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## **Obama and the Politics of Climate Science Communication**

**Rick Piltz  
Climate Science Watch\*  
Government Accountability Project  
1612 K St., N.W., Suite 1100  
Washington, DC  
[piltz@climatesciencewatch.org](mailto:piltz@climatesciencewatch.org)**

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\* Rick Piltz is the Director of Climate Science Watch, the climate science program of the Government Accountability Project. Climate Science Watch is dedicated to holding public officials accountable for using climate research effectively and with integrity in dealing with the challenge of global climate disruption.

# Obama and the Politics of Climate Science Communication

## Abstract

President-Elect Obama's post-election characterization of climate change as "a matter of urgency and national security" contributed to an expectation that, as President, he would champion climate science and articulate the climate change problem forcefully. Developments since then have shown a complex pattern in Obama's relationship to the science and politics of climate change. This paper examines this pattern, in the context of the difficulty of making progress on climate policy in the legislative and diplomatic arenas, and with the aggressive attack on the credibility of mainstream climate science mounted from 2009 onward by opponents of stronger policy. How has Obama's decision to focus primarily on a 'clean energy' framing and his apparent reticence on climate change communication played out in the arenas of national policymaking and U.S. public opinion? The paper concludes that presidential leadership in communicating with the public about climate science and its implications for society and governance should play an important role in policymaking, but that there are understandable reasons why elected officials are cautious about taking on this battle in the current political context.

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"The time for delay is over, the time for denial is over. We all believe what the scientists have been telling us for years now, that this is a matter of urgency and of national security, and it has to be dealt with in a serious way. That is what I intend my administration to do."

--President-Elect Obama, December 9, 2008<sup>1</sup>

At the beginning of 2009 there was a widely shared expectation in the policy arena that the U.S. political system had finally reached a point where it would be possible to take significant steps forward on climate change. The Democrats had regained congressional majorities in 2006 and were developing a climate policy agenda to move beyond a period of inaction, starting with hearings documenting the Bush-Cheney administration's legacy of political interference with climate science communication. President Obama took office with large Democratic majorities in both the House and Senate and having vowed that his administration would address global climatic disruption as "a matter of urgency and national security." Climate change issues had achieved an unusually high level of salience and concern among policymakers and the general public. Multiple factors likely contributed to this, including an evolutionary improvement in media coverage,<sup>2</sup> strong communication by the climate science community including the conclusions of the IPCC Fourth Assessment Report, Al Gore's "An Inconvenient Truth" film, and a growing demand for action by advocates of a stronger climate policy.

There were significant opportunities for action on the legislative, regulatory, and diplomatic fronts. The Waxman-Markey bill, introduced early in 2009, would have established a statutory

basis for systematically reducing emissions over time, while also initiating programs for adaptive preparedness to deal with impacts. Pursuant to the 2007 Supreme Court decision in *Massachusetts v. Environmental Protection Agency*, the new EPA leadership was poised to re-start action on the ‘Endangerment Finding’ that the Bush administration had blocked, and to proceed with regulation of emissions of greenhouse gases under the Clean Air Act. The annual Conference of the Parties to the climate treaty, to be held in Copenhagen in late 2009, held the potential for a new post-Kyoto Protocol agreement in which the major powers would agree on a course of action. The new administration and congressional majority could take significant steps forward on the development and deployment of alternative energy technologies.

But the changes that were widely anticipated turned out to be very difficult to achieve. After narrowly passing in the House in June 2009, the Waxman-Markey cap and trade bill stalled in the Senate, a victim of the 60-vote filibuster-breaking impediment. Following the 2010 election, congressional action on climate change policy has collapsed. Diplomatic post-Kyoto Protocol accomplishments, starting with the voluntary framework cobbled together in Copenhagen, have fallen considerably short of the collective steps that climate science suggests would be commensurate with the scope and urgency of the problem – certainly nothing that indicates collective commitments to reduce emissions anywhere near what would be required to hold global warming to 2° C above the preindustrial level. EPA issued its formal finding that greenhouse gas emissions endanger public health and welfare, which has been upheld in the courts with a strong, science-based defense in the face of aggressive legal challenge by industry and some states. The agency has thus far been able to move forward with rulemakings on vehicle emissions and new power plants, albeit slowly, with no rule yet on the agenda for existing power plants. EPA faces political challenges at every step and could potentially be blocked altogether after the 2012 election.

The Obama administration made an early political decision to focus its climate and energy message primarily on ‘clean energy’ and ‘green jobs’, and only secondarily on global warming and climate change. Following a flurry of action during the push for climate legislation in the House and in the run-up to the Copenhagen conference, by the beginning of 2010, and thereafter, administration officials largely abandoned any serious effort to elevate the salience of climate change issues with the general public.<sup>3</sup>

This was apparent in Obama’s State of the Union address in January 2010, when he made a one-sentence reference to the scientific evidence for climate change, then pivoted quickly away from pressing the issue when greeted with a mocking reaction from congressional Republicans in his audience. In failing to hold his ground in support of the climate science that had come under aggressive attack by the right-wing, call out his global warming denialist critics, and use the opportunity to communicate about climate change as ‘a matter of urgency and national security’ to a nationwide audience, Obama signalled an evasiveness that has characterized his approach to discussing climate change with the public during the past three years.<sup>4</sup>

