THE ELEPHANT IN THE ROOM OR THE ELEPHANT IN THE MOUSEHOLE? THE LEGAL RISKS (AND PROMISE) OF CLIMATE POLICY UNDER § 115 OF THE CLEAN AIR ACT

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Climate policy in the United States is near an inflection point. With Congress uninterested in new legislation, focus at the federal level for most of the last decade has been on the Clean Air Act, but whether regulation under that old statute can successfully address carbon emissions remains unclear. Under President Obama, the EPA has focused on two core programs—vehicle emissions standards and the Clean Power Plan, aimed at fossil fuel power plants. But with the latter of these programs under legal challenge, and both falling short of the flexible, economy-wide policy many believe is necessary, academic and policy attention is turning to an additional Clean Air Act provision. Section 115 of the Clean Air Act is aimed at international air pollution, and its advocates suggest it could be a vehicle to achieve deeper emissions reductions, perhaps including nationwide cap and trade or a carbon tax. This paper critically examines § 115 and its supporters' claims, concluding that it holds great promise but also comes with legal risks. A court considering the inevitable legal challenge to § 115 regulation might deem it a legal "mousehole" that Congress could not have intended to carry the weight of the climate policy "elephant," or it might rule that § 115 is limited to "conventional" pollutants rather than extending to carbon. There are strong counterarguments to both of these, but each remains a real legal risk and has likely been underappreciated by supporters of § 115. Even if § 115 survives such facial challenges, other legal challenges (if successful) could prevent it from being able to match its advocates' ambitions. Most of these narrower challenges appear relatively weak, however. Section 115's promise makes it worth pursuing, but with caution.

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INTRODUCTION

Since the Supreme Court's 2008 decision in *Massachusetts v. EPA*[1] and the 2009 failure of cap-and-trade legislation in Congress, the venerable (and justly venerated) Clean Air Act has become the primary vehicle for climate policy at the federal level. Two Clean Air Act programs aimed at the largest-emitting sectors of the economy have formed the centerpiece of climate policy under the Obama administration: substantially tighter emissions and Corporate Average Fuel Economy (CAFE) standards for road vehicles,[2] and the Clean Power Plan, which sets limits on emissions

1. 549 U.S. 497 (2007).

2. *See* Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324 (May 7, 2010) (to be codified at 40 C.F.R. pts. 85, 86, 600 and 49 C.F.R. pts. 531, 533, 536, 537, 538); 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel

from existing fossil fuel power plants.[3] Of these two programs, the former is well under way, albeit soon up for midterm review.[4] Surprisingly, the latter was stayed in early 2016 by the Supreme Court pending resolution of legal challenges.[5] The future of climate policy under the Clean Air Act therefore remains in flux and under real legal threat. That threat, along with alleged limitations of the Clean Power Plan, has led some to call for a renewed look at legislative options.

But might there be another climate policy option in the Act—a path not taken, possibly superior in important respects to the Clean Power Plan? Some, among them leading environmental law scholars, say yes.[6] Section 115 of the Act,[7] a section explicitly aimed at international emissions problems, is (they claim) a valid alternative or even superior vehicle within the statute for climate policy.[8] According to its proponents, § 115 gives the EPA and states the necessary authority and flexibility to effectively and cost-effectively limit carbon emissions from much of the U.S. economy. Advocates suggest that § 115 might even allow the EPA to oversee state implementation of a national carbon cap-and-trade or tax system.[9]

Economy Standards, 77 Fed. Reg. 62,624 (Oct. 15, 2012) (to be codified at 40 C.F.R. pts. 85, 86, 600 and 49 C.F.R. pts. 523, 531, 533, 536, 537).

3. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

4. *See* 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. at 62,628.

5. *See* West Virginia v. EPA, 136 S. Ct. 1000 (2016).

6. *See* Michael Burger et al., *Legal Pathways to Reducing Greenhouse Gas Emissions Under Section 115 of the Clean Air Act*, UCLA SCHOOL OF LAW PUBLIC LAW RESEARCH PAPER NO. 16-11 (2016), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2742366.

7. Clean Air Act, 42 U.S.C. § 7415 (2012).

8. It remains unclear whether advocates view § 115 as a substitute for the Clean Power Plan or a complement to it. To my knowledge, however, no § 115 advocate has publicly suggested that the Clean Power Plan be abandoned in favor of § 115 (though some did suggest § 115 was superior to § 111(d) as a climate policy vehicle before the EPA made its initial choice). This implies that advocates view the two as complements, or at least that they believe the Clean Power Plan is not sufficiently inferior to scrap before the outcome of its legal challenges are known. Suggesting that the Clean Power Plan should be quickly abandoned is not necessarily a radical position if one believes § 115 is a superior vehicle, however. As discussed below, legal challenges to the two are similar in important respects, and if one believes § 115 is both substantively superior and more likely to survive challenge, then Clean Power Plan litigation risks creating harmful precedent for § 115 without much policy payoff.

9. *See* Burger et al., *supra* note 6, at i–vi.

This paper is an attempt at an honest assessment of the legal risks associated with climate policy under § 115, along with some important policy limitations.[10] In short, acting on climate change via § 115 carries significant legal risks, similar in magnitude to those associated with the Clean Power Plan. Among other risks, the brevity that lends § 115 its flexibility could leave it without sufficient specificity to convince judges that Congress intended it to authorize the sweeping, economy-wide regulatory program necessary for carbon emissions. An interpretation of § 115 to allow such a program may also not be entitled to *Chevron* deference.[11] Especially taken together, these risks increase the chances that a reviewing court would reject § 115 climate regulation entirely. Moreover, the magnitude of these risks may be strongly influenced by the Clean Power Plan litigation—some of the same arguments may apply in both challenges, and the earlier litigation will indicate how receptive the relevant courts (the D.C. Circuit and the Supreme Court, likely with a new justice) will be to those arguments.

In addition to these general or facial risks, important practical elements of § 115 climate policy such as allocation of emissions reduction responsibility to states may be legally difficult for EPA, largely because § 115 lacks any real guidance on program structure.[12] Even if not fatal to § 115, these legal limitations should somewhat temper enthusiasm grounded in § 115's relatively blank policy slate.[13]

But no one of these risks is obviously fatal to § 115 climate policy, and § 115's advocates are correct to identify important advantages of the provision, chiefly its flexibility and ability to apply across different sectors of the economy simultaneously. These advantages may make pursuing § 115 worthwhile, especially if the Clean Power Plan is rejected by courts, even though the path between legal risks for § 115 will be narrow.

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10. A full analysis of the policy and economic implications of § 115 (rather than the legal analysis here) is not only beyond the scope of this paper (and my ability), but in many respects impossible in the absence of a more concrete sense of what form § 115 climate regulation would take. Section 115's flexibility and open-endedness is one of its key advantages as a policy vehicle, but this feature makes early policy analysis particularly difficult.

11. Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984) (pioneering the doctrine of judicial deference to agency interpretations of law).

12. *Infra* Part II.

13. *See id.*

I. THE CLEAN AIR ACT AND CLIMATE: § 115 IN CONTEXT

The Clean Air Act is an expansive statute, with a wide range of authorities granted to the EPA, states, or both to limit air pollution. Before the EPA's plans became clear between 2011 and 2013,[14] the suitability of many provisions of the statute for regulating carbon emissions was considered and debated both within and outside the EPA.[15] The major programs announced to date use only two of these authorities, however. CAFE standards are based on the federal government's well-understood authority to regulate new motor vehicle emissions under Title II of the statute,[16] and the Clean Power Plan is based on much less well-understood joint federal–state authority over existing stationary emissions sources under § 111(d).[17] Other regulatory options, such as listing greenhouse gases (GHGs) as a seventh "criteria" pollutant and setting national air quality standards, were rejected by the EPA.[18] As it stands today, Title II and § 111 are the vehicles for Clean Air Act climate policy.

For reasons that remain somewhat unclear, this debate over which Clean Air Act authorities should be used to regulate carbon has been at least partially reopened.[19] Specifically, legal and policy scholars have directed

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14. *See* Barack Obama, President, Remarks by the President on Climate Change (June 25, 2013) ("So today, for the sake of our children, and the health and safety of all Americans, I'm directing the Environmental Protection Agency to put an end to the limitless dumping of carbon pollution from our power plants, and complete new pollution standards for both new and existing power plants"), https://obamawhitehouse.archives.gov/the-press-office/2013/06/25/remarks-president-climate-change.

15. *See, e.g.*, Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354 (proposed July 30, 2008) (to be codified at 40 C.F.R. ch. 1); Nathan Richardson et al., *Greenhouse Gas Regulation Under the Clean Air Act: Structure, Effects, & Implications of a Knowable Pathway*, 41 ENVTL. L. REP. 10,098 (2011) [hereinafter Richardson et al., *Structure, Effects, and Implications*].

16. *See* 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. 62,624, 62,627 (Oct. 15, 2012) (to be codified at 40 C.F.R. pts. 85, 86, 600 and 49 C.F.R. pts. 523, 531, 533, 536, 537).

17. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662, 64,663 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

18. *See* Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. at 44,367 (describing setting national air quality standards for GHGs as fraught with "major difficulties").

19. To speculate, the most obvious reason to consider § 115 is the serious legal challenge currently facing the Clean Power Plan. Another possibility is that the Paris climate agreement has renewed interest in international climate policy options, for which

renewed attention toward § 115 of the statute, dealing with international pollution.[20] Using § 115 for climate policy is not a new legal discovery. The section has existed in recognizable form since 1965,[21] and there is evidence that at least some in Congress contemplated the provision being used for GHGs at the time.[22] Using § 115 for climate regulation was examined by the EPA in 2008,[23] and was discussed by legal scholars (myself included) around 2009–2010,[24] most notably and extensively by Hannah Chang.[25] Nevertheless, attention has recently refocused on § 115 from policy circles[26] and in the form of major new legal analysis.[27]

This renewed interest may be in response to continuing litigation that has stalled the Clean Power Plan (under the view that § 115 might provide a smoother legal pathway), or it could be aimed at laying early groundwork for emissions reduction policies that go beyond the Clean Power Plan, or both. Recent advocacy for § 115 is ambiguous on this point, sometimes characterizing § 115 as an "alternative" to existing policy and sometimes highlighting its compatibility.[28] At least for now, however, ambiguity on

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§ 115 is the best vehicle under current US law. Alternatively, climate policy advocates may already be looking beyond the power sector covered by the Clean Power Plan and may have concluded that replicating that approach for other sectors is inferior to a broad policy under § 115.

20. *See, e.g.*, Burger et al., *supra* note 6.

21. *See* Clean Air Act Amendments and Solid Waste Disposal Act, Pub. L. No. 89-272, 79 Stat. 992 (1965).

22. *See* Tom Udall, *A New (Old) Approach on Climate Change*, HUFFINGTON POST (Aug. 16, 2016, 5:20 PM), http://www.huffingtonpost.com/tom-udall/a-new-old-approach-on-cli_b_11552626.html.

23. *See* Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. at 44,482.

24. *See* Roger Martella & Matthew Paulson, *Regulation of Greenhouse Gases Under Section 115 of the Clean Air Act*, DAILY ENV'T REP. 1 (2009); *see also* Richardson et al., *Structure, Effects, and Implications*, *supra* note 15, at 10,103.

25. *See* Hannah Chang, *Cap and Trade Under the Clean Air Act?: Rethinking § 115*, 40 ENVTL. L. REP. 10,894 (2010).

26. *See, e.g.*, Greg Dotson & Joe Romm, *How the Paris Climate Agreement Super-Charges the Clean Air Act*, THINKPROGRESS (Jan. 14, 2016), https://thinkprogress.org/how-the-paris-climate-agreement-super-charges-the-clean-air-act-d7220e399833#.y3ryz5p9g; *see also* Brian Potts, *Obama's Hidden Climate Leverage*, POLITICO (Feb. 1, 2016, 5:34 AM), http://www.politico.com/agenda/agenda/story/paris-climate-deal-epa-obama-000034.

27. *See* Burger et al., *supra* note 6.

28. *See id.* at 2 ("The alternative to using Section 115 to address [Greenhouse Gas] GHG emissions from stationary sources is a series of source-specific regulations under Section 111 of the Clean Air Act."); *see also id.* at 63 ("Any action EPA undertakes pursuant

this point is probably politically wise, so as not to disturb hard-won policy gains or inflame turf battles over preferred policies.

In any case, there is significant renewed interest in § 115. By all accounts, the Clean Power Plan and vehicle emissions standards remain the primary federal regulatory programs limiting carbon emissions. EPA's most likely next step is programs like the Clean Power Plan for other emitting sectors.[29] But should the Clean Power Plan be wholly or substantially rejected by courts, an alternative will be needed—that is, unless an opportunity emerges in Congress for new legislation. EPA could also decide that § 111(d) is less suitable for sectors other than electric power and seek an alternative approach while preserving the Clean Power Plan in its domain.

In either case, § 115 appears to be the most likely alternative, or at least the only one currently under serious discussion in the policy and legal communities. Barring renewed congressional interest in climate legislation, therefore, § 115 seems to be the next frontier for national climate policy. Even if one is optimistic that Congress will eventually pass comprehensive climate legislation, successful EPA regulation in the meantime could provide a valuable template or identify problems to avoid.

II. THE CASE FOR § 115 CLIMATE REGULATION

Why such interest in § 115 for climate? The case for its suitability has been ably made elsewhere and will only be summarized here—the focus of this paper is the degree of legal risk associated with using § 115 for climate. But it is nevertheless necessary to summarize the policy arguments in favor of § 115.

At the risk of oversimplification, § 115's appeal stems largely from the fact that it, in contrast to many provisions of the Clean Air Act, is fairly simple. Once the EPA identifies harmful cross-border pollution and establishes that other countries give the United States reciprocal emissions-reducing rights, § 115 allows the agency to demand that states reduce that pollution, within the same process that states use to comply with other parts

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to Section 115 will take place while EPA also implements other critical GHG emissions regulations, including . . . the Clean Power Plan . . . .").

29. *See* Nathan Richardson, *A Quick Legal FAQ on EPA's Clean Power Plan*, RESOURCES FOR THE FUTURE (July 14, 2015), http://www.rff.org/blog/2015/quick-legal-faq-epa-s-clean-power-plan.

of the statute.[30] This simplicity (or rather, lack of specificity) appears to allow the EPA to fill in the blanks, crafting a policy designed explicitly for GHGs rather than being forced to shoehorn regulation of those emissions, with their unique challenges, into more or less rigid and well-established regulatory programs. In short, § 115 appears to offer great breadth and flexibility for the environmental problem that needs that flexibility the most.

