that such a serious and urgent problem must already have the attention of experts and government. And if the government is not acting, then either it is not a pressing problem, or no solutions exist.

While trust in government to do the right thing is at historic lows, there is nonetheless a deep assumption that the government will take care of threats that are—such as national security or global warming according to advocates' descriptions—existential.

To counteract this trap, communicators should give audiences a clear sense that their own efforts are required (including their efforts to drive leaders in the right direction).

SOLUTIONS

"TECHNOLOGY WILL SAVE US"

> **I don't remember exactly what it was, but they talked about putting the CO2 back into the ground and storing it. I think they've started doing that in Germany.**—ENVIRONMENTAL SYMPATHIZER, WOMAN, PHILADELPHIA

Related to the prior two traps is the notion that a technological solution is just around the corner, i.e., scientists are working on some solution that will be available in the future.

The blazing pace of innovation and a consistently improving quality of life causes Americans to believe the future will be better. It goes against the grain for Americans to believe that solving global warming will require

fundamental sacrifice. A familiar analogy can be taken from the domain of Health, where people look to new pharmaceuticals or medical techniques to cure most forms of cancer, rather than lifestyle or environmental changes.

Just as genetic therapy and chemotherapy seem like more practical solutions to curing cancer than do exercise, diet or rethinking the pervasive use of chemicals in society, so too it is in some sense easier for people to imagine "solutions" such as geo-engineering than drastically reducing our consumption of energy.

Communications challenge: Communicators should make an effort to balance messages about scientific innovation with messages about the kinds of effort it will take to make innovation a practical reality.

SOLUTIONS

"LITTLE THINGS MAKE A DIFFERENCE"

> **I'm just a little person that does a little bit. If a lot of people did a little bit, then it would add up.**—ENVIRONMENTAL GROUP SUPPORTER, WOMAN, CHICAGO

It is genuinely important that people make changes in their daily lives to shrink their carbon footprint in direct and indirect ways.

On the other hand, it is clear that making these small changes is not enough, and there are things Americans need to do collectively, as *citizens*, most centrally putting pressure on leaders to make big-picture changes.

There are two ways in which an emphasis on small, daily actions can backfire. First, as in the quote above, people can feel that doing the little things is *all that matters*. Switching to different light bulbs, or recycling, can make people believe they have "done their part," and can stand in for—and even preempt—more significant action.

Secondly, Americans sometimes discount these suggestions as being meaningless in the face of a global challenge.

Communicators can avoid these traps by clearly conveying the connections between smaller actions and the broader changes that are needed. Most important, communications need to begin to lay a foundation for what it will take to achieve the goal, so people have a more realistic view of the challenge that lies ahead.

SOLUTIONS

KITCHEN SINK ENVIRONMENTALISM

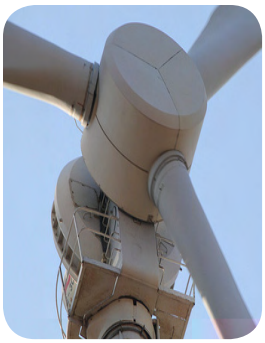
> **I think we all are working on it: you with the recycling; me with not using pesticides; you with community planning. We are all doing something because that all affects global warming**.—ENVIRONMENTAL GROUP SUPPORTER, WOMAN, TAMPA

Environmental group supporters often conclude that every environmental problem and solution relates to global warming in some way. The lack of clarity about what global warming is, what causes it and what can solve it, distracts concerned people from seeing the right actions to take, and can make the whole problem seem more vague and more overwhelming.

Communications challenge: Communicators can help avoid this trap by emphasizing the particular actions that cause global warming, and by explaining how particular solutions help.

SOLUTIONS

THE PERFECTION PROBLEM



> **Even these compact fluorescent light bulbs that we're using today that we're saying are so wonderful, they have a certain amount of mercury in them. They have a certain amount of bad chemicals and the phosphors that allow the fluorescent lights to work.**—ENVIRONMENTAL GROUP SUPPORTER, MAN, CHICAGO

As Voltaire famously remarked, "The perfect is the enemy of the good." Those who are committed to and knowledgeable about the environment can become paralyzed by their knowledge, as they criticize solutions that are not environmental enough. CFLs are made with mercury, solar power does not collect energy at night, windmills are a blight on the horizon, etc. The end result is a reluctance to embrace completely any solution that is not "perfect," leaving them stuck in the status quo and waiting for a more perfect solution.

Communicators can help avoid this trap by being specific about the problems we are trying to solve, and the ways in which the proposed solutions will help.

EXPANDED DISCUSSION OF COMMON MESSAGE PLATFORM

ECONOMIC OPPORTUNITY—USING THE CURRENT CONTEXT TO DEVELOP LASTING SUPPORT

Right now we are in an economic conversation. Skyrocketing energy prices followed by the collapse of the economy in 2008 put economic concerns front and center, and fast-thinking communicators found ways to link climate policies to the nation's economic and energy concerns. By framing fuel efficiency or clean energy, for instance, as beneficial to the economy, communicators allow global warming policies to ride on the back of higher priority issues.

The power of the economic frame goes beyond jobs or wealth; it taps into deep-seated feelings about America's role in the world, our ability to provide a better and more secure future for our children, and the promise of regaining leadership.

Climate advocates can use these compelling values to bridge to global warming and keep the issue prominent in the conversation. (even when surveys suggest an economic message tests better without reference to global warming). For the long term, we cannot afford to promote policies based on economic concerns alone—for the simple reason that the short term economic argument and the long term environmental case will not always coincide. We need a rationale for addressing global warming even when the economic situation becomes a less urgent priority, or can be addressed by something other than a "green" economy. Therefore, even though economic and energy concerns alone may be compelling enough in the current context, communicators should bridge to global warming to lay a foundation for the future so that the public is braced to support the range of interventions that we recognize are necessary for dealing with the problem.

In the current economic climate, in which people are seeking serious, long term economic solutions and a path to renewed greatness, the most effective way of framing the economy, energy, global warming connection is to take a bold and affirmative stance:

Dealing with global warming creates economic opportunity, and just as importantly, an opportunity to recover America's leadership role.

The same theme can be expressed as opportunity costs:

By ignoring the changing realities imposed by global warming, we risk missing the great economic wave of the 21st Century.

Current economic worries offer an opportunity to push energy innovation and infrastructure development to the top of the economic agenda. While communicators may or may not choose to state "global warming creates economic opportunity" directly, broad discussions of how to mitigate global warming should consistently imply it.

(Note that even organizations that are not interested in talking about energy policy can reinforce this point—e.g. discussions of wind energy can refer to rural communities that have experienced an influx of new revenue.)

Rationale

The Economic Opportunity frame resonates with actual current messages from leaders including President Obama. It will reinforce and be reinforced by stories in the news.

In the current context, it sets up the perspective that we should take quick, bold action now—we should be proactive rather than waiting. Note that, by contrast, messages that emphasize working toward a future transformation (Apollo or Manhattan Project frames, for example) sound visionary and motivating, but not necessarily urgent. Most supporters already agree that we should eventually move beyond fossil fuels, and that this will be a positive transformation. But this argument can easily leave supporters without a sense that action is required now.

Americans are used to hearing and thinking about the economic costs of addressing global warming – from higher energy costs (in the short run), to hindrances on overall economic activity. In fact, recent surveys have shown that American's economic fears are causing them to be willing to sacrifice the environment to promote the economy, when the two issues are seen as being at odds. While there are some useful ways of overcoming resistance to environmental costs (including the idea that we can pay less now or more later), overall it is a defensive strategy and a negative and uninspiring way of looking at the issue. The Economic Opportunity frame is a more proactive, hopeful, positive and engaging frame.

In addition, a large body of research by a number of different organizations demonstrates this is currently a very effective way to move economic and energy policy in the right direction, given that economic and energy policy are linked at the top of the national agenda and friendly political leaders are in charge.

Making The Economic Case

Communicators should tie the point to **basic American values** such as *Can Do, American Leadership, Smartness,* and *Practicality*. (See Best Practices.)

Communicators should make the case by offering user-friendly examples of how the economic opportunity works: by creating jobs and industries. The point is much less effective without these concrete explanations that help make it clearer, more vivid and more compelling.

APPLYING THE LEARNING: CONVEYING HOW ECONOMIC OPPORTUNITY WORKS

The United States has been a global leader in technological development, in scientific discovery and in curing disease. Addressing global warming provides an opportunity to build our economy while taking leadership in developing carbon-free energy.

We will create a clean energy future fueled by innovation, local job growth, and environmental stewardship.

We are clearly in a position to be scientific/technological/industrial leaders.

Subsidies for solar and wind energy installations will create more jobs in that industry.

Tax credits to retrofit existing commercial buildings to be more energy efficient will create jobs in construction.

There will be training for plumbers, builders and electricians in energy efficient equipment and methods.

Communicators should also make a related point clear: that the U.S. is in danger of "missing the boat."

APPLYING THE LEARNING: CONVEYING THAT WE COULD "MISS THE BOAT"

Other countries are starting to move on it while we delay. For example, China is working hard to be the world's leader in electric cars. We're in danger of missing the boat. The world is moving in that direction, but we continue to lag.

It would be foolhardy to let this opportunity go by.

Shifting away from the carbon-based fossil fuels that cause global warming will create good new jobs for millions of Americans. The U.S. can either lead and take advantage of this shift, or miss the boat as other countries act more swiftly.

Importantly, global warming advocates need to recognize this as a short term strategy, and use the current policy debate to influence public discourse for the long term. If the focus on economic and energy policy completely buries global warming as a problem, then policy successes and public support for policy will be tied to temporary concerns about energy and the economy. When the energy and economic context changes, will the public continue to be engaged on policies that address global warming?