The White House has steered clear of allowing climate change to become a significant issue in the election campaign. The President has thus far mentioned climate change only sporadically and in front of friendly audiences, such as in speeches to college students. The White House Deputy Assistant to the President for Energy and Climate Change gives a talk on what the Obama administration is doing to promote production of oil, natural gas, ‘clean’ coal, nuclear

power, and renewable energy, plus increased energy efficiency – what the administration terms the ‘all of the above’ approach – without mentioning climate change as a driver for a US energy strategy.<sup>5</sup> Secretary of Agriculture Tom Vilsack, asked at a White House press briefing about the connection between climate change and the disastrous drought now plaguing much of the United States, said “I’m not a scientist so I’m not going to opine as to the cause of this” — thus passing up the opportunity to say something like, ‘Our leading scientists tell us there is a connection between human-caused global warming and the likelihood of more of these severe droughts, and we need to deal with that in addition to the immediate drought-relief steps we will be taking.’<sup>6</sup> John Holdren, the president’s science adviser and Director of the White House Office of Science and Technology Policy, with his long history of articulating climate science and the case for climate policy action with clarity and urgency, has been largely silent on climate issues during the campaign.

With the Republicans having shifted sharply in the direction of denying the scientific case for anthropogenic climate change and resolutely opposing policy on mitigation and adaptation responses, the Obama administration has appeared unwilling or unable to forcefully articulate a pro-science, pro-action position that could turn the issue to their advantage.

What happened?

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It seemed evident as early as 1988, when global warming and climate science became a front-burner issue for policymakers in Washington with a series of congressional hearings, that this had the potential to be an intractable problem for society and the political system to deal with.<sup>7</sup>

Anthropogenic global warming presents society with an extraordinary set of challenges. It is global in scope. It results from the burning of fossil fuels, thus implicating a vast range of human activity. Global climatic disruption is projected to cause a wide range of adverse societal and environmental consequences. It calls for adopting long-range policies and taking complex actions in the near- to mid-term in order to limit or avoid long-term consequences.

One of the essential aspects of the climate change problem is that it emerged and has developed as a public issue on a foundation of specialized scientific work that the great majority of policymakers and the public do not understand on a technical level. Decades of scientific communication aimed at policymakers and a wider audience underpin the development of climate change as a policy problem. But, clearly, scientists cannot solve the problem they have identified. Climate change, as a matter of government policy and societal decisionmaking, must be dealt with in arenas that are radically different from the arena of scientific research, by individuals and organizations whose agendas may be indifferent to, or at cross-purposes with, the conclusions of scientific assessments.

The problem of bringing together the science and policy communities in a fruitful exchange, with a continuing, ongoing advance of scientific understanding proceeding in parallel with a continuing, ongoing policy process, is challenging at best. It becomes much more difficult when climate science assessments are seen as having implications that threaten political, ideological, or

economic interests. In this context, climate change as a policy problem was drawn into a situation rife with possibilities for predatory political interference with the communication of scientific understanding.

From the early 1990's onward, following the release of the IPCC First Assessment Report in 1990 and the subsequent negotiation of the UN Framework Convention on Climate Change, we began to see the manifestation of an organized effort to undermine the conclusion that global warming was either a real problem or a serious problem. From the 1990's to the present, much of this campaign has been supported by coal and oil industry interests, funding anti-regulatory policy groups and public relations campaigns. The aim has been to prevent or limit the adoption of policies that would result in the regulation of emissions of greenhouse gases. The strategy included cultivating a small group of 'skeptical' scientists whose views were at odds with the increasingly widespread conclusions being drawn by the mainstream science community, and thus convenient for creating an enhanced sense of scientific uncertainty. A number of studies have analyzed various aspects of these activities. I termed this disinformation campaign the global warming 'denial machine' – referring, not to scientists with differing viewpoints, but rather to an orchestrated campaign to confuse public opinion by attacking the credibility of mainstream climate science and even the personal integrity of leading climate scientists.<sup>8</sup>

In 2001, the disinformation campaign moved directly into the government as part of the Bush administration, influencing climate change communication through a variety of methods. This campaign did not depart from Washington politics at the end of 2008 along with the personnel of the Bush administration.<sup>9</sup>

Under the best of circumstances, the development and implementation of a coherent U.S. climate policy – including major climate change legislation, an effective regulatory system on greenhouse gas emissions, incorporation of adaptive preparedness for climate change impacts into decisionmaking, and a post-Kyoto Protocol international accord – would require a great deal of political heavy-lifting.

But, in addition to the complexity and difficulty of policymaking in this area, the prospect of major action on climate policy led to a powerful counterattack from corporate interests, most notably the fossil fuel industry, and the elected officials and policy groups they support. Their interest can be seen as essentially forestalling strong regulation and other policy measures that would shift electric power production and the transportation system toward energy alternatives, except to the extent that they control the transition. The position of corporate interests is reinforced in a mutually supportive relationship with 'free market' policy advocates, with wealthy anti-regulatory ideologues, such as the Koch brothers, in the role of connecting and coalescing these forces in the political arena.<sup>10</sup>

In electoral and legislative politics, the counterattack against strong climate policy became an integral part of partisan conflict. Even in the early 1990's, the views on global warming expressed by members of Congress, to the extent they were held at all, could commonly be predicted on the basis of partisanship and on whether one's party controlled the White House. But this partisan division on climate change policy is much sharper now, most notably with the Republicans' ideological shift to the right and hard-line opposition to Obama administration positions. 'Skepticism' about anthropogenic climate change has become a dominant position

among leading Republicans, and a litmus test for support for candidates by the right-wing base – especially from 2009 onward, as the denial machine became part of the Republican mainstream.