But even before considering its flexibility, the first and most obvious attraction of § 115 is its title: "International air pollution."[31] If one were to naively read through the list of section titles in the statute looking for the provision governing GHGs, after overcoming one's initial surprise and disappointment at not finding a specific provision on point, the most appealing section title would probably be that of § 115. Climate change is a truly global environmental problem, most GHGs are globally mixed, and any real solution to the problem of carbon emissions must be international. In fact, § 115 applies *only* to international pollution.[32]

Enthusiasm for § 115 goes beyond its title and international scope, however. Advocates suggest it is a better, more flexible vehicle for climate policy than the EPA's current path under the Clean Air Act.[33]

A. The Clean Air Act and a Carbon Price

Understanding § 115's appeal in policy practice requires a brief diversion to discuss the limitations of the EPA's current approach. A major limitation of the agency's efforts to regulate GHGs under the Clean Air Act is that current programs are inflexible and limited in scope. The Clean Power Plan applies only to existing fossil power plants,[34] and CAFE

30. *See* Clean Air Act, 42 U.S.C. § 7415(b) (2012) (linking state compliance under §115 to the well-established National Ambient Air Quality Standards (NAAQS) compliance process under §110).

31. *Id.* § 7415.

32. *See id.* § 7415(a) (indicating that the Section applies only to air pollutants "emitted in the United States [that] cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country . . .").

33. *See, e.g.*, Burger et al., *supra* note 6, at i (suggesting that §115 "could provide one of the most effective and efficient means to address climate change pollution in the United States").

34. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662, 64,663 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

emissions standards only to new motor vehicles.[35] GHG emissions from other sectors are for the most part currently unregulated, and the EPA announced no detailed plans to regulate them.[36] Both programs use more or less traditional regulatory approaches,[37] rather than directly imposing a single carbon price (via tax or cap and trade), which most economists would argue is more effective. Coordinating the state- or regional-level implementation of emissions reduction in the Clean Power Plan in a sector (electric power) that serves customers across state lines also presents difficult implementation challenges. State-level choices could interfere with power markets and raise costs or worsen emissions outcomes.[38] These limitations likely mean emissions reductions under EPA's current climate policy plans will be smaller and more costly than necessary.

These critiques can easily be oversold. Transportation and electric power generation are the largest-emitting sectors of the economy, so it makes sense to regulate their emissions first, and in any case the EPA must start somewhere. Also, both programs are in fact relatively flexible. The vehicle emissions standards allow some inter-manufacturer and

35. *See* 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. 62,624, (Oct. 15, 2012) (to be codified at 40 C.F.R. pts. 85, 85, 600 and 49 C.F.R. pts. 523, 531, 536, 537).

36. EPA has imposed permitting requirements on certain major new GHG-emitting stationary sources and new regulations on methane emissions related to oil and gas production. *See* Revisions to the Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas (GHG) Permitting Regulations and Establishment of a Significant Emissions Rate (SER) for GHG Emissions under the PSD Program, 81 Fed. Reg. 68,110, 68,110–13, 68,115 (proposed Oct. 3, 2016) (to be codified at 40 C.F.R. pts. 51, 52, 60, 70, 71); *see also* Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources, 81 Fed. Reg. 35,823 (June 3, 2016) (to be codified at 40 C.F.R. pt. 60).

37. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. at 64,663 ("EPA is establishing a CO_2 emission performance rate"); *see also* 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. at 62,627 ("EPA is establishing standards that are projected to require, on an average industry fleet wide basis, 163 grams/mile of carbon dioxide (CO_2) in model year 2025 . . . .").

38. *See* Dallas Burtraw et. al., *A Proximate Mirror: Greenhouse Gas Rules and Strategic Behavior Under the US Clean Air Act*, 62 ENV'T AND RESOURCE ECON. 217, 220 (2015) (finding that "because the emissions rate standard does not place a cap on total emissions, this policy combination can increase emissions overall compared with the outcome if both regions have an emissions rate standard"); *see also* James B. Bushnell et al., *Strategic Policy Choice in State-Level Regulation: The EPA's Clean Power Plan* (Energy Inst., Working Paper No. 255, rev. 2016), https://ei.haas.berkeley.edu/research/papers/WP255.pdf#page=1#page=1.

intertemporal trading,[39] and the EPA actively encourages states to adopt emissions trading systems under the Clean Power Plan.[40]

Nevertheless, many climate policy experts view the siloed, sector-by-sector nature of the Clean Air Act regulation and its relative inflexibility as significant limitations of the statute as a climate policy vehicle, especially in the long run.[41] The standard solution is new legislation, such as a national carbon tax or cap-and-trade program.[42] Such a cross-sector, nationwide approach would be simpler and likely more cost-effective than the EPA's current regulatory pathway.[43] Under a cap-and-trade scheme, emissions allowance auction or trading markets would quickly identify the emitters with the ability to reduce emissions at the lowest cost, regardless of what sector of the economy they operate in. Similarly, under a carbon tax, each emitter would be pressed to reduce carbon emissions, but only to the point where doing so is more cost-effective than paying the tax.

The advantages of these approaches can also be expressed in terms of information and expertise—instead of trying to get the emissions reduction targets for each sector "right" under a Clean Power Plan style approach, regulators under a carbon tax or cap-and-trade system would have only one key variable to set—the price or quantity of emissions. Of course, in reality, either a carbon tax or cap-and-trade program would have plenty of epicyclic complexity, political trade-offs, and implementation complexity. But at its core, it would be a simpler and, many believe, more effective and cost-effective approach.

The Clean Air Act has been generally understood to deny the EPA authority to enact such nationwide and economy-wide emissions pricing schemes (hence efforts to pass cap-and-trade in Congress in 2009).[44] This is reflected in the EPA's current sector-by-sector approach, embodied in

39. *See* 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. at 62,628 ("As proposed, the agencies are finalizing several provisions which provide compliance flexibility to manufacturers to meet the standards without compromising the program's overall environmental and energy security objectives.").

40. *See* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. at 64,666 ("Each state will have the opportunity to take advantage of a wide variety of strategies for reducing CO_2 emissions from affected EGUs, including . . . mass-based trading . . .").

41. *See, e.g.*, Nathan Richardson & Arthur G. Fraas, *Comparing the Clean Air Act and Carbon Price*, 44 ENVTL. L. REP. 10,472, 10,479–82 (2014).

42. *See id.*

43. *Id.* at 10,477–79.

44. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009).

vehicle emissions standards and the Clean Power Plan. As noted above, both programs include or encourage states to include some form of emissions trading, but such trading is limited in scope.

B. § 115: An Overlooked Carbon Price Opportunity?

Advocates of § 115 claim that it can escape these limitations of the Clean Air Act, overcoming siloed regulation by positioning states to make cross-sector plans and creating an opportunity for a national carbon price (tax or cap and trade) without new legislation.[45] To see how this might be possible, it is necessary to briefly explore the powers available under § 115 after it is triggered.

Once the EPA has made a threshold "endangerment finding" under § 115, it must then "give formal notification" of the finding to the relevant states (i.e., those states from which pollution that is causing foreign harms originates).[46] That notification then obligates the states to revise their State Implementation Plans (SIPs) to "prevent or eliminate" the endangering pollution.[47]

SIPs are the core of on-the-ground air pollution regulation driven by the Clean Air Act. They are primarily the means by which states regulate emissions of the six "criteria" pollutants identified by the EPA (such as sulfur dioxide, lead, and particulate matter) and for which National Ambient Air Quality Standards (NAAQS) are set by the federal agency.[48] State SIPs detail how the state will reduce concentrations of criteria pollutants in areas that exceed the standards and maintain concentrations in areas that meet the NAAQS.[49] SIPs have been used for decades, are continually updated, and are a familiar process for both states and the EPA.

The EPA is responsible for reviewing and approving SIPs, and the agency may step in if states fail.[50] States are responsible for proposing and actually implementing the emissions regulations embodied by the SIPs.[51] In practice, most emissions sources are regulated in a direct and

45. *See generally*, Chang, *supra* note 25; *see also* Burger et al., *supra* note 6, at 81 ("[Section 115] would allow EPA and the states to combine multiple sectors and source types in a single rulemaking that could establish a nationwide, cross-sectoral emissions trading program").

46. Clean Air Act, 42 U.S.C. § 7415(a) (2012).

47. *Id.* § 7415(b).

48. *Id.* § 7410(a)(1).

49. *Id.*

50. *Id.* § 7410(c).

51. *Id.* § 7410(a)(2).

fundamentally prescriptive way. However, states must increase the stringency of their SIPs and require additional emissions cuts when the NAAQS are not achieved, sometimes leading to policy innovation and regulation of previously unregulated activities.

The SIP process is complex and can be unwieldy, but it is well understood and, crucially in the § 115/climate context, it is flexible. In fact, the SIP process is not hobbled by some of the limitations of the Clean Power Plan and vehicle emissions standards identified above.

First, it is an economy-wide regulatory process, or at least nearly so, rather than taking the sector-by-sector approach of Title II (vehicles only) or § 111(d) (separate rulemakings for each industrial sector). With their SIPs, states are responsible for meeting pollution targets set by the EPA (such as the NAAQS), but neither the statute nor the EPA generally direct states on how to allocate the burden of meeting those targets. States may allocate emissions reductions among sectors as they see fit, whether for reasons of efficiency or politics.[52] There are a few limitations on the ability of states to regulate vehicle emissions, discussed below, but otherwise states are given a free hand.

This free hand extends not just to *who* is given the emissions-cutting burden but also to *how* the state regulates. Section 110 explicitly allows states to use not just traditional command-and-control regulation but also "economic incentives, such as fees, marketable permits, and auctions of emissions rights."[53] There is no clearer endorsement of modern, market-based environmental regulatory tools in the Clean Air Act.

The breadth and flexibility of the SIP process convinces advocates of § 115 that regulation of GHGs under the section addresses the key limitations of current Clean Air Act climate programs. Moreover, if the EPA and the states can agree, these advocates claim that a national cap-and-trade program or carbon tax is authorized by § 115.[54] If true, this would very likely enable greater emissions reductions, across the entire economy, at a lower cost than the Clean Power Plan and CAFE standards could achieve—an environmental and economic win/win.

In short, its advocates argue, § 115 is explicitly targeted at international pollution problems like climate change and provides unparalleled regulatory flexibility perfectly suited to a complex, economy-wide pollution problem like GHGs.[55]

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52. *Id.*

53. *Id.* § 7410(a)(2)(A).

54. *See generally* Chang, *supra* note 25; *see also* Burger et al., *supra* note 6, at 81.

55. *See* Burger et al., *supra* note 6, at i.

III. THRESHOLD LEGAL RISKS

Section 115 advocates' arguments that the Section is a good policy fit for EPA-led climate regulation are appealing and in many respects persuasive. But there are similarly compelling reasons to suspect that the § 115 path has substantial legal risk. It is possible—though far from certain—that a reviewing court could reject an attempt by the EPA to regulate carbon under § 115.[56] The EPA and (at least until recently) many, perhaps most, legal scholars have taken this skeptical view.[57]

This section and the two that follow consider legal arguments against § 115 as a vehicle for general climate regulation—that is, as a vehicle for substantial national emissions limits enforced via flexible, market-based tools. Litigation by states, industry groups, or both challenging any major EPA regulation has become standard practice, and there is no reason to think that § 115 regulation would be any exception.[58] Courts will therefore certainly consider whether any such regulation is within the scope of authority granted to the EPA under the Clean Air Act.

The first—and weakest—set of legal arguments against climate policy under § 115 asserts that climate change is in some respect insufficient or inappropriate to trigger the Section's threshold conditions, endangerment, and reciprocity. Like many Clean Air Act provisions, § 115 has essentially two parts: a trigger and a set of legal powers to limit or in some way regulate air pollution.[59] Section 115's trigger relies on the international character of a pollution problem—pollution with purely domestic effects is excluded.[60]

A. Endangerment: The International Trigger

Section 115's statutory trigger is characterized, as in most Clean Air Act provisions, as an "endangerment" finding.[61] That is, once the EPA has determined that certain emissions "endanger" "public health or welfare,"

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56. *See* Regulating Greenhouse Gas Emissions under the Clean Air Act, 73 Fed. Reg. 44,354, 44,482 (proposed July 30, 2008) (to be codified at 40 C.F.R. ch. 1).

57. *See, e.g.*, Richardson et al., *Structure, Effects, and Implications*, *supra* note 15, at 10,103.

58. *See* JAMES MCCARTHY & CLAUDIA COPELAND, CONG. RESEARCH SERV., R41561 EPA REGULATIONS: TOO MUCH, TOO LITTLE, OR ON TRACK? 8–37 (2016) (detailing recent major EPA regulations and legal challenges from both industry and environmental groups).

59. *Infra* Parts IV.A., IV.B.

60. *Infra* Parts IV.A.

61. *See* Clean Air Act, 42 U.S.C. § 7415(a)(2) (2012).

then those emissions or their emitters may (often must) be regulated.[62] Section 115, however, requires that this finding be based not on the EPA's assessment of the relevant science (as in other CAA provisions),[63] but on either "reports, surveys, or studies from any duly constituted international agency" or a formal request by the Secretary of State.[64] These reports or the secretary's request must identify endangerment of public health or welfare in a foreign country caused by air pollution originating in the United States.[65] In short, therefore, § 115 authorizes action only when cross-border pollution has been identified as a problem by specific and presumably trusted actors in the international system.

For GHGs, § 115's advocates suggest this trigger is easily met. The EPA has already issued an endangerment finding for GHGs under § 202 of the Clean Air Act as a prerequisite for its more stringent CAFE standards.[66] That finding is largely based on the consensus climate science embodied in the reports of the Intergovernmental Panel on Climate Change (IPCC), under the UN Framework Convention on Climate Change (UNFCCC).[67] The IPCC reports are "reports . . . from [a] duly constituted international agency" that would, advocates claim, be an adequate basis for a § 115 endangerment finding.[68] The only additional finding necessary for § 115 would be a showing that U.S.-sourced emissions harm health and welfare elsewhere. That seems relatively trivial—the United States is among the largest emitters, and effects would be felt worldwide.

Both major legal analyses of § 115 to date persuasively make this point regarding reliance on the IPCC. To put it simply, the prerequisite trigger for § 115 is, according to advocates, available off the shelf.[69] Moreover, even if the IPCC reports were for some reason inadequate to trigger § 115, a request from the Secretary of State alone is sufficient.[70] Such a request

62. *Id.*; *accord id.* §§ 7408(a), 7502(a)(1).

63. *See, e.g.*, *id.* § 7408(a)(2) ("Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities.").

64. *Id.* § 7415(a).

65. *Id.*

66. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. 1).

67. *Id.*

68. *See* Burger et al., *supra* note 6, at 16 (quoting 42 U.S.C. § 7415(a)).

69. *See* Chang, *supra* note 25, at 10,901; Burger et al., *supra* note 6, at 17.

70. *See* Clean Air Act, 42 U.S.C. § 7415(a).

would seem to be a formality if climate policy is a presidential priority or if U.S. political obligations as part of the Paris Agreement effectively require emissions limits.

To be sure, a § 115 endangerment finding would not be immune to challenge. One such challenge could be an argument that a direct connection between U.S. emissions and specific foreign health and welfare harms cannot be established. This argument notes that carbon is globally mixed, that harms suffered may be difficult or impossible to attribute conclusively to climate change, and that reductions in U.S. emissions would not necessarily reduce harms since ultimate effects on the degree of climate change depend on whether other countries similarly reduce their emissions.[71] In short, this argument holds that U.S. emissions are not the proximate cause of any danger to health and welfare elsewhere.

