JONATHAN Z. CANNON

SECTION 115, A NEXT STEP FORWARD IN U.S. CLIMATE POLICY

As the end of President Obama's term approaches, a key question is what climate policies the United States will pursue in 2017 and beyond. Hiding in plain sight is the international air pollution provision of the Clean Air Act (section 115), which could be the basis for an economy-wide, market-based approach to implementing the commitment the United States made in Paris last December. Use of section 115 deserves serious consideration by the next U.S. administration.

President Obama has made addressing climate change a priority and the results show it. Domestically, the Environmental Protection Agency has finalized two rounds of greenhouse gas tailpipe standards for light- and heavy-duty vehicles, promulgated the ground-breaking Clean Power Plan to reduce carbon dioxide emissions from the power sector, and issued the first standards limiting methane from oil and gas activities. Renewable energy sources have increased dramatically. Dozens of energy efficiency standards have been released. And rapid progress is being made in batteries and other forms of energy storage which are essential to increased reliance on renewable sources such as wind and solar.

Internationally, U.S. leadership was essential to reaching the landmark Paris Agreement in December 2015. The International Civil Aviation Organization passed a resolution in October 2016 to establish a Global Market-based Measure that will help the aviation sector meet its commitment to carbon-neutral growth starting in 2021. At the time of writing, a new international agreement sought by President Obama phasing down hydrofluorocarbons (HFCs) under the Montreal Protocol appears close at hand.

These actions have helped decouple economic growth and greenhouse gas emissions. In 2014, for example, total U.S. greenhouse gas emissions were 7% below 2005 levels, according to the most recent Inventory of U.S. Greenhouse Gas Emissions and Sinks prepared by EPA¹, while GDP has continued to increase.

But the next President will have to do more to meet the U.S. pledge under the Paris Agreement for 2025: a 26% to 28% reduction in emissions from 2005 levels. The State Department's 2016 Second Biennial Report² to the United Nations found that under policies in place by the fall of 2015, including the Clean Power Plan (which is currently stayed by the U.S. Supreme Court pending review by the D.C. Circuit), U.S. emissions would drop by only 12% to 16% below 2005 levels by 2025.

A January 2016 report³ by the Rhodium Group examined the additional reductions that can be attained through the recent extension of renewable energy tax credits and planned administration initiatives, including the methane rules, the heavyduty vehicle rule, and the U.S. proposal to phase down HFCs under the Montreal Protocol. These additional measures increase the projected emission reductions in 2025 to 19% below 2005 levels in the core scenario. A July 2016⁴ report by the Center for Climate and Energy Solutions estimates that U.S. emissions could drop to 22% below 2005 levels by 2025 with additional measures.

While the numbers in each report differ, they all deliver the same message: the United States will face a sizeable emissions gap that the next President will need to close.

INTERNATIONALLY, U.S. LEADERSHIP WAS ESSENTIAL TO REACHING THE LANDMARK PARIS AGREEMENT IN DECEMBER 2015.

There are three main options for achieving additional U.S. emission reductions. Congress could surprise nearly everyone by enacting a comprehensive climate policy, perhaps centered on a carbon tax. EPA could issue a succession of industry-specific rules under section 111 of the Clean Air Act similar to the Clean Power Plan to secure reductions outside of the power sector. Alternately, the next administration could deploy its international air pollution authority under section 115.

Relying on section 115 is likely to be more politically realistic than seeking action by Congress and more economically efficient than issuing industry-specific rules. It could also set a durable policy framework that could be used to implement future U.S. commitments under the Paris Agreement and potentially even support future international carbon market integration.

There are two legal prerequisites to using section 115: EPA must find (1) that U.S. emissions are endangering other nations and (2) that if the United States acts to

reduce its emissions, other nations will act reciprocally. The endangerment finding should be straightforward, similar to findings that EPA has made and courts have upheld in other statutory contexts. A January 2016 analysis⁵ by some of the nation's top environmental law professors, which I reviewed, found sound support for a reciprocity finding, especially after the Paris Agreement. When section 115 was enacted, the Senate report described its purpose as creating "a procedure whereby we can cooperate with foreign countries in cases involving endangerment of health or welfare." That is exactly what the United States would be doing if it used section 115 to meet its Paris targets.

