

# Cap-and-Trade Under The Clean Air Act?: Rethinking Section 115

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## INTRODUCTION

As climate legislation stagnates in Congress, the possibility of greenhouse gas (“GHG”) regulation under the Environmental Protection Agency’s (“EPA”) existing Clean Air Act authority as the sole federal means of addressing climate change becomes increasingly likely. Whether EPA has existing authority to implement a cap-and-trade program for GHGs, which many believe is the cornerstone of an effective and efficient approach to controlling emissions, has as yet no definitive answer. The various sections of the Clean Air Act that could act as authority for such a program have their own legal ambiguities and practical limitations.<sup>1</sup>

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1. The three Clean Air Act sections that have been most frequently cited to provide

One largely overlooked section—§ 115 on “International Air Pollution”<sup>2</sup>—however, is potentially quite powerful in its implications for the establishment of a cap-and-trade program.

Upon a finding that pollution in the U.S. is causing or contributing to air pollution “which may reasonably be anticipated to endanger public health or welfare in a foreign country” and a reciprocity finding that the affected foreign country gives the U.S. “essentially the same rights with respect to the prevention or control of air pollution occurring in that country as is given that country” by the section, § 115 authorizes EPA to order the states in which emissions are occurring to revise their state implementation plans (“SIPs”) to address the foreign endangerment.<sup>3</sup>

Where § 115 has not been overlooked due to its historical lack of use, it has been dismissed as an option for GHG regulation because its reference to SIP revisions<sup>4</sup> has led to an assumption that the section may be implemented only if EPA first establishes a National Ambient Air Quality Standard (“NAAQS”) for GHGs.<sup>5</sup> Because atmospheric GHG concentrations are uniform, establishing NAAQS for GHGs would place the entire country either in attainment status, which would have little effect on controlling emissions, or in nonattainment status, which would require states to implement onerous requirements and is consequently viewed as an excessively burdensome approach to GHG mitigation.

This Article shows, however, that contrary to the conventional view, and even EPA’s own view,<sup>6</sup> pollutants regulated by § 115 need

authority for a cap-and-trade program are § 111 (New Source Performance Standards), Title VI (addressing stratospheric ozone protection), and National Ambient Air Quality Standards implemented through the states. See INIMAI M. CHETTIAR & JASON A. SCHWARTZ, INST. FOR POLICY INTEGRITY, NYU SCHOOL OF LAW, THE ROAD AHEAD: EPA’S OPTIONS AND OBLIGATIONS FOR REGULATING GREENHOUSE GASES (2009) [hereinafter THE ROAD AHEAD], available at <http://www.greenbiz.com/sites/default/files/document/TheRoadAhead.pdf>.

2. Clean Air Act, 42 U.S.C. § 7415 (2010).

3. *Id.*

4. SIPs are understood as plans “for national primary and secondary ambient air quality standards.” Clean Air Act § 110, 42 U.S.C. § 7410 (2006).

5. The single piece of literature that has explicitly disclaimed the assumed connection between § 115 and NAAQS was published in March 2009. Roger Martella & Matthew Paulson, *Regulation of Greenhouse Gases Under Section 115 of the Clean Air Act*, DAILY ENV’T REP. (BNA) No. 43, at B-1, B-5, B-6 (Mar. 9, 2009).

6. The Advance Notice of Proposed Rulemaking for Regulating Greenhouse Gas Emissions Under the Clean Air Act, EPA notes that “[t]he Administrator could exercise his authority under [§ 115] if EPA were to promulgate a NAAQS for GHG.” Advance Notice of Proposed Rulemaking, 73 Fed. Reg. 44,354, 44,482 (July 30, 2008).

