

New GHG Rules for Power Plants

BY ROB BARNETT
Senior Energy Economist

TONY COSTELLO
Director of Government Affairs Research

Background

- » On June 2, the Environmental Protection Agency (EPA) [proposed](#) regulations that target carbon dioxide (CO₂) emissions from existing power plants. EPA [estimates](#) that the new rule will help to reduce power-sector CO₂ emissions to about 30 percent below 2005 levels by 2030.
- » A previous EPA [proposal](#), issued last September, would target CO₂ emissions from new power plants. During President Barack Obama's first term, the agency also [issued](#) greenhouse gas (GHG) regulations targeting automobiles and trucks.

Parsing the 30 Percent CO₂ Reduction Target

- » EPA's proposal assigns a specific emissions reduction goal to each state. The goal is specified as a rate in pounds of CO₂ per megawatt-hour (MWh), and is determined based on a formula that includes an assessment of each state's ability to:
 - Improve the efficiency of existing fossil-fueled power plants.
 - Increase the utilization of lower-emitting natural gas plants.
 - Deploy additional low-carbon power sources such as nuclear and renewables.
 - Reduce the growth rate of demand for electricity through investments in energy efficiency.
- » The rule's requirements vary significantly among states. Power companies in Texas, for example, will have to reduce their annual CO₂ emissions by more than 100 million metric tons — which is about one quarter of all the reductions required under the rule. At the same time, nine states plus Washington, D.C., already meet or exceed the proposed requirements for 2030.

Top 10 States With Largest Absolute CO₂ Emission Reduction Goals

CO₂ emission in metric tons

State	2005 emissions	2012 emissions	2030 target*	Change: 2012 to 2030	Percentage change: 2012 to 2030
Texas	261,332,154	253,689,000	149,148,446	-104,540,554	-41%
Louisiana	57,660,206	60,182,000	30,254,594	-29,927,406	-50%
Florida	131,543,370	111,236,000	82,398,491	-28,837,509	-26%
Pennsylvania	128,122,806	109,997,000	82,035,185	-27,961,815	-25%
Arizona	52,003,381	52,350,000	28,813,104	-23,536,896	-45%
Oklahoma	52,152,417	49,186,000	29,678,999	-19,507,001	-40%
Illinois	102,379,235	94,411,000	75,520,664	-18,890,336	-20%
New York	61,025,172	35,669,000	18,280,526	-17,388,474	-49%
Alabama	84,852,496	69,107,000	52,568,829	-16,538,171	-24%
Arkansas	26,774,595	36,234,000	19,723,843	-16,510,157	-46%

*The 2030 target is based on the EPA's Integrated Planning Model results.

- » The costs of meeting EPA's new requirements will not be shared evenly among states. If the average cost of reducing CO₂ is \$25 per ton, for example, then electricity ratepayers in Texas would be paying an annual amount that will build to nearly \$2.5 billion per year by 2030. Based on the same \$25 per ton CO₂ cost, electricity consumers in New Mexico would be responsible for paying only about \$20 million per year in incremental costs by 2030.

Legal Outlook

- » Today's proposal is only a first step for EPA. It is highly unlikely that all aspects of the rulemaking process will be completed before the end of Obama's second term, and it wouldn't be surprising if the process stretched into the next decade.
 - As soon as EPA's proposal is published in the Federal Register, the 60-day public comment period for the rule will begin. Before publishing a final rule, EPA is required to review and address the public comments received by the agency, which is likely to take at least a year.
 - Once EPA publishes a final rule, then states will have to submit their individual plans for meeting its requirements. In the draft rule, individual states are required to submit their proposal by June 30, 2016, but can apply for an extension to June 30, 2017. EPA is required to review each state's plan.
 - Legal challenges can also be filed once the final rule has been published. The agency has had a good track record with the courts during the past 12 months, but it's fairly common for courts to remand rules back to EPA for additional work. For example, because of successful legal challenges, it took EPA more than a decade to complete the sulfur dioxide and nitrogen oxide requirements for power plants that were recently [upheld](#) by the Supreme Court.
- » The next president may have a significant impact on EPA's GHG plans for existing power plants. Once a rule is final and has cleared legal challenges, it is difficult to undo without new legislation. Because the process is likely to be prolonged, a new administration could choose to alter the rule or slow it down. Congress could also intervene in the rulemaking process, although legislation to alter the Clean Air Act would be difficult to pass in the current political environment.

ABOUT BLOOMBERG GOVERNMENT

Bloomberg Government is the only comprehensive web-based information service for professionals who are affected by and interact with the federal government. Bloomberg Government provides rich data, analytical tools, timely news and in-depth analysis from policy experts — all from the leader in business information services.

ANALYST CONTACT INFORMATION

Rob Barnett, Senior Energy Economist

rbarnett12@bloomberg.net

+1 202 416 3400

ABOUT THE ANALYST



Rob Barnett, a Senior Energy Economist with Bloomberg Government, specializes in energy-sector economics, environmental policy and strategy, and EPA regulations. Before joining Bloomberg, he was an associate director of climate change and clean energy at IHS Cambridge Energy Research Associates, where he led the firm's environmental and energy analysis. Barnett holds a master's degree in economics from Boston University and undergraduate and master's degrees in electrical engineering from Clemson University. Follow Rob on Twitter: @barnettenergy