Even an idea like the "post-fossil fuel era" can be justified in terms that have nothing to do with global warming—foreign dependencies, depletion of resources, pollution, etc.—but unless global warming is part of the discussion, each of these concerns can be dealt with in some way that doesn't actually reduce fossil fuel use (increase domestic oil production, use our abundant domestic coal supply, limit "three out of four" emissions, etc.).

In short, our communications strategy needs to use the current context to not only advance policy, but also to build a lasting foundation for action.

The rest of the Framing Guide is divided into a set of communications topics all aimed at improving the effectiveness of talking directly about global warming per se. The topics are a set of interlocking and mutually reinforcing points, that add up to an engaging lens on the issue and can provide support to the Economic Opportunity frame.

THE STAKES

When the climate changes

In the long term, to make the tough choices ahead, we need people to have a deeper, more fundamental grasp of the stakes. Instead of understanding the problem in terms of mere "warming," they need a sense of the broader systems involved. Instead of seeing the environment as separate from humans and global warming as affecting plants and animals, people need to understand human relationships to and reliance on the environment. In short, we need people to begin to think of global warming as "messing up the natural systems our existence depends on"—a communications task that is easier said than done.

One way to help people see the broader systems involved, and their part in those systems, is to change people's thinking about climate. The focus on "warming" has shifted attention away from the broader systems involved such as changes in patterns of rainfall, wind etc. that result in droughts, floods, and so on.

APPLYING THE LEARNING: CONVEYING THAT THE PROBLEM GOES BEYOND WARMING

Global warming isn't just about temperature – it is about the basic weather patterns that make up our climate, including temperature and wind patterns, rainfall and storm patterns and so forth.

In addition, we need to reinforce that just about everything in our lives depends on climate patterns in one way or another. Texts such as the following are effective in giving people a new appreciation of the stakes involved.

APPLYING THE LEARNING: CONVEYING THAT WE DEPEND ON CLIMATE

Weather patterns affect just about everything in our lives – the ability to grow the food we eat, the kinds of infectious diseases and pests that can thrive in our region and affect our health, the amount of water we have for drinking and maintaining our property, our experiences in keeping our homes and families safe from extreme weather, etc.

When people get this inescapable connection between human existence and the way the (natural, physical) world works, they feel an increased urgency to address global warming. Climate becomes an organizing idea, a foundation for understanding the problem and the various consequences.

Furthermore, climate is a topic on which environmentalists can be credible, and further research may find that it also allows environmentalists to get beyond the "terrarium" problem.

Problematically, "climate" is not a strong image in people's minds. It can easily trigger an assumption that we are talking about long-range cycles or simply "weather." So simply saying "climate" or "climate change" is not enough. We need to help people understand the connection between climate, human life and their own quality of life. An analogy can be an effective part of the narrative:

APPLYING THE LEARNING: USING AN ANALOGY TO CONVEY CLIMATE SIGNIFICANCE

The climate (and the environment more generally) is the very foundation of our lives. The climate is like the ground under our feet, and if the climate shifts, it's like the ground shifting, with potentially dramatic consequences.

"Weather patterns" is also a relatively effective "bridge" between the concepts of weather and climate.

APPLYING THE LEARNING: USING THE IDEA OF "WEATHER PATTERNS"

We need to keep in mind how important the climate is. Weather patterns dictate whether or not we will have a drought or favorable temperatures for growing food.

In addition, communicators should include concrete examples that explain how climate connects to our lives and quality of life:

APPLYING THE LEARNING: CONVEYING PARTICULAR WAYS WE DEPEND ON A STABLE CLIMATE

Every aspect of the quality of life we have depends upon a stable climate:

- **We count on water supplies that are only there in a certain kind of climate.**
- **Our agriculture depends on particular ranges of temperature and rainfall.**
- **We build near the shore expecting sea levels to stay the same.**
- **Infectious diseases and pests thrive in some climates and not others.**

Note: "Climate" is just one of many natural systems on which we rely. At this point, we know that climate systems are an effective component in the narrative. Further study is needed to determine how to effectively communicate other natural systems or the concept of sustaining natural systems in general.

UNDERSTANDING THE PROBLEM

LEVERAGING THE SIMPLE IDEA OF "TOO MUCH CARBON IN THE ATMOSPHERE"

Both research and advocates' own experience suggests that the simple idea that "humans are putting too much carbon into the atmosphere/air" should be a basic building block of communications about global warming.

The role of carbon is a key element of the narrative that many Americans do not know, but that organizes and clarifies issue understanding when it is communicated correctly. While Americans may currently not be strongly motivated by isolated references to carbon, the right communications can turn this important piece of the puzzle into a helpful and compelling element of the story.

The idea of "too much carbon" provides a conceptual link that connects most of the policies that address the issue. It allows people to get a handle on the (deeply counterintuitive) idea of global warming, and it facilitates a responsible stance, by making it clearer what people should take responsibility for.

In particular, it helps to clear up a number of stubborn misunderstandings that continue to obstruct the public's ability to engage constructively with the issue:

- ***Global warming is just more of the same old environmentalism:*** Even supporters have a tendency to confuse the specifics of global warming with the more general issue of protecting the environment. This means that recycling seems important because it keeps things out of landfills (not because the stuff takes energy to produce), and keeping toxic chemicals out of the air and the water seems if anything *more* relevant and urgent than energy efficiency, alternative energy, and carbon sequestration. It also leads people to mistake a clear blue sky for evidence of progress on global warming or to imagine that global warming (despite its name) is a local phenomenon—something that happens over Beijing or Los Angeles. This conflation exposes advocacy of global warming initiatives to anti-environmentalism backlash. For this reason, it is important to distinguish between "too much carbon" and "carbon pollution" (see special topic discussion of the term "pollution").

- ***Misunderstandings about energy types:*** Conceptual vagueness about what causes global warming leads to classifying kinds of energy without regard to whether they actually contribute to global warming. For example, biofuels, such as corn ethanol are seen as

"natural," "renewable," or "environmentally friendly"; "clean" coal is seen as good for the environment, and therefore for the global warming problem; and nuclear power is seen as "environmentally unfriendly" and therefore not a potential solution to the global warming problem.

- ***Skepticism about human responsibility for global warming:*** Many middle-of-the road laypeople find it reasonable to assume that while pollution may play some (ill-defined) role, global warming is mainly due to natural causes. This is often enough to reduce their engagement, even while it allows them to accept "science."

These and other basic and stubborn misunderstandings are greatly reduced by the simple causal idea of "too much carbon," making it ideally suited as a core message element that both informs—and is itself supported by-more specific issues: from habitat destruction, to reforestation, to energy choice.

In this section we list some practical applications of the key idea of "too much carbon."

Use simple language to integrate the idea into communications

The idea that "We are putting out too much carbon into the air/atmosphere" can be captured in very simple language. Two related terms tested well in recent rounds of research:

- ***Carbon Overload*** refers to the problem-causing *excess* of carbon being put into the atmosphere (or other "containers" such as forests, topsoil, or ocean).

- ***Carbon Load*** refers to the *amount* of carbon stored in the atmosphere (or other "container").

The terms are memorable and credible—and, importantly, are not political. They don't sound like forced or metaphorical explanations, and they promote a clear and intuitive understanding of the problem—in particular the idea of structural limits. Scientists, advocates, and journalists should feel comfortable using the terms: e.g.,

APPLYING THE LEARNING: CONVEYING THE CORE IDEA OF "TOO MUCH CARBON"

Global warming happens when we overload the atmosphere with carbon.

We're putting too much carbon where it doesn't belong.

Simply put, we're putting too much carbon into the atmosphere, by burning fossil fuels such as coal for energy. The good news is that we can deal with our carbon problem with solutions that exist today.

Build on "too much carbon" to teach other global warming "basics"

Our research suggests that laypeople often have a fair amount of knowledge about global warming—but that the separate facts don't add up to a clear conceptual whole. The idea of "too much carbon" provides both a coherent "working model" and a useful building block for more sophisticated understandings —e.g. various aspects of the carbon cycle.

The idea of "too much carbon" is easily integrated with another fundamental concept—the idea that global warming happens because heat is being trapped by a layer of carbon.

APPLYING THE LEARNING: COMBINING "TOO MUCH CARBON" WITH HEAT-TRAPPING

As we continue to put carbon in the air (by burning fossil fuels) we are creating a thickening layer in the atmosphere that is trapping in heat around the globe.

The idea of a heat-trapping layer can also be effectively conveyed through analogy with a thickening "blanket"—a term/image used in the first IPCC report and already in use by a number of advocacy organizations.

Use "too much carbon" and the idea of carbon management to recruit "budget" thinking

A basic implication of the idea of *too much carbon* is that the vast and seemingly unmanageable problem of global warming can be brought to a manageable scale. Simple quantification allows a "piece-by-piece" approach that changes global warming from a problem that is—almost by definition—beyond the scope of an individual or even a country, to an entirely different kind of problem, namely counting and budgeting.

Cognitive science makes clear that *economizing* is a natural human tendency. The power of budget-making is clear in a wide variety of contexts, for example in the success (and effectiveness) of the Weight Watchers program. This cognitive engine is an extremely powerful one, and lends itself to the idea of "too much carbon"—once it has been turned into a mass/quantity in people's thinking.

The possibilities currently being explored by advocates and others range from measures of an individual or company's carbon footprint to monthly utility statements that compare the customer's own energy consumption with those of neighbors (apparently very effectively).

APPLYING THE LEARNING: TONS OF CARBON

The earth's atmosphere can safely handle around 700 billion tons, and we've already put 800 billion tons into it. This carbon overload is causing changes in our weather patterns.