Even if one finds this argument rhetorically persuasive, it is unlikely to be persuasive to a reviewing court. The Supreme Court rejected similar arguments regarding carbon emissions from vehicles in *Massachusetts v. EPA*:

> EPA does not dispute the existence of a causal connection between manmade greenhouse gas emissions and global warming. At a minimum, therefore, EPA's refusal to regulate such emissions "contributes" to Massachusetts' injuries.
>
> EPA nevertheless maintains that its decision not to regulate greenhouse gas emissions from new motor vehicles contributes so insignificantly to petitioners' injuries that the Agency cannot be haled into federal court to answer for them. For the same reason, EPA does not believe that any realistic possibility exists that the relief petitioners seek would mitigate global climate change and remedy their injuries. That is especially so because predicted increases in greenhouse gas emissions from developing nations, particularly China and India, are likely to offset any marginal domestic decrease.
>
> But EPA overstates its case. Its argument rests on the erroneous assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action. Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop. . . . They instead whittle away at them over time, refining their preferred approach as circumstances change and as they develop a more nuanced understanding of how best to proceed. . . . That a first step might be tentative does not by itself support the notion that federal courts lack jurisdiction to determine whether that step conforms to law.[72]

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71. This is because the U.S. share of global emissions is only around 15% (second to China's roughly 30%). *See* European Commission, Emissions Database for Global Atmospheric Research, *CO2 Time Series 1990–2014 Per Region/Country* (2014), http://edgar.jrc.ec.europa.eu/overview.php?v=CO2ts1990-2014&sort=des9.

72. Massachusetts v. EPA, 549 U.S. 497, 523–24 (2007) (citations omitted).

A similar outcome appears likely in the context of a challenge to a § 115 endangerment finding. Just because U.S. emissions may have an incremental effect on climate change does not mean U.S. emissions have no effect (or no legally cognizable effect). Moreover, the fact that other countries' lack of action could render U.S. action ineffective goes to the effectiveness of subsequent policy, not the threshold question of whether U.S. emissions endanger health and welfare.

The attribution-causation argument against endangerment under § 115 seems similarly weak. Carbon emissions are no different from other air emissions in that it is impossible to attribute a specific molecule of pollution to a specific health effect. That fact does nothing to undercut the scientific understanding or the EPA's judgment that pollution "causes or contributes to" health and welfare effects. Litigants might also challenge the credibility of the IPCC's or the EPA's reliance on external scientific information, as some did (unsuccessfully) in challenges to the EPA's 2009 endangerment finding.[73] Such arguments failed then and would presumably fail now.

Moreover, a reviewing court would be highly deferential to EPA decisions on any of these issues related to a § 115 endangerment finding.[74] In legal terms, any challenge would have to establish that the EPA had acted arbitrarily or capriciously in making its determination in violation of the Clean Air Act.[75] An EPA judgment on endangerment that is merely different from what challengers or even a reviewing court might prefer will not be rejected by that court.

Even if all else fails, as noted above, a formal request from the Secretary of State is sufficient basis for an endangerment finding.[76] It seems extremely unlikely that a reviewing court would interfere with such a request. Nothing in § 115 limits the conditions under which such a request could be made by the secretary or followed by the EPA, and a reviewing

73. *See* Coal. for Responsible Regulation, Inc. v. EPA, 684 F.3d 102, 119–22 (D.C. Cir. 2012).

74. *Id.* at 120. ("'Although we perform a searching and careful inquiry into the facts underlying the agency's decisions, we will presume the validity of agency action as long as a rational basis for it is presented.' In so doing, 'we give an extreme degree of deference to the agency when it is evaluating scientific data within its technical expertise.'") (quoting Am. Farm Bureau Fed'n v. EPA, 559 F.3d 512, 519 (D.C. Cir. 2009)).

75. *See* 42 U.S.C. § 7607(d)(9)(A) ("In the case of review of any action of the Administrator to which this subsection applies, the court may reverse any such action found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law").

76. *See id.* § 7415(a).

court would seem likely to refuse to interfere in deference to the executive's traditional foreign affairs power.[77]

B. Reciprocity

Section 115's international trigger comes with a condition, however: the foreign country or countries found to be endangered by U.S. pollution must give the United States reciprocal rights.[78] Specifically, the country (or countries) must give "the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country by this section."[79] Advocates of § 115 suggest this condition could also be easily met,[80] based on other nations' limitation of their own GHG emissions (such as the EU's emissions trading program),[81] political commitments to reduce emissions like those between the United States and China,[82] or the recent Paris climate agreement.[83]

Section 115 advocates suggest that the triggers of GHG regulation under § 115 are effectively a formality; they have already been accomplished, or could be easily. Legal scholars analyzing § 115 have discussed the meaning and practical impact of this reciprocity condition at some length, considering whether it refers to procedural or substantive rights and what international commitments or domestic laws in other countries would qualify.[84]

As with a § 115 endangerment finding, challenges to reciprocity are still possible, even likely. Litigants may claim (accurately) that none of the international agreements or foreign programs—the United States-China executive agreements, the European Union Emissions Trading System (EU ETS), or the Paris Agreement—give the United States legally binding or enforceable rights to limit foreign emissions that harm the United States. The China agreement is a set of simultaneous promises, not a binding

77. *See, e.g.*, Dep't of the Navy v. Egan, 484 U.S. 518, 529 (1988) ("The Court also has recognized the generally accepted view that foreign policy was the province and responsibility of the Executive.") (internal quotation marks omitted)).

78. Clean Air Act, 42 U.S.C § 7415(c).

79. *Id.*

80. *See* Burger et al., *supra* note 6, at 20.

81. *Id.* at 41.

82. *Id.* at 30–32.

83. *Id.* at 26–30.

84. *Id.* at 20–43 (discussing reciprocity issue in terms of substance and procedure, and concluding that reciprocity is readily established on multiple grounds); *see also* Chang, *supra* note 25, at 10,901–03.

bilateral commitment.[85] The ETS is binding on EU members but does not claim to specifically reduce emissions that affect the United States.[86] And the Paris Agreement commits its signatories only to individually defined Intended Nationally Determined Contributions (INDCs), not to concrete emissions goals.[87] Therefore, the challengers would presumably argue, reciprocity does not exist in a legal sense.

These critiques of existing climate agreements have some validity, but they are probably insufficient for a reviewing court to reject an EPA finding of reciprocity. One response is that § 115 does not require legally binding international agreements to establish reciprocity. Instead, § 115 requires only that other countries give the United States "essentially the same rights." Section 115 advocates do not suggest that EPA allow other countries to specifically intervene in U.S. policymaking to reduce U.S. carbon emissions, but rather that the agency implement a policy unilaterally reducing U.S. emissions. Parallel efforts elsewhere to reduce emissions, whether under bilateral executive agreements, EU treaties, or the Paris Agreement, are therefore "reciprocal" because they similarly commit other countries to domestic actions. Similarly, all such actions are aimed at the common threat of climate change, not at reducing harms in a specific other country. Defining reciprocity to include only such direct interactions is inconsistent with the international character of climate harms and the globally mixed nature of GHGs.

Of course, challengers may suggest that this inconsistency is evidence that § 115 is a poor fit for climate change, and that Congress could not have intended it to be used for global pollution problems. This argument against reciprocity is somewhat harder to dismiss, but it probably founders on the same rocks as the argument against endangerment and rejected by the *Massachusetts* court.[88] All countries that have committed to reducing their carbon emissions have done so to mitigate worldwide harms, even though their own reductions are insufficient alone to prevent those harms.

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85. *See* Office of the Press Secretary, U.S.-China Joint Announcement on Climate Change, WHITEHOUSE.GOV (Nov. 11, 2014) (noting that the United States and China have "announced their respective post-2020 actions on climate change" in an effort to "inject momentum into the global climate negotiations"), http://www.whitehouse.gov/the-press-office/2014/11/11/us-china-joint-announcement-climate-change.

86. *See* European Commission, Climate Action, The EU Emissions Trading System (EU ETS), (June 4, 2014), http://ec.europa.eu/clima/policies/ets.

87. The Paris Agreement, United Nations Framework Convention on Climate Change (UNFCCC) (2015), art. 4.2 (Dec. 12, 2015), http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf.

88. *See supra,* Part II.A.

Suggesting that such policies are not "reciprocal" is an extremely narrow and legalistic reading of that term that can be rejected as readily as the EPA's similarly narrow reading of "contributes" was by the *Massachusetts* court.

Moreover, as with the endangerment question, a reviewing court is likely to be deferential to the EPA on the question of reciprocity. To be sure, whether reciprocity exists is superficially a legal question that judges might feel readily able to determine on their own, rather than the scientific and policy judgment embodied in an endangerment finding. But whether another country grants the United States "essentially the same rights" is at bottom a political judgment and, moreover, an international one. The executive, not the courts, is better equipped to make the reciprocity judgment, and a reviewing court is likely to follow traditional deference on questions of foreign affairs.[89]

In short, legal arguments against the EPA's most likely bases for the endangerment and reciprocity findings necessary to trigger § 115 regulation seem relatively weak. Courts are also likely to be deferential to the EPA and the Secretary of State in reviewing such claims. But triggering § 115 in the climate context is not enough; the EPA must also, with the states, set up a regulatory program. That program will open up the agency to two types of further legal challenges. The first type, considered in the first subsection below, are general or facial legal challenges—that is, those asserting that climate regulation under § 115 is generally improper. The second type, considered in the following subsection, are as-applied challenges, asserting that some important element of the EPA's likely regulatory approach is inconsistent with the statute.

IV. GENERAL LEGAL RISKS

A. Can § 115 Support the Climate Elephant?

The first and most direct facial attack on § 115 climate regulation is simple. The argument goes like this: substantial limits on U.S. carbon emissions, implemented through a national carbon tax or trading system, would be an extremely significant action both politically and economically. If Congress had intended to delegate the power to take such action to the EPA, it would have done so more explicitly and probably more extensively

89. *See* Dep't of the Navy v. Egan, 484 U.S. 518, 529 (1988).

than with a short, skeletal, and (to date) almost completely unused portion of the Clean Air Act like § 115.[90]

Put in these terms, this is a rhetorical or political argument rather than a legal one. But by reframing in terms of statutory interpretation and the degree of deference given to regulatory agencies by courts, a legal argument can be developed that is more or less the same thing. If accepted by a court, this legal argument would lead to rejection of § 115 as a climate policy vehicle.

The political and economic significance of climate policy is hard to overstate. The climate problem is considered by many as the paramount environmental challenge of our time, but even among those who agree that action is needed, there is substantial and sometimes vitriolic controversy over what form that action should take. Climate policy is at times a major national public issue. Congressional debate over cap-and-trade legislation dominated headlines in 2009 and 2010, with a bill passing the House before similar legislation failed to reach the floor in the Senate.[91] Failure of cap and trade has been frequently contrasted with success of health care reform, with the two treated as comparable top-tier policy priorities for the Obama administration.[92] The economic costs of a policy aimed at reducing carbon emissions depend on that policy's design and stringency, but carbon alone among pollutants affects every industry and economic sector because of its direct connection to energy. Carbon regulation would affect the bottom line of every business and household, and it could shape the long-term fate of entire industries. Climate change and policies to prevent it are a big deal.

The ultimately unsuccessful 2009 cap-and-trade legislation was extremely lengthy, detailed, and complex.[93] It would have substantially amended the Clean Air Act, excising authority over carbon emissions from much of the existing statute and adding a new Title that would have (among other things) set emissions limits, established a trading market, and allocated emissions allowances.[94] Section 115, by contrast, is short—only a

90. *See* Clean Air Act, 42 U.S.C. § 7415 (2012).

91. *See* Bryan Walsh, *Cap and Trade is Dead (Really, Truly, I'm Not Kidding). Who's to Blame?*, TIME (July 22, 2010), http://science.time.com/2010/07/22/cap-and-trade-is-dead-really-truly-im-not-kidding-whos-to-blame/.

92. *See, e.g.*, Theda Skocpol, Harvard University Professor of Government and Sociology, Remarks at the Symposium on The Politics of America's Fight Against Global Warming (Feb. 14, 2013), http://www.scholarsstrategynetwork.org/sites/default/files/skocpol_captrade_report_january_2013_0.pdf.

93. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009).

94. *Id.* § 811(c).

few hundred words—and gives no detail on regulatory implementation. Having been drafted decades ago, it does not mention climate change or carbon at all (though the statute does not mention most pollutants it now regulates by name). Can a climate policy similar in ambition to that rejected by Congress in 2009 really be supported by § 115? Is an EPA attempt to do so illegal?

1. The "Elephants in Mouseholes" Problem

If one is a strict statutory textualist, none of this matters. The only question is whether the text of § 115 delegates to the EPA (and states) the requisite authority to enact a given policy. As discussed above, for its advocates the breadth of the language in § 115 appears sufficient. The Section applies to "any air pollutant," can be triggered by most any evidence of international harms, and, through use of § 110 and the SIP process, appears to allow use of most any regulatory tool.[95] That broad language is enough, even if it lacks details. Neither the Constitution nor canons of statutory interpretation require Congress to be verbose or detailed when making a major delegation of authority.

But even professed textualists do not take such a narrow view—the context in which statutory words and provisions appear is always relevant for understanding their meaning. One expression of this fact is an assumption that when Congress delegates substantial authority, it does so clearly. As the late Justice Scalia put it in a 2001 Clean Air Act opinion in the EPA's favor, "Congress, we have held, does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions— it does not, one might say, hide elephants in mouseholes."[96] Scalia did not invent this principle, though his aphorism stuck, with other justices citing it often in majority opinions or dissents.[97]

The precise role and applicability are not clear. Defining an 'elephant' in principle, if not always in practice, may be relatively easy; it is a 'fundamental' aspect of a regulatory delegation. But the same cannot be said for mouseholes. When is a statutory provision sufficiently "vague" or "ancillary" to qualify as a mousehole? Does that determination depend on the size of the regulatory elephant, or is it an absolute? More broadly, what role does the principle serve? Perhaps it is a clear statement rule, putting a

95. *Infra* Part IV.A.3.

96. Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 468 (2001).

97. *See, e.g.*, Burwell v. Hobby Lobby Stores, 134 S. Ct. 2751, 2796 (2014) (Ginsburg, J., dissenting); Entergy Corp. v. Riverkeeper, 556 U.S. 208, 239 (2009) (Stevens, J., dissenting); Gonzales v. Oregon, 546 U.S. 243, 267 (2006).

burden on Congress to clearly articulate major shifts in regulatory authority or protecting Congress from the worst implications of its own at times inartful drafting. Alternatively, it may serve to limit the ability of agencies (or courts) to aggressively interpret statutory text.[98]

Whatever its rationale, most of the time the principle operates as a canon of statutory interpretation—the text of a given statutory provision will be read in light of the principle. Interpretations of statutory text that result in major shifts in regulatory authority or "alter the fundamental details of a regulatory scheme" will be viewed with skepticism. This skepticism can be overcome, though it remains unclear whether it is simply more text, more clarity, or both that Congress must supply to grant such authority (i.e., so that the text in question is no longer considered a mousehole).

