

MEMORANDUM

TO: President Barack Obama

FROM:

DATE: April 12, 2012

RE: Recommendations for Executive Action on Climate Change

Introduction and Summary

Chapter One of the National Research Council's report, entitled *America's Climate Choices*, begins with the following: "The United States lacks an overarching national strategy to respond to climate change."¹ The report recommends that the U.S. address this policy problem (in essence, a problem of omission) in part through a reduction of greenhouse gas emissions.² The U.S. is theoretically already moving toward this goal. In the wake of the 2009 Copenhagen Accord, the administration set the target of a 17 percent reduction of greenhouse gas emissions below 2005 levels by 2020.³ Yet Congressional action (e.g., a cap-and-trade system, carbon tax) is just as unlikely in the future 113th Congress as in the current incarnation. Given this Congressional recalcitrance, this memo will serve to outline options that the administration can enact via its executive authority to meet the nation's reduction commitments.

Possible executive actions include encouraging the Environmental Protection Agency to enact further regulations regarding greenhouse gas emitters, the use of the General

¹ National Research Council. *America's Climate Choices*. Washington, DC: The National Academies Press, 2011: p. 7. http://www.nap.edu/catalog.php?record_id=12781

² *America's Climate Choices*. Summary p. 2

³ *America's Climate Choices*. p. 11-12

Services Administration to purchase a “green” vehicle fleet, and using existing climate treaties and laws to diminish greenhouse gas emissions. The administration will ideally begin to implement these recommendations during the first six months of 2013 – thus taking advantage of its renewed political mandate in the wake of the November 2012 presidential re-election. While ultimately the administration should explore all three options, the third alternative – using extant international agreements and domestic laws to combat pollutants that contribute to the greenhouse effect – holds the fewest drawbacks.

Background

Scientific consensus states that human activity is a major factor contributing toward the warming of the planet. The Earth’s temperature rose almost 1 degree Celsius over the past 100 years as a result of activities such as heavy industry and the use of automobiles. This warming is caused by the preponderance of greenhouse gases (e.g., carbon dioxide, methane) that trap heat in the Earth’s atmosphere.⁴ If unchecked this temperature increase could lead to droughts, food shortages, longer fire seasons, and a rise in worldwide sea levels.⁵

Following the Copenhagen climate summit in 2009, the United States and several other nations agreed to work toward preventing an overall world temperature increase of 2 degrees Celsius.⁶ The American Security and Clean Energy Act, passed by the House of Representatives in June 2009, would have gone a long way toward meeting this goal by

⁴ *America’s Climate Choices* p. 16

⁵ *America’s Climate Choices* p. 18

⁶ *America’s Climate Choices* p. 11

lowering U.S. emissions by 17 percent by 2020 and 80 percent by 2050.⁷ Yet the bill stalled in the Senate and expired at the end of the legislative session. Congress's reluctance to enact is a reflection of the American public's indifference toward the climate change issue. An April 2011 survey by Gallup found that 47 percent of Americans – the highest in the percentage in the world – blame natural causes for global warming instead of human activity.⁸ Thus, there does not exist a strong incentive for Congressional representatives to pass laws the reduce emissions because there is not an equivalent push by their constituents. This reality lends further credence to the notion that the White House must take executive action in this policy area.

Policy Options

The simple “do nothing” option, while applicable in many policy scenarios, is not viable in this instance given the potentially catastrophic nature of the unfettered effects of climate change. Fortunately many avenues exist for the executive to address the issue:

- Encouraging the Environmental Protection Agency (EPA) to promulgate rules that reduce greenhouse gas emissions.
- Order the General Services Administration (GSA) to purchase environmentally friendly technologies (e.g., hybrid automobiles) for the federal government.
- Use international treaties and agreements that the United States is already a signatory to implement emission reductions of non-CO2 greenhouse gases.

⁷ *America's Climate Choices* p. 11-12

⁸ Julie Ray and Anita Pugliese. “Worldwide, Blame for Climate Change Falls on Humans.” *Gallup*. April 22, 2011. <http://www.gallup.com/poll/147242/worldwide-blame-climate-change-falls-humans.aspx> (Accessed on April 11, 2011).