Focus the conversation on human production of carbon

The idea focuses policy thinking clearly on carbon. If the problem is "too much carbon," then the solution is to deal with the excess carbon—e.g., by reducing emissions, or by capturing carbon. Importantly, "pseudo-solutions," advanced by various lobby groups in order to confuse the issue, are less likely to gain traction.

Everyone has seen the smokestacks, and realizes that all those emissions can't be good. Even those who disagree with the idea of human-caused global warming (and more causally indirect effects such as floods and hurricanes) typically agree that it would be a good idea to reduce our carbon emissions.

As a result, the idea is highly spin-resistant, and effectively "wrong-foots" much opposition messaging. Global warming skeptics are able to draw on superficially plausible alternatives to the anthropogenic heat-trapping model of global warming (e.g., natural cycles, etc.). Presumably in order to retain credibility, however, most skeptics freely acknowledge the reality of increases in human-generated carbon emissions.

Use "too much carbon" to connect global warming to forests and oceans

The idea of *too much carbon*—with its corollary that the excess must go somewhere—is readily understood in these terms. It is very natural for laypeople to see that forests (and oceans) store excess carbon. Related ideas, for example that overloading the oceans with carbon damages marine life, or that forests store carbon and should be preserved for that reason, are both interesting and very easy for laypeople to accept.

This is obviously not the same as arguing that global warming directly threatens wildlife, but it moves people in the right direction, and it avoids various kinds of backlash.

APPLYING THE LEARNING: CONNECTING TO OCEANS

Burning carbon-based fuels isn't just causing global warming. The carbon that falls back down into the ocean makes the water more acidic. Higher acidity damages anything with a shell – from tiny organisms that are basic to the food chain to more familiar creatures such as shellfish and coral.

Tested language:

Global warming is happening because we're putting too much Carbon into the atmosphere, by burning fuels for energy. Experts call this Carbon Overload. Basically, the atmosphere can handle 700 billion tons of Carbon, and we're now at 800 billion tons and rising. That's just too much of a load for the atmosphere to handle, and it's causing all kinds of problems. The good news is that existing solutions can bring the atmosphere's Carbon load down to safe levels.

Participant paraphrase 1:

All I can remember is that global warming happens when we put too much carbon into the atmosphere, by burning fuels for energy. The experts call this carbon overload. The atmosphere can handle 700 billion tons of carbon and we are at 800 billion tons and rising.

Participant paraphrase 2:

The Earth's atmosphere can absorb 700 billion tons of carbon and we are already putting 800 billion into it. This overload will cause greater and greater global warming. There are solutions that scientists and planners believe have an excellent chance of reducing the amount of carbon we release into the atmosphere through use of fossil fuels, including coal and oil.

Beyond global warming: Acidification of the Oceans, etc.

On the other hand, a carbon-centered explanation offers the advantage of broadening the discussion of impacts to include, for example, the observation that overloading the world's oceans with carbon is causing an (accelerating) acidification that threatens the marine food web (see, e.g., the recently released Monaco Report).

More generally, the idea of *too much carbon* promotes a more focused way of imagining a critique of the larger industrial system. It offers the possibility—not developed here—of challenging the dominant paradigm that "Pollution is the price of Civilization." Pollution seems inevitable as a kind of "shadow" of civilization; carbon can and should in principle be managed.

Going forward

There are many important questions about how best to use the idea of "too much carbon." For example, while laypeople can easily get from "too much carbon" to the idea that we need to reduce carbon output, the idea of "trading" carbon "credits" is much more difficult for the public to understand and support. It is clear, however, that the basic idea that *we are putting too much carbon into the atmosphere* provides a kind of conceptual currency for many or most of the policy questions on global warming that confront us.

The accuracy of the paraphrases, even when truncated, is clear evidence of the "user-friendly" quality of the central idea of "too much carbon." (See paraphrases at left.)

Importantly, this sort of argument is as credible to many laypeople as anything that any scientist might come up with. The skeptics' strategy is typically to highlight the multiple, invisible and probabilistic causal steps that separate human activity and "natural occurrences," such as increased Atlantic storms. As a result, belief all too often comes down to the messenger.

Skeptic Text:

Some have suggested that the general warming of the earth and human activity are also the cause for increased Atlantic storms, or that somehow people are again to be blamed for natural occurrences. Again, it's easier to blame someone than to seek the truth…

What are the long-term effects of warming? Can we as humans alter the temperature of the earth?

Certainly, the extra carbon dioxide produced by humans can and should be reduced [emphasis added].

To suggest that human efforts alone can alter the sun's impact on the earth's temperature is inexplicable. The earth will get warmer and the earth will get colder. It goes through a cycle about each 125 or so millennium from cold to warm and back again. The long-term effect of warming can be more positive than some have suggested…

But the connection between human activity and increased atmospheric carbon is much shorter and clearer—and virtually impossible to deny. Consider a recent statement by David Frum, taken from a cover story in Newsweek Magazine (3/16/09): "We [Republicans] need an environmental message. You don't have to accept Al Gore's predictions of imminent gloom to accept that **it cannot be healthy to pump gigatons of carbon dioxide into the atmosphere** [emphasis added]." With no hedging at all, communicators can state unequivocally that increasing levels of atmospheric carbon are associated with negative consequences—a stance that greatly increases their perceived credibility, relevance, and comprehensibility.

INSPIRING ACTION

Create a connection to identity

As noted in the Preface, this guide is primarily (though not exclusively) geared toward determining how to mobilize those people who already care about the environment, since they are the easiest to mobilize on behalf of global warming. On the other hand, even those who care deeply about the environment can view this issue as distant and outside their ability to influence, disconnected from their lives and concerns, not requiring clear actions, and not having recognized leading organizations to turn to. In the end, many are ultimately unlikely to *connect* their existing concerns to global warming, to recognize the role of local or state action on the issue, or to commit to significant action.

Communicators have tried to overcome these obstacles in a number of ways. Some have emphasized the local impacts of global warming to make the problem more real and relevant. Some have promoted a series of small, individual actions people can take in the hopes that individual actions will eventually lead to collective action, or to make an overwhelming problem seem more manageable.

We have an opportunity to connect in deeper, lasting ways by changing people's fundamental *relationship* to the issue.

Connecting to identity

We need to establish a new relationship with the issue. The most effective way to motivate action is to point out how global warming relates to the beliefs and commitments that sympathetic Americans already possess, **but don't recognize as connected to the issue.**

To a certain extent, environmental group supporters have made environmental concern part of their identity; they see the world through an environmental lens. They collect recyclables and take them home after meetings and they fight to institute "no idling zones" at their kids' schools.

> **"To communicate your desires and your passions to other people, that's why we're volunteering because we're passionate about something.**—ENVIRONMENTAL GROUP SUPPORTER, MAN, PHOENIX

But many environmental group supporters and sympathizers (not to mention other Americans) do not automatically connect their concerns to global warming. We have an opportunity to help bring a global warming lens to their lives and work to connect global warming to a sense of who they are and what they do, and to create a new relationship with global warming by highlighting the connection to the issues they already care about.

There is an important role for communications in connecting the dots between what individuals already care about and global warming. Rather than position global warming as another issue they need to worry about, it is most helpful to demonstrate how their current work and actions connect to global warming and how their work needs to evolve to incorporate global warming concerns.

APPLYING THE LEARNING: CONNECTING GLOBAL WARMING TO EXISTING ENVIRONMENTAL CONCERN

We have to connect the dots between our own lives and the climate that surrounds and supports our quality of life. And that starts by connecting the work each of us is already doing on the issues we care about, with the issue that links us all - global warming.

Ideally, "connecting the dots" simultaneously links the problem, solution, and actions.

APPLYING THE LEARNING: LINKING VARIOUS "GREEN" ACTIONS WITH GLOBAL WARMING

Buying food grown locally cuts down on fossil fuels used for transportation and helps bring down our overall carbon emissions that create global warming. So whether you love gardening, cooking or eating, there is a lot you can do to support local independent farmers.

We all care about improving our communities, cities, states and nation. With smarter decisions about development, we can cut down on long-distance commutes, save fuel and cut the carbon emissions that surround the earth and trap in heat, leading to disruptions in the climate we rely upon. With enough pressure from citizens, we can bring carbon-free energy, such as solar and wind power right here. We need to take global warming into account as we make these decisions, but that takes each of us getting up and asking the tough questions.

Research demonstrates that this approach sounds like "actionable solutions" and "things they can do" even when the "ask" includes collective action and pushing for policy change.

Finally, there is an organizational challenge and opportunity inherent in this approach. Advocates have an opportunity to create a continuum of engagement if they can bring a global warming perspective to organizations outside the environmental and climate communities so that people are surrounded by opportunities to act and engage. In the short term, we can give members and activists of global warming organizations the tools and insights they need to take a global warming perspective **to others who share their interests.** This begins a continuum of engagement as people learn more about the number of ways global warming touches their lives, and the range of acts (personal and political) they can take to make a difference.

APPLYING THE LEARNING: CREATING A CONTINUUM OF ENGAGEMENT

If you are a member of a garden or cooking club, ask others to join a CSA with you and support local farmers, cutting down on transportation fuels for food shipped long distances.

If you are a schoolteacher or member of a PTO/PTA, have the school adopt a local forest and replant trees, which absorb heat-trapping carbon from the atmosphere.

If you are a member of a place of worship, start a stewardship club or stewardship lectures to share with others the knowledge and opportunities to protect God's creation.

If you work at a place of business, suggest opportunities to save energy or ask your employer to create an energy-saving task force to investigate options.

If you care about your community, support a local organization's efforts to promote helpful government action.