The implications of this principle in the § 115 context are that a reviewing court could view EPA authority to limit national carbon emissions and encourage states to set up a trading system or carbon tax as a major or "fundamental" regulatory shift—an elephant. The short, relatively unused and unheralded § 115 could be considered a "vague" or "ancillary" provision—a mousehole. If so, then the text of § 115, no matter how open-ended and flexible, would be insufficient to support the major regulatory programs its advocates suggest. The next subsection discusses the implications of such a finding, before the following subsection considers more deeply whether § 115 is, indeed, a mousehole.

2. The EPA May Not Get Chevron Deference

In a 2010 paper considering Clean Air Act authorities that the EPA might use for climate policy, my coauthors and I considered § 115 and argued that it carried great legal risk, largely due to potential wholesale rejection by courts on "elephants in mouseholes" grounds.[99] Advocates of § 115 have not discussed this legal risk specifically—neither Chang nor Burger mention "elephants in mouseholes" and its line of cases. To be fair, Burger argues at length that a broad interpretation of the EPA's authority under § 115 is compatible with the text of the statute.[100] They also point to

98. *See* Jacob Loshin & Aaron Nielson, *Hiding Nondelegation in Mouseholes*, 62 ADMIN. L. REV. 19, 53 (2010); *see also* Nathan Richardson, *Keeping Big Cases from Making Bad Law: The Resurgent "Major Questions" Doctrine*, 49 CONN. L. REV. 355 (2017) [hereinafter Richardson, *Keeping Big Cases from Making Bad Law*].

99. *See* Richardson, et al., *supra* note 15, at 10,104.

100. *See* Burger et al., *supra* note 6, at 1 ("The language of the provision 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

deference shown to agency interpretations of statutory text under the *Chevron* doctrine as a reason to be optimistic—if the agency favors a broad interpretation (as would be required if it pursued comprehensive climate regulation under § 115), the deference shown to the agency under *Chevron* would reduce the risk of judges overturning that interpretation.[101]

While it is true that *Chevron* might apply and that deference would be helpful to the EPA's hypothetical case, *Chevron* has limited ability to protect agency interpretations from "elephants in mouseholes" counterarguments. This is because "elephants in mouseholes" is an interpretive principle, and therefore operates before deference is available to agencies or even may deny deference. To explain how this is so, a brief review of *Chevron* deference may be helpful.

Under *Chevron*'s standard of review, agency interpretations of ambiguous provisions are given controlling weight by the reviewing court, so long as those interpretations are "reasonable" or "permissible."[102] The court therefore asks two questions: First (Step 1), is the statute ambiguous?[103] And second (Step 2), is the agency interpretation reasonable?[104] *Chevron* "deference" refers to the broad latitude given to agencies at step 2. But it is available only after step 1 analysis has established that some ambiguity exists in the text. To make this Step 1 ambiguity determination, courts use "traditional tools of statutory interpretation," including the text itself, its context, and canons of statutory construction.[105] The "elephants in mouseholes" principle is one such canon, and therefore operates at Step 1 of the *Chevron* review process—before "*Chevron* deference" is available to agencies.

Even if an agency survives *Chevron* Step 1, the "elephants in mouseholes" principle remains relevant in *Chevron* Step 2. In the Supreme Court's recent decision in *Utility Air Regulatory Group v. EPA*,[106] the Court agreed with EPA that a provision of the Clean Air Act was ambiguous but rejected the agency's interpretation as "unreasonable" despite the deference available under *Chevron*—in other words, the agency suffered a rare loss at *Chevron*

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through the Clean Air Act's state implementation plan (SIP) process.").

101. Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984); Burger et al., *supra* note 6, at 14–16.

102. *See Chevron*, 467 U.S. at 843–44.

103. *Id.* at 842–43, 845.

104. *Id.*

105. *Id.* at 843 n.9.

106. 134 S. Ct. 2427 (2014).

Step 2. Among other reasons, Justice Scalia (writing for the majority) echoed the "elephants in mouseholes" principle:

> EPA's interpretation is also unreasonable because it would bring about an enormous and transformative expansion in EPA's regulatory authority without clear congressional authorization. When an agency claims to discover in a long-extant statute an unheralded power to regulate a significant portion of the American economy, . . . we typically greet its announcement with a measure of skepticism. We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast economic and political significance.[107]

The Court's interpretation of specific language in the Clean Air Act in *Utility Air Regulatory Group* may also be relevant for how a reviewing court would consider climate regulation under § 115, as the next subsection discusses. Those specifics aside, the *Utility Air Regulatory Group* opinion also illustrates the legal threat of the "elephants in mouseholes" principle at *Chevron* Step 2, beyond its role as an interpretive rule at Step 1.

To summarize, a reviewing court could conclude that § 115 clearly does not give the EPA authority to enact major economy-wide regulation because "Congress does not hide elephants in mouseholes"—that is, the court could conclude that the statute is not ambiguous in this respect (step 1) or that despite ambiguity, such an interpretation is unreasonable (step 2).[108] This possibility means that citing *Chevron* and the great degree of deference toward agencies that it embodies is little or no defense against the argument that § 115 is too "vague" or "ancillary" a provision to support comprehensive climate policy. "Elephants in mouseholes" leaves that determination up to judges alone.

Chevron deference could be denied to the EPA in a hypothetical case for other, closely related reasons as well. The "major questions" doctrine suspends *Chevron* deference in certain "extraordinary cases" with great economic, political, or other significance.[109] The 2015 *King v. Burwell*[110] case is the most notable recent example of the Court employing the doctrine. In that case, the Court rejected challenges to agency implementation of the Affordable Care Act but denied *Chevron* deference to agency interpretations of the statute.[111]

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107. *Id.* at 2444.

108. *See Chevron*, 467 U.S. at 842–43.

109. *See* Richardson, *Keeping Big Cases from Making Bad Law*, *supra* note 98 (discussing the history of the major questions doctrine and its current relevance).

110. 135 S. Ct. 2480 (2015).

111. *See id.* at 2488–89, 2496.

The major questions doctrine is in many ways very similar to the "elephants in mouseholes" principle, and in fact, I have argued elsewhere that they are sometimes indistinguishable.[112] Both operate to shift interpretive authority from agencies to judges when the regulatory stakes are great. Indeed, the two cases cited by Justice Scalia for the initial 2001 appearance of "elephants in mouseholes" are *MCI Telecommunications Corp. v. American Telephone & Telegraph Co.*[113] and *FDA v. Brown & Williamson Tobacco Corp.*,[114] the same two cases in which the major questions doctrine was first articulated.

The boundaries of the major questions doctrine are not clear, and it has only occasionally been invoked. But a challenge to comprehensive climate regulation under the Clean Air Act would at least be a strong candidate for a major questions case. In a recent analysis of the doctrine, I discussed how prospective Clean Power Plan litigation is a rare example of a case that arguably implicates all four factors that the Supreme Court has previously associated with "extraordinary" cases" to which the major questions doctrine applies.[115] Those four factors—economic significance, political significance, a change in agency position, and limited statutory text—all also apply to climate regulation under § 115. If this reading is correct and litigation over an EPA climate program under § 115 is deemed an "extraordinary case," then *Chevron* deference will not be available.

Taken together, the major questions doctrine and the "elephants in mouseholes" principle make relying on *Chevron* to support EPA's reading of § 115 imprudent.

3. Does "Elephants in Mouseholes" Really Hurt § 115?

This does not end legal debate over the fitness of § 115 as a vehicle for climate policy; it merely shifts it to a different arena. Rather than simply appealing to the breadth and ambiguity of § 115's text, and to *Chevron* deference, it is necessary to consider whether § 115 really is a "vague" or "ancillary" mousehole in the legal sense. This is far from a foregone conclusion.

As noted above, the best arguments that § 115 is indeed a mousehole are its brevity and lack of detail. What text there is in § 115 deals primarily with its international triggers, with relatively little said about how pollution limits would be set under the section and nothing on what form regulation

112. *See* Richardson, *Keeping Big Cases from Making Bad Law*, *supra* note 98.

113. 512 U.S. 218 (1994).

114. 529 U.S. 120 (2000).

115. Richardson, *Keeping Big Cases from Making Bad Law*, *supra* note 98.

would take. Read alone, § 115 appears both vague (in that it lacks clarity) and ancillary (in that it lacks detail). The fact that the EPA has almost never used § 115 might also be evidence of its ancillary character. Finally, and assuming one considers legislative history to be relevant to statutory interpretation, there is some evidence that Congress envisioned § 115 only as a tool to address localized cross-border pollution between the United States and Canada or Mexico.[116] Congress may not have envisioned climate change or possibly even globally mixed air pollution at all when the provision was first considered in the 1960s and 1970s. If correct, this further supports the claim that § 115 is an "ancillary" provision aimed at less important pollution problems. However, strong counterarguments exist for each of these claims. Taken together, they may be sufficient to prove § 115 is no mousehole at all.

Most important, § 115 is neither as short nor as vague as it initially seems. As discussed above, the regulatory meat of § 115 comes from its reference to states' powers (and responsibilities) to create SIPs under § 110. In fact, § 115 can be viewed as little more than an alternative entry point to the well-understood and detailed § 110 SIP process. Section 110 is a core provision of the Clean Air Act, arguably *the* core provision, and cannot be considered "vague" or "ancillary." Under this view, § 115 should not be deemed a mousehole in comparison to other, comprehensive delegations of authority under the Clean Air Act, such as the NAAQS program embodied in §§ 108–110, or new motor vehicle regulations in Title II.[117]

Instead, a better comparison is to § 108 alone. Under that section, the EPA is charged with identifying pollutants that endanger public health or welfare, and setting the national air quality standards for them.[118] Like § 115, § 108 does not say how those pollutants will be regulated.[119] This is unsurprising, however; both rely on § 110 for implementation through the states. Section 115 is not appreciably shorter than § 108. Section 108 is arguably more precise (i.e., less vague), but if so, this too is unsurprising. Section 108 directs the EPA to do its own review of scientific evidence of

116. *See* Burger et al., *supra* note 6, at 8–9 (quoting S. COMM. ENV'T & PUB. WORKS, CLEAN AIR ACT AMENDMENTS AND SOLID WASTE DISPOSAL ACT, S. REP. NO. 89-192, at 4 (1965) ("The committee urges the administration to seek agreements with Canada and Mexico to help protect U.S. citizens from air pollution originating in those countries."). *But see* Udall, *supra* note 22 (arguing that at least some in Congress did recognize the risks of anthropogenic climate change, even in the mid-1960s, and may have viewed the precursors of § 115 as a vehicle through which to limit GHG emissions).

117. Clean Air Act, 42 U.S.C. § 7521 (2012).

118. *Id.* § 7408.

119. *Id.*

pollution-related harms,[120] while § 115 relies on outside bodies (international organizations or the Secretary of State).[121]

If this view is correct, then the combination of threshold determinations in § 115 and regulatory implementation in § 110 should no more be a mousehole than the same pairing in § 108 and § 110. The NAAQS program authorized by §§ 108–110 has been extensively developed by the EPA and litigated (indeed, it was the subject of *Whitman v. American Trucking Associations*,[122] the case in which the "elephants in mouseholes" principle was first articulated in those terms).[123] It is implausible to suggest that it is a statutory mousehole, so the same may very well be true for § 115, when considered with § 110.

Moreover, the key regulatory powers under a § 115 regulatory program—to use market-based tools, set the geographic scope of markets, and above all enforce against emitters—belong to states, not the EPA, at least in the first instance.[124] States' inherent police powers therefore are an additional source of legal authority. If § 115 does not have to bear that weight, it looks less like a mousehole (or the regulatory program looks less like an elephant—the distinction is sometimes tricky).

The claim that Congress intended § 115 to apply only to countries bordering the United States (i.e., Canada and Mexico), and therefore that it is an "ancillary" provision of limited importance, is also weak, as Burger et al. argue.[125] Congress easily could have so limited § 115 but did not do so. The reference to international organizations also implies a broader scope than bilateral relations with one or two neighboring countries.

Moreover, if one supports § 115 as an alternative to regulating carbon under other Clean Air Act provisions, these programs and § 115 may face these same legal risks. This is most apparent with the Clean Power Plan, which is currently being litigated.[126] Section 111(d), on which the Clean Power Plan is based, is even shorter than § 115 and has also been used only rarely.[127] Like § 115, it also suffers from a lack of detail on how regulatory

120. *Id.* § 7408(a)(2).

121. *Id.* § 7415.

122. 531 U.S. 457(2001).

123. *id.* at 468.

124. *See* Clean Air Act, 42 U.S.C. § 7410(a).

125. *See* Burger et al., *supra* note 6, at 33.

126. *See* West Virginia v. EPA, 136 S. Ct. 1000 (2016).

127. *See, e.g.*, Megan Ceronsky et al., *Resolved: EPA and States Can Regulate Emissions Outside the Facility Fence Line Under Clean Air Act § 111*, 44 ENVTL. L. REP. 10255, 10255–57 (2014). The debate transcript in which David Doniger of environmental group NRDC argues § 111(d) is largely a blank slate for EPA regulation. Jeffrey Holmstead counters that, while

programs under its authority can be implemented. It may therefore be a mousehole. Even if not economy-wide, as would be possible under § 115, the Clean Power Plan's regulation of the electric power sector is probably a regulatory elephant. *Chevron* deference therefore may not be available to the EPA in Clean Power Plan litigation either. For similar reasons (and as noted above), the Clean Power Plan litigation could be considered an "extraordinary case" to which the major questions doctrine applies.[128] A small piece of evidence of the extraordinary character of the case is the Supreme Court's unprecedented interlocutory stay of the Clean Power Plan in early 2016.[129] The Clean Power Plan litigation and litigation over a future § 115 program are similar in this respect, and its outcomes therefore may be linked—if the Clean Power Plan is treated as a mousehole hiding an elephant, or as a major questions case, it becomes much more likely that a court would treat § 115 similarly.

If one assumes therefore that EPA must (or at least will) choose *some* Clean Air Act vehicle for climate regulation, then the "elephants in mouseholes" critique of § 115 adds little or no significant legal risk over other options like § 111(d).[130] This could cut either way. For the climate-regulatory cynic, *any* attempt to shoehorn climate regulation into a 1970s-vintage statute is putting an elephant in a mousehole. For the optimist, a legal argument that would essentially say that all or most provisions of the statute are "vague" or "ancillary" cannot be correct.

Perhaps one could distinguish § 115 climate regulation from that under other provisions by focusing on its economy-wide rather than sector-by-sector nature, but that seems like an overly fine distinction. As suggested above, regulating a whole sector is probably just as much a regulatory elephant as regulating the whole economy. That said, such a distinction at least forces § 115's critics onto narrower ground and opens the "elephant" question to debate as well as the mousehole.