Some of this line of attack is a direct descendant of the “Global Climate Science Communications Action Plan” developed in 1998 at the American Petroleum Institute by representatives of API, Exxon and other energy corporations, the Marshall Institute, and other advocacy groups. The strategy emphasized using skeptic scientists with views congenial to the industry to frame a narrative of fundamental scientific uncertainty as a means of influencing public opinion and weakening political support for climate mitigation policy.<sup>11</sup>

But we have also seen an increasingly aggressive effort to delegitimize climate science spilling over into attacks on the professional credibility and personal integrity of leading figures in the climate science community. Some of these attacks, whether coming from high-level elected officials or from the blogosphere, have made the Bush Administration – which had been willing to misrepresent and bury climate science findings but had largely stopped short of inquisitorial attacks on scientists – look moderate by comparison.<sup>12</sup>

Thus, especially from 2009 onward, global warming has been drawn into a polarized, partisan struggle for power and a very high-stakes policy conflict about the future of the energy system. In addition, it has been drawn into a broader ‘culture war’ and ideological conflict over the role, scope, and direction of the U.S. government and the overall priorities of society. The political conflict has made it difficult for political elites to conduct a pragmatic, problem-solving discourse informed by a shared understanding and agreement on scientific assessments of the climate change problem. Rather, any attempt to discuss the implications of climate change for policymaking in terms that accept mainstream scientific assessments, such as those embodied in the National Research Council’s multi-volume America’s Climate Choices study, provoke immediate challenge and conflict.<sup>13</sup>

This sets the bar quite low for making Obama appear reasonable on the issue.

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“[C]limate change is an enormously important dimension of the energy challenge that we face, and larger environmental challenges that we face ... The President is well aware of that. I certainly expect that there will be, at some point, going forward... a major speech from the President that puts all this together in a very forceful way. ... It’s far, far more powerful when the President is out there saying it, and he will do that.

“The President understands with crystal clarity what a big deal this is, and it’s not just a matter of the stuff we should do even if we don’t believe in climate change. He believes in it, he understands it, and we’re going to get it done. ...

“Unless and until the U.S. gets serious nationally about climate change – and we’re not serious until we put a price on greenhouse gas emissions – until we do that we’re not going to have the international agreement, we’re not going to have the mitigation that we need, and we’re not going to have the support for adaptation. ...”

--John Holdren, White House senior adviser to President Obama for science and technology, during the Q&A following his remarks to the National Climate Adaptation Summit, Washington, DC, May 27, 2010<sup>14</sup>

President Obama has yet to give a speech to the American general public focused on climate change, its potential impacts, mitigation, adaptive preparedness, and U.S. international responsibilities. White House political and communications advisers pushed early in his presidency to adopt a framing in terms of ‘clean energy’ and play down talking about climate change and global warming, which apparently were seen as politically sensitive, controversial, scientifically confusing, and, in general, not likely to be near-term winners with public opinion.<sup>15</sup>

This framing continues into the 2012 election campaign, with Obama even downplaying clean energy to some extent to focus on his ‘all of the above’ approach to domestic energy production. Creating jobs with domestic energy production and moving toward energy independence is seen as a re-election message that will go down easier with a public for which the climate change problem is of limited salience and limited immediate concern. And the electorate is not generating significant bottom-up pressure on candidates to deal with climate change as a priority. This is entirely to be expected, given the immediacy and urgency of problems with the economy and the general lack of conveying any sense of urgency on the part of political elites. Obama’s near-term political calculus is readily understandable – although it can be argued that he could gain an additional political advantage by emphasizing climate preparedness and accusing the Republicans of anti-science global warming denialism, especially in the face of the recent U.S. experience with severe drought and intense wildfires.

A national representative survey conducted in March 2012 for the Yale Project on Climate Change Communication and George Mason University Center for Climate Change Communication found that:

Overall, majorities of Americans say that global warming and clean energy should be among the nation’s priorities, want more action by elected officials, corporations and citizens themselves, and support a variety of climate change and energy policies, including holding fossil fuel companies responsible for all the “hidden costs” of their products. A majority also say they would be more likely to vote for a candidate who supports a “revenue neutral” tax shift from income taxes to fossil fuels, and that global warming will be one of the issues that determines their vote for President this fall.<sup>16</sup>

The data suggest there is a significant reservoir of potential support for a stronger climate policy, despite the efforts of opponents to make the issue too hot for elected officials to handle – efforts with which they have had considerable success to date. In the ‘Six Americas’ taxonomy of Americans’ interpretations of and responses to climate change, the percentage of the public in either the ‘Alarmed’ or ‘Concerned’ audiences considerably outnumber those in the ‘Dismissive’ and ‘Doubtful’ groups.<sup>17</sup>

Findings from an update of the Yale-George Mason Six Americas survey study in 2011 suggest that much of public opinion is soft, with many not holding firm or well-informed views. The authors reported: “Uncertainty on the issue remains high: More than a third of Americans

agreed they could easily change their minds about global warming – especially those in the Disengaged (73%) and Cautious (58%) segments.”<sup>18</sup> I would suggest that climate change is an example of a complex policy problem that most people don’t understand in terms of relating it to their direct experience – thus it seems unlikely that policymakers will feel a great deal of pressure from the public to take stronger action. As with other issues with which most people don’t have direct experience to base a viewpoint on – for example, the problem of what to do about U.S. military involvement in Afghanistan – much of public opinion is likely to take its cues from and can potentially be swayed by high-level governmental and economic leadership and credible experts.