Advocacy organizations with grassroots ties, or that build close relationships with organizations that have grassroots ties, have a powerful mechanism for mobilizing the public and influencing policy at local, state and national levels. Organizationally, this provides rich opportunities for an array of engagement strategies.

TIME TO ACT

The "crossroads" frame

Environmentally concerned Americans believe global warming needs to be addressed. However, as noted in the prior section titled What We're Up Against, their thinking can still fall into counterproductive patterns, including a sense that the issue "can wait" and is a low priority compared with pressing matters such as the ailing economy.

However, there is a way of framing the conversation that effectively highlights the need to take serious, concrete action now. **We currently face a critical choice between action and inaction.** The time for action is now. The time for delaying and arguing is past.

APPLYING THE LEARNING: CONVEYING THE MOMENT OF CHOICE

As President Obama and other leaders have said, the time for arguing and delaying is past. We are at a crossroads, with a choice between responsibly addressing the problem now, or dealing with severe consequences later.

This Crossroads/Choice frame is far more effective than **messages that simply urge that it is important to act.** Environmentally oriented Americans have heard for a long time that the problem is real and serious and that it is important to act. They have even heard that it is important to act quickly. But the issue can "coast" this way for a long time (and has) before some "tipping point" makes real action inevitable.

Framing the conversation in terms of a Crossroads/Choice puts us in the position of being **accountable for not acting.** The default outcome of coasting for a while longer is reframed as **deliberately choosing inaction:** "doing nothing," "delaying," "waiting" (for what?). With respect to global warming, inaction amounts to: "ignoring the problem," "letting the problem get worse," leading to more and costlier damage as time goes on. Inaction is irresponsible, shortsighted, and foolish (see First Principles).

Instead, it's a "no brainer" that we should take **smart and responsible steps** now.

APPLYING THE LEARNING: USING AN ANALOGY TO FRAME ACTING VS. IGNORING

Global warming is an urgent problem, like termites eating away at the foundation of your house. If you ignore the problem, the result will be serious structural damage.

Finally, another element that supports the Crossroads/Choice frame is that Barack Obama has stood up for this position. For the time being at least, Obama's support lends great credibility to the Crossroads point.

THE ROLE OF IMPACTS

As noted earlier, impacts should not be the **center of attention** in communications. Stories that focus on impacts risk sounding like **old news,** risk making the problem seem **overwhelming**, or (depending on how they are discussed) can even backfire by making the problem seem **less real and immediate**, or worse, like **manipulation**. To ensure that impacts do not become the sole focus of the discussion, it is important to put equally strong emphasis on other points, such as the need for timely action, and so forth.

In addition, impacts are too often used as the definition of the problem, as a substitute for describing what global warming is, how it works, and what causes it. Impacts are not the problem; they are the consequences of not addressing the problem.

But if communicated correctly, impacts are a very important part of the story—and describing them can make the issue more real, concrete and urgent. There are some ways of framing impacts and consequences that are much more effective than others—and that can increase rather than decrease engagement. The following are several principles and examples to remember when discussing the consequences of global warming:

The costs of inaction

In order to highlight the need for action it is helpful to frame impacts as the *unavoidable results of inaction*.

APPLYING THE LEARNING: CONVEYING THE COSTS OF INACTION

If we don't take action to prevent global warming, the consequences will be severe, including...

The worst effects of global warming are avoidable if we take action now. On the current course we will see...but if we act now, we can reduce the effects to...

Global warming has broad effects on our lives

Even environmental supporters often have trouble seeing how global warming will have broad effects on our own lives and quality of life. Connect impacts to Americans' quality of life, either by emphasizing direct human impacts, localized impacts, or both.

APPLYING THE LEARNING: CONVEYING THE BROAD EFFECTS ON OUR LIVES

If there is no snow in Flagstaff, there's no water in Phoenix.

Warming temperatures are creating ideal conditions for the spread of infectious diseases; diseases that had not been common in our region before.

Explaining "cause and effect" helps people see the big picture

Each impact presented in isolation does not add up to a damaged natural system. People become more engaged when they can see the kinds of connections and far-reaching effects that insiders are familiar with.

APPLYING THE LEARNING: EXPLAINING CAUSE AND EFFECT IN A USER-FRIENDLY WAY

We're all part of the same food chain. If it affects wildlife, it is going to affect us.

If the birds don't migrate, they don't reproduce. If there are fewer birds to eat insects, insects will get out of control and damage the crops we rely upon.

Global warming consequences are happening now

Catastrophic changes in 100 years do not create as much of a sense of urgency as the smaller indications that changes are already beginning.

APPLYING THE LEARNING: MAKING CLEAR THAT IT IS HAPPENING NOW

We are already experiencing a drought. A longer drying trend could lead to severe water shortages in our state.

New information is better at engaging attention

People are more likely to rethink their assumptions when they are presented with a new part of the story, a new insight about the issue.

APPLYING THE LEARNING: OFFERING LISTENERS NEW INFORMATION OR INSIGHTS

Frozen methane in Arctic Ocean shelf sediments is warming and now bubbling out of the ocean, releasing a heat-trapping gas 25 times more powerful than carbon dioxide.

ORIENTING TOWARD SOLUTIONS

An effective communications strategy helps audiences visualize specific, tangible strides toward fixing the problem. It tells a story about how to get to where we need to be.

As noted earlier, impacts are too often emphasized almost to the exclusion of describing what global warming is, how it works, and what causes it. The assumption is that fear of the impacts will position people to act. In this approach, solutions are often an afterthought—a list of policies or personal actions at the end of the conversation.

To be constructive, the orientation of the conversation about global warming needs to change. Fear of the problem will *not* cause the public to rise up and invent solutions. It is advocates' responsibility to determine the change that needs to occur, to orient the conversation toward the specific actions we can and need to take, and to motivate people to support the process of change that puts the right solutions and policies in place.

Some particular solutions will require tailored framing strategies to be successful. For example, an advocate could follow all of the following recommendations, and still be faced with a public that is skeptical of cap and trade or particular energy investments, etc., because those particular solutions need additional framing strategies. (For more on this challenge see "Special Topics.")

On the other hand, there are several general communications practices that apply to all climate solutions.

Best Practices

Solutions are central to our story, and framing them well will make the solutions sound more practical and concrete. The following are several best practices and examples to take into account.

Government has a central, proactive role

By default, Americans tend to assume the profit motive will lead corporations to introduce new products at competitive prices. In order to move people past this perspective, we need to be clear about government's proactive role, rather than waiting for the energy situation to "evolve on its own."

APPLYING THE LEARNING: EXPLAINING THE NEED FOR PROACTIVE GOVERNMENT

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

Collective action matters

People can easily default to either a view that individual behavior is what counts (recycling, etc.) or that government is responsible, with no obvious role for individuals. To the extent possible, our communications should make collective action apparent, and highlight the importance of citizen action to hold government accountable. Create a vision of citizen action and individual behavior change will naturally follow, but individual behavior change will not necessarily lead to citizen action.

APPLYING THE LEARNING: CONVEYING THE IDEA OF COLLECTIVE ACTION

We can only address global warming by addressing it together. Driving less helps, but what we really need is high fuel efficiency standards. Turning off the lights helps, but what we really need is more carbon-free electricity sources, such as solar and wind power.

Make clear how this idea helps solve the problem

We cannot assume that even our strongest supporters have a sophisticated understanding of the issue, the policy solutions, the role of the market and so on. Too often, critical explanations are left out of the conversation and people are left to wonder why a particular suggestion has anything at all to do with solving global warming. It is imperative—and often easy—to make the connections clear.

APPLYING THE LEARNING: EXPLAINING SOLUTIONS

We need to encourge more cities and states to adopt "smart growth" policies, where new construction occurs close to existing water, sewer, electric and phone lines, mass transit and highways, rather than creating suburban sprawl. This will limit long commutes and dramatically reduce the use of carbon-based fuels that lead to global warming.

Solutions are available now

As noted earlier in the section titled What We're Up Against, people frequently believe that technology will eventually solve the problem. Further, many believe that renewable energy sources such as solar and wind just aren't ready yet, or they would be more widely available. To address this obstacle, we need to reinforce that solutions are ready now, but require effort and action.

APPLYING THE LEARNING: EMPHASIZING THAT SOLUTIONS ARE READY NOW

We have the knowledge and technology we need to address global warming, we just need the leadership to make it happen.

We already have effective, proven solutions to reduce our carbon load. We just need the political will and support to bring them up to scale.

Empower the audience

A conversation about solutions has an enormous ability to engage the audience in active support of the issue. Communicators should carefully consider all of the ways in which different forms of action can be used to create, expand and solidify public support. Lower the bar for "collective action" so people can begin to get engaged and identify themselves with the issue. Invite the audience to join us.

APPLYING THE LEARNING: EMPOWERING AN AUDIENCE

There is a lot each of us can do to help, whether that means learning more about the issue, talking with others, changing our own energy use, or making sure elected officials know how we feel.

We need your help to make "X" change happen: talk to others about what is happening, visit our website to learn more, voice your support by contacting your state legislator/city official, and most important, send us your ideas at "X".

Finally, in promoting solutions, avoid a number of common mistakes:

- **Mismatching the size of the problem and the size of the solution, for example:** *Global warming will change life as we know it, unless each household changes one light bulb.*
- **Triggering the sense that nothing can be done, for example:** *Due to rapidly increasing emissions around the globe, the earth is warming and catastrophic effects will occur.*
- **Implying that solutions exist in the future, or that technology will solve the problem someday, for example:** *If we put enough investment in research and development, our grandchildren won't have to rely on fossil fuels.*

SPECIAL TOPICS: understanding solutions

Communicators need to place more emphasis on solutions to make it apparent that there is a practical way forward on this issue. People are ready to act, but are unclear about the actions that will make a difference. In this section, we review a number of public understandings that create both obstacles and opportunities in engaging public support for particular solutions and actions.

