
REACTION

THE PRESIDENT, CLIMATE CHANGE, AND CALIFORNIA

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At the risk of parochialism, I have one word of advice for President Obama and his advisors in implementing his promise to address climate change through executive action: California. A focus on California has already led the President to his most significant action to date on climate change, the adoption of tough nationwide standards for greenhouse gas emissions from cars and light trucks. If he continues that focus, we may see the extension of California's landmark economy-wide carbon cap-and-trade program to other states. Indeed it is conceivable that through existing executive authority the President could establish a nationwide cap-and-trade system to regulate greenhouse gas emissions from most of the country's largest emitters. With the President's leadership, we could also see real increases in the development of alternative fuels to replace or at least reduce carbon-based transportation fuels through support of California's Low Carbon Fuel Standard (LCFS). And none of these accomplishments require congressional action.

I should state the obvious at the outset. The world would be a better place if Congress enacted a national program to reduce greenhouse gases. Such a program would have as its centerpiece a well-designed set of policies to place a price on carbon, either through a tax or a cap-and-trade program. But my focus here is on a second- or third-best alternative: using the President's rather significant existing authority to reduce the country's emissions of greenhouse gases. I should also make clear that my focus on California is only one part — though in my view the most important part — of a laundry list of potential executive actions the President should take on climate change. That list includes more aggressive action by the Department of Energy (and, to the degree the President can influence it, the independent Federal Energy Regulatory Commission) on distributed generation, electricity storage, and electric vehicle readiness; expansive use of the government's procurement power to purchase low-carbon products like automobiles; and continued Department of Defense leadership on renewable energy. And implementation of this list should give the United

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States the moral authority to take a real leadership role on the international stage, both through the United Nations framework and in bilateral and multilateral negotiations with other large-emitting countries. The President should exert that authority.

Now, back to California. While Congress has spent its time ignoring or denying the problem of climate change, the State has implemented what is arguably the most ambitious program in the world to reduce the state's greenhouse gas emissions to 1990 levels by 2020. At the core of the State's efforts are several components of the program aimed at the largest sources of emissions, transportation, and electricity generation. The President's leadership can make (or already has made) a significant difference in the potential success of these components of the State's program.

Let's begin with what the President has already done. Shortly after taking office in 2009, the President granted California a waiver to proceed with ambitious greenhouse gas emissions standards for cars and light trucks. The waiver followed seven years in which California fought for its right to issue those standards. California used its authority under the federal Clean Air Act (CAA) to issue the standards but could not proceed without a waiver from Environmental Protection Agency (EPA), a waiver the Bush Administration denied. When President Obama took office, his EPA quickly reversed the Bush denial. California was immediately positioned to implement its standards, and another fourteen states were poised to follow its lead, something authorized under the CAA. Instead, in a stroke of political genius, the President negotiated with the auto industry — with significant leverage due to the auto bailout — to implement California's standards on a nationwide basis. The standards will raise the average fuel efficiency of cars and light trucks to 35.5 miles per gallon by 2016. In a subsequent round of rulemaking that included California regulators, the Administration adopted standards to require a fuel efficiency standard of 54.5 miles per gallon by 2025. Together, the standards are a remarkable achievement: in total they should reduce greenhouse gas emissions by 6 billion metric tons over the life of the program. To put the accomplishment in perspective, *total* U.S. greenhouse gas emissions in 2011 were 6.7 billion metric tons. The President accomplished these reductions without any congressional involvement using existing statutory authority.

The President now has another major opportunity to use California's leadership to advance progressive policies to reduce carbon emissions from the electricity and industrial sectors. His authority stems from the CAA, and more specifically from the finding that his EPA made — as required under *Massachusetts v. EPA* — that greenhouse gases endanger public health and welfare. As a result of that endangerment finding, EPA is currently considering regulating the emissions of existing electric-generating units and petroleum refineries under sec-

tion 111(d) of the CAA. As with many provisions of the CAA, states play a crucial role in implementing the standards set by the federal government. Here is where California comes in.