My view is that the "elephants in mouseholes" principle and, more broadly, possible denial of *Chevron* deference to EPA in litigation over § 115 legal policy constitute a substantial legal risk. But the more I consider the issue, the stronger the counterarguments become. I do now think I was too quick to dismiss § 115 on these grounds when I first considered it in 2010,

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the provision is not the "40 year old virgin" Doniger claims, it is still a relatively broad grant of authority, albeit one that he argues must be applied to each facility individually. *Id.*

128. *See* Richardson, *Keeping Big Cases from Making Bad Law*, *supra* note 98.

129. *See West Virginia*, 136 S. Ct. 1000.

130. The EPA's Clean Power Plan, based on § 111(d) of the statute as noted above, is currently the subject of significant litigation. *See West Virginia*, 136 S. Ct. 1000.

especially given the legal challenges now advanced against the § 111(d) regulation we suggested as the preferable, or at least knowable, pathway (not that we suggested in 2010 that § 111(d) was without legal risk).[131] Climate policy using either § 115 and § 111(d) carries similar legal risk from courts' potential skepticism toward major policy innovation (the major questions doctrine), especially when based on narrow statutory provisions (elephants in mouseholes).

B. Does § 115 Apply Only to the Six NAAQS Pollutants?

Even if § 115's reliance on § 110's implementation powers may insulate it against the claim that it is a regulatory mousehole, that connection ironically opens another legal vulnerability: does § 115 apply only to the six "criteria" pollutants regulated under the §§ 108–10 NAAQS program? If so, then climate regulation under § 115 would be impossible, at least without setting a NAAQS for GHGs—something the EPA and most observers think would be unworkable.

Like the "elephants in mouseholes" argument against § 115, this claim is at heart relatively simple. First, the state-driven SIP process in § 110 is traditionally and almost exclusively aimed at achieving the NAAQS for the six criteria pollutants. Second, as described above, § 115 is an international analogue to § 108, the domestic starting point for NAAQS regulations. Therefore, this argument goes, § 115 should be limited to those same pollutants.

1. The Case for a NAAQS-Only § 115

There is more to this argument than a simple analogy. First, the § 115 and § 110 combination lacks important components of the §§ 108–10 NAAQS process. Section 108 requires the EPA to consider "the latest scientific knowledge" on the potential harms, actual effects, and atmospheric interactions of air pollutants.[132] This ensures (in theory, at least) that NAAQS are based on the best available scientific evidence. Section 115 requires no § 108-style scientific review, instead relying only on international organizations or the Secretary of State to provide the basis for an endangerment finding.[133] Section 108 also provides for periodic review of scientific evidence, allowing the EPA to update the NAAQS.[134] Section

131. *See* Richardson et al., *Structure, Effects, and Implications*, *supra* note 15, at 10,104–106.

132. *See* Clean Air Act, 42 U.S.C. § 7408(a)(2) (2012).

133. *See id.* § 7415(a).

134. *Id.* § 7408(a)(1).

115 provides for no such review process.[135] On what basis is the agency supposed to evaluate the international evidence it considers under § 115? Lack of direction for the EPA in these respects may imply that Congress intended the EPA to rely on the determinations made under § 108 that are available only for criteria pollutants.

For such pollutants, EPA already has strong evidence that has survived the notice-and-comment rulemaking process that the pollutants in question cause public health harms. The international evidence that triggers § 115 serves only, this argument suggests, to establish that U.S. pollutants are causing foreign harms above and beyond the domestic harms already identified in the § 108 endangerment finding. Or to put it differently, if Congress intended for the EPA to consider new pollutants under § 115 not regulated under the NAAQS, it would have done so more explicitly (an "elephants in mouseholes" argument) or at least would have given the agency § 108-style direction on how to select, evaluate, and review evidence of harms.

Second, § 115's integration with the § 110 SIP process distinguishes it from other Clean Air Act provisions being used to regulate GHGs. Unlike § 115, Title II of the statute provides a comprehensive, self-contained regime for evaluating pollutants from motor vehicles and regulating the sources of those pollutants—engines and fuels.[136] Section 111 of the statute governing new- and existing-source performance standards is similar in this respect.[137] It gives the EPA guidance and authority to identify endangerment (here, source categories or industrial sectors rather than pollutants) and impose certain kinds of regulation on the sources of that endangerment.[138] Section 115, by contrast, creates no such independent regulatory scheme. Its input is the international evidence of endangerment discussed above, and its regulatory outputs are governed entirely by § 110's SIP process.[139] This can be interpreted as evidence that Congress did not intend § 115 to operate independently of—that is, on different pollutants than—the NAAQS.

If this view is correct, then § 115 can be used to regulate GHGs only if the EPA first classifies them as criteria pollutants under § 108 and then issues NAAQS under § 109. The EPA could in principle do this—there is

135. *See id.* § 7415.

136. *Id.* § 7521.

137. *See id.* § 7411 (providing detailed process for setting performance standards for source categories of new emissions sources).

138. *Id.* § 7411(b).

139. *See id.* § 7415(a)–(b).

almost certainly sufficient scientific evidence to support an endangerment finding for GHGs under § 108. In fact, one interpretation of § 108—and Supreme Court precedents considering that section—is that the EPA *must* list GHGs as criteria pollutants.[140] Despite being petitioned on the point, however,[141] the EPA has shown little interest in doing so,[142] and most who have considered the possibility have concluded that the NAAQS are a poor vehicle for climate regulation.[143] This is true for a variety of reasons, but the most notable is that the NAAQS are set at a given atmospheric concentration of a pollutant.[144] States responsible for achieving the NAAQS individually (or even collectively) have little or no ability to significantly affect concentrations of a globally mixed pollutant like carbon dioxide.[145] A GHG NAAQS would, therefore, be set at such a high level that it could be met trivially, or at such a low level that states would be unable to take any action that would bring them into compliance. In either case, a GHG NAAQS would be ineffective.

The EPA's interpretation of § 115 is restricted to NAAQS pollutants. In a 2008 Advance Notice of Proposed Rulemaking (ANPR), the EPA considered various Clean Air Act provisions as possible vehicles for climate regulation and requested comment.[146] It quickly rejected § 115, at least independent of a GHG NAAQS:

> Addressing GHGs under [§ 115] could allow some flexibility in program design, subject to limitations of the SIP development process. Section 115 could not be used to require states to incorporate into their SIPs measures unrelated to attainment or maintenance of a NAAQS. . . . We request comment on the efficacy of using section

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140. *See* Nathan Richardson, *Greenhouse Gas Regulation Under the Clean Air Act: Does* Chevron *Set the EPA Free?*, 29 STAN. ENVTL. L.J. 283, 296–99 (2010).

141. *See* Center for Biological Diversity, *Petition to Establish National Pollution Limits for Greenhouse Gases Pursuant to the Clean Air Act*, at 15 (Dec. 2, 2009), http://www.biologicaldiversity.org/programs/climate_law_institute/global_warming_litigation/clean_air_act/pdfs/Petition_GHG_pollution_cap_12-2-2009.pdf.

142. *See* Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354, 44,367 (proposed July 30, 2008) (to be codified at 40 C.F.R. ch. 1) (noting "major difficulties" with a GHG NAAQS).

143. *See, e.g.*, Richardson et al., *Structure, Effects, and Implications*, *supra* note 15, at 10,102–03.

144. *See* Clean Air Act, 42 U.S.C. § 7409(a)–(b) (directing the EPA to set "air quality standards," not limits on emissions).

145. *See* Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. at 44,367 ("There is little or nothing that a single State or region can do that will appreciably alter the atmospheric GHG concentration level in that particular State or region.").

146. *See id.* at 44,407.

115 as a mechanism to facilitate more effective regulation of GHGs through a NAAQS.[147]

2. The Case for a NAAQS-Independent § 115

Despite the EPA's position, this reading of § 115 is not necessarily correct. Good or at least plausible counterarguments exist to each of those advanced above in favor of limiting § 115 to NAAQS pollutants. Recent Supreme Court precedent may increase the risk of a narrow reading, however.

For one, the claim that § 115's reliance on endangerment evidence from international bodies or the Secretary of State is inferior to § 108's reliance on "the latest scientific knowledge" is easily overstated. Reports from "a duly constituted international agency" need not be scientifically inferior to the EPA's own determinations; this certainly does not appear to be the case for the IPCC reports on which a § 115 endangerment finding would presumably rely. Moreover, there is no legal reason why Congress could not have (or should not be understood to have) delegated endangerment determinations under § 115 to the Secretary of State or, indirectly, to international bodies, rather than to the EPA alone, or to have intended a less science-driven process under § 115 than under § 108. In other words, § 115 is not incomplete in some way that should suggest that Congress assumed a reliance on § 108; it is just different.

The history of § 115 also provides some evidence that Congress intended the provision to apply beyond the NAAQS pollutants, though the evidence is susceptible to more than one interpretation. In its original form in the 1965 Clean Air Act Amendments, § 115 (then part of § 105 and the primary regulatory provision in the statute for stationary sources) used an "abatement conference" process to control emissions, under which a variety of stakeholders negotiated reductions.[148] The 1970 Clean Air Act Amendments introduced the modern NAAQS program, and § 115 was therefore largely restricted to interstate and international emissions.[149] At the same time, a new subsection § 115(b)(4) was added, specifying that an abatement conference for interstate air pollution "may not be called . . .

147. *Id.* at 44,483.

148. Clean Air Act, Pub. L. 89-272, 79 Stat. 992, 996 (1965); S. COMM. ENV'T & PUB. WORKS, *Clean Air Act Amendments of 1977*, S. REP. NO. 95-127, at 47 (1977) (current version at 42 U.S.C. § 7415).

149. Clean Air Act, Pub. L. 91-604, 84 Stat. 1676, 1689 (1970) (current version at 42 U.S.C. § 7403).

with respect to an air pollutant for which . . . a [NAAQS] is in effect."[150] This provision had the effect of limiting § 115 to *only non-NAAQS* pollutants in the interstate context, indicating an explicit intent of Congress that the section applies beyond the NAAQS pollutants.

In the 1977 amendments to the Act, the abatement conference process was finally removed from § 115 in favor of its current connection to the SIP process.[151] As a result, the statute removed § 115(b)(4).[152] But a new § 115(d) was added to refer to the abatement conference process, stating that conference recommendations prior to 1977 "shall remain in effect" for any non-NAAQS pollutants.[153] Section 115(d) remains in the Act today. It, like § 115(b)(4), can be understood to indicate congressional intent for § 115 to apply beyond the list of NAAQS pollutants.

An alternative reading is possible, however. By stripping § 115(b)(4) from the statute and limiting § 115(d)'s reach to pre-1977 abatement conferences, Congress removed or rendered obsolete the only provisions in § 115 that indicate it applies to non-NAAQS pollutants. The suggestion that this removal of § 115(b)(4) and limitation of § 115(d) indicates congressional intent to restrict § 115 to NAAQS pollutants is unlikely since the removal of § 115(b)(4) was probably intended merely to clean up extraneous material no longer relevant due to the scrapping of the abatement process. Nevertheless, the absence of § 115(b)(4) and time-limitation of § 115(d) do limit those provisions' ability to demonstrate congressional intent with respect to the scope of § 115. In my view, they are evidence for a NAAQS-independent reading but are far from conclusive. The Clean Air Act has a rich textual history, and it is likely that further evidence for or against a NAAQS-independent § 115 lies within that history.

Another argument against a NAAQS-only reading of § 115 is its current plain text, specifically the broad scope set in § 115(a). As we shall see, a recent Supreme Court decision substantially undercut this superficially strong argument. Section 115(a) applies to any "air pollutant or pollutants."[154] The Court's decision appears to foreclose an argument that § 115 was intended to apply to criteria pollutants only. Congress could

150. *Id.*

151. *See* Clean Air Act, Pub. L. 95-95, 91 Stat. 685, 710–11 (1977) (current version at 42 U.S.C. § 7412).

152. *See id.* (replacing the previous § 115 with new text, replicating some of the previous version but not including § 115(b)(4)).

153. *Id.* at 710.

154. *See* Clean Air Act, 42 U.S.C. § 7410 (2012).

have easily restricted § 115 to NAAQS pollutants explicitly but instead described its scope in the broadest possible terms. Burger et al. argue this point at some length, even suggesting that a NAAQS-only reading is further foreclosed by subsequent EPA actions and Supreme Court precedent.[155] Burger et al. point out that it is the same words—"any air pollutant"—in § 202 that the Supreme Court in *Massachusetts v. EPA* deemed to encompass "all airborne compounds of any stripe," including GHGs.[156]

Massachusetts would appear to have ended this debate in favor of a NAAQS-independent § 115, but a subsequent Supreme Court holding has muddied the waters significantly. In 2014's *Utility Air Regulatory Group*, discussed briefly above, the Court partially rejected an attempt by the EPA to include GHGs in a permitting program for new emissions sources and, in doing so, reconsidered the *Massachusetts* court's reading of "any air pollutant."[157]

Some background on the case is helpful to understand its implications for § 115. The Clean Air Act provision at issue in *Utility Air Regulatory Group* requires the EPA to conduct preconstruction permitting for any source emitting more than 250 tons annually of "any air pollutant"—the same scope language present in § 115.[158] However, a strict interpretation of this provision would have compelled the EPA to regulate large numbers of sources with trivial GHG emissions—250 tons is a relatively small amount of annual GHG emissions, relative to other pollutants traditionally regulated under the Clean Air Act. The EPA, however, considered itself bound by *Massachusetts*'s maximally broad interpretation of "any air pollutant"; the agency believed those words compelled it to regulated GHGs under the provision at issue.[159] As a last resort, the agency issued a "Tailoring Rule" in which it argued that forcing small GHG sources to undergo permitting would lead to "absurd results" and therefore postponed doing so indefinitely.[160] In other words, the EPA decided to ignore its own

155. *See* Burger et al., *supra* note 6, at 44.

156. *Id.* at 45–46.

157. *See* Util. Air Regulatory Grp. v. EPA, 134 S. Ct. 2427, 2439–41 (2014).

158. *Id.* at 2436.

159. *See* Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514, 31,516 (June 3, 2010) (to be codified at 40 C.F.R. pts. 51, 52, 70, 71) ("This Tailoring Rulemaking is necessary because without it, PSD and title V would apply to all stationary sources that emit or have the potential to emit more than 100 or 250 tons of GHGs per year . . .").

160. *See id.* at 31,516.

interpretation of the statute, with only the thinnest of legal defenses for doing so.