Note: In describing the challenges facing certain kinds of solutions, we do not mean to suggest those solutions should be avoided. Rather, those solutions will require careful research and tested framing to build public support.

INDIVIDUAL OR SYSTEMIC?

Are we asking people to change individual behavior, to engage in policy change, or both?

Some assume communications should emphasize everyday behavior change (drive less, change light bulbs, etc.) in the hope of starting a cycle of engagement that leads to support for systemic change. But when presented with individual actions alone, people often cannot imagine the systemic change that would matter or their role in advancing systemic change. On the other hand, when the conversation draws a clear picture of the broader changes that are needed, people can more naturally fill in the individual behavior change that matters.

The best answer is that people need a mental picture both of the big-picture changes that are needed, and of their own role in making change happen. As communicators, we must help people to **bridge between personal and collective action**. The idea of "managing carbon," for example, allows people to think both at a collective level and an individual level.

COMMUNICATING GOVERNMENT ACTION

Public support for government policy solutions hinges in part on whether people believe the policy really addresses the problem. If a person does not see a logical link between the recommended policy and the problem to solve, she or he will reject it. Generally, the more direct the link between the policy and the solution, the more readily people support it. Think of government policy as falling into one of three conceptual categories: direct, indirect, or market-based.

Direct

People are strongly supportive of direct government action to mandate certain kinds of behavior such as eliminating pollutants. While "regulation" is often an unfavorable term in other contexts, when it comes to environmental policy, people often support strict rules and enforcement. Furthermore, environmental supporters are specifically favorable to the idea that government action such as investment can "*jump start*" big changes in business and industry.

A number of polls demonstrate that people tend to support those government policies that clearly and directly address the problem as they understand it, such as:

- Investing to develop new sources of energy such as wind, solar, etc.
- Setting (lower) limits on emissions levels (often described as "pollution")
- Requiring more use of "clean" energy

Indirect action

Another approach to government policy is to encourage, but not mandate behavior. This kind of action takes the form of incentives, subsidies, or tax measures to encourage and discourage certain kinds of behavior. While advocates might debate whether such measures are adequate, poll findings generally suggest that people are strongly supportive of encouraging measures such as:

- Subsidizing "clean" energy producers
- Giving incentives to buy efficient cars
- Establishing tax breaks for renewable energy use or efficiency measures

But people are less enthusiastic about discouraging measures such as:

- Establishing fees for industrial pollution (polluters pay)
- Increasing taxes on fossil fuel use
- Requiring surcharges for exceeding average energy use

In part, objections have to do with making life more expensive for consumers—an especially sensitive point in the current economic climate. They can also sound as though we are "selling licenses" to pollute. Furthermore, many of these discouraging measures seem to punish the public while not providing an alternative or a systemic solution. For example, a person may want to use public transit, but may live in an area where it is not available. The measures that are easier to get agreement with sound more straightforwardly like *punishment* of polluters.

Market-based

Using market forces to lead to change is the most challenging of the different approaches to policy. Since people have a limited understanding of the causes of global warming, and a limited understanding of how markets work, many believe market-based solutions such as Cap and Trade are just a scam, a scheme to take more money from average citizens. If there are no renewable sources to turn to, these solutions just seem to penalize people rather than encourage a shift.

Many people see a number of negative consequences of market-based solutions:

It doesn't really solve the problem; Companies will just keep polluting.

> **I wrote "bull" on the paper next to it. It's just another excuse to keep on polluting.**—ENVIRONMENTAL SYMPATHIZER, MAN, PHILADELPHIA

> **If you've got something that is really emitting crap and it's hurting people, you shouldn't be able to buy your way out of it.**—ENVIRONMENTAL GROUP SUPPORTER, MAN, CHICAGO

If they find it cheaper to pay penalties than to upgrade, they will pay penalties, pass on the costs to consumers, and emissions still won't change.

> **I think if something is not mandated, and unless it is so astronomical to pay for going over the limit, I don't think businesses will -- I mean it's been proven that businesses don't change unless it costs them.**—ENVIRONMENTAL SYMPATHIZER, WOMAN, PHILADELPHIA

If it is too expensive to meet American rules, companies will move overseas, so we will lose jobs and emissions won't change.

> **If you start cranking up the penalties on our manufacturers, you are just going to drive all the manufacturing to other countries that are not having that carbon thing.** —ENVIRONMENTAL GROUP SUPPORTER, MAN, CHICAGO

These dynamics underscore the difficulty of building support for a market-based policy such as Cap and Trade (or Cap and Invest or Cap and Dividend, etc.). People do not trust business to play by the rules and do not understand how this policy will end up solving the problem. They strongly support a mandatory "cap" but begin to have doubts when they consider the "trade" part of the policy. As a result, many would rather raise taxes for direct action (such as investing in wind power) than make companies buy credits in the hopes of encouraging those companies to change.

FRAMING SOLUTIONS

In addition to the best practices listed in the Common Message Platform section, there are a couple of additional frames that help communicate the benefits of indirect and market-based solutions. These approaches are good starting points, but additional research is needed to refine the frames that will advance specific policies such as cap and trade, etc.

Tradeoffs: tie incentives and disincentives into one story

As noted earlier, people generally support incentives but are less enthusiastic about disincentives (tax penalties). When both are tied together under the umbrella of tradeoffs, people are more likely to grasp the big-picture shift that is being encouraged, and more likely to support the solution.

APPLYING THE LEARNING: TRADEOFFS

To pay for this plan, we will encourage tradeoffs. For example, we will increase taxes on the fossil fuel (oil and coal) use we are trying to discourage while cutting taxes on wind and solar energy; we will increase sales taxes on gas-guzzling cars (that get 15 mpg or less) while lowering sales taxes on fuel-efficient cars (that get 30 mpg or better).

Carrot and stick

Similarly, when both incentives and disincentives are presented in an overarching "carrot and stick" approach, people can see the utility of both the "carrot" and the "stick." Importantly, this only works if people and businesses have a realistic ability to avoid the "stick." For example, if taxes on carbon-based energy are increased, people must have the *ability* to shift to carbon-free energy.

APPLYING THE LEARNING: CARROT AND STICK

One way to force the changes we need is to create a carrot and stick approach. New laws set limits on how much carbon each company can emit. Companies that are under their limit get incentives, while companies that are over their limit pay penalties. The overall amount of allowed emissions goes down each year, making the penalties more and more severe for those companies that don't change, eventually making the cost of violations so high that they will be at a disadvantage compared to more innovative competitors.

SPECIAL TOPICS: distinguishing between energy sources

One of the basic choices global warming communicators face is how to contrast different sources of energy. Are we choosing between:

"clean" and "dirty" (or polluting) energy?

"renewable" and limited energy?

"new" and "old" energy?

"carbon-free" or "carbon-based" energy?

How we describe the choice can reinforce people's understanding of the problem and direct them toward the right solutions.

"Pollution"

Perhaps the most common contrast is between "clean" energy on the one hand, and "pollution" on the other.

All evidence points to the fact that "pollution" is a motivating idea—a problem that all Americans prioritize and want to address.

On the other hand, as qualitative research has repeatedly shown, there are a number of serious liabilities associated with referring to carbon emissions as "pollution":

- "Pollution" is mainly about dirty and/or toxic substances. These ideas don't reinforce and may clash with creating understanding of the actual heat-trapping mechanism that is causing global warming. The result may be a confusing, vague and unsatisfying mental picture as people hear stories about how "pollution" is warming the atmosphere.
- The "Pollution" problem is implicitly (if falsely) solved by "cleanliness"—for example, "blue skies," "low particulate emissions," etc.
- "Pollution" is also very broadly associated with all the human activities that harm or diminish nature. This broad understanding can interfere with a clear picture of how to address global warming—see Kitchen Sink trap.
- The idea that carbon dioxide is "pollution" is also susceptible to opposition arguments that it is actually clean, natural and harmless.
- The word "pollution" also tends to reinforce the misperception that electricity is not part of the problem, since people feel electricity does not pollute. (See the section on Energy sources

—communicators should directly attack the misperception of "clean electricity.")

Recommendation

Communicators should work hard to move people to a new level of understanding, and not leave them in a limited "pollution" mindset.

Phrases such as the following convey the key idea of too much carbon without falling into the various traps associated with "pollution": "carbon emissions," "carbon load," "putting excess carbon into the atmosphere," "carbon overload," etc.

Organizations that do rely upon pollution language can begin to move people to new understanding by using "carbon pollution that leads to global warming" as a bridge to the too much carbon conversation. Try to avoid "pollution" as the leading idea. It is important to get other ideas established first—e.g. too much carbon, connection to energy, heat-trapping, etc.

Finally, "carbon pollution" should be tied to other points, such as the idea of heat-trapping. People are sometimes able to put these ideas together in their minds:

> **Pollution, like carbon dioxide, collects in the earth's atmosphere. It traps the sun's heat, which causes the earth to heat up at an accelerated rate.** —ENVIRONMENTAL SYMPATHIZER WOMAN

> **Carbon dioxide and other air pollution collect in the atmosphere like a thickening blanket, trapping the sun's heat and causing the planet to warm up.** —ENVIRONMENTAL SYMPATHIZER WOMAN

"Clean" energy

This is a memorable and user-friendly way to refer to renewable energy sources, and one that helps people feel they "understand" the value and benefits.

In fact, though, the term is actually misleading regarding benefits—for all the reasons that "pollution" is problematic, this term is too.