The U.S. currently has no climate change policy strategy, in the sense of a policy framework and implementation agreed on by the White House and a critical mass in Congress, with strong support among key stakeholders. The public that takes its cues from the power elite does not see climate change being addressed coherently as a matter of ‘urgency and national security.’ There is a dysfunctional political dynamic and essentially a disconnect between climate science – with its findings and assessments that appropriately could instill some sense of urgency – and the lack of coherent policymaking.

This raises the question, is it possible to make significant progress on the climate change science-policy connection without an active communication between political elites and the public about the nature of the climate change problem and the associated policy issues. The White House appears, for now, to be taking a ‘stealth’ approach of implementing executive measures in the absence of legislation, without talking to the general public about climate change.

Keeping the focus on Obama, I believe this approach has several unfortunate and damaging consequences that, whatever role it may play in his re-election effort, will make it more difficult to address climate change in the future unless he sets a significantly different course during a second term. If Obama is defeated for re-election, the same problem will need to be addressed with a different configuration of climate policy leadership.

I suggest there are several problems not addressed under Obama’s evasiveness on climate change. These include: (1) the denial machine and the war on climate science; (2) the urgency and time-sensitivity of the sustainable energy transition; and (3) the problem of climate change preparedness.

### **The denial machine and the war on climate science –**

Obama’s refusal, or inability, to find a way to communicate forthrightly with the public about global warming and climate change signals a failure to acknowledge, at the presidential level, the assessment of the problem that he is getting from the leadership of the scientific community. No drawing on the words of his science adviser John Holdren, NOAA Administrator Jane Lubchenco, and other experts in government; no public acknowledgement of the America’s Climate Choices series and other significant reports of the National Research Council; no White House invitations to meet with and show support for James Hansen and other leading scientists.

The President has put forward no defense of the science community in the ongoing war on climate science and scientists, from 2009 onward, when the global warming denial machine went

into full attack mode in Congress and in the policy advocacy world. With climate science taking a beating from people whose political agendas are all too apparent, Obama has been pretty much AWOL.

Jonathan Lash, president of the World Resources Institute, said:

I don't blame the president for the failure of climate legislation, but I do hold him accountable for allowing opponents to fill the void with misinformation and outright lies about climate change. By excising 'climate change' from his vocabulary, the president has surrendered the power that only he has to explain challenging issues and advance complex solutions for our country.<sup>19</sup>

Al Gore criticized Obama in similar terms:

President Obama has never presented to the American people the magnitude of the climate crisis. He has simply not made the case for action. He has not defended the science against the ongoing, withering and dishonest attacks. Nor has he provided a presidential venue for the scientific community — including our own National Academy — to bring the reality of the science before the public.<sup>20</sup>

### **The sustainable energy transition –**

“What do we lose when global warming and climate change get repackaged as clean energy?” asks Max Boykoff in a *Washington Post* op-ed. “We wind up missing a thorough understanding of the breadth of the problem and the range of possible solutions. ... The way we talk about a problem affects how we deal with it.”<sup>21</sup>

I would argue that the 'clean energy' framing has, thus far at least, not been sufficiently strong to overcome established patterns and organized resistance. It is understandable as a short-term tactical approach, given the political difficulties that currently affect climate policy. But if climate change is dropped from the discourse because it seems politically inconvenient, how much time will be lost, and how will public support be maintained through the costs and inconveniences of a sustainable energy transition?<sup>22</sup>

Further, the enormous and difficult project of decarbonizing the global energy system during this century is necessitated by the prospect of unchecked global climate disruption and its potentially disastrous consequences. A 'clean energy' transformation is an urgent, time-sensitive policy problem that should be understood as one of the components of a comprehensive climate policy. Martin Hoffert, Emeritus Professor of Physics at New York University, made this point in countering those who have advocated for decoupling the issues of human energy systems from climate change as a way to expedite progress on energy:

Without the possibility of catastrophic climate change radically changing Earth's environment in decades to a hundred years or so, creating a new global energy system would be a problem for the 22nd Century plausibly tackled in a leisurely way without failure posing an existential threat.

[There is] plenty of coal to run high tech civilization at least another hundred years even with substantial economic growth by burning it in conventional coal-fired electric plants and making liquid hydrocarbon automotive fuels from it. It is planet-transforming climate change — from coal-burning plants now on track to be built by China, India and the U.S. that, de facto, will become the energy infrastructure of the middle and late 21st century — that makes a push to urgently transform of our energy system away from fossil fuels the challenge of the century.<sup>23</sup>

Todd Stern, Obama's Special Envoy for Climate Change, acknowledged this point in a recent speech at Dartmouth College:

What we need is a straight-shooting conversation that explains what's at stake in climate change and why we need action to accelerate the transformation to a clean energy economy. We can and should make clear that there are immediate, non-climate benefits to doing this — building America's competitive future, since clean energy will be one of the defining industries of the 21<sup>st</sup> century; making our air cleaner; protecting our health against conventional pollution. But we also need to make clear that the severe risks of climate change make this transformation essential if we care about sustaining our health, our prosperity and our national security. Climate change is what makes the transformation of our energy system an engagement of necessity, not one of choice. ...

While potent issues of the moment will always command our attention, we must also take the long view, acting now to avoid crisis down the road.<sup>24</sup>

But how would the President reconcile such a framing, were he to adopt it as his own, with his administration's promotion of an 'all of the above' approach to energy? The President seeks political support in a difficult economy by emphasizing his administration's stepped up support for oil production in the Gulf of Mexico, on federal lands, and in the Arctic, along with promoting the game-changing benefits of a long-term supply of natural gas produced by hydrofracking. Mountaintop removal coal mining continues, and more than five years after *Massachusetts v. EPA* there is no sign of a rulemaking to restrict GHG emissions from existing power plants.