With these prerequisites met, EPA could use section 115 to set a national emission reduction target and apportion the reduction requirements among the states. The states must then revise their clean air plans - called State Implementation Plans (SIPs) - to meet the EPA targets, taking into account all sources of emissions. The Clean Air Act expressly authorizes the states' plans to use market-based approaches like emission trading systems or carbon taxes. EPA can use a model plan to promote a nationwide emissions trading system, as the agency successfully did in making emissions trading the foundation of interstate efforts to curb ozone pollution. And if a state fails to act, EPA can adopt a Federal Implementation Plan (FIP) for the state using similar market-based authorities.

Section 115 would complement and backstop existing EPA regulations.

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States could get credit for the emission reductions they achieve under the Clean Power Plan and other EPA rules. If states implement the Clean Power Plan through a mass-based trading program, they will have a structure in place that they can extend to other large sources in complying with a section 115 rule. Should the courts invalidate the Clean Power Plan, section 115 would provide alternative legal authority for reducing power sector emissions. While legal challenges to the use of section 115 would be likely, section 115's flexible, open design and express focus on pollutants of international concern may make its use as a vehicle for climate change policy more resilient in the face of interpretational challenges and legal risks.

Section 115 also avoids the need to promulgate sector-specific rules under section 111 for oil refineries, steel mills, manufacturing facilities, chemical plants, pulp and paper mills, and other large emitters. These rules would be administratively burdensome for EPA and the states, and they would be more costly for the regulated sources because there is no precedent under section 111 for crosssectoral trading. In comparison, a section 115 rule would require a single round of SIP revisions and could explicitly authorize the use of cost-saving market-based mechanisms. There are other desirable features of section 115. Unlike other provisions of the Clean Air Act, section 115 could provide for the use of cost-saving offsets from agriculture and forestry if they meet EPA standards. Although it is premature to consider linking a U.S. emissions trading market with markets in other nations, section 115 could provide a pathway for doing so as the markets mature and demonstrate integrity. And perhaps most attractive, the market-based mechanisms used to achieve the 2025 Paris Agreement pledge could be readily adapted to meet the United States' 2030 and subsequent pledges.

At 300 words, section 115 is model of legislative brevity. This concision necessarily leaves key implementation issues to be developed by EPA through the regulatory process. Industries that favor economy-wide, market-based approaches to reducing emissions should look at this as an opportunity – likely their most promising one – for working with the next administration to establish a sensible and economically efficient climate policy for the United States.

Jonathan Z. Cannon is Blaine T. Phillips Distinguished Professor of Environmental Law at the University of Virginia School of Law. Before joining the law school faculty, he served as General Counsel of EPA.

(1) Inventory of Greenhouse Gas Emissions and Sinks 1990-2004: EPA, https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf (2) Second Biennial Report of the US Under the United Nations Framework Convention on Climate Change, 2016, https://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/2016_second_biennial_report_of_the_united_states_.pdf (3) Taking Stock: Progress Toward Meeting US Climate Goals: Rhodium Group, http://rhg.com/wp-content/uploads/2016/01/RHG_Taking_Stock_of_US_Climate_Goals_Jan28_2016.pdf (4) Achieving the United States' Intended Nationally Determined Contribution; C2ES, July 2016, http://www.c2es.org/docUploads/achieving-us-indc.pdf (5) Burger, M: Legal Pathways to Reducing Greenhouse Gas Emissions Under Section 115 of the Clean Air Act. Columbia Law School, January 2016, https://web.law.columbia.edu/sites/default/files/microsites/ climate-change/legal_pathways_to_reducing_ghg_emissions_under_section_115_of_the_caa.pdf