In addition, it is susceptible to effective spin about "clean" car emissions, etc.—*that have reduced amounts of other materials, but not carbon dioxide.*

Recommendation

Once people have a clearer picture of the role of carbon (see Common Message Platform), they respond constructively to terms that mention "carbon"—including non-carbon and carbon-free. These terms are very spin-resistant, and keep listeners focused on the relevant policy choices. Communicators should establish helpful terms related to carbon—such

as "non-carbon energy" and "carbon-free" energy. Even though these terms may be less known at the moment, they set up the right thinking on the issue for the long term.

Additional terms for communicating "good" sources of energy

Communicators have a number of choices when it comes to referring to renewable energy sources. The following insights can help communicators deal with the particular connotations of these terms.

"Renewable" energy:

This term has the advantage of familiarity, and is also correctly associated with energy sources such as solar, wind, and geothermal.

One liability may be that the term sounds like a niche—i.e., it is strongly associated with energy sources that currently meet little of our demand.

Another caveat is that the term can apply to sources of energy such as corn-based ethanol.

"Green" energy:

This term has the advantage of being vivid and memorable.

On the other hand it is not as clearly associated with the specific energy sources advocates want to promote, it is relatively vague in meaning, and may therefore be especially susceptible to dilution or spin – industries can claim that a particular energy approach is "green" and find ways of justifying the label.

Sustainable energy:

Since even environmentally concerned Americans tend to have a weak grasp of sustainability, this term is *not* recommended.

Recommendation

Communicators can continue to use "renewable," "clean," and "green," but should be aware of the liabilities of each and try to replace those terms with carbon-related terms when possible, such as carbon-free, non-carbon and so on.

Terms for Communicating "Bad" Sources of Energy

Once people have a clearer picture of the role of carbon (see Common Message Platform), they respond constructively to terms that include "carbon."

"Fossil fuels"

This term is well understood and very familiar, and has the "right" (i.e. negative) connotations – it is associated with pollution and global warming.

"Carbon overload" and "Carbon load"

Carbon Overload refers to the excess of carbon being put into the atmosphere/air (or other "containers" such as forests, topsoil, or ocean).

Carbon Load refers to the amount of carbon stored in the atmosphere, etc.

- The terms are memorable and credible. They don't sound like forced, rhetorical, or metaphorical explanations, and they promote a clear and intuitive understanding of the problem. Scientists and journalists should feel comfortable using the terms.

- Framing carbon as a mass or substance makes it much easier for people to connect with it, and to visualize taking responsibility for it—for example by thinking about *amounts* of carbon.

- There are obvious advantages to terms that reinforce the idea of carbon emissions and that are compatible with terms such as carbon-based/carbon-free energy or economy.

Recommendations

Communicators should refer to "carbon-based energy," "carbon fuels," etc.

Communicators should continue to talk about "fossil fuels" and should make it clear that fossil fuels are "carbon-based energy."

Communicators should talk about the "carbon overload problem" and "carbon load."

While it is unlikely that the terms Global Warming or Climate Change will be completely replaced by more effective terms, adding a term to the conversation such as Carbon Overload can provide a means of referring to the *cause* rather than *impacts*—e.g., "How does the proposed policy address the Carbon Overload problem?" "We need to bring the atmosphere's Carbon Load down to a safe level."

SPECIAL TOPICS: energy production and global warming

Many global warming communicators are focused on changing energy policy, yet their efforts are hampered by the fact that the role of energy choices is one of the biggest missing pieces in Americans' understanding about the issue.

By default, the problem is often attributed to pollution in general (or even to aerosols and CFCs)—as opposed to emissions of carbon dioxide in particular—see discussion of the Kitchen Sink trap. While environmentally sympathetic Americans are concerned about "the pollution from cars and factories," they often think of these emissions in terms of dirty, toxic air pollution—and not in terms of energy or carbon.

Unless these connections are made clear, people won't have a clear idea about where we should be focusing our efforts to address the problem.

Energy and global warming

It is easy to tie energy use to global warming in a clear way:

- We're creating the problem every time we burn fossil fuels such as coal, oil and gas to produce energy—for electric lights, cars or anything else.

Communicators should keep up a steady stream of these kinds of user-friendly statements—in order to reinforce the connection between energy choices and global warming.

Carbon

Discussions of energy choices and their role are also more effective if they reinforce the central idea of *too much carbon*, and smart, responsible management of carbon.

- Burning fossil fuels for energy is what puts carbon into the atmosphere—whether it's for our cars or to keep the lights on. Most electricity, for instance, comes from burning coal.

Electricity

It is very helpful to clarify the link between electricity and global warming. Currently, *environmentally supportive Americans often think of electricity as clean and green*. And even more basically, *they often don't know or think about where our electricity comes from*.

Is it better to use an electric lawnmower or a gas lawnmower? Why? (Internet questionnaire)

> **Electric would be better because it is a cleaner energy source.**—ENVIRONMENTAL SYMPATHIZER WOMAN

> **Electric lawnmowers are better since they pollute less.**—ENVIRONMENTAL SYMPATHIZER MAN

> **I'm not sure, but I'd guess an electric lawnmower is better because it doesn't emit waste into air. I'd guess the electric use is less harmful than the gas.**—ENVIRONMENTAL SYMPATHIZER WOMAN

> **Electric because less emissions.**—ENVIRONMENTAL SYMPATHIZER WOMAN

It is easy to make this point—i.e. to "problematize" electricity—in various effective ways:

APPLYING THE LEARNING: EXPLAINING THE ROLE OF ELECTRICITY

More than half of all electricity in the U.S. is generated by burning coal, a carbon-based fuel.

Many of us are putting carbon into the sky every time we use electricity.

Every time we turn on a light or anything else plugged into a socket, it's more than likely the electricity is coming from coal, a carbon-based fuel.

Efficiency

Environmentally sympathetic Americans already understand that it would be a good idea to *use less energy*. This is a familiar idea, but one that unfortunately doesn't have much power or urgency. It is also a relatively vague idea, easily lumped in with a larger category of imperatives such as "don't litter." The idea of energy conservation also has a troubled history —played on in references by Dick Cheney:

- "Conservation may be a sign of personal virtue, but it is not a sufficient basis for a sound, comprehensive energy policy."
- "We all remember the energy crisis of the 1970s when people in positions of responsibility complained that Americans just used too much energy."

The recommended language already mentioned in this section can make the idea of energy conservation **more concrete, specific and urgent.**

Once the connection between global warming and energy is clearer, general statements like the following are helpful.

APPLYING THE LEARNING: CONVEYING THE BASIC IDEA OF ENERGY EFFICIENCY

We need to use energy more efficiently, so that we burn less coal, oil and gas.

It's important that we build more energy-efficient houses, shopping malls, light bulbs, appliances and so forth.

APPLYING THE LEARNING: OFFERING POLICY EXAMPLES TO PROMOTE EFFICIENCY

It is also helpful to offer concrete, easy-to-understand examples of policy change to promote efficiency.

Strengthening the energy codes for new buildings

Requiring manufacturers to produce hybrid and plug-in cars for a broader market

Enhancing energy efficiency standards for appliances and equipment

Enhancing tax incentives for homes and businesses that use energy more efficiently

SPECIAL TOPICS: preparation and adaptation

Most global warming communications emphasizes the need to *prevent* the problem and the consequences of *failing to act*. Experts agree, however, that a certain level of warming is inevitable and is in fact, already occurring. With that in mind, what are the benefits and risks of framing the message as adapting to or preparing for a world altered by global warming?

Preparing for impacts

Some organizations are beginning to put more emphasis on the need to prepare for the (domestic) effects of global warming that are already underway or that are certain to come. This approach has several notable benefits:

- It helps position global warming as a real, current problem, and pushes the "reality" question to the sidelines, particularly when it emphasizes the effects that are happening now.

- For those who continue to insist that we "don't know enough," a preparation approach can frame the uncertainty as a reason to act rather than a reason to delay, for example "taking necessary precautions."

- It creates the expectation that governments at all levels should be doing something.

- It taps people's desire to plan for the long term rather than wait for a crisis to occur, a desire that has become even more apparent during the current economic crisis.

At the same time, advocates need to use caution in using "preparation" as the lead message in the global warming debate. There are several ways the message can backfire if communicators are not careful:

Broken government

Emphasizing government's past or current failure to prepare for global warming can easily reinforce the strong default view that government is broken and cannot do anything right. This can cause citizens to feel helpless and disempowered. (And messages that emphasize *only* the role of government exacerbate this same problem.)

> **I read this and I just find it infuriating because I feel it's all governmental responsibility that they are referring to. They don't make water management plans; there are no federal requirements…outdated building codes. What could I possibly do about that? I can use less water; I can plant trees, but I can't do any of this because we elect people to do it.** —ENVIRONMENTAL SYMPATHIZER, WOMAN, PHILADELPHIA

Too late to fix

The preparation message can inadvertently undermine steps to prevent the worst effects of global warming by suggesting we've waited too long to fix it.

> **I think you're looking at it too much like a fait accompli… I think people would rather work to prevent it.**—CORE ENVIRONMENTALIST, WOMAN, CHICAGO

It can wait

During these stressful economic times, people have more pressing things to worry about and a preparation message can convey that this is a problem that can wait.

> **The problem is we have, for a lot of people, more pressing problems like whether they're going to have their house next week or not; whether they're going to be able to afford groceries or not.**—CORE ENVIRONMENTALIST, MAN, PHOENIX

As a secondary message, the preparation approach can have beneficial effects as long as it emphasizes the strengths and avoids the weaknesses suggested above. That is, it should:

- Make it clear that serious people consider the problem to be *real now*
- Implicitly emphasize *responsible management of risks*
- Include *individual/citizen action* in the picture
- Allow for the importance of *prevention* as well as preparation

APPLYING THE LEARNING: CONVEYING PREPARATION IN A HELPFUL WAY

In addition to doing everything we can to prevent the worst effects of global warming, we need to prepare for the effects we are already beginning to experience. Just like a responsible homeowner wouldn't wait for a rainstorm to fix the hole in the roof, we can't wait for the worst effects of climate change before we begin to act.

