

To: David Plouffe

From:

Re: Presidential Action on Climate Change

Date: February 12, 2012

Summary

As you requested, what follows is a brief consideration of alternative actions that President Obama may take independent of Congress regarding climate change. One must immediately acknowledge the inherent difficulty in finding unilateral executive actions that can have the reasonable expectation of directing the nation towards significant climate change results by 2030; almost any action taken without the force of law could be undone by political opponents in Congress or adversarial future Presidents, and our range of options is limited without legislative support and funding. Because of this I have confined my consideration of available options to those that are representative of the President's role in the federal government as explained in the Constitution, such as commander of the armed forces and the nation's chief diplomat¹, and as the central voice on the national agenda of the United States. My ultimate recommendation is to establish, through executive order, a Federal Agency on Climate Change, by reorganizing parts of related agencies into a single body with the expertise to create and implement a national climate change strategy. I present first, however, contextual information on climate change.

Background

The average global temperature has been increasing over the past century; most of the warming taking place since the 1980s, with the average global temperature increasing in that time by

¹ National Archives, "Constitution of the United States." Accessed April 8, 2012.
http://www.archives.gov/exhibits/charters/constitution_transcript.html.

around 1°F (out of a total 1.41°F over the century)². The vast scientific consensus agrees that human activities are responsible for this trend, specifically the use of combustible energy sources that release carbon emissions into the atmosphere, but also industrial activities adding other greenhouse gases such as methane to the atmosphere, forest clearing, and agriculture.³ Some adverse affects related to global warming have already been observed in the United States and across the globe, and will increase in quantity and intensity in the future, though the true extent of both is still largely unknown.⁴ The threat of global climate change has been internationally recognized since the early 1990s with the United Nations Framework Convention on Climate Change (UNFCCC), and international agreements were made in the 1997 Kyoto Protocol and 2009 Copenhagen Accord that attempted to address the problem.⁵ The latter Copenhagen Accord took the form of a pledge by signatory states to reduce emissions to prevent a global average temperature increase of greater than 2°C since the pre-industrial era, but a United Nations Environment Programme (UNEP) report from November, 2011 indicates that current international emission reductions are projected as being insufficient to reach that goal.⁶ With only five percent of the world's population, the United States generates a fifth of the world's carbon dioxide emissions.⁷

Objectives

While the obvious ultimate objective is to reverse the pattern of global climate change, that is far too broad and complicated a subject for any one memo. The NRC released last year an extensive

² National Research Council on America's Climate Choices (Albert Carnesale, Chair) (2011). *America's Climate Choices*. Washington, DC: The National Academies Press, 2011, p. 15.

³ National Research Council on America's Climate Choices (Pamela Matson, Chair) (2011). *Advancing the Science of Climate Change*. Washington, DC: The National Academies Press, 2011, p. 26.

⁴ Ibid. 2, p.15-23

⁵ United Nations Framework Convention on Climate Change, "Essential Background." Last modified 2012. Accessed April 9, 2012. http://unfccc.int/essential_background/items/6031.php.

⁶ UNEP 2011. *Bridging the Emissions Gap*. United Nations Environment Programme (UNEP), 2011, p. 8.

⁷ Ibid. 2, p. 55

consideration of the climate change problem as it relates to the American context, with a number of recommendations for national action.⁸ I draw from these two major avenues where the President could exercise substantial influence to address challenges of climate change, independent of the legislature: being a catalyst for international collaboration, and/or developing a foundation for adaptation strategies. To the first, the President is expected to be America's main player on the international stage, and is far more suited to coordinate international planning and cooperation than Congress. To the second, the President can use the executive power to focus the bureaucracy on tasks of international importance despite a deadlocked or ambivalent Congress. Achieving either objective would be a major step towards future results on halting global climate change.