The Court unsurprisingly rejected the Tailoring Rule, but it did not then require the EPA to conduct permit reviews of small GHG sources.[161] Instead, the Court freed the EPA from the statutory trap into which it had wandered by ruling that "any air pollutant" need not always be read to include "all airborne compounds of any stripe," as *Massachusetts* had done.[162] In making this ruling, the Court pointed to various contexts in the Clean Air Act in which the same words appeared, but where the EPA had limited their scope in practice—as the Court put it, "where the term 'air pollutant' appears in the Act's operative provisions, EPA has routinely given it a narrower, context-appropriate meaning."[163] For example, the EPA has never required sources to undergo permitting if the only pollutants it emits are not currently regulated.[164] *Massachusetts*, the Court held, "did not invalidate all these longstanding constructions," but rather depended on the particular context of § 202 in which the "any air pollutant" language at issue in that case appeared.[165]

While courts presume that words have the same meaning throughout a statute, that presumption can be overcome by context. The Court in *Utility Air Regulatory Group* characterized *Massachusetts* as depending largely on context for its broad interpretation of "any air pollutant":

> EPA's inaction with regard to Title II was not sufficiently grounded in the statute, the [*Massachusetts*] Court said, in part because nothing in the Act suggested that regulating greenhouse gases under that Title would conflict with the statutory design. Title II would not compel EPA to regulate in any way that would be "extreme," "counterintuitive," or contrary to "common sense. . . ."
>
> *Massachusetts* does not strip EPA of authority to exclude greenhouse gases from the class of regulable air pollutants under other parts of the Act where their inclusion would be inconsistent with the statutory scheme. . . . *Massachusetts* does not foreclose the Agency's use of statutory context to infer that certain of the Act's provisions use "air pollutant" to denote not every conceivable airborne substance, but only those that may sensibly be encompassed within the particular regulatory program.[166]

In short, whether "any air pollutant" includes *all* air pollutants, and in particular GHGs, depends on whether including the pollutants in question

161. *See Util. Air Regulatory Grp.*, 134 S. Ct. at 2442–43.

162. *See id.* at 2439–42.

163. *Id.* at 2439.

164. *Id.* at 2440.

165. *Id.* at 2440–41.

166. *Id.* at 2441 (citations omitted).

"would conflict with the statutory design" or "be inconsistent with the statutory scheme."[167] If so, a more limited interpretation of "any air pollutant" is permitted.[168] As the Court put it, "there is no insuperable textual barrier" to a narrow, GHG-exclusive interpretation.[169]

This is music to the ears of anyone arguing that § 115 should be limited to NAAQS pollutants. Such arguments are fundamentally about § 115's place in the statutory scheme and design—they suggest that § 115's connection to § 110, among other factors, strongly implies congressional intent to limit § 115 to already identified NAAQS pollutants, rather than to open a backdoor to the SIP process for any pollutant causing international harms. *Utility Air Regulatory Group* therefore, at least appears to give EPA license to interpret § 115 in this way, as it has done, without running afoul of *Massachusetts*' maximal interpretation of "any air pollutant" in the § 202 context.

Burger et al. discuss *Utility Air Regulatory Group*, but only briefly. They argue that *Utility Air Regulatory Group*, supports a NAAQS-independent § 115 because "both the context and statutory scheme call for applying Section 115 to GHGs."[170] Critics of § 115, of course, would make the opposite claim. Burger et al. offer in support of their characterization of § 115's statutory scheme that, "there is no more compelling example of emissions that affect other nations than greenhouse gases."[171] While perhaps true, this is beside the point—the applicability of § 115 to international harms from U.S. pollution is not in question. The debate here is over whether Congress's statutory scheme or design for § 115 extends to non-NAAQS pollutants. If so, then § 115 could regulate GHG's even if their effects were small, and if not, then they may not be regulated even if their effects are significant. This does not mean that there are no good arguments that § 115's design is consistent with regulating GHGs—some such arguments are presented above, and more are probably available. But Burger et al. dismiss *Utility Air Regulatory Group*'s negative implications for § 115 too quickly.

Burger et al. also argues that a NAAQS-independent interpretation of § 115 is "patently reasonable" and therefore should be entitled to *Chevron* deference.[172] The *Utility Air Regulatory Group* Court does say that the

167. *See Util. Air Regulatory Grp.*, 134 S. Ct. at 2441.

168. *See id.* at 2441–42.

169. *Id.* at 2442.

170. *See* Burger et al., *supra* note 6, at 46.

171. *Id.*

172. *See id.* at 47.

decision of whether to interpret "any air pollutant" broadly or narrowly is initially up to the EPA—the agency gets first cut at determining what interpretation matches the statutory scheme.[173] The Court's decision is significant in the *Utility Air Regulatory Group* context, since there the agency felt its hands were tied by *Massachusetts*, requiring a broad GHG-inclusive interpretation that would have required permits for small sources. But the *Utility Air Regulatory Group* Court went further than to license the EPA to adopt a narrow interpretation of "any air pollutant"—it considered and ultimately rejected the EPA's GHG-inclusive interpretation, deeming it "impermissible" and therefore not entitled to deference.[174] Despite the Court's holding that "any air pollutant" could take on different meanings in different parts of the statutes, it held that interpreting the Prevention of Significant Deterioration (PSD) threshold requirements (100 or 250 tons) to include GHGs was unambiguously an incorrect reading.[175] A court reviewing the EPA's interpretation of the same language in § 115 could reach the same conclusion. Alternatively, it might find that ambiguity *does* exist in the § 115 context, but that GHG regulation is beyond the bounds of that ambiguity and therefore similarly impermissible (in other words, the agency could lose at *Chevron* step 1 or step 2, if *Chevron* is indeed applied). This is a warning that *Chevron* may not be an adequate shield against challenges to a broad reading of "any air pollutant" in other climate and Clean Air Act contexts such as § 115.

However, Burger et al. correctly point out that the Court's stated rationale for rejecting the EPA's interpretation in *Utility Air Regulatory Group* would not be present in a § 115 case.[176] In *Utility Air Regulatory Group*, the fact that large numbers of sources not traditionally subject to Clean Air Act regulation would face burdensome permitting obligations led the Court to conclude that Congress could not have intended such a result, and therefore the EPA's interpretation of "any air pollutant" was unreasonable.[177] But climate regulation under § 115 would not, Burger et al. observe, require regulation of significant numbers of currently unregulated sources.[178] The fossil fuel power plants, internal combustion vehicles, and industrial facilities responsible for most GHG emissions are already subject to various forms of Clean Air Act regulation.

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173. *See Util. Air Regulatory Grp.*, 134 S. Ct. at 2444–45.

174. *See id.* at 2445.

175. *See id.*

176. *See* Burger et al., *supra* note 6, at 46.

177. *See Util. Air Regulatory Grp.*, 134 S. Ct. at 2444.

178. *See* Burger et al., *supra* note 6, at 46.

While correct, this argument is not completely reassuring. First, many important GHG sources, such as farms, forests, and natural gas distribution networks, *are* largely unregulated under the Clean Air Act. A § 115-driven economy-wide climate policy could lead states to impose regulations on those sources via their SIPs. If so, a reviewing court could have similar concerns to those that motivated the Court in *Utility Air Regulatory Group*; state or industry challengers will almost certainly draw this parallel. EPA anticipated and attempted to avoid this argument by basing its calculations of state targets only on sources and sectors already regulated under the Clean Air Act. The EPA's calculations would cover most, although far from all major emitting sectors. Such a limitation would not, however, prevent states from deciding to limit emissions from other sources to reach their reduction targets. State flexibility is one of § 115's virtues, but it could in this narrow respect prevent the EPA from being able to avoid a source of legal risk.

Second, *Utility Air Regulatory Group* may be evidence of a general willingness on the part of some Justices to limit the EPA's authority to regulate GHGs under the Clean Air Act by constraining the deference available to the agency under *Chevron*. Indeed *Utility Air Regulatory Group* can be viewed as a revanchist reaction to *Massachusetts*, substantially limiting the reach of the earlier case's holding without explicitly overruling it. Should a majority of the Court take a similar approach in litigation over climate regulation under other Clean Air Act provisions, such as § 111 or § 115, then *Massachusetts* could eventually be limited to its facts (i.e., to § 202 only). Even if the Court does not go that far, *Utility Air Regulatory Group* should serve as a warning that broad readings of the Clean Air Act to include GHGs may not be given the deference that *Massachusetts* and *Chevron* imply.

With the passing of Justice Scalia, *Utility Air Regulatory Group*'s author, the risk that the EPA will not get deference may or may not diminish. Five Justices joined the portion of *Utility Air Regulatory Group* that rejected the EPA's GHG-inclusive interpretation of "any air pollutant."[179] Two of them (Alito and Thomas) went even further in dissent, calling for *Massachusetts* to be overruled.[180] Four surviving Justices, therefore, appear willing to limit the EPA's discretion to read Clean Air Act statutory schemes to include GHGs. The view of the Court's newest Justice on this issue will likely be crucial. Justice Breyer's dissent in *Utility Air Regulatory Group* offers an alternative path that, in addition to doing arguably less violence to the

179. *See Util. Air Regulatory Grp.*, 134 S. Ct. at 2439 (Part II-A of the opinion, joined by Justices Scalia, Thomas, Alito, Kennedy, and Chief Justice Roberts).

180. *See id.* at 2455 (Alito, J., dissenting).

statutory text, limits the degree to which *Massachusetts*'s reading of "any air pollutant" would be undercut.[181] If a Justice Gorsuch prefers this reading, then *Utility Air Regulatory Group*, rather than *Massachusetts*, could eventually be the outlier among cases reviewing Clean Air Act GHG regulation.

Nevertheless, relying on deference and the reasonableness of a hypothetical EPA interpretation of § 115 seems ill-advised or at least extremely risky. Both the Court's specific skepticism toward interpreting the Clean Air Act to allow climate regulation in *Utility Air Regulatory Group*, and its general skepticism toward broad regulation based on narrow textual support in the "elephants in mouseholes" principle appear to be significant sources of legal risk.

However, there is at least one more argument in favor of a NAAQS-independent interpretation of § 115, grounded in the Clean Air Act's statutory scheme and therefore well armored against *Utility Air Regulatory Group*-style attack. As both Chang and Burger et al. identify, the state-led SIP process is not and has never been restricted to NAAQS pollutants.[182] This fact undercuts the claims that by relying on SIPs, § 115 is by implication limited to NAAQS pollutants.

As Chang notes, at more than one point § 110 explicitly directs states to write their SIPs not only to ensure compliance with the NAAQS, but also to "comply with any requirements of this chapter" (i.e., the entire Clean Air Act).[183] Listing these requirements separately, the argument goes, implies that Congress intended the SIP process to be a general vehicle for reducing air pollution via cooperative federalism, not merely a means of achieving the NAAQS. Burger et al. note that SIPs are not limited to NAAQS-compliance measures in practice.[184] The new-source review permitting program at issue in *Utility Air Regulatory Group* is largely implemented by states and overseen by the EPA within the context of states' SIPs—when states modify their permit processes to include GHGs; they do so via SIP revisions reviewed by the EPA. Burger et al. suggest that this not only implies that SIPs may include non-NAAQS requirements, but even forecloses a NAAQS-only reading of § 115.[185] Burger et al. suggest that by ultimately allowing GHG permitting under new-source review (and

181. *See id.* at 2452–54 (Breyer, J., dissenting).

182. *See* Chang, *supra* note 25, at 10,896–97; Burger et al., *supra* note 6, at 44–45.

183. *See* Chang, *supra* note 25, at 10,896 (emphasis omitted) (quoting Clean Air Act, 42 U.S.C. § 7410 (k)(5) (2012)).

184. *See* Burger et al., *supra* note 6, at 47–48.

185. *See id.* at 44.

therefore in SIPs), the *Utility Air Regulatory Group* Court adopted the broad view of SIPs discussed above.[186]

To suggest that a NAAQS-only reading of § 115 is *foreclosed* by *Utility Air Regulatory Group* is probably an overambitious reading of that case. The Court did, after all, substantially restrict the EPA's ability to include GHG sources in the permitting program—only sources that must acquire permits for other pollutants can be included.[187] Moreover, such "anyway" sources are subject to permitting in most cases because of their emissions of NAAQS pollutants (chiefly nitrogen oxides, sulfur dioxide, and particulate matter). The *Utility Air Regulatory Group* Court's decision to allow GHG permitting only for "anyway" sources say little or nothing about the Court's general views on the NAAQS-SIP process and its possible relationship with § 115.

Nevertheless, the fact that the statute allows the SIP process to be driven by non-NAAQS pollutants does undercut a NAAQS-only interpretation of § 115. The kind of careful analysis of the Clean Air Act's structure—and the EPA's past practice—that Justice Scalia did in *Utility Air Regulatory Group* might therefore lead to a different result in a future § 115 case. That is, reading "any air pollutant" to include GHGs might be consistent with the statutory scheme in § 115 even if it is not in § 169 (the provision at issue in *Utility Air Regulatory Group*).

The potential for a court-imposed NAAQS-only reading of § 115 remains a significant legal risk, however, especially given the reduced likelihood of deference to the EPA's reading of the statute. This risk was the EPA's justification for not pursuing § 115 climate regulation as far back as its 2008 ANPR, and *Utility Air Regulatory Group* appears to have increased the risk, not decreased it. The textual history of § 115 provides some good evidence in the other direction (i.e., in favor of a NAAQS-independent § 115), but it does not appear decisive either.

C. Can the EPA Allocate Carbon Targets to States under § 115?

A final source of significant legal risk for climate regulation under § 115 arises from the allocation of emissions-cutting responsibility to states. The two legal risks for § 115 climate regulation discussed above are effectively facial challenges—they assert that in one or another respect, § 115 is fundamentally incompatible with regulating carbon. This is more of an as-applied challenge, but if successful, it would fundamentally undermine a

186. *See id.* at 46–47.

187. *See* Util. Air Regulatory Grp. v. EPA, 134 S. Ct. 2427, 2447–49 (2014).

§ 115 approach. This makes it appropriate to discuss it here rather than in the next section, which deals with potential limits to the scope of § 115 climate regulation.

Section 115 climate policy advocates generally envision the EPA as setting national, economy-wide emissions reduction goals, perhaps based on the U.S. commitments made in its Intended Nationally Determined Contribution (INDC) submitted to the UNFCCC under the 2015 Paris Agreement.[188] The EPA would then somehow apportion this total national emissions reduction responsibility among the states that must implement § 115 through the SIP process.[189] A variety of allocation methods are suggested, such as per capita, an even split among the fifty states, allocation based on past emissions, or allocation to equalize estimated marginal costs of emissions reduction.[190] States would then be required to submit SIPs that implement regulations (presumably market-based approaches, ideally with interstate trading, discussed below) for EPA approval.

This approach works in principle—it could achieve significant national emissions reductions while pushing implementation choices down to states, ideally resulting in low-marginal-cost emissions reductions. As Burger et al. noted, a national target allocated to states is crucial for § 115 climate policy to work.[191] As they put it, "independent state determinations of GHG reductions . . . under Section 115 would prove unhelpful. Successful implementation would instead require EPA to establish an aggregate amount of necessary U.S. emissions reductions."[192]

But this approach is in some tension with § 115's structure, to the limited extent that structure can be divined from the statute. Under § 115, the EPA is charged with requiring states to revise their SIPs to "prevent or eliminate" emissions that cause international harms.[193]

For local pollutants carried across borders, the way this works is clear. If Michigan emissions are carried to Ontario and cause health or welfare harms there, then § 115 allows the EPA to require Michigan to reduce those emissions to prevent or eliminate Canadian harms. Even for local

188. *See* Burger et al., *supra* note 6, at 50.