Option 1: Promulgation of New Rules by the Environmental Protection Agency

The Supreme Court ruled in 2007 that the EPA had the responsibility to regulate greenhouse gases under the Clean Air Act.⁹ In response the EPA issued several regulations that treat these gases as pollutants that endanger public health. Most notable is the “tailpipe rule” that the EPA issued in conjunction with the Department of Transportation in 2010. This rule sets emission standards for cars and light-duty trucks and calls for all new vehicles to achieve an average of 35.5 miles a gallon by 2016.¹⁰

The President can exert influence over the EPA after re-election by appointing and retaining key personnel to oversee these agencies who share his environmental policy preferences. The problem, however, with using the EPA in this manner is that the agency is not totally immune to Congressional influence. The Senate may refuse to reconfirm key nominees. Congress can also amend the Clean Air Act in such a way that forbids the EPA from regulating greenhouse gas emissions. Finally, Congress can cut the agency’s funding. While the legislative branch may not be able to follow through on these threats given the executive’s veto power, these actions nevertheless cost time and serve as distractions from addressing the root problem of climate change.

Environmental advocacy groups will likely be pleased with further EPA regulations provided that there is a perception that the rules will benefit the environment. The petroleum industry, the automobile industry, and possibly unions will be displeased if this

⁹ *America’s Climate Choices* p. 12

¹⁰ Environmental Protection Agency (EPA). “EPA and NHTSA Finalize Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks.” EPA-420-F-10-014. April 2010. <http://www.epa.gov/otaq/climate/regulations/420f10014.htm> (Accessed April 11, 2012).

means additional costs involved with production. The costs to the federal government, and thus the taxpayers, will likely increase as the result of enforcement of new regulations and the burden of defending them in court.

Option 2: General Services Administration

Another option is to require the General Services Administration (GSA) to purchase more energy efficient vehicles for the federal fleet. The White House has previously directed the GSA to accomplish this under Executive Order 13514, which requires the federal government to reduce its use of petroleum in its automobile fleet by 30 percent by 2020.¹¹

The GSA made some progress in this area. In 2010, for the first time the GSA bought more automobiles that run on ethanol than traditional gasoline. Yet, ethanol still contributes to climate change through extensive land use (e.g., supplanting trees and other vegetation for corn). By contrast, hybrid and electric vehicles made up only about 10 percent of the GSA's purchases.¹² To step up these efforts the executive may issue another order that mandates a certain percentage of the GSA's annual purchases consist of hybrid, electric, and hydrogen-powered automobiles. The percentage of such vehicles purchased by the GSA can increase each year until such "green" vehicles make up the majority of the fleet.

¹¹ White House. Office of the Press Secretary. "President Obama signs an Executive Order Focused on Federal Leadership in Environmental, Energy, and Economic Performance." October 5, 2009. http://www.whitehouse.gov/the_press_office/President-Obama-signs-an-Executive-Order-Focused-on-Federal-Leadership-in-Environmental-Energy-and-Economic-Performance (Accessed April 11, 2012).

¹² Lou Jacobson. "Big gains for alternative-fuel vehicles, but not for electric plug-ins." *Tampa Bay Times*. February 1, 2012. <http://www.politifact.com/truth-o-meter/promises/obameter/promise/469/require-federal-fleet-to-be-half-hybrids-or-electric/> (Accessed April 11, 2012).