Opportunities and Challenges

Global climate change is one of the most difficult and complicated challenges that the United States, and all mankind, has ever faced. The most immediate challenge is our own uncertainty. There is a substantial amount of knowledge about the ramifications of climate change, the magnitude of those ramifications⁹, and the costs and benefits of addressing them that we simply do not and may never have.¹⁰ From a political standpoint, it is challenging for us to address climate change because of the long-term nature of the issue: some of the negative aspects of global warming "can take several centuries or millennia to be expressed,"¹¹ some of the policies we would want to enact (especially relating to infrastructure changes) can take years to complete,¹² and the true benefits will be experienced by later generations. The American system of democracy, however, focuses largely on short-term action, and voters are most responsive to

⁸ Ibid. 2

⁹ Ibid. 3, p. 4-5

¹⁰ Ibid. 2, p. 34

¹¹ Ibid. 2, p. 30

¹² Ibid. 2, p. 30

effects that are easily traced “back to a governmental action and then back to a representative’s individual contribution,”¹³ neither of which are conducive to approaching the issue of global climate change. The most daunting challenge is that of organization and cooperation. Because “a molecule of CO₂ emitted in India or China has the same effect on the climate system as a molecule emitted in the United States,”¹⁴ all of the world’s governments must work together to effectively decrease greenhouse gas emissions. Similarly daunting challenges of coordination are seen within the United States due to our heavy energy consumption, which will require compatible policies at the national, state, and local levels as well as less carbon-intensive energy consumption by private enterprises and individuals.¹⁵ Among the possible opportunities is the fact that creating American energy independence is beneficial to national security.¹⁶ Mitigating climate change will prevent instability in certain parts of the world.¹⁷ Also, decreasing emissions will also reduce other pollutants that are harmful to human health.¹⁸

Players and Perspectives

As a global issue, each nation could be said to be a distinct player with a set of perspectives on climate change, and to describe them all could take volumes. As my recommended options will not speak to specific international relations, I will not attempt to describe the international perspectives. The same could also be said of each state and local government. The most important players for our context will be political players influencing public opinion, namely Conservatives aligned with fossil-fuel industries. Though the options will be available independent of Congress, avoiding an incident like the non-ratification of the Kyoto Protocol in

¹³ R. Douglas Arnold, *The Logic of Congressional Action*, (New Haven, CT: Yale University Press, 1990), 47.

¹⁴ *Ibid.* 2, p. 32

¹⁵ *Ibid.* 2, p. 32

¹⁶ Rosen, Mark. University of Richmond, "Energy Independence and Climate Change: The Economic and National Security Consequences of Failing to Act." Last modified March 28, 2010. Accessed April 10, 2012.

¹⁷ The Pew Project on National Security, Energy, and Climate (Joshua Reichert, Managing Director) (2010), *Reenergizing America's Defense*, Washington, D.C.: The Pew Charitable Trust, 2011, p. 4.

¹⁸ *Ibid.* 2, p. 33

1997,¹⁹ any initiative can be stopped with sufficient public criticism. As it is, a Gallup poll from last month indicates 30 percent of Americans hold beliefs contrary to the scientific consensus about the immediacy of the global warming issue, with half of them refuting it entirely.²⁰

Options

I believe any of the following three proposals could be reasonably expected to precipitate significant results in addressing the nation's part in the global climate change issue:

Option 1 – Establish a bi-annual summit on climate change hosted by the United States, convening world leaders and top climate scientists to discuss, develop, and maintain international strategies in response to climate change.

Option 2 – Order the Army Corps of Engineers to expand their current operations of adaptation in the face of global climate change to encompass a broader range of the nation's infrastructure, acting in a capacity of coordination and technical support for localities.

Option 3 – Via executive order, reorganize responsibilities of various relevant agencies into a Federal Agency on Climate Change, with the purpose of developing, monitoring, and revising strategy to implement and coordinate the national response to climate change.

Analysis of Options

Option 1: Hosting a major climate change summit every two years will keep the issue of climate change from leaving American public discourse and may foster the kind of political pressure that will result in an actionable national climate change strategy. Hosting every two years means that Obama himself will attend twice, preventing his successor from discontinuing it under the justification that it was a one-time event. Also, this kind of commitment to international

¹⁹ McCright, Aaron M., and Riley E. Dunlap. "Defeating Kyoto: The Conservative Movement's Impact on U.S. Climate Change Policy." *Social Problems*. 50. no. 3 (2003): 348.