not be pollutants for which NAAQS have been established (known as criteria pollutants). The following discussion first shows that the statutory language reveals no requirement that the pollution addressed by § 115 be criteria pollutants. Three trends revealed in an examination of the Clean Air Act's legislative history substantiate this view. First, Congress's preference shifted from a conference approach, which gathered relevant parties to negotiate pollution abatement, to state implementation of air quality standards as the most effective means to address pollution. Second, as Congress increasingly departed from a conference approach to an air quality standard approach implemented through the states, its original uniform treatment of all pollution (whether intrastate, interstate, or international) necessarily bifurcated between abatement of pollution with air quality standards and abatement of all other pollution, including international pollution. Third, the eventual incorporation of international pollution into the SIP framework was *not* accompanied by dictates that air quality standards be established for international pollution, but was instead accompanied by amendments requiring SIPs to address Clean Air Act requirements unrelated to NAAQS. These legislative trends suggest a distinction that has become obfuscated over time: state implementation is not synonymous with the implementation of air quality standards. Certainly, SIPs implement regulations to attain and maintain NAAQS, but states have all along been empowered to abate all types of air pollution, not just those with established air standards.

## I. THE STATUTORY LANGUAGE

The language of § 115 as well as § 110 (which is referenced in § 115) leaves open the possibility that EPA has authority to implement § 115 for pollutants for which NAAQS have not been established.

### A. Section 115 “International Air Pollution”

Section 115(a) identifies two conditions—upon a foreign endangerment finding or at the request of the Secretary of State—under which EPA is required to give notice to the Governor of a state in which emissions originate:

Whenever the Administrator, upon receipts of reports . . . from any duly constituted international agency has reason to believe that *any air pollutant or pollutants* emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.<sup>7</sup>

Significantly, the reference to “*any pollutant . . . emitted in the United States*” does not limit § 115 pollutants to criteria pollutants.

Section 115(b) then presents a SIP revision under § 110 as the remedy for such pollution (hereinafter referred to as “international pollution” or “§ 115 pollution”).

The notice of the Administrator shall be deemed to be a finding under section 7410(a)(2)(H)(ii) of this title which requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a) of this section.<sup>8</sup>

Section 115(c) mandates reciprocity such that the section applies only to a “foreign country which the Administrator determines has given 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.”<sup>9</sup> Clearly, nothing in the face of § 115 itself suggests that the pollutants to which the section refers must be ones for which NAAQS have been established.

#### B. Section 110 “State Implementation Plans for National Primary and Secondary Ambient Air Quality Standards”

A look at the referenced § 7410(a)(2)(H)(ii) confirms that the pollutant discussed in § 115 need not be one for which NAAQS has been established. Two points are worth noting about § 110. First, SIPs are to be revised to incorporate provisions unrelated to attainment or maintenance of NAAQS. Second, just as a SIP is required to regulate *any air pollutant* that would interfere with

7. 42 U.S.C. § 7415(a) (2006) (emphasis added).

8. *Id.* § 7415(b).

9. *Id.* § 7415(c).

another state's attainment or maintenance of NAAQS, it is required to comply with § 115's requirement to avoid causing endangerment in another country.

To begin, § 110(a)(2) lists the required components of a SIP. One such component is that the plan "provide for revision" under two circumstances:

(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard . . . and

(ii) . . . whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements *or to otherwise comply with any additional requirements established under this Act*;<sup>10</sup>

Subparagraph 110(a)(2)(H)(ii) with the italicized language above is the section referenced in § 115. The use of "or" to preface the requirement to comply with "any additional requirements" is important: SIPs can be revised to comply with requirements separate and apart from NAAQS-related requirements.

Section 110 also references § 115 in conjunction with the requirement that a state prevent emissions of any air pollutant that would interfere with another state's NAAQS attainment or maintenance. In § 110(a)(2)(D), the Act requires that SIPs contain provisions addressing two circumstances: "(i) prohibiting . . . any source or other type of emissions activity within the State from emitting *any air pollutant* in amounts which will interfere with another state's attainment or maintenance of NAAQS, and "(ii) insuring compliance with the applicable requirements of sections 7426 and 7415 [§ 115] of this title . . . ."<sup>11</sup>

Significantly, subparagraph (i) requires states to prohibit the emission of *any air pollutant* that would interfere with another state's attainment or maintenance of NAAQS. The reference to "any" air pollutant indicates that the statute is written broadly enough to require states to control non-criteria emissions that interfere with another state's NAAQS. In the case of § 115 pollutants, of course, the foreign country will not have NAAQS in

10. 42 U.S.C. § 7410(a)(2)(H) (2006) (emphasis added).