189. Of course, the EPA might not pursue § 115 climate policy in the manner described here. For example, it could take a bottom-up approach, assigning emissions reduction goals to states based on their emissions intensity, or the emissions from certain sectors. The EPA might not set a national target at all. Legal analysis of those or other alternative approaches and associated allocation methods would be different.

190. *See* Burger et al., *supra* note 6, at 54–55.

191. *See id.* at 50.

192. *Id.*

193. *See* Clean Air Act, 42 U.S.C. § 7415(b) (2012).

pollutants, however, the reality would likely be more complex. If multiple upwind states are responsible for various downwind impacts, the connections, which are difficult to establish precisely, between the degree and location of necessary emissions reductions (or that can legally be imposed by the EPA) rapidly become very difficult to determine. The EPA's tortuous experience with the Clean Air Act's "good neighbor" provision aimed at addressing such upwind-downwind problems within the United States is illustrative. EPA rulemakings under this provision—which operates similarly to § 115, requiring SIP revisions in upwind states—have been rejected by courts.[194] In particular, interstate trading has been largely eliminated.[195]

For a global pollutant like GHGs, how § 115 would operate is similarly unclear. In some respects, the analysis required is much simpler. As Burger et al. note, it is not necessary to attribute any one state's emissions to downwind health and welfare impacts, since all emissions reductions are equally helpful for a globally mixed pollutant.[196] But regulating GHGs adds other complexities that § 115 gives the EPA no guidance on how to address. First, § 115 does not give the EPA authorization to set *national* emissions reduction goals, referring only to *state* responsibility to reduce emissions with international effects.[197] Second, even assuming a national goal can be set, § 115 says nothing about how or whether the EPA can allocate that responsibility among states. In either respect, if § 115 does not give the EPA the requisite authority, climate regulation becomes practically impossible. Just as with a GHG NAAQS, discussed above, no state can meaningfully affect international climate-related impacts alone, much less "prevent or eliminate" such harms.

Burger et al. discuss both critiques and eventually dismiss them, but they arguably undersell the associated legal risk. They dismiss the argument that § 115 provides no authority for the EPA to set a national emissions target on the grounds that they "prevent or eliminate" language in the provision "requires pollution control rather than cessation of all GHG

194. *See* North Carolina v. EPA, 531 F.3d 896, 930 (D.C. Cir. 2008) (vacating the EPA's Clean Air Interstate Rule).

195. *See* Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208, 48,272 (Aug. 8, 2011) (to be codified at 40 C.F.R. pts. 51, 52, 72, 78, 97) (limiting regulated emitters to *intra*state emissions trading).

196. *See* Burger et al., *supra* note 6, at 57.

197. *See* Clean Air Act, 42 U.S.C. § 7415(b) (providing only for "plan revisions," referring to state-level implementation plans, rather than directing the EPA to set or revise national standards).

emissions."[198] This is almost certainly a correct reading, but it seems unrelated to the question of the EPA's authority (or lack thereof) to set a national target under § 115. Burger et al. seem to move directly from the (correct) assertion that a national target is necessary for climate regulation under § 115 to work to the assumption that therefore, § 115 must allow the EPA to set such a target. This is not implausible— § 115's silence on the point should arguably be interpreted as statutory ambiguity that, under *Chevron*, the EPA may reasonably fill.

An alternative interpretation is that Congress intended § 115 to apply only to local pollutants, and that global pollutants like GHGs are fundamentally incompatible with the § 115 scheme—as evidenced by the lack of any federal authority to set a national target. In this sense, the lack of explicit EPA authority to set a national target is further evidence for the position, discussed at length above, that Congress intended § 115 to apply only to NAAQS pollutants. And even if that argument can be rejected, a fallback position is that "any air pollutant" should be interpreted to include only local pollutants whose U.S. source and international impacts can be traced, such that a national target is not needed. In reality, Congress almost certainly did not consider globally mixed pollutants when it drafted § 115; the legal question is whether interpreting § 115 so as to allow regulation of such pollutants is within the range of interpretive deference allocated to the EPA (which depends in part on whether *Chevron* deference applies; see above).

Even if the EPA prevails against such challenges and can set a national GHG emissions target, it still must somehow divide that target among states. Fortunately for the agency, the argument that § 115 does not give it authority to allocate emissions reduction responsibility among states seems substantially weaker. As Burger et al. identify, this is largely due to the substantial existing case law on the analogous good neighbor provision of the Clean Air Act aimed at addressing domestic upwind-downwind pollution.[199] Just like § 115, that provision requires states to ensure their SIPs control in-state emissions sufficiently to prevent or eliminate downwind harms or, as the good neighbor provision puts it, ensure in-state emissions do not "contribute significantly to nonattainment in, or interfere with maintenance by, any other State."[200]

198. *See* Burger et al., *supra* note 6, at 51.

199. *See* Burger et al., *supra* note 6, at 55–57 (discussing case history of the good neighbor provision).

200. *See* Clean Air Act, 42 U.S.C. § 7410 (a)(2)(D)(i)(I).

As noted above, when an upwind-downwind pollution problem has sources and impacts in multiple states, allocating responsibility becomes complex. But courts confronted by the EPA's attempts to resolve this complexity have not reacted by simply concluding that the good neighbor provision fails to grant the agency authority to allocate responsibility among states. Instead, they have consistently held that the EPA has some discretion to allocate responsibility.[201] These cases have carefully scrutinized the EPA's allocations, and rejected some of them as being inconsistent with the statute, but they fundamentally have recognized that *some* allocation is necessary.[202] If this experience is any guide for how courts will interpret § 115, an agency interpretation allowing allocation of responsibility to states might be closely scrutinized but would ultimately be permitted in some form.

Burger goes further, suggesting that proportional allocation is likely legal because some judges have gone so far as to hold that it is *required* in the context of interstate emissions (citing the dissent in the Supreme Court's most recent case reviewing regulation under the good neighbor provision, *EPA v. EME Homer City Generation*[203] and the D.C. circuit ruling in that case).[204] Moreover, as they suggest, the level of judicial scrutiny of allocation of GHG-reduction responsibility might be substantially less than that for traditional upwind-downwind pollutants since emissions reductions of global pollutants are fungible among states.[205] In the GHG context, there is no risk of the EPA mistakenly requiring states to reduce emissions that are not actually causing downwind harms. It is still possible that a court might reject a given EPA allocation, but that risk is probably lower than with traditional pollutants, which should come as some relief to the EPA, given its difficult experience with such allocations in recent years.

It is worth briefly contrasting the EPA's potential ability to fill these two gaps in § 115. Why is it that a court might show more deference to the EPA in allocating emissions reductions among states than it would in

201. *See, e.g.*, EPA v. EME Homer City Generation, 134 S. Ct. 1584, 1606 (2014) ("the Good Neighbor Provision does not dictate the particular allocation of emissions among contributing States . . . .").

202. *See* North Carolina v. EPA, 531 F.3d 896, 930 (D.C. Cir. 2008) ("The SO_2 regionwide caps are entirely arbitrary, since EPA based them on irrelevant factors like the existence of the Title IV program. The allocation of state budgets from the NO_x caps is similarly arbitrary because EPA distributed allowances simply in the interest of fairness.").

203. 134 S. Ct. 1584 (2014).

204. *See* EPA v. EME Homer City Generation, L.P., 727 F.3d 274 (D.C. Cir. 2013); *see also* Burger et al., *supra* note 6, at 57.

205. *See id.* at 56–57.

allowing the agency to set a national target, when § 115 is silent on both? One answer is the preexisting precedent on the analogous good neighbor provision, which allows the EPA and a reviewing court to provide more support for reading allocation authority into the statutory gap.[206] Another is that the lack of explicit authority for the EPA to set a national target goes to the fundamental scope of § 115, and its suitability for global pollutants. In other words, it is relevant for the question of whether a GHG-inclusive interpretation of "any air pollutant" is consistent with the statutory scheme, as the *Utility Air Regulatory Group* court would require. By contrast, statutory silence on how to allocate responsibility among states is a technical implementation issue of the type traditionally left to agency discretion.[207] Moreover, allocation issues arise with local pollutants as well as global ones, as the EPA's experience with the good neighbor provision illustrates, so lack of statutory direction on that point does not indicate that § 115 is unsuited to global pollutants—it just reflects a general difficulty in regulating complex cross-border air pollution problems.

Section § 115's silence regarding the EPA's ability to set a national emissions target therefore appears to be a greater source of legal risk than its parallel silence about how the EPA may allocate emissions-cutting responsibility among states—at least assuming that the EPA sets a national target instead of taking another approach like sectoral or state-by-state targets. Nevertheless, an interpretation of § 115 that denies the agency's authority to do either would make climate regulation under the section effectively impossible—without a national target and a way to make states responsible for progress toward it, there appears to be no way to achieve GHG emissions reductions under § 115.

V. PRACTICAL LEGAL LIMITS

Advocates of § 115 suggest, in many respects very persuasively, that it allows for more flexible, comprehensive, and potentially cost-effective climate regulation than other provisions of the statute. Assuming it survives the general legal challenges described above, this is probably correct. But it may not be quite as well suited to climate policy as its advocates suggest. In at least three important respects, § 115 climate regulation could be limited by the statute. Although far from fatal, these limitations could reduce the

206. *See id.* at 55–57 (discussing case history of the good neighbor provision).

207. For example, in *Chevron* itself the Court approved the EPA revision of its methodology for allocating emissions responsibility among co-located emissions sources, under the so-called "bubble" approach. *See* Chevron U.S.A.., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984).

appeal of § 115 compared to regulation under other parts of the statute. Of course, the degree to which any limitations of § 115 climate regulation is important depends on whether it is understood as an alternative to other Clean Air Act programs or a complement to them.

A. Could Transportation Sector Emissions Be Regulated under § 115?

The Environmental Law 101 description of the Clean Air Act is that states have ultimate responsibility for regulating stationary sources in their SIPs under Title I of the Act (which includes the §§ 108–110 NAAQS as well as § 115), while the EPA is responsible for regulating mobile sources under Title II of the Act.[208] This is, unsurprisingly, an oversimplification. As is undoubtedly clear by this point, the EPA plays a large role in Title I stationary source regulation. States may and do regulate mobile sources—that is, transportation—to some degree in their SIPs. State vehicle emissions inspection programs and regulations requiring gas station vapor recovery nozzles to reduce the release of volatile organic compounds (VOCs) are but two examples of such state regulation aimed at reducing NAAQS pollutants.[209]

The Clean Air Act does, however, impose some limits on states' ability to regulate mobile sources. Specifically, it generally prohibits states from regulating emissions from new motor vehicles or motor vehicle engines, reserving that authority for the federal EPA and Department of Transportation (DOT) in the form of CAFE emissions standards and other regulatory tools (such as EPA authority under the Clean Air Act to regulate aviation engines).[210] Also, the Clean Air Act prohibits states from regulating transportation fuels unless the EPA has not done so for the relevant pollutant (the EPA extensively regulates vehicle fuel formulations to reduce conventional pollutants, though not GHGs).[211] In both cases, the ostensible rationale for this preemption is to preserve a single, national market. The preemption is not absolute, however—California is permitted

208. *See* Clean Air Act, 42 U.S.C. § 7543 (2012) (generally prohibiting states from imposing vehicle emissions standards stricter than those set by the EPA).

209. *See, e.g.*, Illinois Environmental Protection Agency, *Vehicle Emissions Testing Program*, http://epa.illinois.gov/topics/air-quality/mobile-sources/vehicle-emissions-testing/index (describing the purpose of Illinois vehicle inspection programs as a means of achieving NAAQS compliance).

210. *See* Clean Air Act, 42 U.S.C. § 7521.

211. *See Learn About Gasoline*, EPA, https://www.epa.gov/gasoline-standards/learn-about-gasoline (summarizing EPA programs under Title II of the Clean Air Act regulating the content of road vehicle fuels).

to apply to the EPA for a waiver allowing it to set its own rules for both new engines and fuels, and if the waiver is granted, other states may choose to follow either the national rules or California's.[212]

This preemption of state authority over transportation emissions applies to § 115 regulation as well. This is significant because a large share of U.S. GHG emissions originate from the transportation sector—in fact, recent data indicates that the sector's emissions exceed those of the electric power sector for the first time since the 1970s, making it the largest-emitting sector in the economy.[213]

The preemption does not mean that transportation GHG emissions would remain unregulated—as noted above, the EPA is already regulating emissions from new motor vehicles through the CAFE standards. Moreover, the preemption is limited to new engines and to fuels.[214] Regulations on existing vehicles, such as inspection requirements, and on indirect contributors to transportation emissions, such as land-use rules and road design standards, are not preempted.

Nevertheless, the preemption means § 115-driven climate policy would be unable to create a truly economy-wide emission regulatory or trading system, able to equalize emissions reduction costs across all sectors. For example, imagine a state, faced with a general carbon emissions reduction obligation under § 115, believes that the cheapest or most politically palatable means to reduce emissions is to limit sales of new high-emitting pickup trucks. The allocation of authority under the Clean Air Act prevents the state from doing so (unless it is California and gets EPA approval).[215] The state would be forced to choose other, more economically or politically costly regulatory options.

Alternatively, a state may not know which emissions reductions are most cost-effective and could therefore conclude an economy-wide carbon tax is its best option. But it is unclear whether the Clean Air Act's division of authority would permit such a policy to be truly economy-wide within the state. It is unclear whether such a tax could be imposed on vehicle fuels or to the sale price of new vehicles based on their likely emissions. To be sure,

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212. *See* Clean Air Act, 42 U.S.C. § 7543(b).

213. *See* Brad Plumer, *Power Plants are No Longer America's Biggest Climate Problem. Transportation Is.*, VOX (June 13, 2016, 11:10 AM), http://www.vox.com/2016/6/13/11911798/emissions-electricity-versus-transportation.

214. *See* Clean Air Act, 42 U.S.C. § 7543(a) ("No State or any political subdivision thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part.").

215. *See id.* § 7543(b) (detailing California's preemption waiver process).

the Clean Air Act does not prevent states from imposing their own gasoline taxes—all states currently have state-level gas taxes.[216] But it is less clear that the statute allows states to enact fuel or new-vehicles taxes explicitly to achieve Clean Air Act mandates.

Burger et al. suggest that the fact that the EPA has not set GHG limits for vehicle fuels means that portion of the Title II preemption has not been triggered, leaving states free to regulate transportation fuel GHGs.[217] The EPA's renewable fuels standard is aimed at least in part at reducing vehicle fuel GHGs, with limited success.[218] But as Burger et al. note, the renewable fuel standard is authorized under a dedicated provision of the statute (§ 211(o)) separate from the EPA's general regulatory authority over vehicle fuels in § 211(c).[219] It therefore, they argue, does not trigger any preemption of state GHG fuel regulations.[220] If the EPA intends for states to be able to regulate transportation fuel GHGs in their SIPs, such that those emissions are within the same more or less economy-wide regulatory system as other emissions, it may have to refrain from regulating in this area in the future.

No such escape from the Clean Air Act's preemption on regulation of new-vehicle emissions is available, other than the prospect of California-led waivers.[221] Such waivers could allow California and any other states that join it in a potential interstate GHG emissions trading system to integrate all transportation emissions into their § 115-driven climate regulations. In the absence of such waivers, or for states that choose not to adopt California's approach, the cost implications of excluding new-vehicle emissions are unclear and merit economic analysis.

