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Legal Pathways to Reducing Greenhouse Gas Emissions under Section 115 of the Clean Air Act

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Executive Summary

Under President Barack Obama, the U.S. Environmental Protection Agency (EPA) has issued a number of Clean Air Act regulations that seek to reduce domestic greenhouse gas (GHG) emissions. These regulations—which cover GHG emissions from motor vehicles, transportation fuels, new and existing power plants, the oil and gas sector, and municipal landfills—form an essential part of the nation’s overall response to climate change. However, the United States will need to find other ways to reduce GHG emissions if it is to live up to its international emissions reduction pledge and maintain its position as a leader in the effort to prevent dangerous levels of global warming. While EPA can continue with its present approach, tackling individual sources

separately is not optimal. The scale and scope of the climate change problem, and the need for immediate and significant action, call for a well-coordinated, comprehensive national program to reduce GHG emissions.

The success of the recent climate negotiations in Paris provides a strong basis for invoking a powerful tool available to help achieve the country's climate change goals: Section 115 of the Clean Air Act, titled "International Air Pollution." This provision authorizes EPA to require states to address emissions that contribute to air pollution endangering public health or welfare in other countries, if the other countries provide the U.S. with reciprocal protections. The language of Section 115 does not limit the agency to regulating a particular source-type, or a given industrial or economic sector. Rather, it grants EPA and the states broad latitude to address international air pollution comprehensively through the Clean Air Act's State Implementation Plan process, increasing administrative efficiency and reducing burdens on regulated companies. EPA and the states could use the provision to establish an economy-wide, market-based approach for reducing GHG emissions. Such a program could provide one of the most effective and efficient means to address climate change pollution in the United States.

This Report—which reflects the collaborative efforts of scholars and lawyers at the Sabin Center for Climate Change Law at Columbia Law School, the Emmett Institute on Climate Change and the Environment at UCLA School of Law, and the Institute for Policy Integrity at NYU School of Law, and which benefited from assistance from the Center for Global Energy Policy at Columbia University—contains a careful legal analysis of the potential for reducing GHG emissions under Section 115. The analysis demonstrates that Section 115 provides the authority and flexibility necessary to design a climate change program that maximizes efficacy and efficiency for state and federal regulators, regulated businesses, and, ultimately, the public at large. The analysis and conclusions have been endorsed by a group of the nation's leading experts on climate change and environmental law.

The Report's primary conclusions are as follows:

- **Regulation of GHG emissions under Section 115 is legal because both prerequisites for invoking the provision are satisfied:** Section 115 is triggered when (1) EPA finds that emissions in the United States contribute to air pollution that endangers public health or welfare in another country (the "endangerment

finding”), and (2) EPA determines that the other country provides “essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country” by Section 115 (the “reciprocity determination”). In the context of climate change, both of these prerequisites are easily met. First, there can be no real question that GHG emissions in the U.S. are a form of air pollution and contribute to climate change, which endangers health and welfare in countries all around the world. Second, EPA has ample support to make a reciprocity determination. Although there are numerous bilateral and multilateral agreements on which EPA might rely, the strongest evidence may be found in the procedural rights provided and the substantive commitments made through the United Nations Framework Convention on Climate Change (UNFCCC) and the international efforts to address climate change which recently coalesced in Paris in December 2015. Indeed, the Paris Agreement provides for both an “enhanced transparency framework,” through which the U.S. can comment on other countries’ climate action, and the submission of Intended Nationally Determined Contributions (INDCs), which include significant pledges to mitigate GHG emissions. At the time of this writing, nearly 190 countries have made emissions reductions pledges through the INDC process, accounting for over 93% of current global GHG emissions.

- **Regulation of GHG emissions under Section 115 is good policy because it can use market mechanisms and obviate the need for multiple sector-by-sector regulations:** Section 115 is made effective through revisions to State Implementation Plans (SIPs), which are developed by states in accordance with Section 110 of the Clean Air Act. The SIP process allows EPA and the states to address multiple sources of GHG in a single proceeding and expressly authorizes the use of “economic incentives such as fees, marketable permits, and auctions of emission rights.” Section 115 thereby provides an opportunity for avoiding potentially dozens of source-specific GHG regulations under other provisions of the Act, while simultaneously allowing businesses to lower their compliance costs through reliance on market-based approaches.