11. *Id.* § 7410(a)(2)(D)(i)-(ii) (emphasis added).

place for any pollutant. If states are required to regulate “any air pollutant” that affects another state’s NAAQS (and not simply a criteria pollutant that affects another state’s NAAQS), by implication, states are required to regulate any air pollutant that endangers another country pursuant to § 115. This understanding is substantiated by the Act’s legislative history.

## II. THE LEGISLATIVE HISTORY

As this section explains, pollution originating in a state that endangers a foreign country (that is, international pollution) was originally handled in the same manner as intrastate and interstate pollution—through abatement conferences. When the Act was amended in 1967 to permit the federal government to set air quality standards for the first time, the conference provisions were restructured to clarify that they covered air pollution, including international pollution, *not* previously addressed by air quality standards. In 1970, the amendments that created the modern Clean Air Act distinguished for the first time intra- and interstate pollution, on the one hand, and international pollution, on the other; while it established the NAAQS and SIP procedures for the former, it retained the conference mechanism for the latter. Section 115 took on its current form in 1977, when Congress explained that the conference procedures were less effective than SIP procedures and consequently decided to extend SIPs to include abatement of international pollution.

As noted earlier, three trends are evident in this history. First, pollution abatement shifted from a collaborative conference approach to a more enforcement-oriented SIP approach because Congress viewed enforceable state implementation as the more effective way to abate pollution. Given that not all pollutants had air quality standards and that air quality standards might not exist in the “recipient” state or country in the case of cross-boundary pollution, the gradual introduction of air quality standards into the legislative scheme necessitated a change in the originally uniform treatment of various types of pollution (intrastate, interstate, and international). Ultimately, the reconvergence of the abatement method for the various types of pollution—that is, abatement through SIPs—resulted from a desire for effectiveness. Far from mandating air quality standards for all the pollutants now addressed by SIPs, Congress made a clear effort to empower states

to incorporate non-air quality standard-related requirements into SIPs.

#### A. Early Uniform Treatment of All Air Pollution Through Abatement Conferences

The 1963 amendments to the Air Pollution Control Act of 1955 were the first to provide for actual abatement of air pollution by delineating procedures for abatement conferences to address intra- and interstate pollution. Under § 5 of the 1963 “Abatement of Air Pollution” amendments, “[t]he pollution of the air in any State or States which endangers the health or welfare of any persons, shall be subject to abatement as provided” by the conference procedures.<sup>12</sup> As the following explanation shows, the conference procedures—then the only means to address air pollution—were extremely cumbersome.

The Secretary of Health, Education, and Welfare (“the Secretary”), at the request of the Governor of any state in which intra- or interstate pollution was “alleged to endanger the health or welfare of persons” or at the Secretary’s own initiative when he had reason to believe such pollution existed, was authorized to call a conference of relevant city, state, and interstate agencies to discuss the “occurrence of air pollution subject to abatement” and “the adequacy of measures taken toward abatement of the pollution.”<sup>13</sup> If, after the conference, the Secretary believed that effective progress toward abatement was not being made, he was to “recommend . . . remedial action” to the appropriate agencies.<sup>14</sup>

If these recommended actions had not been taken after six months, the Secretary was authorized to call a public hearing. The hearing board was to make findings as to whether pollution endangering health or welfare was occurring and “whether effective progress toward abatement [was] being made.”<sup>15</sup> If such pollution was occurring and abatement was inadequate, the hearing board recommended abatement measures. If these actions were not taken, the Secretary was authorized to request the Attorney General to bring a suit on behalf of the U.S. in the case of interstate pollution, or provide assistance to the state in judicial

12. Clean Air Act of 1963, Pub. L. No. 88-206, § 5(a), 77 Stat. 392, 396 (1963).

13. *Id.* § 5(c)(1)–(3), 77 Stat. at 396–97.