Talking about the implications of climate science would require a politically inconvenient re-framing of the current energy discourse, which seems to be based on the premise that we are going to go on using coal, oil, and natural gas for the indefinite future, with no recognition of a need for a fundamental transformation of the energy system.

### **Climate Preparedness –**

In addition to the question of mitigation – the reduction of GHG emissions from fossil fuels – there is the matter of global climatic disruption already underway. The U.S., and the world, face a wide range of adverse and potentially disastrous impacts, arguably already beginning to manifest in heat waves, disrupted water resources, extreme precipitation, severe drought, flooding, extraordinary wildfires, and accelerated Arctic ice loss.

What message should the public be hearing from the President and from government leaders at all levels about the need for a national and international strategy for adaptive preparedness to deal with climate change consequences? The U.S. has no national strategy for adapting to climate change, raising issues of the dangers of being unprepared for increasingly disruptive climate change impacts. With Washington, D.C., elected officials largely silent, if not in outright opposition to acknowledging the problem, the burden shifts to states and local communities to lead in using impacts assessments in proactive policymaking.<sup>25</sup>

At the level of managers and technical experts in federal agencies, activity has ramped up on strategic planning to integrate climate adaptation considerations into existing programs and decision processes. An Interagency Climate Change Adaptation Task Force has issued several reports.<sup>26</sup> A National Climate Assessment, focused on impacts and aimed at providing analysis to inform decisionmaking in communication with stakeholders, is underway under the sponsorship of the U.S. Global Change Research Program and scheduled to issue a report in 2013.<sup>27</sup> But there is no high-profile acknowledgement of these activities and their significance by the President, and agencies are left with minimal new resources for implementing adaptation. Agencies may be reluctant to promote their climate change adaptive preparedness activities in a hostile political environment, and may re-label some climate-related program activities in budget requests so as to protect them from denialist congressional overseers.<sup>28</sup>

The low salience of communication between political leaders and the public on the issues of adaptive preparedness arguably makes more difficult the challenge of creating the necessary public understanding and building and maintaining the necessary public support for the kinds of policies that will be necessary to deal with global climatic disruption.

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Could Obama reasonably be expected to speak to the public about climate science and policy in the way we are told he has been given to understand the problem by his science adviser John Holdren and the mainstream climate science community? If he truly understands what Dr. Holdren has presented in numerous talks and writings, as well as the conclusions of the key National Research Council reports, this could be seen as a daunting challenge in several respects.

In congressional testimony on “The Administration’s View of the State of the Climate,” Dr. Holdren concluded:

While our understanding of the global climate system and our ability to project its future behavior have grown enormously over the past couple of decades, we cannot yet predict with confidence exactly where on a rising temperature trajectory these or other thresholds would be crossed. It seems clear, however, that the probability of crossing one or more of them goes up sharply as the global-average surface temperature increase compared to 1900 goes above 3.6°F (2°C). That is a major reason for the growing global consensus that worldwide efforts should limit heat-trapping emissions sufficiently to hold the average temperature increase to 3.6°F (2°C) or less.<sup>29</sup>

In an analogous vein, The National Research Council’s America’s Climate Choices report, *Limiting the Magnitude of Climate Change*, in discussing goals for international efforts to limit

climate change, focuses on analyzing a range of global atmospheric GHG concentrations between 450 and 550 ppm CO<sup>2</sup>-equivalent. The NRC panel concluded:

Global temperature and GHG concentration targets are needed to help guide long-term global action. Domestic policy, however, requires goals that are more directly linked to outcomes that can be measured and affected by domestic action. The panel thus recommends that the U.S. policy goal be stated as a quantitative limit on domestic GHG emissions over a specified time period—in other words, a GHG emissions budget.<sup>30</sup>

Further analysis in this report suggest that a reasonable ‘representative’ range for domestic emissions, 170-200 Gt of CO<sup>2</sup>-eq for the period 2012-2050, would require roughly a reduction of emissions from 1990 levels of 50-80 percent. Achieving the higher end of this range “will require a major departure from business-as-usual emission trends,” is the panel’s understated conclusion.

The framings in the America’s Climate Choices report and Dr. Holdren’s testimony suggest that, in order to prevent dangerous anthropogenic interference with the climate system – the core goal of the UN Framework Convention on Climate Change – there is a need for policy to constrain future GHG emissions within some kind of carbon budget, i.e., a limit on aggregate future GHG emissions. This would require a global budget, partitioned into national responsibilities. Following the implications of this framing to their likely conclusions: with consideration of the problem of equitable sustainable development and the need for buy-in from developing nations, and with the momentum of ongoing global warming and the current trajectory of global GHG emissions, we could calculate that, in order make its contribution to staying under a 2° C warming limit, the U.S. would have to embark immediately on a path toward radically reduced emissions and sustain it over a period of decades. With every year of delay, the transition would become substantially more costly and the goal would become more difficult to reach.<sup>31</sup>

If politics is the art of the possible, what U.S. political leader is going to take that up as a proposed policy? In U.S. politics, the prospect of an aggressive climate policy could unleash a perfect storm of fundamental conflict.

Dealing with climate change calls for government action on a large scale, at all levels of agreements, with the United States constraining its own behavior in a multilateral context. It requires policy to regulate emissions of greenhouse gases and drive substantial reductions in emissions, on a path sustained over decades. It requires planning and implementing adaptive preparedness to deal with a wide range of disruptive climate change impacts. It calls for support for the research, development, and deployment of new energy technologies.