As part of its economy-wide effort to reduce emissions to 1990 levels by 2020, California has enacted a cap-and-trade program to reduce the state's carbon emissions from about 350 of its largest emitters. The emitters include electric-generating units and petroleum refineries. The cap-and-trade program includes a declining overall cap on emissions, so that 2013 and 2014 emissions must decline by two percent from 2012 levels and 2015 through 2020 emissions must decline by three percent annually. The program achieves these reductions by issuing allowances to emitters, equal to one ton of carbon dioxide or its equivalent in greenhouse gas potency, to cover the allowable emissions. Emitters cannot emit more than their total allowances unless they purchase allowances from other emitters; if a facility emits less than its allocation it can sell its excess allowances. The central idea and promise of the system is that the market will produce the most cost-efficient reductions rather than have the state designate in advance where and how the reductions will occur.

In designing its program, California's Air Resources Board borrowed heavily from the experience of other market-based programs, including the European Trading System, the Regional Greenhouse Gas Initiative, and the CAA's Acid Rain Trading Program. The result is a system that improves on existing programs by incorporating design elements that will maximize the program's effectiveness.

So what does California's program have to do with EPA's design of section 111(d) regulations for existing sources of greenhouse gases? One big and looming question is whether the agency can and will design its regulations to count an emitter's participation in California's cap-and-trade program as compliance with section 111(d). If, instead, EPA were to require emitters to, for example, install a particular type of technology to reduce emissions, then the flexible mechanisms that the states have developed to reduce emissions would be undermined. Perhaps more importantly, the country as a whole would lose the significant learning benefits it gains from state experimentation.

Instead, the President's EPA should use its regulatory power under section 111(d) to craft regulations that allow state cap-and-trade programs to meet performance standards issued by the federal government. And EPA can do even more. The section 111(d) regulations could be drafted to allow other states to comply by participating in the California or Regional Greenhouse Gas Initiative markets, creating the potential that a large portion of the country could be covered by a regional or even national cap-and-trade scheme. In other words, through judicious and careful use of existing executive power, the President may be able to implement the very policy — a national cap-and-trade program — that he backs but has failed to get Congress to enact.

A third component of California's climate program requires fuel producers to reduce the carbon content of their fuels by ten percent by 2020 through a program called the Low Carbon Fuel Standard (LCFS). California's program measures carbon content by using a lifecycle analysis that includes not just the carbon content of the fuel itself but of the carbon used in its production. Such carbon includes emissions from electricity generation in the production process and from transporting the fuel. Without such a life-cycle analysis, the state could end up actually *increasing* its greenhouse gas emissions by relying on fuel that, while lower in carbon content than other fuels, uses more carbon emissions in the production process than the higher carbon content fuel. Indeed, federal law requires such a life-cycle analysis for fuel produced to meet the Renewable Fuel Standard under the Energy Independence and Security Act of 2007. But a district court has struck down the state's LCFS on the ground that in measuring carbon from transportation and electricity generation, California unconstitutionally discriminates against out-of-state ethanol producers under the dormant commerce clause.

So, again, where does the Obama Administration come in to protect California's LCFS? The California case and other cases challenging state power to limit carbon emissions from out-of-state sources when those sources import products into a state will likely work their way all the way up to the U.S. Supreme Court. The California case has already been argued in the Ninth Circuit Court of Appeals. The President could throw the considerable weight of the executive branch into the court cases by filing briefs in favor of state regulatory power to limit carbon emissions. California and other states are not seeking to discriminate against out-of-state businesses in regulating emissions beyond their borders. The President's support could help guide the Court to allowing the states to regulate their own emissions vigorously.

After four years of relative silence on the issue of climate change, the President's pledge to act to reduce emissions even without congressional action is a breath of fresh air. It is also significantly more than that. By embracing the path California has taken, the President can achieve real reductions in emissions, reductions that might even exceed what he could win from Congress.