14. *Id.* § 5(d), 77 Stat. at 397.

15. *Id.* § 5(e)(2), 77 Stat. at 397.

proceedings or bring suit on behalf of the U.S. at the request of the Governor in the case of intrastate pollution.

The 1965 amendments, which maintained this conference mechanism, incorporated international pollution for the first time. The amendments added a new subparagraph in the original section on pollution abatement after (A) conference regarding interstate pollution called at the request of Governor, (B) conference regarding intrastate pollution called at the request of Governor, and (C) conference regarding interstate pollution called on the Secretary's own initiative:

(D) Whenever the Secretary, upon receipt of reports . . . from any duly constituted international agency, has reason to believe that any pollution referred to in subsection (a)<sup>16</sup> which endangers the health or welfare of persons in a foreign country is occurring, or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such nature, the Secretary of Health, Education, and Welfare shall give formal notification thereof to the air pollution control agency of the municipality [the State, and the interstate region] where such discharge or discharges originate . . . and shall call promptly a conference of such agency or agencies.<sup>17</sup>

The Secretary was authorized to invite the affected foreign country to “participate in the conference,” and the representative of that country was to “have all the rights of a State air pollution control agency” for purposes of the conference and subsequent proceedings.<sup>18</sup> In the event that a public hearing was held and the hearing board's recommendations were not taken, the foreign country, like a state affected by interstate pollution, was authorized to “request the Attorney General to bring a suit on behalf of the United States to secure abatement of the pollution.”<sup>19</sup>

As of 1965, then, the Clean Air Act used the abatement conference as the sole mechanism to treat all air pollution problems, whether they endangered public health or welfare in the

16. Subsection (a) refers to “[t]he pollution of the air in any State or States which endangers the health or welfare of any persons . . . .” Clean Air Act Amendments of 1963, Pub. L. No. 88-206, § 5(a), 77 Stat. 392, 396 (1963).

17. Clean Air Act Amendments of 1965, Pub. L. No. 89-272, § 102(a), 79 Stat. 992, 995 (1965).

18. *Id.*

19. *Id.* § 102(b), 79 Stat. at 995–96.

same state the emissions originated, in another state, or even in another country.

B. The 1967 Amendments: Introduction of Air Quality Standards and Growing Differentiation in the Treatment of International Pollution

The Air Quality Act of 1967 involved a wholesale legislative rewriting and introduced the precursors to the modern NAAQS and SIP. Section 107 of the 1967 amendments authorized the Secretary to define “air quality control regions” and to issue air quality “criteria” necessary for “the protection of the public health and welfare” and “pollution control techniques.”<sup>20</sup> Section 108, “Air Quality Standards and Abatement of Air Pollution,” then sets forth two ways in which states were to abate air pollution: through implementation plans and abatement conferences. As this section shows, the existence of two approaches to abatement reveals a growing differentiation in the treatment of (1) pollution with established air quality standards and (2) other alleged air pollution, including international pollution.

Section 108(c) sets forth the predecessor of the modern SIP. The section permits states to adopt “ambient air quality standards” and “a plan for the implementation, maintenance, and enforcement of such standards of air quality adopted.”<sup>21</sup> The Secretary approves the state plan if he determines that the state ambient air quality standards are consistent with the federally-established air quality criteria issued in § 107. Where the state fails to establish air quality standards within its jurisdiction, the Secretary may do so.<sup>22</sup> If the Secretary finds that air quality does not meet established standards, the Secretary is authorized to request the Attorney General to bring suit on behalf of the U.S. in the case of interstate pollution, or to provide assistance to the state in judicial proceedings, or to bring suit on behalf of the U.S. upon request of the Governor in the case of intrastate pollution.<sup>23</sup>

Section 108(d) essentially incorporates the entire conference procedures delineated in the 1965 amendments. It retains the

20. Clean Air Act Amendments of 1967, Pub. L. No. 90-148, § 107, 81 Stat. 485, 490–91 (1967).

21. *Id.* § 108(c)(1), 81 Stat. at 492.