Taking policy in those directions is anathema to a significant percentage of the U.S. public and to powerful political and economic interests. There is a powerful set of interests in the U.S. that, in order to defend its ‘conservative’ value system and a deregulated free market, is willing to attack the credibility of climate science and even to call into question the integrity of the climate science community, in order to avoid coming to grips with the implications of this problem. Naomi Klein contends:

The deniers did not decide that climate change is a left-wing conspiracy by uncovering some covert socialist plot. They arrived at this analysis by taking a hard look at what it would take to lower global emissions as drastically and as rapidly as climate science demands. They have concluded that this can be done only by radically reordering our economic and political systems in ways antithetical to their “free market” belief system. As British blogger and Heartland [Institute] regular James Delingpole has pointed out, “Modern environmentalism successfully advances many of the causes dear to the left: redistribution of wealth, higher taxes, greater government intervention, regulation.” Heartland’s Bast puts it even more bluntly: For the left, “Climate change is the perfect thing.... It’s the reason why we should do everything [the left] wanted to do anyway.”

Here’s my inconvenient truth: they aren’t wrong.<sup>32</sup>

Wrong in their denial of climate science, Klein says, but not wrong in fearing that accepting the science will lead down a slippery slope toward undoing the free-market ideology that has dominated the global economy for decades.

The collision between climate science and the realities of U.S. politics today is such that, to repair the dysfunctional relationship, political leadership would have to tackle this situation and either transform it or decisively defeat the opposition. Climate change can’t be carved out and dealt with as a separate issue unto itself. It must be addressed in this larger context of what might be called a crisis of American democracy – which is due partly to the extent to which the economic interests of corporate power and wealth dominate the political process, and partly to the partisan, ideological, and cultural polarization that creates impasse in the policy arena.

It is no wonder that political leaders are reluctant to take this on.

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<sup>1</sup> “Obama Vows Action on Global Warming,” *Boston Globe*, Dec. 9, 2008, [http://www.boston.com/news/politics/politicalintelligence/2008/12/obama\\_vows\\_acti.html](http://www.boston.com/news/politics/politicalintelligence/2008/12/obama_vows_acti.html)

<sup>2</sup> Maxwell T. Boykoff, “Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006,” *Area*, 2007, 39.2 (journal of the UK Royal Geographical Society)

<sup>3</sup> Graciela Kincaid, “Running from Climate Change: The Obama Administration’s Changing Rhetoric,” December 22, 2011, <http://climatedevlab.wordpress.com/2011/12/22/running-from-climate-change-the-obama-administrations-changing-rhetoric/>

<sup>4</sup> Rick Piltz, “Obama State of the Union evasive and inadequate on climate change and climate science,” *Climate Science Watch*, January 28, 2010, <http://www.climatesciencewatch.org/2010/01/28/obama-state-of-the-union-evasive-and-inadequate-on-climate-change-and-climate-science/>

<sup>5</sup> Rick Piltz, “White House energy policy talk has ‘all of the above’ except climate change,” *Climate Science Watch*, July 26, 2012, <http://www.climatesciencewatch.org/2012/07/26/white-house-energy-policy-talk-has-all-of-the-above-except-climate-change/>

<sup>6</sup> White House, Office of the Press Secretary, “Press Briefing by Press Secretary Jay Carney and Secretary of Agriculture Tom Vilsack,” July 18, 2012, <http://www.whitehouse.gov/the-press-office/2012/07/18/press-briefing-press-secretary-jay-carney-and-secretary-agriculture-tom->

<sup>7</sup> The discussion in this paper draws on the author’s 24 years in Washington, DC, as a participant-observer in the collision between the world of climate science and the realities of Washington politics. This experience included four years on the professional staff of the House Committee on Science, Space, and Technology, 10 years in senior

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positions in the U.S. Global Change Research Program / Climate Change Science Program coordination office, and seven years as the founder and director of a public interest watchdog project.

<sup>8</sup> Ross Gelbspan, *The Heat Is On: The Climate Crisis, the Cover-Up, the Prescription*, New York, Basic Books, 1998; Chris Mooney, *The Republican War on Science*, New York, Basic Books, 2006; Union of Concerned Scientists, *Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco's Tactics to "Manufacture Uncertainty" on Climate Change*, 2007, [www.ucsusa.org/assets/documents/global\\_warming/exxon\\_report.pdf](http://www.ucsusa.org/assets/documents/global_warming/exxon_report.pdf); James Hoggan and Richard Littlemore, *Climate Cover-Up: The Crusade to Deny Global Warming*, Vancouver, Greystone Books, 2009; Naomi Oreskes and Erik M. Conway, *Merchants of Doubt*, New York, Bloomsbury Press, 2010; James Lawrence Powell, *The Inquisition of Climate Science*, New York, Columbia University Press, 2011