We need national legislation that would require states and cities to assess their vulnerability to more intense hurricanes, water shortages, drought and wildfires, rising sea levels, and other events that could affect the U.S. and its economy in the decades to come.

Now is the time for all of us to act responsibly, and tell our elected officials to plan ahead for the changes that are already on the way, while also doing everything we can to prevent more severe effects by slowing down carbon emissions.

Helping poor countries adapt

Some organizations focus on the consequences of global warming on the world's poorest citizens. These organizations argue that developed nations have benefited the most from industrialization and/or have contributed the most to causing the problem of global warming, so they have a responsibility to assist poor (and innocent) countries in adapting to the worst effects of global warming.

This approach has certain benefits:

- It offers people a new insight, a new take on the issue (rather than familiar news about threatened species and locations, for instance).
- It ties global warming to broad consequences for humans, an important element of the Common Message Platform.
- It focuses attention on *how to solve the problem* rather than questioning the reality of global warming.
- It may engage new audiences in the issue, such as those that are interested in addressing global poverty.

However, caution should be taken when communicating with environmental supporters and sympathizers using this approach, and possibly other audiences. First, it is easily interpreted as a message about global poverty, rather than global warming. Therefore, it can trigger familiar objections associated with the topic of international aid such as skepticism about how funds would be used and a desire to help Americans first.

> **We've got too many people without health insurance, we've got too many children going hungry at night; we've got too many people not educated. Let's worry about our own first and then worry about the rest of the world.**—SYMPATHETIC ENVIRONMENTALIST, MAN, TAMPA

Even when motivated to address global poverty, this approach may backfire on those seeking to limit emissions by creating a desire for more industrialization of poor countries.

> **For 300 years, we've done all these things that we're not supposed to do. And now just when all these other countries are starting to catch up, we're telling them oh no, you can't do it that way.**—SYMPATHETIC ENVIRONMENTALIST, WOMAN, TAMPA

Ultimately, however, the most challenging element of this message is how it assigns moral responsibility to developed countries—as opposed to merely pointing out how developing nations are impacted by the problem—and implies that "we" owe a debt to "them." This element represents a special sticking point.

Recommendation

Adaptation and the international aspects of the issue are critically important to the policy agenda especially in the context of ongoing international negotiations on climate, but this is a very complex area with challenges outside the scope of this framing guide. Adaptation is complicated because it seeks to draw together three areas that each have significant framing challenges: international relations, global poverty, and global warming. More research is needed to develop an effective interpretation of this message for our core audiences. In the interim, we suggest communicators keep the following ideas in mind:

- The Common Message Platform recommendations will go a long way toward building the foundational understanding that will help audiences accept an international adaptation message in the future, so advocates should add the platform concepts into their messaging.

- Americans feel (rightly or wrongly) that they are expected to carry the burden of the world. Making Americans responsible for the impacts of global warming on the world's poor could backfire as yet another "blame America first" message. Instead, messages that place the United States as part of an international problem-solving team, rather than as responsible for the problem or solely responsible for the solution, are likely to fare better.

- The human aspect of global warming is likely to be the most important element of the story. Some organizations frame people in developing nations as helpless victims in need of charity, which can lead Americans to think there is no improvement in sight. Instead, organizations should consider framing people in developing nations as capable, but global warming will strain or break what was functioning in these societies if not addressed.

- Finally, solutions stories (those that promote a particular successful approach) tend to be more motivating than stories that only discuss the problem.

SPECIAL TOPICS: wildlife and habitat

In order to be most effective, wildlife communicators should keep in mind all the **Best Practices** discussed early in the Guide, as well as the elements of the Common Message, from the **Crossroads frame** to keeping the idea of **Too Much Carbon** front and center to showing supporters how global warming is actually connected to the existing commitments and priorities that already shape their identity.

There are also a number of more specific guidelines that will help wildlife advocates make a more compelling case.

Avoiding the terrarium problem

Importantly, communicators should take care to *tie the fate of wildlife to the fate of humans*—in order to avoid the default idea that nature is a separate (and usually secondary) topic. Otherwise, even wildlife supporters are susceptible to prioritizing wildlife lower if they seem completely separate from human concerns.

APPLYING THE LEARNING: TYING WILDLIFE FATE TO OUR FATE

When natural systems collapse, it is a troubling indication about how global warming is impacting all of us, threatening the air we breathe, the water we drink, and the foods we eat. For example, in northwestern Minnesota, a stressed habitat has resulted in a population crash from 4,000 moose to about 300 in a 20-year period. We all rely on nature for survival, so we must strengthen our efforts to prevent global warming as much as we can, and to do what we can to help people, plants and animals and natural areas adapt to the impacts of a changing climate. By helping nature, we are actually helping ourselves.

This connection between human concerns and impacts on broad systems is a critical component of messaging:

> **"This really has a far-reaching effect. If anybody knows anything about wildlife, if the birds don't migrate, they don't reproduce. They don't eat the insects. The insects are going to take over everything. They're going to eat the crops. It just goes on and on and on.**—ENVIRONMENTAL SYMPATHIZER, MAN, CHICAGO

Forests and Oceans—Connecting Global Warming, Carbon and Habitat

Forests and oceans bring aspects of the issue together in particularly concrete and compelling ways. Discussions like the following can reinforce supporters' sense of what is causing the problem, as well as what to do about it, and how the fate of animals and habitat is tied to our own.

APPLYING THE LEARNING: EXPLAINING EFFECTS ON HABITAT

As temperatures continue to rise, trout stand to lose three quarters of their current habitat: They are coldwater fish that depend on a frigid mixture of spring and glacier water to thrive.

Migrating birds find food along the way by timing their migrations to when plants bloom or insects hatch. But as temperature change changes local ecosystems, birds migrate only to find that the insects, plants, or other foods they eat are not available.

Familiar animals

Certain animals are clearly easier to think about than others—because they are familiar, we understand more about their needs, habitats, and so forth. But, it is important to remember that for much of the public, mentioning animals is not enough—it is important to discuss them in the context of the value of wildlife and wild places; and the connection between what's good for wildlife is also good for people; as well as the principles and recommendations mentioned earlier in the Common Message Platform (a focus on big picture changes and ecosystems, a connection to human fate and identity, first principles and values, and so forth).

Natural infrastructure

An indirect, but very powerful, complement to highlighting the impacts of global warming on wildlife and habitats is to remind people of the critical role played by habitats in dealing with global warming and its impacts. As discussed earlier, it is easy for people to see that forests store excess carbon. Similar arguments can be made about the role of wetlands in mitigating the impacts of (global warming-caused) hurricanes, etc.

Qualitative research makes clear that the idea that natural systems offer protection and services resonates with many people—and changes the frame from nature as victim, to nature as support system. At the same time, more research and practical experience is needed to develop the specific language for making this point.

APPENDIX

ORIGINAL RESEARCH CONDUCTED FOR THIS PROJECT

Topos Partnership, "Talking Global Warming to Environmental Supporters: A Topos Research Report," eight focus groups and talkback testing with over 600 adults nationwide, November 2008 - February 2009.

Topos Partnership, "Overcoming the Cost Barrier: Findings from Qualitative Research and Message Testing," four focus groups and talkback testing with 150 adults nationwide, April-May 2008.

Topos Partnership, "Scanning the Climate Change Terrain," a review of existing public opinion research (including publicly available sources as well as sources confidential to particular organizations) , May 2008.

INFLUENTIAL WORKS THAT CONTRIBUTED TO THIS ANALYSIS

1 Sky, summary of climate change polling from 11 polls, 2007.

ABC News/Planet Green/Stanford, July 23-28, 2008, and based on telephone interviews with a national adult sample of 1,000. Interviews were conducted by TNS Intersearch.

ABC News/Washington Post/Stanford University, April 5-April 10, 2007 and based on telephone interviews with a national adult sample of 1,002. Interviews were conducted by TNS Intersearch. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

ABC News/Time/Stanford University, March 9-March 14, 2006 and based on telephone interviews with a national adult sample of 1,002. Interviews were conducted by TNS Intersearch. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

ABC News/Washington Post, June 2-June 5, 2005 and based on telephone interviews with a national adult sample of 1,002. Interviews were conducted by TNS Intersearch. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Action Media, "Talking about Reforming the Electric Generation System," 8 focus groups, July 2005.

Alliance for Climate Protection, "Pulse Check Research Findings," based on an online survey with 600 adults evenly divided among Democrats, Republicans and Independents, and four focus groups, September 23, 2008.

Alliance for Climate Protection, May 18-21, 2007, and based on an online survey with a national adult sample of 1,815 adults age 18-74, and eight focus groups conducted April 24 - May 1, 2007.

American Enterprise Institute, AEI Studies in Public Opinion, "Polls on the Environment and Global Warming," April 20, 2007. This source was used for historic trend data.

American Environics and Lake Research Partners, "Re:Green – The Ecological Roadmap," for Earthjustice. Report summarizes: 2,000 home surveys of Americans age 15+, 12 focus groups, a Washington State survey and a green consumerism survey. Published December 2008.

American Environics, "Revised Earthjustice Segmentation," based on the 2007 American Values Survey of 1,803 adults 15+.

American Environics, "Global Warming and Renewable Energy Focus Groups: A Report for the Breakthrough Institute," based on two focus groups, October 16, 2007.