22. *Id.* § 108(c)(2), 81 Stat. at 492.

23. *Id.* § 108(c)(4), 81 Stat. at 493.

identification, (A) through (D), of the four types of conferences (relating to interstate pollution called at the request of the Governor, intrastate pollution called at the request of the Governor, interstate pollution called on the Secretary's own initiative, and international pollution) as well as the hearing and judicial enforcement provisions. Section 108(d) also retains the language of the earlier amendments that referred to "air pollution which is *alleged to endanger* the health or welfare of persons" with respect to conferences requested by Governors,<sup>24</sup> and air pollution that the Secretary "*has reason to believe*" endangers health or welfare with respect to conferences initiated by the Secretary.<sup>25</sup> This language is key to understanding why the implementation plan and conference procedures are not redundant means of abatement: whereas the state plans were to implement air quality standards, the conference procedures were retained to address pollution that was not subject to existing air quality standards and was merely "alleged" or "believe[d]" to be an endangerment. A critical point with respect to international pollution specifically is that it is *necessarily* pollution that is "alleged" or "believed" to cause endangerment, as the foreign country naturally will not have federally-established air quality criteria by which to measure endangerment.

At this stage in the early history of the Clean Air Act, then, international pollution began its gradual differentiation from pollutants with established air quality standards. This differentiation arose from the unique nature of the relationship between air quality standards and international pollution (where the affected jurisdiction necessarily had no such standards), *not* because states were authorized to abate only pollution with air quality standards and *not* because states were deemed incapable of implementing measures to address foreign endangerment. Recall, after all, that whether under § 108(c)'s state implementation of air quality standards or under § 108(d)'s conference procedures, states were required to take abatement action. States, in other words, were legislatively authorized to address foreign endangerment, but simply did not do so through an air quality standard approach.

24. *Id.* § 108(d)(1)(A)–(B), 81 Stat. at 494 (emphasis added).

25. *Id.* § 108(d)(1)(C)–(D), 81 Stat. at 494–95 (emphasis added).

### C. The 1970 Amendments: Disassociation Between International Pollution and NAAQS

The 1970 amendments established the framework for NAAQS and SIPs, moved the international pollution provision to § 115 where it remains today, drew a clear distinction for the first time between intra- and interstate pollution, on the one hand, and international pollution, on the other, and solidified the distinction between the treatment of pollutants with air quality standards and pollutants not covered by such standards.

To begin, the amendments significantly expanded the earlier distinction between state plans to implement air quality standards and conference procedures to abate other alleged pollution. Section 110 is newly written to solely address “implementation plans,” and the remainder of the earlier § 108 relating to conference procedures is redesignated as § 115 “Abatement by Means of Conference Procedure in Certain Cases.” The amendment also breaks apart the (A) through (D) listing of intrastate, interstate, and international pollution seen in earlier legislation that treated all types of pollution uniformly, and instead groups intra- and interstate pollution together as § 115(b) and separately identifies international pollution under § 115(c).

This new distinction is notable because the amendments then add § 115(b)(4), *applicable only to intra- and interstate pollution*: “A conference may not be called under this subsection with respect to an air pollutant for which (at the time the conference is called) a national primary or secondary ambient air quality standard is in effect under Section 109.”<sup>26</sup> The fact that this prohibition was not also included under § 115(c) dealing with international pollution allows for two possibilities: (1) that a conference may be called for an international pollutant for which a NAAQS is in effect, and more broadly (2) that a conference may be called for an international pollutant, *regardless* of whether a NAAQS is in effect for that pollutant.

The implications of the careful legislative insertion of § 115(b)(4), without a similar insertion under § 115(c) for international pollution, relate back to the unique nature of international pollution. Where air quality standards necessarily do not exist in the foreign country in which the international

26. Clean Air Act Amendments of 1970, Pub. L. No. 91-604, §4(a), 84 Stat. 1688 (1970).

pollution is endangering public health or welfare, it makes little sense to regulate through the mechanism of air quality standards. That Congress nevertheless intended for states to abate the foreign endangerment is evident in its maintenance of the conference procedures for international pollution that had originally been used to address all forms of pollution.