<sup>9</sup> For a detailed review, see Rick Piltz, "Secrecy, Complicity, and Resistance: Political Control of Climate Science Communication Under the Bush-Cheney Administration," in *Government Secrecy*, pp. 219-246 (*Research in Social Problems and Public Policy*, Volume 19, Susan Maret, ed., Emerald Books, 2011); also Rick Piltz, "The Denial Machine," *Index on Censorship*, Vol. 37, No. 4, pp. 72-81, available at: [www.climate-science-watch.org/file-uploads/The\\_Denial\\_Machine\\_-\\_Index\\_on\\_Censorship.pdf](http://www.climate-science-watch.org/file-uploads/The_Denial_Machine_-_Index_on_Censorship.pdf); Rick Piltz, Testimony Before the Committee On Oversight and Government Reform, U.S. House of Representatives, *Hearing on Allegations of Political Interference With the Work of Government Climate Change Scientists*, January 30, available at: [http://oversight.house.gov/index.php?option=com\\_content&task=view&id=2607&Itemid=2](http://oversight.house.gov/index.php?option=com_content&task=view&id=2607&Itemid=2); Seth Shulman, *Undermining Science: Suppression and Distortion in the Bush Administration*, Berkeley, University of California Press, 2007; Union of Concerned Scientists and Government Accountability Project (2007), *Atmosphere of Pressure: Political Interference in Climate Science*, available at: [www.ucsusa.org/assets/documents/scientific\\_integrity/atmosphere-of-pressure.pdf](http://www.ucsusa.org/assets/documents/scientific_integrity/atmosphere-of-pressure.pdf); Tarek Maassarani, *Redacting the Science of Climate Change: An Investigative and Synthesis Report*, Washington, D.C., Government Accountability Project, 2007, available at: [www.whistleblower.org/storage/documents/RedactingtheScienceofClimateChange.pdf](http://www.whistleblower.org/storage/documents/RedactingtheScienceofClimateChange.pdf); Mooney, C. (2007), An Inconvenient Assessment. *Bulletin of the Atomic Scientists*, Vol. 63, No. 6, pp. 40-47, 63. DOI: 10.2968/063006010

<sup>10</sup> See, for example, Jane Mayer, "Covert Operations - The billionaire brothers who are waging a war against Obama," *The New Yorker*, August 30, 2010, [http://www.newyorker.com/reporting/2010/08/30/100830fa\\_fact\\_mayer?currentPage=all](http://www.newyorker.com/reporting/2010/08/30/100830fa_fact_mayer?currentPage=all)  
Read more [http://www.newyorker.com/reporting/2010/08/30/100830fa\\_fact\\_mayer#ixzz25HBPTRY](http://www.newyorker.com/reporting/2010/08/30/100830fa_fact_mayer#ixzz25HBPTRY)

<sup>11</sup> [http://www.climate-science-watch.org/file-uploads/API\\_communication\\_plan\\_memo.pdf](http://www.climate-science-watch.org/file-uploads/API_communication_plan_memo.pdf)

<sup>12</sup> See, for example: Tom Clynes, "The Battle Over Climate Science - Climate scientists routinely face death threats, hate mail, nuisance lawsuits and political attacks. How much worse can it get?" *Popular Science*, posted June 21, 2012, <http://www.popsci.com/science/article/2012-06/battle-over-climate-change>; Suzanne Goldenberg, "US Senate's top climate sceptic accused of waging 'McCarthyite witch-hunt,'" *The Guardian*, March 1, 2010; Rick Piltz, "Sen. Inhofe inquisition seeking ways to criminalize and prosecute 17 leading climate scientists," Climate Science Watch, February 24, 2010, <http://www.climate-science-watch.org/2010/02/24/sen-inhofe-inquisition-seeking-ways-to-criminalize-and-prosecute-17-leading-climate-scientists/>; Rick Piltz, "Rep. Sensenbrenner projects 'fascism' and 'fraud' onto scientists, is rebutted at hearing," Climate Science Watch, December 8, 2009, <http://www.climate-science-watch.org/2009/12/08/rep-sensenbrenner-projects-fascism-and-fraud-onto-scientists/>; Douglas Fischer, "Cyber bullying rises as climate data are questioned," *The Daily Climate*, March 1, 2010, <http://www.dailyclimate.org/tdc-newsroom/2010/03/cyber-bullying-rises-as-climate-data-are>

<sup>13</sup> National Research Council, *America's Climate Choices* reports, Washington, DC, National Academies Press, [http://www.nap.edu/catalog.php?record\\_id=12781](http://www.nap.edu/catalog.php?record_id=12781)

<sup>14</sup> <http://www.climate-science-watch.org/2010/05/28/holdren-at-adaptation-summit-not-serious-until-we-put-a-price-on-greenhouse-gas-emissions/>

<sup>15</sup> Joe Romm, "Messaging 101b: EcoAmerica's phrase 'our deteriorating atmosphere' isn't going to replace 'global warming' — and that's a good thing." Climate Progress, May 3, 2009, <http://thinkprogress.org/climate/2009/05/03/204051/messaging-ecoamerica-global-warming-pollution/>

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<sup>16</sup> Anthony Leiserowitz, Edward Maibach, Connie Roser-Renouf, and Jay D. Hmielowski, *Climate Change in the American Mind: Public Support for Climate and Energy Policies in March 2012*, Yale University and George Mason University, New Haven, CT, Yale project on Climate Change Communication, 2012, <http://www.climatechangecommunication.org/images/files/Policy-Support-March-2012.pdf>

<sup>17</sup> Anthony Leiserowitz, Edward Maibach, Connie Roser-Renouf, and Jay D. Hmielowski, *Global Warming's Six Americas in May 2011*, Yale University and George Mason University, New Haven, CT, Yale project on Climate Change Communication, 2011, <http://www.environment.yale.edu/climate/files/SixAmericasMay2011.pdf>