²⁰ Roper Center, "Topics at a Glance: Global Warming." Last modified March, 2012. Accessed April 10, 2012. http://www.ropercenter.uconn.edu/data_access/tag/global_warming.html

collaboration on climate change has the dual possibility of generating more effective technologies or methods to combat climate change through mutual exchange, and of positioning the United States as a leader in the movement which it has had difficulty asserting after being one of the few nations not to ratify the Kyoto protocol.²¹ As diplomatic business, it is well within the President's purview to host such a gathering. This option is directly related to the NRC's sixth recommendation on America's Climate Choices.²²

The main drawback of this option is that it is ambitiously optimistic; while the potential benefits are significant, they may also be nonexistent. Domestic benefits rely on favorable and widespread media coverage to incite positive public interest. The benefits of international collaboration could easily be no different than that of events conducted by the UN, and critics may be averse to America sharing technology with other countries. And there is the ever-present possibility that agreements proposed in the summit could be rejected by an unfriendly Congress. In short, it could be a complete waste of time and resources.

Option 2: At the moment, the Army Corps of Engineers "oversees and administers public water resources and associated infrastructure in every state"²³ and is well qualified to conduct efforts to coordinate and implement climate change adaptation efforts across the country. In managing the nation's water resources, they have already acknowledged and begun addressing the needs of adaptation, as well as the special importance of interagency collaboration.²⁴ Additionally, the

²¹ Ibid. 19

²² Ibid. 2, p. 4

²³ U.S. Army Corps of Engineers, "Climate Change Adaptation Plan Submitted to President's Council on Environmental Equality." Last modified September 7, 2011. Accessed April 10, 2012.

²⁴ US Army Corps of Engineers (Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Work) (2011), *USACE Climate Change Adaptation Plan and Report 2011*. June 3, 2011, p. 35

USACE has taken “a phased approach that allows [them] to identify uncertainties”²⁵ in evaluating and implementing climate change adaptation projects that is very similar to the “iterative risk-management”²⁶ approach recommended by the NRC. And it practically goes without saying that, as a part of the military, the USACE is under the command of the President, giving him complete authority to direct it. If the Army Corps of Engineers were tasked with directing the nation’s climate change adaptation, much of the work would probably be completed or underway by 2030.

The main counterpoint to this option is how direct it is: the President would be using the military to address an issue of national policy, which would probably be viewed unfavorably regardless of effectiveness. And just as it is easy for the President to order it, it would be equally easy for a successor to reverse course. As a matter of practicality, the Corps of Engineers would probably need to expand to meet such a sweeping directive.

Option 3: At times the President has used the executive order to create agencies that could deal with complex, ongoing public concerns. Both the EPA²⁷ and FEMA²⁸ were established by executive order reorganizing responsibilities of existing agencies into new ones. What may have prevented such a measure so far is the view of climate change as a temporary issue, but rather it is a problem the nation will require continuing, dynamic strategizing and expertise for decades. The ramifications of global climate change extend far beyond merely regulating pollution, the

²⁵ Ibid. 24, p. 9

²⁶ Ibid. 2, p. 42-43

²⁷ Lewis, Jack. EPA Journal, "The Birth of the EPA." Last modified June 8, 2011. Accessed April 10, 2012. <http://www.epa.gov/aboutepa/history/topics/epa/15c.html>.

²⁸ National Archives, "Executive Order 12127 -- Federal Emergency Management Agency." Accessed April 10, 2012. <http://www.archives.gov/federal-register/codification/executive-order/12127.html>.

priority of the EPA. Furthermore, the combined expertise needed comes from many varied fields that would rarely otherwise interact, indicating the need for a specialized agency. This would seem to be a logical step for the federal government to take to address climate change. An effective agency coordinating action against climate change could have significant results within a decade, let alone by 2030. The difficulties with having a truly effective agency, however, are extensive and thoroughly documented, and far too numerous to elaborate here.

Implementation & Recommendation

Of these options, I recommend Option 3, creating a Federal Agency on Climate Change. I believe it has the greatest likelihood of producing real results within the next 18 years, as long as it is constructed for effectiveness and relatively free from political interference. The President needs only to draft an executive order that will organize the agency. Expanding the responsibilities of the USACE will be too prone to controversy and, by the same token, easy for a later President to undo. An American global climate change summit could be viewed as high-risk/high-reward, with a small chance to produce a technological or diplomatic breakthrough outweighed by a large chance of not achieving anything that similar existing conferences would not achieve. Delegating an expert body to develop and oversee climate change preparations is an advisable and necessary step that President Obama and the national government can take at this moment to address the challenge of climate change.