The most significant barrier to this option is cost. These vehicles are more expensive than their traditional counterparts that run exclusively on gasoline. The 2012 Chevy Volt, for example, costs almost \$40,000 on average.¹³ In 2010 the federal government owned almost 249,359 passenger vehicles.¹⁴ Assuming, for the sake of argument, that each of these were replaced with a Chevy Volt, the cost would be almost \$10 billion. Granted it's unlikely that all these vehicles will be purchased at once, but these numbers are simply meant to demonstrate the scale of the necessary fiscal resources. In addition, a higher cost will no doubt attract Congress's attention. The legislative body then may decide to strip the GSA of funds in the next federal budget. The good news, however, is that this option will probably face less pushback from interest groups. The petroleum industry may prefer that the U.S. government purchase gasoline-based vehicles, but hybrids are probably an acceptable alternative. Moreover, the American automotive industry will probably not protest as long as the government continues to buy domestically manufactured vehicles

Option 3: Use International Agreements to Combat Climate Change

The recent round of United Nations climate talks ended in Durban, South Africa in December 2011 with still no agreed follow-up to the Kyoto Protocol that will expire at the end of 2012. Even, however, if a new greenhouse gas reduction agreement were implemented, there is no guarantee Congress would ratify it. One method to side step this dilemma, to the benefit of domestic greenhouse gas reduction, is for the administration to employ current treaties of which it the U.S. is already a signatory. In February 2012,

¹³ *U.S. News and World Report* – 2012 Chevy Volt. February 3, 2012.
http://usnews.rankingsandreviews.com/cars-trucks/Chevrolet_Volt/ (Accessed April 11, 2012).

¹⁴ U.S. General Services Administration. 2010 Federal Fleet Report.
<http://www.gsa.gov/portal/content/242645> (Accessed April 11, 2012).

Secretary of State Hillary Clinton announced a multinational effort to reduce short-term pollutants that have a disproportionate effect on climate change, including black soot, methane, and hydrofluorocarbons. Collectively these pollutants make up 30 to 40 percent of global warming. Scientists believe that action on these substances can reduce global warming by 0.5 degrees Celsius by 2050.¹⁵

Under this option the administration would throw its full support behind this initiative—making it a major component of its environmental policy – and go further by commissioning a relevant department (e.g. Department of State, EPA) to conduct research into other existing treaties or laws that could be used to regulate or reduce emissions. The administration’s argument, therefore, is that the U.S. is not employing a new policy per say, but is rather enacting steps to fulfill its existing commitments.

There are many benefits to this approach. First, the regulation of these pollutants can be accomplished without additional legislation or rules. The regulation of hydrofluorocarbons, for example, can be controlled under the auspices of the Montreal Protocol ozone treaty that the U.S. signed in 1987. As a result, Congress doesn’t need to be heavily involved in the matter. Further, the cost would likely be less than the other two options given that the structures already exist to deal with these pollutants.

Environmental groups will likely be the loudest voices of protest with this approach.

They will argue that the administration is overlooking the real cause of global warming –

¹⁵ Information in this paragraph: John M. Broder. “U.S. Pushes to Cut Emissions of Some Pollutants That Hasten Climate Change.” *New York Times*. February 15, 2012. <http://www.nytimes.com/2012/02/16/science/earth/us-pushes-to-cut-emissions-that-speed-climate-change.html?src=tp> (Accessed April 11, 2012).

carbon dioxide emissions. Yet, the fact that this option deals with pollutants over “carbon” allows the administration to avoid skeptics’ arguments that carbon dioxide is a natural, benign part of the world’s climate.

Recommendation

In some sense, the administration is already pursuing all three of these options to some degree. The question, however, is which option the administration should emphasize in the short-term while still continuing the other two. The EPA is too mired in controversy and judicial and Congressional battles to be totally effective in its rule-making capacity. Moreover these rules are often slow to be formulated and implemented. The option of pursuing a full hybrid/electric/hydrogen federal vehicle fleet is attractive given that it will allow the government to lead by example. Moreover by purchasing such vehicles the government will effectively drive down their price for the overall “green car” market. Yet the process for this transition is likewise slow and will be subject to the whims of a Congress that is already pushing budget cuts. Thus, the most reliable option is the third that deals with exploiting current treaties and laws to combat greenhouse gas emissions domestically. This can be done relatively quickly compared to the other two models since these structures already exist. It also has the highest tangible benefit, provided the 0.5 degree Celsius reduction is accurate. Thus, we recommend devoting the bulk of the administration’s resources after re-election to pursuing this third option.