<sup>18</sup> *ibid.*

<sup>19</sup> Juliet Eilperin, "New vehicle rules to curb greenhouse gas emissions spark debate," *Washington Post*, July 3, 2011, [http://www.washingtonpost.com/national/health-science/new-vehicle-rules-to-curb-greenhouse-gas-emissions-spark-debate/2011/06/28/AG32hbW\\_story.html](http://www.washingtonpost.com/national/health-science/new-vehicle-rules-to-curb-greenhouse-gas-emissions-spark-debate/2011/06/28/AG32hbW_story.html)

<sup>20</sup> Al Gore, "Climate of Denial," *Rolling Stone*, June 22, 2011, <http://www.rollingstone.com/politics/news/climate-of-denial-20110622>; John M. Broder, "Gore Criticizes Obama for Record on Climate," *New York Times*, June 22, 2011, <http://www.nytimes.com/2011/06/23/science/earth/23gore.html>

<sup>21</sup> Maxwell T. Boykoff, "When did 'climate change' become 'clean energy'?" *Washington Post* op-ed, January 27, 2012. (Online title: "A dangerous shift in Obama's 'climate change' rhetoric") [http://www.washingtonpost.com/opinions/a-dangerous-shift-in-obamas-climate-change-rhetoric/2012/01/26/gIQAynwzVQ\\_story.html?hpid=z7](http://www.washingtonpost.com/opinions/a-dangerous-shift-in-obamas-climate-change-rhetoric/2012/01/26/gIQAynwzVQ_story.html?hpid=z7)

<sup>22</sup> Bill Dawson, "'Climate Change' ... and 'Global Warming': The New Dirty Words? And If So ... What Then?" Yale Forum on Climate Change & the Media, August 10, 2011, <http://www.yaleclimatemediaforum.org/2011/08/climate-change-and-global-warming-the-new-dirty-words/>

<sup>23</sup> "Martin Hoffert: 'No. No. No to decoupling the issues of human energy systems from climate change.'" Climate Science Watch, September 20, 2010, <http://www.climatesciencewatch.org/2010/09/20/martin-hoffert-no-no-no-to-decoupling-energy-systems-from-climate-change/>; also, James Hansen, "Game Over for the Climate," *New York Times*, May 9, 2012, <http://www.nytimes.com/2012/05/10/opinion/game-over-for-the-climate.html?src=me&ref=general>

<sup>24</sup> Todd Stern, Remarks at Dartmouth College, Hanover, N.H., August 2, 2012, <http://www.state.gov/e/oes/rls/remarks/2012/196004.htm>

<sup>25</sup> Nick Sundt, "Federal Report Warns of Costly Impacts to U.S. Cities from Changing Weather Extremes," World Wildlife Fund climate blog, May 22, 2012, <http://www.wwfblogs.org/climate/content/climate-change-urban-infrastructure-may2012>

<sup>26</sup> Interagency Climate Change Task Force, *Federal Actions for a Climate Resilient Nation*, October 28, 2011, [http://www.whitehouse.gov/sites/default/files/microsites/ceq/2011\\_adaptation\\_progress\\_report.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ceq/2011_adaptation_progress_report.pdf); Nick Sundt, "White House Reports on Climate Change Adaptation, as Communities Face Rising Impacts Without National Strategy," World Wildlife Fund climate blog, November 1, 2011, <http://www.wwfblogs.org/climate/content/interagency-adaptation-task-force-report-oct2011>

<sup>27</sup> See U.S. Global Change Research Program website, [http://www.globalchange.gov/index.php?option=com\\_content&view=article&id=417&Itemid=401](http://www.globalchange.gov/index.php?option=com_content&view=article&id=417&Itemid=401)

<sup>28</sup> Nick Sundt, "Dangerously Unprepared: Congressional Budget Cuts are Leaving Americans Vulnerable to Climate Extremes," World Wildlife Fund climate blog, July 21, 2011, <http://www.wwfblogs.org/climate/content/dangerously-unprepared-congress-budget-cuts-americans-vulnerable-climate-extremes>; Nick Sundt and Lynn Englum, "As the Costs of Extreme Weather Rise, Americans Cannot Afford Denial," World Wildlife Fund climate blog, September 9, 2011, <http://www.wwfblogs.org/climate/content/costs-of-denial-8sep2011>

<sup>29</sup> John P. Holdren, Testimony before the Select Committee on Energy Independence and Global Warming, U.S. House of Representatives, December 2, 2009, <http://globalwarming.markey.house.gov/tools/3q08materials/files/holdren.pdf>

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<sup>30</sup> National Research Council, *America's Climate Choices: Panel on Limiting the Magnitude of Climate Change, Limiting the Magnitude of Climate Change*, Washington, D.C., National Academies Press, 2010, [http://www.nap.edu/catalog.php?record\\_id=12785](http://www.nap.edu/catalog.php?record_id=12785)

<sup>31</sup> Jonathan Koomey, co-author of the first comprehensive analysis, in 1989, of the implications of a normative target of 2° C warming, argues for basing policy on setting a long-term goal and determining what it would take to reach it. In his new book, *Cold Cash, Cool Climate* (Burlingame, CA, Analytics Press, 2012), Koomey follows the logic of a carbon budget through its implications for emissions reductions and energy policy.

<sup>32</sup> Naomi Klein, "Capitalism vs. the Climate," *The Nation*, November 28, 2011, <http://www.thenation.com/article/164497/capitalism-vs-climate#>; see also "Jon Koomey on climate change mitigation, corporate power, social responsibility, and the role of the market," Climate Science Watch, July 21, 2012, <http://www.climatesciencewatch.org/2012/07/21/jon-koomey-on-climate-change-mitigation-corporate-power-social-responsibility-and-the-role-of-the-market/>