In short, the 1970 amendments bifurcate abatement mechanisms between (1) NAAQS as the exclusive approach for intra- and interstate criteria pollutants and (2) the conference approach for all international pollution and non-criteria intra- and interstate pollutants. In Congress's own words, newly-amended § 115 "retains the enforcement provision of existing law for abatement of international pollution problems and abatement against certain sources of pollution not covered by [the newly-established NAAQS]."<sup>27</sup> What is increasingly evident, then, is that Congress intended for the international pollution contemplated by § 115 to be abated, regardless of whether NAAQS were established for those pollutants.

#### D. The 1977 Amendments: Establishing the Current § 115

The 1977 amendments established the current § 115, renamed "International Air Pollution," as a standalone section separate from intra- and interstate pollution abatement. In light of "the patent failure of the conference procedures,"<sup>28</sup> the 1977 amendments did away with all abatement conferences and changed the mechanism for addressing international pollution from conference procedures to SIP revisions. The rationale behind this change is telling:

Before 1970 the principal legal means for control or abatement of air pollution was the enforcement conference procedure. The Clean Air Act Amendments of 1970 substantially changed that . . . . The basic tool of enforcement became the State implementation plan with its enforceable requirements for every source. This replaced the abatement conference, a lengthy and uncertain process. . . .

The 1970 amendments, however, retained in section 115 the conference procedures for abatement of interstate air pollution, as well as international situations. The authority of section 115 has not been used, and the implementation plan approach for interstate air

27. H.R. REP. NO. 91-1783, at 6 (1970) (Conf. Rep.), *reprinted in* 1970 U.S.C.C.A.N. 5374, 5380.

28. 1 WILLIAM H. RODGERS, JR., *RODGERS' ENVIRONMENTAL LAW* § 3.33 (West 2009).

quality control regions has proved to be more successful in dealing with air pollution problems involving more than one State.

In fact, the committee believes that the implementation plan approach is also more appropriate than the enforcement conference for international air pollution. Section 115 as revised, therefore, provides that the determination that emissions of air pollutants in the United States are endangering the health or welfare of citizens of a foreign country will require the State in which the source of those emissions is located to revise its implementation plan to control those emissions.<sup>29</sup>

Notably, this explanation for replacing ineffective conference procedures with the “more appropriate” SIP procedures references only *effectiveness* as the rationale and does not break with the then-apparent understanding that international pollution need not have an established NAAQS to be deemed an endangerment in a foreign country. Congress evidently viewed state implementation of international pollution abatement as desirable, without creating any associated requirement that air quality standards be established for such pollution.

The other provisions of § 110 mentioned in Part I were enacted in 1977, concurrently with the newly-created § 115, and bolster a claim that Congress knew that international pollution would not necessarily have air quality standards and nevertheless wanted SIPs to be the abatement method for such pollution. First, Congress amended § 110(a)(2)(H)(ii) to add the language that requires SIPs to provide for revisions beyond those necessary to attain NAAQS. Specifically, the amendment inserts after the provision requiring plans to provide for revisions “to achieve the national ambient air quality primary or secondary standard which it implements”: “*or to otherwise comply with any additional requirements established under the Clean Air Act Amendments of 1977.*”<sup>30</sup> The implication is that § 115’s provisions are precisely those “additional requirements”—unrelated to NAAQS—that are to be incorporated through plan revisions.

Furthermore, the 1977 amendments added the provision that exists today requiring SIPs to prohibit “any air pollutant” from interfering with another state’s NAAQS attainment or

29. S. REP. NO. 95-127, at 57 (1977).

30. Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 108(a)(6)(A), 91 Stat. 685 (1977) (emphasis added).

maintenance.<sup>31</sup> A § 115 endangerment finding is equivalent to a finding that a state is failing to meet its NAAQS, which are set at a level to prevent endangerment. Where states are required to prevent “any” air pollutant from interfering with NAAQS in another state, states would also be required, by extension, to prevent any air pollutant (not just criteria pollutants) from endangering public health or welfare in another jurisdiction where NAAQS are not in effect.