Moreover, ambiguity over whether states can include new-vehicle emissions (or fuel-related emissions) in their SIPs complicates the EPA's initial emissions target and allocation decisions. If the CAFE standards are assumed to cover new-vehicle emissions while § 115 covers everything else, then the EPA should set its national § 115 target at a level sufficient to

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216. *See* Nicole Kaeding, *State Gasoline Tax Rates in 2016*, TAX FOUND. (Mar. 3, 2016), https://taxfoundation.org/state-gasoline-tax-rates-2016.

217. *See* Burger et al., *supra* note 6, at 69–70.

218. *See Program Overview for Renewable Fuel Standard Program*, EPA, https://www.epa.gov/renewable-fuel-standard-program/program-overview-renewable-fuel-standard-program.

219. *See* Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 77,420, 77,421 (Dec. 14, 2015) (to be codified at 40 C.F.R. pt. 80).

220. *See* Burger et al., *supra* note 6, at 69–70.

221. *See* Clean Air Act, 42 U.S.C. § 7543(b) (2012) (detailing California's preemption waiver process).

achieve policy goals or international commitments exclusive of projected CAFE emissions reductions. If the agency then grants waivers to California to write its own new-vehicle GHG rules and include them in its SIPs (and other states follow California), leakage between CAFE and § 115 could occur, and total emissions reductions might fall short. Similarly, once the EPA allocates a portion of its national emissions reduction target to a state, that state might be able to strategically switch to (or away from) California rather than federal new-vehicle standards, bringing that portion of transportation sector emissions into its SIP or leaving them out. In short, the EPA probably needs to decide in advance whether new-vehicle emissions will remain outside of § 115 climate regulation or whether it will attempt to bring them in via the California waiver process.

B. Does § 115 Allow Interstate Emissions Trading?

Section 115 advocates envision it as a vehicle through which EPA and the states could create a national emissions trading system. This flexibility, and the potential cost savings it brings, is advanced as one of the key advantages of § 115 over alternative or complementary pathways like CAFE and the Clean Power Plan (though, again, both those programs do allow or at least encourage some degree of trading). But it is not obvious that § 115 allows interstate trading. Critics will likely argue that the statute says nothing about it and arguably implies that each state must meet its § 115 obligations individually.[222] However, deeper analysis shows these arguments against trading under § 115 are relatively weak.

Under § 115, each state must revise its SIP to "prevent or eliminate" the international endangerment that has been identified.[223] As discussed above, each state under a § 115 climate program would presumably be allocated an emissions reduction responsibility by the EPA as a share of the national total. But if a state engages in an interstate emissions trading program, it might not meet that emissions-cutting responsibility. The state might not reduce its emissions at all; in fact, state emissions might even *increase* if the state is a net buyer of allowances (though, of course, *national* emissions

222. Some may wonder who would sue the EPA over inclusion of trading within a § 115 climate program, which seemingly would benefit both industry and greens. One response is that counting on a potentially legally questionable policy surviving for lack of a plaintiff is always unwise—all it takes is one (with standing) to get in court. Another is that there are in fact plenty of potential plaintiffs, including greens skeptical of emissions trading and industry challengers seeking any means of undermining the regulation.

223. *See* Clean Air Act, 42 U.S.C. § 7415(b).

would still decrease). Such a result could be deemed inconsistent with the state's obligation to "prevent or eliminate" endangerment.

Courts have considered similar arguments in reviewing EPA regulation of interstate pollution under the good neighbor provision of the Act.[224] That line of cases is too extensive to discuss in detail here, but the end result has been that courts have effectively rejected interstate trading as inconsistent with state obligations under the statute.[225] Could a reviewing court reach the same conclusion under § 115? If so, only much less cost-effective intrastate trading would be possible.

Such a result seems fairly unlikely, though it cannot be ruled out. The reason is, again, the globally mixed nature of GHG emissions. In the conventional pollutant context, a state whose emissions cause harms downwind but that, instead of cutting emissions, buys allowances from elsewhere has undermined the purpose of the regulation. Although total emissions will have decreased, the specific harms caused by the buying state will persist. To be sure, harms caused by emissions in selling states could be reduced even more than the regulation required, but that is little consolation in the context of the good neighbor provision, since its aim is to prevent downwind areas from exceeding the NAAQS. The buying state is still violating its responsibility under the statute to refrain from causing downwind areas to exceed the NAAQS, while the statute is more or less indifferent to the fact that areas downwind of the selling states have cleaner air than the NAAQS requires. This makes sense because the NAAQS are supposed to be set at a level adequate to protect public health (plus a margin of safety).[226] An area where air quality is worse than the NAAQS suffers harm, while an area with better air quality than required may not be better off.

But this relationship breaks down for a globally mixed pollutant. States are no longer in a meaningful sense "upwind," and affected areas are similarly not "downwind." Reductions anywhere have similar effects (though it should be noted that co-benefits from reductions of non-GHG air

224. *See* North Carolina v. EPA, 531 F.3d 896, 921 (D.C. Cir. 2008) ("EPA's approach [allowing trading] contravenes section 110(a)(2)(D)(i)(I); the statute requires each state to prohibit emissions 'within the State' that contribute significantly to downwind pollution, not to pay for other states to prohibit their own contributions.").

225. *See* Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208, 48,272 (Aug. 8, 2011) (to be codified at 40 C.F.R. pts. 51, 52, 72, 78, 79) (limiting regulated emitters to *intra*state emissions trading).

226. *See* Clean Air Act, 42 U.S.C. § 7409(b)(1).

pollutants are not evenly distributed). Areas affected by climate change (i.e., more or less everywhere) do not care where emissions reductions come from. Therefore, a state that does not reduce its emissions but instead buys allowances is in fact acting to "prevent or eliminate" the endangerment its emissions cause or contribute to, no more or less than a state that reduces its own emissions without trading, or even a state that over reduces emissions and is a net allowance seller.

A reviewing court should therefore reject analogies to the precedents underlying rejection of interstate trading in the context of the good neighbor provision. Interstate trading should be allowed under § 115. The existence of those precedents does create some legal risk, but it should be small.

C. Does § 115 Allow States to Use Carbon Taxes?

Another appeal cited by advocates of § 115 is that it allows not only interstate emissions trading but also carbon taxes.[227] Many climate policy experts prefer carbon taxes for a variety of reasons, including their simplicity, political palatability to some groups, and ability to generate revenue (though an allowance auction could also do so).[228] Litigants challenging § 115 climate regulation (or, more likely, specific states' § 115 SIPs) may argue that carbon taxes are incompatible with § 115. These arguments turn out to be relatively weak, however.

States have the authority under their police powers to enact a carbon tax (or most other forms of climate policy) on their own at any time. But, advocates claim, § 115 is rare or perhaps unique among Clean Air Act provisions in allowing a carbon tax to be used to meet EPA-set national goals (i.e., to "count" for Clean Air Act purposes).[229] This claim is based on the broad grant of SIP regulatory authority to states in § 110, which authorizes, among other things, "economic incentives such as fees, marketable permits, and auctions of emissions rights."[230] "Marketable permits" refers to emissions trading systems, and "auctions of emissions rights" to the use of auctions to raise revenue in allocating rights in such systems.[231] "Fees," it is argued, authorizes Pigouvian emissions taxes.[232] This may be correct.

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227. *See* Burger et al., *supra* note 6, at v.

228. *See, e.g.*, Adele Morris, *The Many Benefits of a Carbon Tax*, BROOKINGS (Feb. 26, 2013), https://www.brookings.edu/research/the-many-benefits-of-a-carbon-tax/.

229. *See* Burger et al., *supra* note 6, at v.

230. Clean Air Act, 42 U.S.C. § 7410(a)(2)(A).

231. *See* Burger et al., *supra* note 6, at iii.

However, fees are not the same thing as taxes, at least in many contexts, though the two are quite similar. Many states' laws distinguish between taxes and fees,[233] and some states require additional procedures for legislatures to impose taxes.[234] Definitions differ, but generally speaking, taxes are intended to raise revenue, while fees are paid in exchange for specific rights granted or services provided by the government.[235] In short, taxes apply to all, or at least to all that are similarly situated, while fees are optional, being paid only by those who determine the service being paid for is worth the fee. In some states, the operative distinction is whether revenues are used for a specific, related purpose (fees) or for general state expenditures (taxes).[236]

Neither distinction is so clear in practice. But few taxes would be as widespread in their impact as a carbon tax. Perhaps they would be levied only on fossil fuel producers or importers to simplify administration, but effects would be felt by all in the form of higher energy prices (just as businesses pay sales taxes to the state, but all consumers ultimately feel their incidence). If § 115 allows only "fees" but not taxes, it might allow, for example, a state to charge a fee for a permit to open a new factory that emits GHGs, but not to levy a general tax on fossil fuels or tons of carbon emitted.

Such a reading of § 110's authorization is probably too narrow, however, drawing fine distinctions that the statute does not support. For one thing, the list of regulatory tools available to states for use in their SIPs is not exclusive—§ 110 says states may use "control measures, means, or techniques . . . *including*" fees and emissions trading.[237] So long as a tax is a "control measure, means, or technique" (and it is), that tax is permitted; fees and emissions trading are only examples, perhaps intended to make it

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232. *Id.*

233. *See* Joseph Henchman, *How Is the Money Used: Federal and State Cases Distinguishing Taxes and Fees*, TAX FOUND. (Mar. 2013), http://taxfoundation.org/sites/default/files/docs/TaxesandFeesBook.pdf.

234. *See, e.g.*, CAL. CONST. art. 13, § 3, cl. a ("Any change in state statute which results in any taxpayer paying a higher tax must be imposed by an act passed by not less than two-thirds of all members elected to each of the two houses of the Legislature . . . .").

235. *See* Henchman, *supra* note 233, at 2.

236. *See, e.g.*, Sinclair Paint Co. v. State Bd. of Equalization, 937 P.2d 1350, 1351 (Cal. 1997) ("Contrary to the trial court and Court of Appeal, we conclude that the Act imposed bona fide regulatory fees, not taxes, because the Legislature imposed the fees to mitigate the actual or anticipated adverse effects of the fee payers' operations, and under the Act the amount of the fees must bear a reasonable relationship to those adverse effects.").

237. Clean Air Act, 42 U.S.C. § 7410 (a)(2)(A) (2012) (emphasis added).

clear that SIPs are not limited to traditional command-and-control regulatory tools. In terms of canons of construction, the *expressio unius est exclusio alterius* principle should not apply here.

In fact, an even broader interpretation of this part of § 110 is that it authorizes states to use any enforceable regulatory tools within their general police powers not prohibited by other law (e.g., by the Constitution or federal preemption). If that reading is correct, then carbon taxes certainly are permissible under § 115. In either case, it appears just barely plausible, though very unlikely, that a reviewing court would reject a carbon tax as inconsistent with § 115.

CONCLUSION

Balancing the advantages cited by advocates with the legal risks and limitations discussed above, does § 115 provide a viable vehicle for climate regulation? The answer remains somewhat ambiguous. It is fair to say that its advocates have substantially underappreciated at least some of the legal risks associated with § 115. A court could rule that Congress intended the section to apply to NAAQS pollutants only (or somewhat less likely) that the EPA has no authority under the section to set national emissions reduction targets and allocate them to states. In considering these challenges and others, a court could also deny *Chevron* deference to the EPA on either "elephants in mouseholes" or major questions doctrine grounds, substantially reducing the agency's likelihood of success.

Even if a regulatory program survives these challenges, it may be less ideal as a climate policy vehicle than its advocates suggest. The possible inability to include some transportation emissions and (much less likely) inability to allow interstate trading or carbon taxes could substantially undercut its cost-effectiveness.

These legal risks may not individually be obviously fatal or even a dire threat, but taken together they are significant. This is likely the primary reason why the EPA has to date avoided regulating under § 115 in favor of other sections of the statute.

However, the EPA's Clean Power Plan also faces similarly significant legal risk. If one views § 115 as an alternative to the Clean Power Plan, then relative legal risk does not obviously make one more appealing than the other. The economy-wide character of § 115 and its likely greater compatibility with market-based regulatory tools may therefore tip the balance in its favor.

Alternatively, if one views the Clean Power Plan and § 115 as complements, then at a minimum, further investigation of § 115 seems warranted. Should the Clean Power Plan survive legal challenge, the EPA must decide whether to apply a similar model to other sectors or use

another vehicle, presumably § 115, to regulate the remainder of the economy. Such an approach would not necessarily be as awkward as it might seem. The two largest-emitting sectors (transportation and electric power), in which the lowest-cost emissions reduction opportunities seem clear, at least over the short term, would have their own dedicated Clean Air Act programs in the form of CAFE and the Clean Power Plan. In other sectors where the lowest-cost (political and economic) emissions reduction opportunities are less clear, § 115 would allow the necessary trade-offs, with states in the lead. The potential limitations of § 115 in the transportation sector also fit well with this division of regulatory labor.

If the courts reject the Clean Power Plan, § 115 becomes an obvious fallback option for the EPA, regardless of its legal risk. However, as discussed above, the reasons why courts reject § 111 are important. If a court reviewing the Clean Power Plan, for example, denies deference to the EPA on major questions doctrine/elephants-in-mouseholes grounds or, worse, overrules or substantially limits *Massachusetts*, then prospects for § 115 will become far dimmer. Denial of *Chevron* deference is in my view the most significant legal risk for both § 115 and the Clean Power Plan. The legal risks of the two policy pathways to some extent covariate and legal challenges to each cannot be treated as independent events, reducing the value of § 115 as a backup plan. Conversely, should the Clean Power Plan survive then the prospects for § 115 improve as well, raising the chances that § 115 could complement the Clean Power Plan, expanding the reach of the EPA climate policy to other emitting sectors and balancing abatement costs across those sectors. This is not to say that courts will necessarily accept or reject both the Clean Power Plan and § 115 climate policy—those decisions depend on the details of each rulemaking and the two provisions do carry significant independent legal risks. But § 115 advocates should closely watch the Clean Power Plan litigation, as it will at least provide important clues and could provide legal precedent for how the D.C. Circuit and Supreme Court would view § 115.

If § 115 and the Clean Power Plan are both rejected by courts, then new legislation will be necessary to implement comprehensive climate policy and meet the United States' international commitments. In such a scenario, courts will have implicitly (if not explicitly) said as much in rejecting climate regulation under § 111 and § 115.

The EPA rejected § 115 as a vehicle for climate policy in 2008.[238] In 2010, I agreed with this decision. In 2016, it remains the case that § 115

238. *See* Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354, 44,482–83 (proposed July 30, 2008) (to be codified at 40 C.F.R. ch. 1).

carries substantial legal risk. The EPA would be reckless to abandon its current policy approach in favor of § 115. But further investigation of § 115 by both the EPA and outside legal and economic analysts is warranted—either as a backup approach or (somewhat more likely) as a complement to CAFE and the Clean Power Plan.

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