- **Section 115 applies to GHG emissions:** Any argument that Section 115 cannot be used to regulate GHG emissions because Section 110 does not address GHGs has been foreclosed by both a Supreme Court decision and EPA and state practice, which respectively call for and enact regulation of GHGs under Section 110. In addition, the plain language of the provision, the context provided by the Clean Air Act, and the legislative history of the provision all indicate that regulating GHG emissions under Section 115 falls well within the discretion given to EPA under the statute.
- **EPA can use the national goal set forth by the U.S. in its INDC as an aggregate limit for GHG emissions:** Because emissions from all U.S. states contribute to foreign endangerment, and reductions from any state would contribute equally to solving the problem, successful implementation of Section 115 would require EPA to establish an aggregate amount of necessary U.S. emissions reductions. As a matter of both law and policy, it would be eminently reasonable for EPA to establish a national GHG emissions target under Section 115 based on the U.S.'s contribution to a global effort to reduce GHG emissions, such as the U.S. INDC submitted to the UNFCCC in March 2015. Although domestic emissions reductions alone may not eliminate climate change, they can in conjunction with reciprocal efforts by other nations prevent many of its impacts.
- **EPA can apportion emissions allowances to the states based on a number of different methodologies:** Section 115 does not dictate a methodology for apportionment of the national emission reduction goal among the states, leaving EPA with the discretion to determine the best way to do so. Accordingly, EPA might utilize a variety of formulas. For example, EPA might require each state to meet an equal percentage reduction, as measured from a selected baseline year. Alternatively, it might require each state to reduce its emissions to a point where marginal cost reductions are equal across states, thereby achieving the same target but assigning responsibility based on implementation costs rather than equal percentage reductions. To temper potential disparate impacts from these approaches, EPA might choose a third methodology that combines the two methods, assigning a portion of required reductions as a percentage of state emissions but another portion on the basis of cost.

- **If necessary, EPA can implement a federal Section 115 program within recalcitrant states:** Under the Clean Air Act, states have the primary responsibility for addressing air pollution, primarily through their SIPs. The SIP process is also assigned the task of implementing international air pollution control requirements set forth under Section 115. As with conventional criteria pollutants, if a state does not submit a SIP for Section 115 pollutants, or submits a SIP that is inadequate, EPA must promulgate a Federal Implementation Plan (FIP) for that state. In order to encourage states to submit SIPs, to reduce the administrative burden on states, or to encourage uniformity sought by industry, EPA may issue guidance or model rules for how states can achieve compliance. Where states still do not comply, EPA can design and implement a streamlined FIP, including one that includes a trading mechanism.
- **EPA can integrate a new Section 115 program with existing and future rules for stationary sources:** Any action EPA undertakes pursuant to Section 115 will take place while EPA also implements other critical GHG emissions regulations, including the New Source Performance Standards established under Section 111 for new power plants, the Clean Power Plan established under Section 111 for existing power plants, and methane emissions reductions standards for the oil and gas sector and municipal landfills. EPA and the states can readily integrate these existing rules—and any future ones—into a more comprehensive GHG emissions regime established under Section 115 by allowing states to take credit for any emission reductions achieved under the rules. If the power sector has low-cost emission reduction opportunities remaining after compliance with the Clean Power Plan, Section 115 could permit cross-sectoral trading that would economically benefit both the power sector and other regulated sources.
- **EPA can integrate regulation of transportation fuels (and residential and commercial natural gas) into a Section 115 program:** Section 115 would enable states to develop implementation plans that address GHG emissions from transportation fuels, which account for about 27% of GHG emissions. The most attractive option might be to integrate transportation fuels into a cross-sectoral, interstate market-based trading program, thus achieving the cost-savings and

efficiency of a universal cap. Alternatively, states might opt for carbon taxes, enhanced transportation planning, or a low carbon fuel standard under a Section 115 SIP. Similar approaches are available to address emissions from residential and commercial use of natural gas.

- **EPA could permit the use of offsets in an economy-wide, cross-sectoral trading program:** Under Section 115, EPA should have considerable discretion to allow or disallow offsets or to impose restrictions on their use, potentially creating additional cost-saving opportunities.

Section 115 of the Clean Air Act provides an untapped but potent opportunity for achieving many of the United States' long-term climate change goals. The goals that Section 115 can advance include reducing GHG emissions significantly in an economically and administratively efficient manner that provides ample flexibility for states and regulated entities and opportunities for continuing innovation that can accommodate the need to ramp up climate change mitigation ambition in the near future. EPA and the states could implement a Section 115 regime with less difficulty than the current, sector-by-sector, source-by-source approach, and could instead combine multiple sectors and source types in a single rulemaking that could establish a nationwide, market-based emissions reduction program. Such an approach would be legally defensible, and while implementation issues would be inevitable, as they are in any regulatory program, they would also be manageable. Ultimately, regulation of GHG emissions under Section 115 would provide EPA with the opportunity to develop a comprehensive, market-based, nationwide platform that would increase the scope of emissions covered, streamline administrative efforts, and maximize market efficiencies.