## New Obama Climate Rules Draw Darts and Delight



Many scientists say they are not the most efficient way to reduce carbon emissions, they cover only one industrial sector, and they're way overdue. Still, climate researchers are mostly applauding proposed rules that the Obama administration released this morning to slash carbon emissions from existing power plants. The overall goal is to cut greenhouse gas emissions from the U.S. power sector by up to 30% by 2030, relative to 2005 levels.

"It's very encouraging to see activity aimed at reducing our impact on climate," says Katharine Hayhoe, a climate scientist at Texas Tech University in Lubbock. "Up to now, most of the action we've actually seen is on the other side—the changing climate, often at speeds and rates faster than our models have predicted."

The proposal marks the biggest step the United States has taken to date to cut greenhouse gas emissions, notes climate scientist Ken Caldeira of the Carnegie Institution for Science in Palo Alto, California. But in formulating its plan, the White House made plenty of compromises. These include rejecting calls to simply impose a price—or tax—on each ton of carbon emitted by power plants that burn coal and other fossil fuels. Instead, the Obama administration is proposing that states have a

menu of options, from setting up markets for trading carbon pollution permits to investing in energy efficiency, for reducing emissions.

That more complex approach makes the new rules somewhat similar to another major Obama policy initiative—reforming health insurance—that was marked by give-and-take, Caldeira says. "If a simple price on  $CO_2$  emissions is the single-payer plan of climate policy, what we are getting is closer to Obamacare," he says. "Better than nothing, and maybe the best we can achieve, but far less than what we need."

The plan calls for using the Environmental Protection Agency's (EPA's) authority under the Clean Air Act to target greenhouse gas emissions from the nation's roughly 1000 fossil fuel power plants, which emitted more than 2 billion tons of carbon dioxide in 2011, about 40% of U.S. carbon dioxide emissions.

Each state would be obligated to achieve a set target for annual emissions from power plants within their borders. To reach the goal, states and utilities would have a variety of options. Power utilities could invest in new technologies to reduce emissions, for example, or distribute generation among plants they own to minimize releases. Some could choose to invest in new renewable energy facilities that have little or no emissions. Or they could sponsor energy efficiency programs to curb electricity demand.

Acting to cut greenhouse gas pollution from the power sector is the biggest single step the Obama administration has taken to confront climate change, but it has taken 6 years to get here. Upon taking office in 2008, President Barack Obama attempted to pass legislation that would include a comprehensive cap on carbon emissions across the power, industrial, agriculture, and other sectors. Many economists have argued that is the most efficient method of lowering total national emissions. But that effort died in the U.S. Senate in 2010.

Advocates of reducing U.S. greenhouse gas emissions have often seen executive action as the plan B. As a backup, environmental groups had petitioned EPA in 1999 to force the agency to regulate greenhouse gases under the Clean Air Act, which it had been considering under administrator Christine Todd Whitman early in the administration of George W. Bush. After the Bush administration reversed its plans, that lawsuit went all the way to the Supreme Court. The high court ruled in 2007 that carbon dioxide and other greenhouse gases were pollutants under the act, forcing EPA to regulate them. Since then, EPA has one by one targeted industrial sectors that emit greenhouse gas emissions. Cars and light trucks came under such rules in 2010; 2 years later the agency passed rules covering power plants yet to be built.

But existing power plants, including the nation's roughly 600 coal-fired plants, have always proven the most politically difficult to regulate. Today's rules come after a year of consultations with the public and industry. But politicians in coal states have already signaled their opposition, including several

Democratic candidates for the U.S. Senate. And leaders of the Republican-controlled U.S. House of Representatives have vowed to try to block their implementation.

"The Clean Air Act was never intended to regulate carbon," said Representative Lamar Smith (R-TX), chair of the House science committee, in a statement today. "The EPA's plan is 'all pain, no gain.' It will close power plants and drive up electricity prices. These regulations will mean more jobs lost to places like China and India. ... And studies show that dramatically cutting carbon emissions in the U.S. will have little impact on global temperature in the future."

Eileen Claussen, president of the Center for Climate and Energy Solutions, a Washington, D.C.—area think tank that has advocated for emissions controls, was more positive. "Given the complexities and the stakes, it looks as if EPA has done a credible job on a tough issue," she said in a statement today. "It's clear the agency has taken to heart what it's heard from states and utilities, and is trying to offer considerable flexibility so they can figure out their own best way to meet the standard."

The rules are now under public comment and set to be finalized next year. They will surely face stiff legal opposition. The issue could end up before the Supreme Court, where swing justice Anthony Kennedy, the deciding vote in the 2007 decision, may again be pivotal.

For the time being, however, scientists are pleased to finally see action on the nation's biggest emitters. "This is the most important thing the president has done on climate change," says geologist Daniel Schrag of Harvard University, one of the president's top advisers on climate. He predicts the rules will "drive huge new investments in all sorts of new generating capacity, [and] on energy efficiency."

\*Correction, 2 June, 1:10 p.m.: The nation's fossil fuel power plants emitted more than 2 billion tons of carbon dioxide in 2011, not more than 2 million tons, as was previously reported. This has been corrected.