American Environics, "Energy Attitudes: An Analysis of Opinion Research on Energy and Global Warming" for the Nathan Cummings Foundation, June 2007.

American Environics, "A Plan for Global Warming Preparedness" a white paper developed with the Breakthrough Institute and The Center for American Progress, Fall 2006.

American Environics, "Narrative Analysis," for Earthjustice, July 2006.

American Environics, "Road Map for an Ecological Majority," for Earthjustice, July 2006.

American Environics, "Toward a New Ecological Majority," for Earthjustice, supported by Nathan Cummings Foundation, 2005.

Aubrun, A., and Grady, J. (2001). The Missing Conceptual Link: Talkback Testing of Simplifying Models for Global Warming. Providence, RI: Cultural Logic. As reported in Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change Edited by Susanne C. Moser, Lisa Dilling Published February 2007. Cambridge University Press, Cambridge: UK, chapter 1: 1. Weather or climate change? (Ann Bostrom and Daniel Lashof) pp 31-43.

Belden Russonello and Stewart, September 28-October 8, 2008 and based on telephone interviews with a national adult sample of 800, for Natural Resources Defense Council.

Belden Russonello and Stewart, July 16-20, 2008 and based on telephone interviews with a national adult sample of 821, for the Wilderness Society.

Belden Russonello and Stewart, "Energy Efficiency: A Smart Investment in America's Future," a report of eight focus groups, conducted for Natural Resources Defense Council, April 2008.

Belden Russonello and Stewart, "Voters Consider the Climate Security Act and Senatorial Leadership," June 8-10, 2008 and based on telephone interviews with 587 registered voters, for Natural Resources Defense Council.

Belden Russonello and Stewart, "We Can Do It: Communicating How America can move Beyond Oil," an analysis of 8 focus groups, for Natural Resources Defense Council, August 2006.

Bellweather Research and Consulting, National Wildlife Federation Nationwide Poll of Sportsmen, 752 hunters and anglers nationally, June 8 and June 20, 2004.

Bowman, Tom, "Summary Report: A Meeting to Assess Public Attitudes About Climate Change," sponsored by NOAA and George Mason University Center for Climate Change Communications, April 8, 2008.

Budescu, David V., Stephen Broomell and Han-Hui Por, "Improving Communication of Uncertainty in the Reports of the Intergovernmental Panel on Climate Change," Psychological Science, 2009.

CBS News/New York Times, April 20-April 24, 2007 and based on telephone interviews with a national adult sample of 1,052. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

CNN/Opinion Research Corporation, November 2-November 4, 2007 and based on telephone interviews with a national adult sample of 1,024. Data provided by The Roper Center for Public Opinion Research, UConn.

CNN/Opinion Research Corporation, January 19-January 21, 2007 and based on telephone interviews with a national adult sample of 1,008. Data provided by The Roper Center for Public Opinion Research, UConn.

Defenders of Wildlife, in collaboration with The Nature Conservancy and National Wildlife Federation, focus group analysis, September 2008.

Doppelt, Bob, "How People Change," from *The Power of Sustainable Thinking: How to Create a Positive Future for the Climate, the Planet, Your Organization and Your Life*, Earthscan Publishing 2008.

eco-America/SRIC-BI, "The American Climate Values Survey," Oct 2008, based on a mailed survey to a nationally representative sample of adults drawn from the TNS/NFO panel, 1,707 completed questionnaires, March/April 2008.

eco-America/SRIC-BI, "The American Environmental Values Survey," Oct 2006, based on a mailed survey to a nationally representative sample of adults drawn from the TNS/NFO panel, 1,506 completed questionnaires.

EMC Research/American Environics/Nathan Cummings, August 26 – September 6, 2007, and based on telephone interviews with a national adult sample of 1,517 likely voters.

Feygina, Irina, John T. Jost and Rachel E. Goldsmith, "System Justification and the Denial of Global Warming," pre-publication, August 2008.

Gallup, March 5-8, 2009 and based on telephone interviews with a national adult sample of 1,012. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup, March 11-March 14, 2007 and based on telephone interviews with a national adult sample of 1,009. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup, February 22-February 25, 2007 and based on telephone interviews with a national adult sample of 1,018. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup, March 13-March 16, 2006 and based on telephone interviews with a national adult sample of 1,000. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup/CNN/USA Today, April 1-April 2, 2005 and based on telephone interviews with a national adult sample of 1,040. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup/USA Today, March 23-March 25, 2007 and based on telephone interviews with a national adult sample of 1,007. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup/USA Today, March 11-March 14, 2007 and based on telephone interviews with a national adult sample of 1,009. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Gallup/Yale University/ClearVision Institute, July 23-26, 2007, and based on telephone interviews with a national adult sample of 1,011 adults from Gallup's household panel.

Global Strategy Group/Yale Center for Environmental Law and Policy, Feb. 5-11, 2007, and based on telephone interviews with a national adult sample of 1,017.

Greenberg Quinlan Rosner Research, "The Energy Debate," July 24-29, 2008, and based on telephone interviews with a national adult sample of 1,004 likely voters.

Greenberg Quinlan Rosner Research, "Big Thinking on Energy," June 15-20, 2006, and based on telephone interviews with a national adult sample of 1,000 likely voters.

Greenberg Quinlan Rosner Research, "Summation of Global Warming Research Findings," February 16, 2006.

Greenberg Quinlan Rosner Research, "Toward a Political Framework for Global Warming," based on focus groups and two national surveys of 1,000 adults each, February 11-13, 2002 and March 20-25, 2002.

Greenberg Quinlan Rosner Research/Center for American Progress, "Energy Independence to stop Global Warming," March 19-22, 2007, telephone interviews with 1,000 registered voters and 8 focus groups.

Grove Insight, for WEC, WCV and Climate Solutions, 588 interviews among likely 2008 general election voters in Washington State, Nov. 9-12, 2007.

Hart/McInturff/NBC News/Wall Street Journal Poll, January 17-20, 2007 and based on telephone interviews with a national adult sample of. N=1,007.

International Communications Research, eight focus groups among active environmentalists and Audubon supporters, for Audubon, May 2007.

Los Angeles Times/Bloomberg, July 28-August 1, 2006 and based on telephone interviews with a national adult sample of 1,478. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Market Strategies, New Jersey Energy Efficiency/Clean Power Research Tracking, 800 telephone interviews with New Jersey residents, June 13-27, 2006.

Market Strategies, New Jersey Clean Energy Program Pre-Campaign Research, 800 telephone interviews with New Jersey residents, released December 2005.

Markowitz, Ezra M. and Bob Doppelt, "Reducing Greenhouse Gas Emissions Through Behavioral Change," Climate Leadership Initiative, Institute fro a Sustainable Environment, January 2009.

Mellman Group, March 25-29, 2009, and based on interviews with 800 likely 2010 general election voters, for the Pew Environment Group.

Mellman Group, October 25-29, 2008, and based on telephone interviews with 1,000 likely voters, for the Pew Environment Group.

Mellman Group and Public Opinion Strategies, October 20-23, 2008, and based on online interviews with 1,600 registered voters, for the Pew Environment Group.

Mellman Group and Public Opinion Strategies, eight focus groups, July 2008, for the Pew Environment Group.

Natural Resources Defense Council, Summation of Global Warming Research Findings, February 2006.

Polling Company, May 29 – June 1, 2008, and based on telephone interviews with a national adult sample of 1,000. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

PollingReport.com, for historic trend data.

Pooley, Eric, "How Much Would You Pay to Save the Planet?" a discussion paper series of the Joan Shorenstein Center on the Press, Politics and Public Policy, January 2009.

Princeton Survey Research Associates International/Newsweek, August 1-August 2, 2007 and based on telephone interviews with a national adult sample of 1,002. Data provided by The Roper Center for Public Opinion Research, University of Connecticut.

Princeton Survey Research Associates International/Pew Research Center, January 9-13, 2008 and based on

telephone interviews with a national adult sample of 1,515.

Princeton Survey Research Associates International/Pew Research Center, January 10-15, 2007 and based on telephone interviews with a national adult sample of 1,708.

Princeton Survey Research Associates International/Pew Research Center, June 14-19, 2006 and based on telephone interviews with a national adult sample of 1,501.

Public Agenda, "The Energy Learning Curve," January 15-30, 2009 and based on telephone interviews with a national adult sample of 1,001.

Resource Media, "Fighting Clean Coal," issue analysis including a review of print and digital media, six focus groups, and a review of existing surveys, published March 2009.

RT Strategies National Omnibus Poll, with Cook Political Report, January 18-21, 2007.

Shugoll Research, "Global Warming Solutions Messaging," for National Wildlife Federation, 8 focus groups among concerned but uncommitted on global warming, and environmental members, July 17 - Aug 8, 2007.

Sierra Club, Global Warming Public Attitudes memo.

Sierra Club, Carbon Cap Position by Carl Pope, February 2007.

Teague, Peter and Jeff Navin, "Why Progressives Should Shift the Emphasis from Regulation to Investment in their Political and Policy Approach," American Prospect, June 26, 2007.

Union of Concerned Scientists, Nuclear Power and Global Warming position paper.

Ward, Bud, "Communicating on Climate Change," Fall 2008.

Yale Project on Climate Change and the George Mason University Center on Climate Change Communication, "Six Americas," 1,980 telephone surveys, summer 2007.

Yale School of Forestry & Environmental Studies, "Galvanizing National Action on Climate Change" Spr 2006.

photo credits

Seth Tisue.....page 10
albmulay.....page 13
awinn233.....page 15
chanchan222.....page 18
Stephen Michell.....page 23
Sharada Prasad..... .....page 27
PaulS.....page 29
richardmason.....page 40
Smiles Are Free.....page44
mahalie.....page 61