Ultimately, the legislative trends that take shape in a reading of the Clean Air Act’s treatment of international pollution provides insight into Congress’s intent. When the ineffectiveness of the conference procedures prompted moves to an air quality standard approach implemented through the states, the unique nature of international pollution, where air quality standards do not exist in the foreign country, led to differential treatment of international pollution from pollutants with air quality standards. Congress’s frustration with the conference mechanism manifested in its decision in 1977 to abate international pollution through state plans. Nothing was said of the need to establish air quality standards for the international pollution that now fell under the purview of the SIP mechanism, however, given that NAAQS are domestic standards and § 115 has its own means to identify endangerment. Indeed, Congress made a clear effort to extend the language of § 110 to require the inclusion of non-NAAQS-related requirements into SIPs.

### III. EXERCISING § 115 AUTHORITY

The implication of a conclusion that Congress intended EPA to regulate non-criteria pollutants under § 115 is that EPA can exercise this authority *now*. As others have noted,<sup>32</sup> the foundational reports by the Intergovernmental Panel on Climate Change detailing anthropogenic effects on the climate system likely enable EPA to make a foreign endangerment finding. In any event, the Secretary of State can request EPA to act under § 115 if she finds such endangerment to exist.

With respect to the reciprocity finding, the 1981 determination

31. *Id.* § 108(a)(1).

32. *See, e.g.*, THE ROAD AHEAD, *supra* note 1, 167 n.569; Martella & Paulson, *supra* note 5, at 7.

by then EPA Administrator Costle that § 115's reciprocity requirement had been satisfied by an amendment to the Canadian Clean Air Act<sup>33</sup> provides insight into what constitutes the necessary reciprocity. To begin, identical statutory language is likely not required.<sup>34</sup> On the other hand, something more than "substantive" reciprocity, which would merely ask whether the foreign country mandates emissions mitigation to the same degree as the U.S., is likely necessary.<sup>35</sup> That said, the action that many countries have already taken to address climate change and the desire many countries have to see the U.S. act on climate change may make some countries amenable to establishing the necessary reciprocity as Canada did in the acid rain context.

In issuing a call for SIP revisions under § 115, EPA could effectively establish a cap on GHG emissions and encourage interstate trading by identifying GHG emissions "budgets" for each state and presenting a model budget trading rule, much like it did in the 1998 NO<sub>x</sub> SIP call for NO<sub>x</sub> emissions.<sup>36</sup> Although EPA cannot force states to implement particular measures in SIPs, the existence of a cap on GHG emissions in a state would incentivize participation in trading as a cost-effective means of emissions reduction.<sup>37</sup>

33. Costle's determination was made in letters dated January 13, 1981 to then Secretary of State Edmund Muskie and Senator George Mitchell. Letters from Douglas M. Costle, EPA Administrator (Jan. 13, 1981), *reprinted in* *New York v. Thomas*, app. A-B, 613 F.Supp. 1472, 1486, 1488 (1985).

34. Costle had noted that the Canadian legislation's foreign endangerment "refers to 'significant danger to the health, safety or welfare of persons,'" which differs from § 115's reference to the endangerment of "public health or welfare," but assumed that the phrase in the Canadian legislation would be "interpreted to have essentially the same coverage" as the § 115 phrase. *Id.* at 1488.

35. The Canadian legislation and § 115 were substantially similar, and Costle's reciprocity determination noted key similarities, including that both statutes authorize a federal official to make a finding concerning foreign endangerment caused by domestic emissions and "to prescribe specific emission limits" to address the endangerment; and both allow the foreign government opportunity to participate in hearings on any proposed action. *Id.*

36. Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region, 63 Fed. Reg. 57,356-01 (Oct. 27, 1998) (codified at 40 C.F.R. pts. 51, 72, 75, 96) [hereinafter "NO<sub>x</sub> SIP call"]. Although parts of that rule were vacated by the D.C. Circuit, the court upheld the EPA's determination of state NO<sub>x</sub> budgets that served as the underpinning for the trading program, and the trading program itself was not challenged. *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000).

37. See THE ROAD AHEAD, *supra* note 1, at 80.

## IV. THE ADVANTAGES OF IMPLEMENTING § 115

Exercising authority to revise SIPs under § 115 offers multiple benefits. First, unlike § 111 on new source performance standards, which EPA has indicated may be its Clean Air Act authority of choice to implement GHG trading<sup>38</sup> and which suffers from inconclusive legal precedent and practical limitations, § 115 would take advantage of the clear mandate that states have to implement market mechanisms and offer substantial flexibility. EPA's exercise of authority under § 115 essentially hands the responsibility of meeting GHG emissions budgets to the states, which has the distinct advantage of capitalizing on the Clean Air Act's clear authorization of state participation in trading programs.<sup>39</sup> By contrast, there is ambiguity as to whether the language of § 111 would permit a cap-and-trade program.<sup>40</sup> Moreover, the definition of "stationary source" is such that a cap-and-trade program under § 111 could likely regulate only downstream sources, which may be less effective in limiting GHG emissions than regulation of upstream sources—an option that states would have under a § 115 pathway.<sup>41</sup>

Exercise of EPA's authority under § 115 also offers an advantage over Title VI, which was enacted to phase out ozone-depleting substances. Regulation under Title VI requires a finding that GHGs "may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, and such effect may reasonably be anticipated to endanger public health or welfare."<sup>42</sup> It is not clear such a finding could be made.

Finally, as has been mentioned, § 115 is preferable to the establishment of NAAQS under § 108. Aside from the impracticality of subjecting the entire country to the onerous requirements that accompany nonattainment, EPA's previous

38. In its fiscal year 2011 budget, EPA sought \$7.5 million to issue new source performance standards for GHGs, which may include a cap-and-trade system. *EPA Faces Likely Hurdles in Bid to Use NSPS Authority for GHG Trading*, INSIDE EPA (Washington Publishers), Feb. 12, 2010, at 1.

39. 42 U.S.C. § 7410(a)(2)(A) (2006).

40. See THE ROAD AHEAD, *supra* note 1, at 86–89. The Clean Air Mercury Rule, which established a mercury emissions cap-and-trade program under § 111, was struck down on other grounds, and the legality of the trading system itself under § 111 was not addressed by the courts. *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008).

41. THE ROAD AHEAD, *supra* note 1, at 86–89.

42. Clean Air Act § 615, 42 U.S.C. § 7671n (2006).

attempts to use its authority relating to NAAQS to implement cap-and-trade programs have met with uneven success. Although EPA successfully established a trading program through the NO<sub>x</sub> SIP call,<sup>43</sup> the D.C. Circuit struck down EPA's attempt to cap and allow trading of sulfur dioxide and nitrogen oxides under the Clean Air Interstate Rule.<sup>44</sup>

## V. CONCLUSION

Ultimately, although obscure and shadowed by a misplaced assumption that it necessitates the establishment of NAAQS, § 115 offers promise because (1) its authority can be exercised relatively quickly, (2) it stands on strong legal ground insofar as states have clear authority to participate in allowance trading (and would be strongly incentivized to trade through the establishment of a cap), (3) it devolves responsibility to the states, which should give individual states political breathing room in deciding how to comply with the cap, and (4) it offers flexibility, which should encourage the greatest efficiencies in complying with the cap.

Federal legislation enacting a cap-and-trade program for GHG emissions is no doubt the ideal approach. In the absence of a comprehensive federal scheme, however, and in the face of a political climate that seems increasingly resistant to a comprehensive cap-and-trade regime, this Article seeks to encourage the consideration that EPA has more in its Clean Air Act arsenal than it currently supposes. Section 115 must be rethought.

43. See *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000).

44. *North Carolina v. EPA*, 531 F.3d 896, 908 (D.C. Cir. 2008).